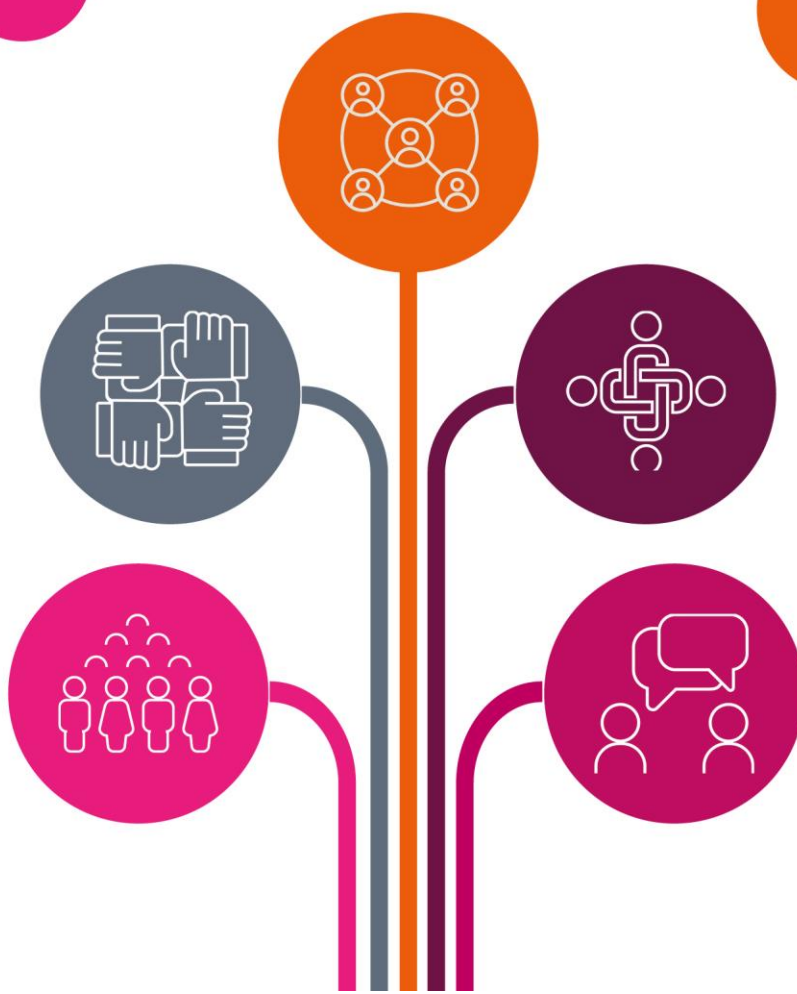


How can Exercise Referral Schemes increase physical activity: developing initial programme theory

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About this report

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Disclaimer

The views expressed in this report are those of the authors and do not represent those of Sheffield Hallam University.

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Lay summary

Increasing activity levels is a priority for healthcare due to the role being active plays in preventing and treating multiple diseases. There is an increasing value of healthcare that is person-centred, which tailors support to meet people's needs. The use of social prescribing, a community-based approach which focuses on a person's strengths and encourages self-management to improve wellbeing, has expanded rapidly in the United Kingdom. This approach has the potential to increase physical activity levels, but little is known about how this can be achieved. Exercise Referral is a person-centred community service which explicitly aims to increase physical activity. It has a detailed history, and lessons can be learnt about how it can achieve this outcome. Key documents, and best practice guidance over the history of exercise referral, highlighted several areas of learning for social prescribing. Active ingredients for success cover the following areas: partnership with medical referrers, standards of practice, offering counselling and a supportive journey for patients and robust practice management. These focal points are important as they bring essential resources and conditions into the limelight and consider prudent areas across the person's journey, from first referral to the service content that is offered to them.

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Background

The commitment to personalised care in the United Kingdom (UK) acknowledges the person's values, experiences and aspirations and works collaboratively to activate them in their own health (Hibbard & Greene, 2013). Of particular interest within this practice is the potential to support self-management of lifestyle behaviours. Physical activity (PA) is a lifestyle behaviour and refers to habitual patterns of movement. There is a well-established relationship between low levels of PA, mortality, and morbidity (Rhodes et al., 2017). Increasing PA is now a worldwide priority (World Health Organisation, 2018), due to the burden low PA places on society, healthcare, and the individual. Therefore, effective non-medical services are paramount.

