

# INPLASY

## Feedback facilitation – are we addressing health inequalities? A systematic review

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### ADMINISTRATIVE INFORMATION

**Support** - n/a.

**Review Stage at time of this submission** - Data extraction.

**Conflicts of interest** - MS and SA have previously developed feedback facilitation interventions, although not ones included within the current review. OT and SA are currently developing an audit and feedback intervention, which will indirectly address the impact of health inequalities on the impact of audit and feedback. This is not included within the current review.

**INPLASY registration number:** INPLASY2023120044

**Amendments** - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 11 December 2023 and was last updated on 11 December 2023.

## INTRODUCTION

**Review question / Objective** 1. Are health inequalities considered in the design, implementation, and dissemination of feedback facilitation? 2. Is feedback facilitation being adapted to narrow existing health inequalities, and if so, in which ways?

**Rationale** Audit & Feedback (A&F) is an established implementation science method that involves the provision of “summary of the clinical performance of healthcare provider(s) over a specified period of time” in relation to a gold-standard practice (1). A Cochrane review demonstrated that A&F changes clinical behaviour and is particularly effective when there is low baseline compliance (1). Feedback facilitation describes a co-intervention frequently delivered

alongside A&F with the aim of improving its efficacy, by identifying and providing solutions to reduced responsiveness to the feedback process or providing ‘support’ through characterising local barriers and enablers to implementing change (2–4). Sykes et al. conducted a review alongside an ongoing update of the 2012 Cochrane systematic review on the effectiveness of A&F interventions, which focusing specifically on papers identified as providing feedback facilitation to provide an overview of their content and delivery strategies (5,6). This work highlights that whilst the use of feedback facilitation is increasing, there is wide heterogeneity in the approaches seen, with limited description in publications of its theoretical underpinnings or its mechanism of action (5). The ‘inverse prevention law’ states that new interventions may widen socioeconomic inequalities through lower uptake from those most

deprived compared to those in the least deprived categories (7). Some analysis suggests that upstream, preventative interventions can be more likely to initially increase inequality than downstream interventions, but this effect may diminish over time (8,9). Type 1 diabetes in the UK has been the focus of the national diabetes audit for over a decade. Despite this intervention, clear health inequalities based on geography, socioeconomic status, and ethnicity have persisted and, in some cases, widened (10–12). In Scotland, incentivised chronic disease management in primary care was shown to widen health inequalities, possibly due to a lack of incentives to encourage engagement with ‘hard to reach’ populations (13). Others have suggested that, in the correct circumstances, such interventions can reduce inequality; this has been demonstrated through the introduction of the English ‘Quality and Outcomes Framework’ for primary care, which produced a faster rate of improvement in clinical outcomes in the most deprived practices compared to the more affluent practices (14).

Given feedback facilitations' focus on identifying barriers and tackling pockets of underperformance, it has a clear capacity to be able to identify and improve positive impacts of A&F on health inequalities in real time. It is currently unclear if this potential is being realised in practice. This study proposes to review all papers identified by Sykes et al. to be using feedback facilitation alongside A&F, with the aim of identifying any uses of feedback facilitation to describe or address problems relating to health inequities (5). To help structure this process and measure the progress being made in ensuring this methodology is being used with appropriate considerations towards achieving health equity, the recommendations produced by Shelton et al, Brownson et al, and Baumann have been used to extract relevant data (15).

**Condition being studied** How to tackle the causes and impact of health inequalities has been an important part of the national debate in the UK since the Black report was published in 1990, which established a clear and convincing stepwise relationship between economic inequality and mortality rate (16). Since then, other graded inequalities in health have been found both in the UK and across the world, based on a wide range of factors including differences in education, gender, geographical location, and being a member of a minority social or ethnic population (17). These factors have collectively become known as the wider (social) determinants of health; a concept that acknowledges that health inequalities are continually impacted by events

throughout life and across generations, as well-being impacted by both internal stressors such as raised cortisol levels and external stressors such as financial income (18,19).

Despite this awareness, analysis in the UK has shown that the previously steady increase in life expectancy has stalled and health inequalities are widening rather than narrowing (20). The COVID-19 pandemic drew new light on these health inequalities, with the manifestation of clear socially unequal gradients of both reduced vaccination uptake and markedly worse COVID-19 related mortality linked to factors including deprivation and ethnicity (21,22). Within recent years, it has become clear that tackling these health inequalities is a priority in the UK, demonstrated through the governmental UK white paper regarding ‘levelling up’, the establishment of the UK governmental ‘Office for Health Improvement and Disparities’, and the English National Health System’s (NHS’s) new ‘Core20Plus5’ approach to accelerated reductions in health disparities (23–25).

