

A systematic review of the evidence on home care reablement services

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Box 1: Features of the home care reablement intervention.

Diagram 1: PRISMA Flowchart

Table 1: Characteristics of excluded studies

Appendix 1: Search strategy for Medline

Word count: 1814

Key words: reablement, older people, personal care services, multimorbidity, disability, independence, systematic review, randomized controlled trial, non randomized controlled trial, public policy.

Abstract

Objective To determine whether publically funded 'reablement services' have any effect on patient health or use of services.

Design Systematic review of randomised controlled trials and non-randomized studies in which reablement interventions were compared to no care or usual care in people referred to public funded personal care services. Data sources included: Cochrane central register of controlled trials, EPOC register of studies, trials registers, Medline, Embase, and Cinhal. Searches were from 2000 up to end February 2015.

Setting Not applicable.

Participants Investigators' definition of the target population for reablement interventions.

Main outcome measures Use of publically-funded personal care services and dependence in personal activities of daily living (PADL).

Results We found no studies fulfilling our inclusion criteria that assessed the effectiveness of reablement interventions. We did note the lack of an agreed understanding of the nature of reablement.

Conclusions Reablement is an ill-defined intervention targeted towards an ill-defined and potentially highly heterogeneous population/ patient group. There is no evidence to suggest it is effective at either of its goals, increasing personal independence or reducing use of personal care services.

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Introduction

Many people with ill health, frailty or disability need assistance with personal hygiene, toileting, dressing or feeding to maintain their health and safety at home. In the UK, the provision of adult social care/ personal care services is the responsibility of local government (authority) adult care services.

In the late 1990's, adult social services were criticized by the Department of Health for providing services '*which do things for and to dependent people*' rather than providing '*the support needed by someone to make most use of their own capacity and potential*'.¹ The same document noted that the response "*may include developing specialist rehabilitation services*". At the same time, it was recognized that the demands for personal care services from older people were growing and presented one of the major challenges to social care policy². This was even more pressing because of the erosion of the provision of rehabilitation for older people in acute hospitals³ and the shift of health care from hospitals to settings closer to people's homes.

Emergence of reablement in UK, 2007

In 2003, public funded adult social care services was the subject of a public sector efficiency review⁴. A service, “Homecare Re-ablement” (from here on reablement) was selected by the UK government⁵ and implemented by local governments as the intervention to meet the efficiency targets set out in the review.

In 2007, the Department of Health⁵ published a discussion document with the aim of sharing knowledge and emerging findings based on observational data from local authorities with responsibility for adult care services who had implemented or were in the process of implementing reablement schemes. In this report reablement was described as *“services for people with poor physical or mental health to help them accommodate their illness by learning or re-learning the skills necessary for daily living”* and distinguished from rehabilitation which was described as, *“services for people with poor physical or mental health to help them get better.”*⁵ More recently reablement has been described as, *“a relatively new approach to supporting people to regain (or maintain) independence and resume the activities which make up their daily lives”*⁶.

The stated aim of reablement was to encourage people in receipt of home care services to live independently, reduce demands for hospital resources and for long-term support and simultaneously offer typical adult social care ‘home care’ service users greater choice and control. Reablement was supposed to represent a shift from

reactive home care services to preventative and proactive models of home care service provision based on early intervention and active engagement in reablement.

Over the last decade the UK government has invested over £500 million in reablement and associated initiatives⁷.

Given the large sums of money involved, one would expect that a strong evidence base supported its effectiveness. We also noted that, in 2014, the National Institute for Health Services Research allocated approximately £900,000 to determine which elements are essential in making the reablement program successful⁶. This also suggests that effectiveness has been established.

Therefore we undertook a systematic review to document the evidence related to this new service.

Method

The protocol containing details of the review methods has been published⁸ and is summarised here. (Systematic review registration: PROSPERO 2014:CRD42014008801)

We sought to identify all randomised controlled trials (RCTs) and Controlled Clinical Trials (CCTs) where reablement interventions were compared to no care or usual care.