Primary care is touted as an important platform to support personalised care due to the large exposure to patients and established trust from patients, however, the implementation is often met with multiple barriers (Berenguera et al., 2017; Clark et al., 2017; Huijg et al., 2015). There have been numerous innovations which attempt to ameliorate the issues experienced in primary care. Many have been fraught with issues including a lack of staff training, shared definitions, operations, and inadequate utilisation or testing in practice settings (Reiter et al., 2018).

Social prescribing (SP) is a community, de-medicalized, assets-based approach, which aims to support the prevention and management of a person's wellbeing. The central premise builds on a person's strengths and encourages engagement with a range of opportunities (Pilkington et al., 2017; National Academy for Social Prescribing, 2020). In contrast to previous innovations in primary care, SP is congruent with, and has helped shaped a paradigm shift towards, a salutogenic model that rejects disease-centric thinking. Consequently, there has been widespread adoption of SP as it aligns with the National Health Service's commitment to personalised care (Howarth et al., 2020). Despite the commitment to SP, the rapid utilisation has created issues due to a the difficulty in defining the practice, collecting information on effectiveness, and an insufficient theoretical underpinning (Bickerdike et al., 2017).

An exercise referral scheme (ERS) is a formal partnership between a leisure provider and primary care to identify and refer people with mild chronic diseases to a time-limited person-centred programme. The aim of ERs are to support PA behaviour change (Department of Health, 2001). The evolution of ERSs have many hallmarks of SP as it underwent rapid scale up; is naturally heterogenous; and is usually atheoretical. In addition, ERSs are complex interventions relying on partnership between a community workforce and primary care (Oliver et al., 2016). As the role of SP within PA is in its infancy, lessons can learnt from similar types of, 'family member', programmes to understand the processes and conditions necessary to support individual PA. Historical literature of various guises provide tacit knowledge and can provide insight about the long causal chain necessary to support service users (Pawson, 2013).

1.1. Aim

The aim was to scope the field of ERSs to 'map the territory' and unearth key areas on how community services may influence PA. By using ERS key documents, initial rough ideas about the mechanisms and prudent conditions needed to attain positive outcomes can be articulated.

Methods

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2.1. Overview

The overarching stance of this work is scientific realism. The approach aspires to move beyond describing interventions to build tentative ideas about the casual working of programmes known as programme theory (Davidoff et al., 2015; Pawson, 2013). In addition, stakeholder experiences of schemes provide authentic 'folk wisdom' about common mechanisms that underpin practice. Thus realism values accumulated knowledge (Booth et al., 2018).

The work aligns with the initial stages of a realist review (Pawson et al., 2005). The assumption that interventions will operate differently contingent on contextual factors means a systematic and linear search of the literature is not optimal. However, a comprehensive sampling frame can scope the field to provide an understanding of the concepts, boundaries, and enduring areas of challenges and success.

Exploring service history, best practice documentation, and stakeholder views alongside published evidence provides a useful learning platform when the phenomena of interest are real world problems (Carey et al., 2015). The work aspired to utilise key documents alongside contemporary literature to develop programme theory.

2.2. Search strategies

This work focused primarily on the "background/scoping" element of a realist review (Pawson, 2007). Due to the diverse interest in concept mining and theory development the search was broad and included "exercise referral" OR "physical activity referral scheme" OR "physical activity prescription" OR "GP referral". This was applied to PubMed, Scopus, and Google Scholar using the Publish or Perish software. As realist searches are interested in theory as opposed to topic, the date, country of origin, service, and study design were left open.

However, due to the magnitude of papers retrieved a more selective search was undertaken, limiting the papers to the last five years, and omitting similar services (e.g. weight management, falls prevention, cancer services, pain services, physiotherapy-led provisions). The procedures of the work were iterative and berry picking and citation searching were undertaken in an iterative way as the search and thinking evolved (Booth, 2016).