Implementation science is the study of how to get research findings into clinical practice through complex interventions (26,27). The importance of addressing health equity through these methods has become more prominent in recent years, with implementation frameworks such as the EquiR framework being published with a direct focus of addressing health inequity (28). Literature suggests that in practice implementation science has been slow to include vulnerable populations in its research and has a need to re-focus its methodology through equity and anti-racism lenses (29,30).

Brownson et al. reviewed the literature to produce recommendations on how to re-focus implementation science to become a tool to achieve health equity rather than widen pre-existing inequalities (15). They suggest that implementation science needs to improve the evidence base on how to achieve this by specifically researching links between social determinants of health, inequitable intervention uptake, and health inequities in implementation trials; using equity-relevant metrics; integrating equity into implementation models; and designing and tailoring implementation strategies to address the context of local health inequalities. They also suggest there is a need to build capacity for equity research in the implementation science field and re-focus on equity through its dissemination efforts (15). Similar conclusions were re-drawn by Brownson et al. conducted a review of the evidence gaps in implementation sciences, which recommended further research on the impacts of different types of implementation methods on pre-existing inequalities (31). Shelton et al., take these

ideas further, highlighting the inexplicable bi-directional link between sustainability of implementation interventions and health equity (32).

## METHODS

**Search strategy** Trials utilising Audit and Feedback alongside additional feedback facilitation co-interventions delivered to health care workers were identified from the latest update of the Cochrane review of audit and feedback, which lists the full search criteria and protocol for the identification of studies (6). In short, the Cochrane review identified all randomised controlled trials of audit and feedback with and without additional feedback facilitation co-interventions being delivered to health care workers between 1982 and 2020, with no exclusion criteria. Quality was also assessed as part of the Cochrane review (6).

**Participant or population** The original population group defined in the on-going Cochrane review of Audit and Feedback for healthcare professionals, which has provided the original source of articles for this review, were defined as “healthcare professionals directly involved in patient care. Healthcare professionals in postgraduate training were included, but studies involving only undergraduate students were not” (6).

**Intervention** The interventions sought by the on-going Cochrane review used audit and feedback, either alone or as an element of a larger, multi-component intervention (6). This was narrowed further by Sykes et al., who identified studies that audit and feedback alongside feedback facilitation in a multi-component intervention only (5). This review described here plans to further narrow the criteria to only include interventions that explicitly sought to address health inequalities.

**Comparator** Studies sought by the on-going Cochrane review were compared to “other quality improvement intervention, no intervention, or usual care” (6).

**Study designs to be included** Only randomized trials will be included (6).

**Eligibility criteria** Eligibility for inclusion in this review was decided based on a positive response to this screening question: A. Does the intervention explicitly seek to address inequalities? (Y/N) – (key indicator used for the decision of inclusion in this study): I. Are any of the prioritised interventions explicitly focused on reducing health inequalities seen in the population receiving the intervention?

Health inequalities may be based on socio-economic factors, geography, specific protected characteristics, or socially excluded groups and seek to address, for example, differences in health outcomes, access to healthcare, quality of care, engagement in risky behaviour, or wider determinants of health. Once this criteria has been determined, the following data from eligible studies will be extracted: A. Author: I. The surname of the first author B. The year published. C. Companion papers: I. Citation D. Brief name: I. Record the feedback facilitation intervention name as it is given in the paper, or if not stated, summarised by reviewer in the next column. E. Brief description by extractors: I. A short one sentence summary of the aim of the study. F. Is there evidence of feedback facilitation support exploring the link between the wider social and structural determinants of health, unequal intervention implementation, and health inequalities? I. Instruction: i. This relates to facilitation involving support for barrier and enabling factor analysis in the context of potential inequities in implementation achievement and health outcomes. Describe any discussion around barriers and enabling factors that relate to the wider socio-economic and structural factors described in Appendix I – point G. II. Context: i. There is a need to further understand how these socio-economic and structural determinants link to inequality in implementation study outcomes, as highlighted in reviews of literature (15,31). G. Is a description of the local context of health inequalities that the feedback facilitation is planned to be implemented in included? I. Instruction: i. This would include any description of the wider population that will be affected by the feedback facilitation (not the clinicians receiving the intervention themselves) that relate to the wider socio-economic and structural factors described in Appendix I – point G. II. Context: i. Feedback facilitation is known to be a complex intervention that is highly context specific. Reviews have shown that when context is taken into account in implementation studies, the results are more likely to provide rich information around the ability to generalise results to wider populations and settings (27). Without first describing and explaining how the wider determinants of health fit into the wider picture of inequities in implementation outcomes, only limited progress can be made in producing strategies to adjust for them (29) H. Do any implementation models / theories used to underpin the feedback facilitation consider equity? I. Instruction: i. Review any models / theories that are described as underpinning the feedback facilitation to see if equity (in relation to the wider socio-economic and structural factors described in Appendix I – point G.) is considered