We planned to accept the investigators' definition of the population of interest.

We found no standard definition or specification of the reablement intervention; therefore we defined it as '*a short and intensive intervention (typically around 6 weeks)*'. The features we used to help identify reablement are shown in Table one. This definition was developed based on a descriptive analysis of reablement services, which indicated that these services had several features in common.

Table one

The primary outcomes of interest were the extent to which reablement services reduced dependence in personal activities of daily living and/or reduced health and social care resource use at the individual level. Secondary outcomes were case fatality, need for long-term institutional care, hospital admission, ability to undertake instrumental activities of daily living, social participation and autonomy, the patient's perceived health status, well-being and quality of life, carer stress and quality of life, and resource use(e.g. length of hospital stay).

The search strategy was developed specifically for this review,,; the details are shown in Appendix 1. We searched the Cochrane Central Register of Controlled Trials (CENTRAL) 2014. Issue 4); EPOC Specialised Register; Medline, EMBASE, CINAHL. For ongoing trials and other studies, we searched ClinicalTrials.gov, the Australian New Zealand Clinical Trials Registry (ANZCTR), International Standard Randomised Controlled Trial Register (ISRCTR) and the National Institute for Health and Clinical Excellence (NICE)¹¹. We also scanned reference lists of articles and original papers and spoke to colleagues and experts in the field. Searching was complete 28th February 2015.

One review author (LL) downloaded all the titles and abstracts of references retrieved by electronic searching to the reference management database Reference Manager and removed duplicates. Two review authors (LL, JG) independently examined the remaining references. Studies which did not meet the inclusion criteria were excluded. Full text copies of all potentially relevant references were obtained. Two review authors (LL, JG) independently examined the retrieved papers and reports for eligibility. Discrepancies were resolved by discussion and, where required, arbitration by a third person.

We used RevMan, version 5.2 for Windows by the Cochrane Collaboration to prepare the review.

The sponsors of the study had no role in study design, data collection, data analysis, data interpretation, writing of the report or decision to publish.

Results

The searches up to February 2015 identified 70 potentially relevant references. After screening the titles and abstracts, we obtained full publications of 34 references for detailed evaluation. These 34 references/ reports related to 32 individual studies or reports (See diagram 1: Flowchart). We could not access the full text for one.

Figure one

We found no completed RCTs or non-randomised studies investigating the effects of reablement on personal care resource use or on dependence in personal activities of daily living.

The reasons for exclusion included:

- the purpose of the study was not to evaluate the effects of reablement on the outcomes of interest (6 studies)¹²⁻¹⁷;
- observational study (7 studies)¹⁸⁻²⁸;
- qualitative study (2 studies)^{29, 30};
- multidisciplinary intervention delivered by professional staff (4 studies)³¹⁻³⁴;
- literature review (2 studies)^{35, 36};
- studies using secondary data (1 study)³⁷,
- research brief³⁸ (1 study),
- description of reablement services (1 study)³⁰,
- reablement intervention does not meet the systematic review 'intervention' criteria'(1 study)³⁹.

Searches of trial registries identified five ongoing trials⁴⁰⁻⁴⁴ and one large ongoing National Institute for Health Research (NIHR) funded study⁴⁵. Only one ongoing study potentially meets review our inclusion criteria⁴⁰.

Discussion

Our review found no data evaluating the effects of reablement interventions on the need for support and assistance from public funded personal care services or on

service, safety, effectiveness and user experience outcomes. We also found reablement to be an ill-defined intervention with no sound theoretical or conceptual basis, which goes against best practice.⁴⁶

We believe that our finding regarding reablement services (no completed RCTs or CCTs) is robust, due to the use of systematic review techniques. We accept that there are services calling themselves reablement services that do not fit the definition we used, such as those using health professionals rather than home care⁴⁷ and our findings do not apply to other variants of intermediate care such as health service based admission avoidance and early discharge services that have evidence, including evidence of some benefits such as reduced use of long term care and reduced hospital length of stay⁴⁸⁻⁵⁰.