Key documents and best practice guidance were purposefully sampled for their relevance and ability to populate programme theory (Booth et al., 2013; Downey et al., 2021). This phase of the work became the focal point, as the range of literature within ERS, and potential immediate programme theory alone, was diverse. Therefore, the grey literature was seen as an important platform to develop initial rough ideas about programme theory (Booth et al., 2018).

2.3. Selection criteria

The work was interested in phenomena across the layers of the system which may influence downstream outcomes for services users, therefore, the selection of papers was not limited by scope. The research team identified key stages of the process which provided a conceptual arrangement of the literature search. The stages included the referring professional, ERS worker, the service provider, and the ERS activities. However, due to the heterogeneity of the field certain boundaries were needed. Academic papers and grey literature were included if:

- There was an explicit mention of referral by a medical professional to an exercise specialist in a community setting.
- The cohort referred were sedentary and presented with a long-term condition.
- The work was time-limited and not residential.
- The aim of the intervention was to support PA levels in the service user.

2.4. Data extraction and analysis

The magnitude of the search (Appendix 1) meant that data extraction was only completed on the document analysis of key documents (resources and time limited). The approach adopted a realist qualitative procedure (Maxwell, 2012). In brief, all selected documents (Appendix 2) were uploaded to NVivo 12. Documents were read and any large passages of text which described necessary conditions, or recommendations, for a successful programme were coded into broad categories representing programme theory at various levels of the system (referring professional, provider, ERS worker, or intervention activities). These passages were then examined within word document tables configured by each category of the system. 'If... then...' and 'if... then... because...' statements were generated, where possible, based on each statement within each category. While each statement did not always offer complete realist theory configurations, they often provided complementary facets of explanation or essential context to emerging theory areas. In addition to the 'if... then...' process, each statement was issued an inductive code to represent a theory area. Each inductive code, and realist statement, was then reappraised by EG to consolidate, abstract, and redescribe the 'if... then...' statements to capture each nugget of emerging theory in a more condensed fashion (Pearson et al., 2015). Due to the interaction of system levels/stages, it was difficult to trace how mechanisms and contexts operated across the various domains of the systems. An excel document was then produced with the theory areas as separate tabs which allowed an examination of which theory was prudent within each category of the system (labelling and sorting columns). The findings below describe how each theory area operates for each stakeholder group.

Summary of findings

3.1. Description of included studies

The academic literature was screened, but not examined to test or further develop the rough programme theory developed through the documents analysis. The evolving best practice guidelines proved fruitful as they were developed against a background of incomplete service implementation and limited efficacy literature. Therefore, the documents explicitly discussed the necessary conditions and practices required to achieve success, which was not widespread nor standardized historically. The results highlight four theory areas which operate at various stages of the service pathway. The four areas include 11 'if... then...' statements that capture the essential facets needed to create a system which can support PA.

3.2. Person centeredness

All practices, interactions, programme offers, and data collection should be 'for the purposes of helping the patient towards an independent, physically active lifestyle (Department of Health, 2001)'. All aspects of this programme theory relate to the 'intervention activities' category of the system, or the processes the service 'provider' should undertake. However, there was crossover in the theory areas which stressed the need for a person-centred climate. Within this theory area, mechanisms covered individualised care, choice, and counselling.

If patients are given a 1-1 appointment, during which a co-created, holistic assessment and care plan are created, then there is a greater chance of a sustained change in PA because the service is tailored to them, they fully understand the process; they receive an agreeable dose of exercise; and the service is relevant to them, so they are more likely to commit.

Individualised practice refers to tailoring practice and involving the person in their own care. Regardless of the context, it is stated that practices that involve the patient, look to understand their position, and tailor content based on patient motives, values, barriers, and preferences, would lead to a corresponding change in a patient's commitment, awareness, and adherence.