within them. II. Context: i. It has been highlighted that whilst a multitude of implementation models exist, only a few consider health equity within them (15). Without widely testing models involving health equity, their flaws and advantages cannot be fully understood (15). I. Is there any evidence of equity being considered in the design, tailoring, or modification of feedback facilitation strategies? I. Instruction: i. In the design of the feedback facilitation, or during any point during the tailoring or modification process of the intervention (see Sykes et al. publication in progress for definition of tailoring), is equity (in relation to the wider socio-economic and structural factors described in Appendix I – point G.) considered and adapted for? II. Context: i. Literature reviews have suggested that, so far, limited considerations have been given to equity in the design and tailoring of feedback interventions (15). However, theories with compelling evidence are being put forward that suggest that without taking equity into account in the design and tailoring phase, or adjusting for the impacts of complex interventions on equity during their implementation through modification, the sustainability of such interventions will suffer (15,27,32). J. Are equity-relevant metrics used to assess the impact of feedback facilitation? I. Instruction: i. This relates to the primary or secondary outcomes measures of the study and should describe any inclusion of indicators that could facilitate the comparison of health or modifiable determinants of health across strata of the wider determinants of health described in Appendix I – point G. II. Context: i. As highlighted by Bronson et al., without first recording these differences it is unlikely further progress will be made in recognising any issues caused by these interventions on health equity, and therefore attempts to mitigate these consequences are also unlikely (15). K. Is there a focus on equity in the dissemination effort of the study? I. Instruction: i. Does the main published article have a clear focus on highlighting the positive or negative effects of the intervention on health equity in the discussion and future recommendation sections? II. Context: i. Without clear messaging that has been designed to resonate with key stakeholders and policy makers around the importance of considering health equity in feedback facilitation, the literature suggests that even if the research community does better characterise these issues, the solutions uncovered are unlikely to be taken further in wider practice (15).

**Information sources** This review will draw on the resources identified in the on-going audit and feedback Cochrane review, which was conducted in “MEDLINE (Ovid), EMBASE (Ovid), CINAHL

(Ebsco), the Cochrane Library, and clinicaltrials.gov from June 2010 to June 2020. WHO ICTRP was only searched until February 2019; no information was available beyond that due to the COVID-19 pandemic” (6).

**Main outcome(s)** The on-going Cochrane review selected for outcomes that “objectively measured health professional practice outcomes (e.g., prescribing, test-ordering, counselling, referrals, etc.). Excluded studies that only measure patient health outcomes, knowledge/attitudes, or performance in a test situation” (5).

**Additional outcome(s)** n/a.

**Data management** Data for this systematic review was originally extracted as part of a wider systematic review exploring the content of feedback facilitation co-interventions reported in the Cochrane review; the full data collection and management protocols can be found within the published protocol (5). Data was extracted from journal articles, publicly available protocols, and from companion papers describing the trial. Eight reviewers extracted data from the included studies using a specifically designed and piloted proforma adapted from the TIDieR framework (33). Data was recorded in Excel (see appendix I). Reviewer guidance notes were developed and piloted to accompany the proforma. Each paper was reviewed by 2 reviewers who extracted data separately, compared their outcomes, and resolved disagreements through discussion. In relation to this review, each reviewer checked each publication for any mention of health inequalities being considered in the design of the feedback facilitation co-intervention.

Papers identified from this process as having mentioned health inequalities will then be further reviewed in this study by the principal investigator, who will use a specifically designed proforma in Excel to extract relevant data on how health inequalities are being taken into consideration (see appendix II). 20% of this data extraction process will be repeated by a second reviewer, with disagreements settled by discussion prior to the full data extraction.

**Quality assessment / Risk of bias analysis** As the focus of this review was a qualitative review of the content of the trial designs rather than specific outcomes, no quality assessment analysis will be undertaken.

**Strategy of data synthesis** The dataset will be cleaned by the primary reviewer, referring to source papers where necessary, before analysing the data

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narratively, graphically, and statistically using Excel. The aim is to summarise the current explicit consideration on health inequalities shown when designing feedback facilitation co-interventions, whilst drawing on wider guidance and literature to consider the implications this may have for future practice.

**Subgroup analysis** n/a.

**Sensitivity analysis** n/a.

**Language restriction** No language limits will be imposed.

**Country(ies) involved** England (University of Leeds).

**Keywords** Audit and Feedback; Feedback facilitation; Health inequalities; Wider determinants of health; Social determinants of health; Quality improvement; Implementation sciences; Equity.

**Dissemination plans** Full results will be disseminated through local presentations, national conferences, and through publication through a respected international scientific journal.

**Contributions of each author**

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