We appreciate that a lack of evidence of effectiveness should not be interpreted as evidence of lack of effectiveness, and we note that some evaluations of reablement that have been evaluated using less rigorous designs (and therefore did not meet our criteria on methodological grounds) have reported favourably on it²⁰. Nevertheless, the evidence base is well below that needed to justify and commission most new healthcare interventions.

Our main finding was that reablement is an ill-defined intervention⁶. There is no well-developed understanding of the problem that it is intended to address and the intervention lacks any explicit conceptual or theoretical framework. There is no clearly defined theory of change or mechanisms by which a reablement intervention program might achieve its intended outcomes. Further, there is no specific detail on the agreed essential features that define an effective reablement program including principles, functions, activities and key ingredients necessary to achieve the intended outcomes and which links to the theory of change. The lack of any definition and the absence of any robust theoretical base or well-operationalised core components will inevitably prevent both effective implementation and evaluation⁵¹.

Indeed the given definition - *‘a relatively new approach to supporting people to regain (or maintain) independence and resume the activities which make up their daily lives’*³ - is not new but is simply a variant of the WHO definition of rehabilitation - *“[to] assist individuals who experience, or are likely to experience, disability to achieve and maintain optimal functioning in interaction with their environments”*⁴). The Department of Health’s definition - *“services for people with poor physical or mental health to help them accommodate their illness by learning or re-learning the skills*

necessary for daily living" - is a definition of rehabilitation as both processes help 'learning or relearning the skills necessary for daily living'.

Moreover the problems addressed by reablement services are identical to those facing rehabilitation services. For example, the target population for reablement interventions are likely to be older patients with diverse mortality and morbidity risks, multimorbidity, prognostic outcomes, symptoms and disability. The needs of these patients may require a range of services tailored to need (such as for those disabled by stroke, or hip fracture). A 'one size fits all' reablement model is unlikely to suit most patients. Furthermore, local authority home care staff may lack the skills and team structure required to generate the modest benefits of rehabilitation that have been demonstrated using staff trained in rehabilitation. Moreover, local authority home care staff may not have access to up-to-date information on evidence based and evidence informed interventions. It follows that there is good reason to subject reablement interventions to robust evaluation, especially to show its additional benefit over and above rehabilitation services.

The problem identified in 1998 was one of organisational culture - an attitude of just providing support, not encouraging more independence. This culture was reinforced

by the lack of sufficient resources, because encouraging independence requires more time, more expertise and more effort. It was further reinforced by the disintegration of services, whereby anything involving increasing independence (rehabilitation) was seen as a responsibility of health services, and therefore should be provided by them (or funded by them).

Policy-makers, commissioners and providers of reablement services should be aware that the benefits of reablement are unproven. At a policy level, the UKs reablement strategy is one of many approaches targeted towards maximising independence and reducing the need for long term home care, which include (health care) rehabilitation services, health promotion programs and advocacy services, many of which have good evidence of effectiveness and might also be advanced.

The absence of robust evidence of unequivocal benefit of reablement services means that establishing their safety, individual effectiveness and quality of experience for users must be a priority for commissioners and providers of reablement services, particularly when resources are limited and when rehabilitation services, which have identical goals, are already of proven effectiveness.

Clinical messages

- Home care reablement is an ill-defined intervention for an ill-defined problem
- The benefits of home care reablement are unproven

Further trials of home care reablement are necessary

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AUTHORS AND CONTRIBUTORS

All authors made substantial contributions to the conception and design of the review, and/ or literature searching and interpretation of findings.

All authors participated in drafting the article or revising it critically for important intellectual content; and

All authors give final approval of the version to be submitted and any revised version.