This mechanism was revered across practice, evident by the varying ways it could be harnessed by ERSs. Provider monitoring ensures potential dropouts can be reached and supported through tailoring, thereby, increasing the efficiency and relevance of the scheme. Practitioners should consider wider drivers of behaviour and look to support social inequity barriers. Providers should consider setting up non-traditional ways to engage those who would not normally access the scheme. Moreover, practitioners should be provided with guidance on how to respond to varying patient circumstance. These were all important aspects which ensure tailoring of the service can be achieved in a person-centred manner.

If patients can choose from a variety of quality assured schemes and are offered flexibility, including the option for social interaction, then adherence will improve because there will be fewer barriers to access, and patients will be more motivated through personal choice and enjoyment.

The second facet of person centredness focused on the variety of options available for patients. There should be flexibility in both the range of options, and when people can attend. This is set against a backdrop that many sedentary people may not find traditional exercise-based interventions desirable or convenient. In addition, increased opportunities allow people choice, platforms for social intervention, variety, and new experiences which can contribute to motivation.

If the schemes embed behavioural counselling throughout the person's journey, then they will be more likely to improve and sustain PA change because they will be empowered by having access to prudent tools (including relapse prevention, monitoring, feedback, education, continued support, and explicit exit strategies).

The focus on behaviour change techniques were consistent across key documents. A key context which has been absent within ERS practice, is the need for schemes to value long term behaviour change as their primary aim. This context provides a catalyst for behaviour change approaches, explaining and reducing dropouts, ensuring there is support beyond the end of schemes, and creating a database to support long term changes in PA.

3.3. Partnerships

The link between the first referrer, usually the General Practitioner (GP), and the ERS practitioner was deemed important for successful schemes. The documents were clear on the need for all stakeholders to be part of the scheme development, delivery, and formative changes. Yet the relationship between these two professional bodies continues to be subpar as detailed by the evolving ERS practice guidelines. Without a shared agenda, clear roles and responsibilities, collaborative scheme development, mutual understanding and trust, ERSs will not operate optimally. Mechanisms across partnerships include aligning needs and the pathway offer; communication; trust; and shared commitment and responsibility.

If referrers have a clear understanding of the nature and aims of the scheme, via training; clear, accessible guidance; and processes to support the alignment of needs and offers, then they will refer more appropriately (approach & people) because they will be aware of, and have processes to, access the scheme.

GPs are vital to the appropriate referral to the ERS pathway. The document analysis highlighted the need for GPs to be trained; have accessible inclusion criteria; and have exercise guidance and pathways integrated on their computer systems. The prominence and visibility of the scheme increases the chances of GPs accessing the service, and having conversations about the risk, benefits, and orientation of ERS with their patients. This will increase the volume of appropriate people attending the intervention. There is clear guidance on who should be referred to align the patients with the strengths of ERSs. Namely those who are sedentary and need support with motivation, exercise programming for specific health conditions, and monitoring.

Lastly, the relationship between the provider and the GP is of note within this area of partnership. It is highlighted that an important context which allows the aforementioned theory to be activated is the engagement of GPs with the provider. It is stated that the provider has the task of ensuring GPs are involved, informed, trained, and that schemes can be relied upon in the form of formative feedback, standardised protocols, and quality assurance.

If all practitioners involved in a patient's care work in a partnership and communicate with each other in a timely, meaningful, and effective manner, then patients will experience better quality of care and outcomes, because continuity will improve, people referred will be suitable, and inter-professional cooperation and mutual value will improve.

Contextual factors needed to allow optimal communication to transpire into a good patient experience and care outcomes relate to GP apprehension (see trust below), service infrastructure, and the dominant medicalisation of practice (see trust below). Ongoing communication between the staff groups about patient programming and progress allows the GP to check the ERS with their intention and establish value, increasing the chance for ERS advocacy and commitment. Communication allows practitioners to demonstrate their worth and feedback to GPs about issues and patient suitability. Communication between GPs and the providers allow the barriers of each industry to be articulated and attended to. This can increase the first referrer investment in the ERS through modifying their confidence in the scheme. This requires focused marketing, evaluation, and dissemination activity on behalf of the provider along with other engagement communicative activities.

If all professionals involved in patients' care have mutual respect and trust for one another and schemes are quality assured and valued as part of the wider healthcare agenda, then referrers and ERS professionals will develop better partnerships and improve the quality of patient care because there will be greater cooperation, confidence, and perceived efficacy.

An enduring feature of the document analysis was the reluctance of the medical community to refer to ERSs. The lack of partnership is impinged by the incomplete professionalism of ERSs. The GPs apprehension is due to the leisure sector's approach to quality assurance and the perceived competence of ERS staff. ERS staff are not allied health professionals that require registration with a trusted body in the medical community (e.g., The Health and Care Professions Council). This creates doubt and lack of confidence by GPs. This also creates challenges to trust from a referral and medio legal perspective. The medical community have clear guidance on referring to other allied health professionals, however, the delegation of responsibility does not occur within an ERS referral meaning the need for trust is greater.

The medical culture also dissuades partnership with ERSs. There is currently no monetary incentive to utilise ERSs which was highlighted as an important context that would facilitate trust being a driver of positive outcomes. Furthermore, the routine medicalisation and risk/benefit mindset creates difficulties for GPs when appraising the utility of the scheme. Their focus on an exercise 'prescription' may not be congruent with the ERS staff views on practice. This discrepancy can also quell the development of trust. Another prudent aspect of medical culture relates to the lack of medical commitment to using exercise as a therapeutic service. There is a limited number of Sports Medicine posts who focus on using clinical exercise physiology, and there are no champions of ERSs within the medical leadership sphere.

Lastly, GPs' understanding of exercise for the management of disease, coverage of exercise on the medical curriculum, and personal value of exercise creates another context that requires consideration. Where GPs are role models and have a good knowledge of exercise it is seen as advantageous in the development of trust.

If referrers and schemes take joint responsibility for supporting patients, with clear and appropriately assigned roles and responsibilities, then patients are more likely to engage with appropriate ERS schemes because there will be a sense of coherence, advocacy, and integration.

There were clear recommendations on what GPs will be required to do if ERSs are to work optimally. There needs to be a shift in practice where PA behaviour change is prioritised and incentivised. This will require medical leadership and potentially changes to the schooling of medics and the government financial model. Downstream, GPs need to be trained in the scheme procedures and behaviour change approaches. Additionally they require a local lead for ERSs, clear information of their role and responsibility within the pathway, and on-going collaborative reflective practice on how they may be influencing the efficacy of the scheme.

It is acknowledged that GPs will be restricted by resource, therefore, it was also encouraged that the provider play a crucial role in providing the platform to allow the development of a shared commitment. Providers who adopt practices to engage and equip GPs to commit are fundamental. This includes co-creating local schemes and operational documentation, setting out roles and responsibilities of the scheme, and devising formal arrangements between the organisation and the primary care team.

3.4. Standards of practice

If exercise professionals were required to register with a statutory regulatory body, then the quality of ERSs (necessary training provisions; governance issues; and medio-legal rigour) would improve and health care professionals would be more likely to refer patients to the scheme. This is because it would be clearer that the exercise professionals would have the necessary competencies to deliver a safe and effective service; adhere to a code of practice; hold the necessary insurance; undertake regular appropriate continuing professional development (CPD); and work within their scope of practice as part of a multidisciplinary team.

Although this was mentioned as a prudent context that would support the development of trust for GPs, it is also a mechanism that will foster trust and equip the staff to meet the demands of the role. Although, there is a regulatory body for exercise professionals, it is not a mandatory requirement, and the esteem is lower than bodies who serve medical professionals. There are wider factors which complicate the regulation of the fitness industry. Other literature has questioned the role of the industry and potential incongruent mix of commercial and regulatory functions (De Lyon et al., 2017; Lloyd, 2005).

If all practitioners involved in patient care undertake CPD, personal reflection, and an annual review of their practice, then this will improve the quality of ERSs and integration with GPs. This is because CPD will focus on identifying gaps in skills and knowledge relating to standards of practice and transform thinking rather than consisting of arbitrary training.

This aspect of theory encapsulates two separate stages of the pathway. When GPs engage with training it provides a catalyst for appropriate referral and commitment to the scheme. The focus is on providing them with an awareness of the scheme, its processes, and how to work with the provider. In contrast, the training on exercise for disease management and behaviour change provides GPs the opportunity to practice in a non-medical fashion and use counselling skills which will establish value in ERSs. The CPD for ERS staff is instrumental; and provides tailored development of their practice. There must be a wider organisational commitment to long term change, and staff development, illustrated through the commitment to this learning climate.

3.5. Management of services

If schemes are designed collaboratively, with the goal of achieving long-term behaviour change and congruent monitoring, and evaluation processes are adopted, then efficacy will be higher and utilisation greater because schemes will be able to make formative changes, there will be clarity on what is expected, and schemes will be able to demonstrate their worth and safety.

The requirement for schemes to be designed with the aim of long-term behaviour change was widespread. In addition, the need to pre-plan and create the capacity for continuous, long-term evaluation and monitoring was consistently encouraged. The need to involve key stakeholders from the outset to harness local priorities, achieve buy-in, and articulate the expectations of the scheme and evaluation requirements was also noteworthy.

There was a caveat to pragmatically choose realistic, sensible, and congruent measures of evaluation due to the resourcing of ERSs. Despite this, there was strong advocacy for long-term evaluation beyond the cessation of the scheme. The use of quantitative monitoring of patients and qualitative exploration of implementation were both recommended. The value of monitoring and long-term evaluation is seen in the ability to strengthen the on-going learning from practice, make formative changes to improve quality, and accumulate evidence of impact to demonstrate the worth to funders and stakeholders.

If there is a dedicated local leader who is responsible for coordinating stakeholders, arranging budget agreements, producing operational documentation, developing formal agreement processes and duty of care procedures alongside supporting ERS staff to meet their practice and governance duties while supporting the implementation and evaluation of schemes, then schemes will be of higher quality and will be more likely to achieve greater impact. This is because the scheme will be driven in a direction consistent with best practice guidelines and they will be able to show compliance with health and safety and wider quality indicators valued by other stakeholder and all involved will be clear on the expectations of the scheme.

Despite no national guidance on the competencies of an ERS manager, the role is revered highly. Local leadership should be more than staff coordination, and leaders can initiate many of the previous facets of programme theory outlined. However, the document analysis also uncovered concerns about the implementation of best practice due to resourcing issues. The transformative work of a local leader requires investment in middle management with astute business acumen, people management, organisational development, and networking skillsets. Moreover, it requires the development of iterative and dynamic documentation for varying audiences. A paramount context is employing someone at this level and having the platform to increase the co-creation and visibility of a local ERS.

3.6. Implications

The aim of this project was to scope the field of ERSs to 'map the territory' and unearth key areas on how community services may influence PA. This was envisaged to provide prudent lessons for SP. There is a need to understand the challenges and opportunities of SP to support PA due to their increasing utilisation, however, the research is in its infancy. The results from this project highlight key areas that need considering if the implementation of SP is efficient and wastage is minimised. SP policymakers, commissioners, providers should consider how the service attends to all aspects of the patient journey including the referral, intervention content, provider tasks, and practitioner practices. This project provides direction to improve the

functioning of SP. Partnership that attend to trust, aligning needs with the pathways offer, communication, and shared commitment; Standards of practice that consider the regulation of staff and cross professional CPD; Management of schemes which explicitly plan the design and evaluation of schemes and have robust leadership; and schemes which are patient centred by their individualised practice, commitment to patient choice, and use of counselling approaches are paramount.

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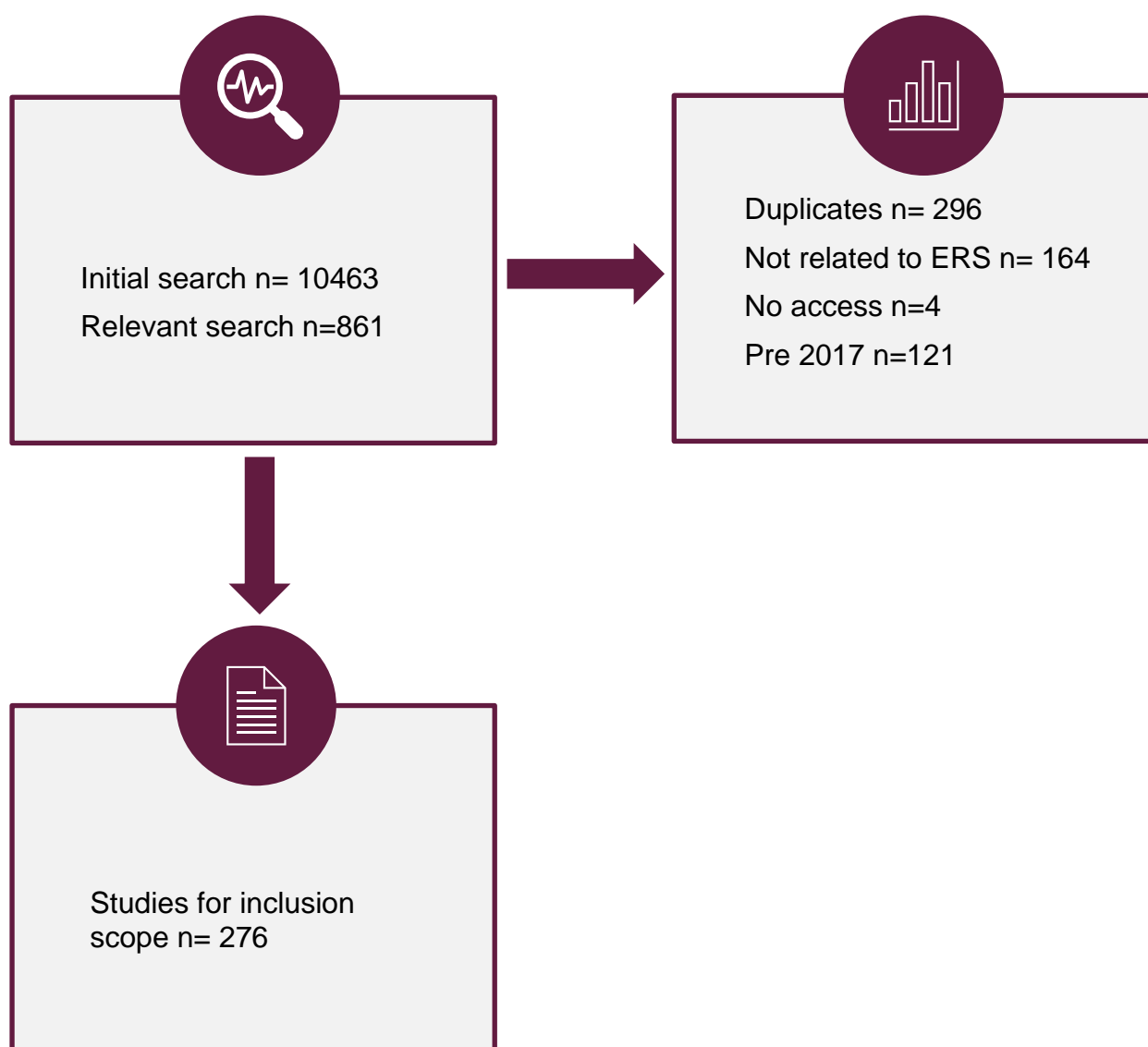
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Appendix 1

A1



Appendix 2

A2

Documents	Author
Exercise referral systems: a national quality assurance framework	Department of Health (2001)
Professional and operational standards for exercise referral	Joint Consultation Forum (2011)
A toolkit for the design implementation & evaluation of exercise referral schemes: guidance for exercise professionals	British Heart Foundation Centre for Physical Activity and Health (2010)
Physical activity: exercise referral schemes	National Institute for Health and Care Excellence (2014)
Behaviour change general approaches	National Institute for Health and Care Excellence (2007)
A toolkit for the design, implementation & evaluation of exercise referral schemes	British Heart Foundation Centre for Physical Activity and Health (2010)
Exercise for life physical activity in health and disease	Royal College of Physicians (2012)