DECLARATION OF CONFLICT OF INTERESTS

All authors declare: no support from any organisation for the submitted work; no financial relationships with any organisations that might have an interest in the

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Table one**Characteristics of reablement service**

- targeted towards individuals referred for public funded personal care services
- the intention is to reduce government funded personal care services
- the intention is to enhance the functional capacity (such as improving self-efficacy beliefs) of the person or improve performance (by modifying features of the social and physical environment) in normal day-to-day activities and thereby reduce the need for professional support and assistance⁹. Support and assistance includes physical help, encouragement or supervision. Support and assistance excludes performing duties for others, e.g., domestic duties or as a personal attendant. It is not possible to provide an exhaustive list of normal day-to-day activities, "However, in general, day-to-day activities are things people do on a regular or daily basis, and examples include shopping, reading and writing, having a conversation or using the telephone, watching television, getting washed and dressed, preparing and eating food, carrying out household tasks, walking and travelling by various forms of transport, and taking part in social activities."¹⁰
- it is delivered by government funded personal care staff (i.e., home care workers, home health aides etc)
- it is a time limited intervention (e.g., six weeks)
- it is a goal orientated intervention
- there is active ongoing assessment
- it is delivered in the home setting or in the local community

Table two**Excluded studies**

Baker 2001 ¹²	Description of the development of a restorative care programme
Bonner 1972 ¹³	Description of a comprehensive restorative care programme provided to community dwelling individuals.
Crawford 2012 ¹⁴	Paper describes development of a Program Development.
CSIPa 2007 ¹⁸	Qualitative summary of data relating to reablement services in England.
CSIPb 2007 ¹⁸	Case studies.
CSIPc 2007 ¹⁸	Responses to survey.
Ghatorae 2013 ¹⁹	Case studies.
Gitlin 2006 ³¹	Multicomponent intervention involving physiotherapy and occupational therapy but no home care service intervention.
Glendinning 2008 ³⁵	Non systematic review of the literature.
Glendinning 2010 ²⁰⁻²⁴	Comparative before and after study.
Kent 2000 ²⁸	This study compares a group of service users receiving the reablement intervention with a group from the past who did not.
King 2012 ³⁹	This is not a time limited service prior to the delivery of home based care and support services. The duration of the intervention was over one year with trial associated assessments at four and seven months. The key difference is that this intervention allows for changes over time to be dealt with, whereas time-limited reablement interventions only deal

	with 'needs' during the short reablement period.
Lewin 2010 ³³	The Home Improvement Program (HIP) comprises a registered nurse, physiotherapist and occupational therapist.
Lewin 2013 ⁵²	The Home Improvement Program (HIP) team comprises of an occupational therapist, physiotherapist and registered nurse. Personal care staff are trained in independence strategies
McLeod 2009 ²⁵	Observational study
Nadash 2003 ³⁸	Research brief
Newbronner 2007 ³⁷	Analysis of routinely collected data.
Parsons 2012 ¹⁵	The study aims to assess the impact of a designated goal facilitation tool on health-related quality of life (HRQoL), social support and physical function among community-dwelling older people referred for home care.
Parsons 2013 ¹⁶	This study compares the use of 'TARGET' as a strategy to identify the goals of an older person and the subsequent use of these goals to structure the services delivered to support the older person compared to usual care processes.
Rabiee 2011 ²⁹	Study using qualitative methods
Ryburn 2009 ³⁶	Review of the literature
Senior 2014 ³⁴	Intervention delivered in short-stay residential care facilities and at participants' residences. Intervention included a comprehensive geriatric assessment and care plan developed and delivered, first of all by a multi-disciplinary team and subsequently by home care assistants.
Tinetti 2002 ²⁷	Prospective cohort study using individual matching. Unexposed 'usual home care' participants were matched with exposed 'reablement' participants.

Tinetti 2012²⁶

Prospective cohort study using individual matching.
Unexposed 'usual home care' participants were matched with
exposed 'reablement' participants.

Walker 2013¹⁷

The intervention is a training programme including restorative
care knowledge, attitudes, and practices of assisted living
targeted towards residential/nursing home administrators and
staff.

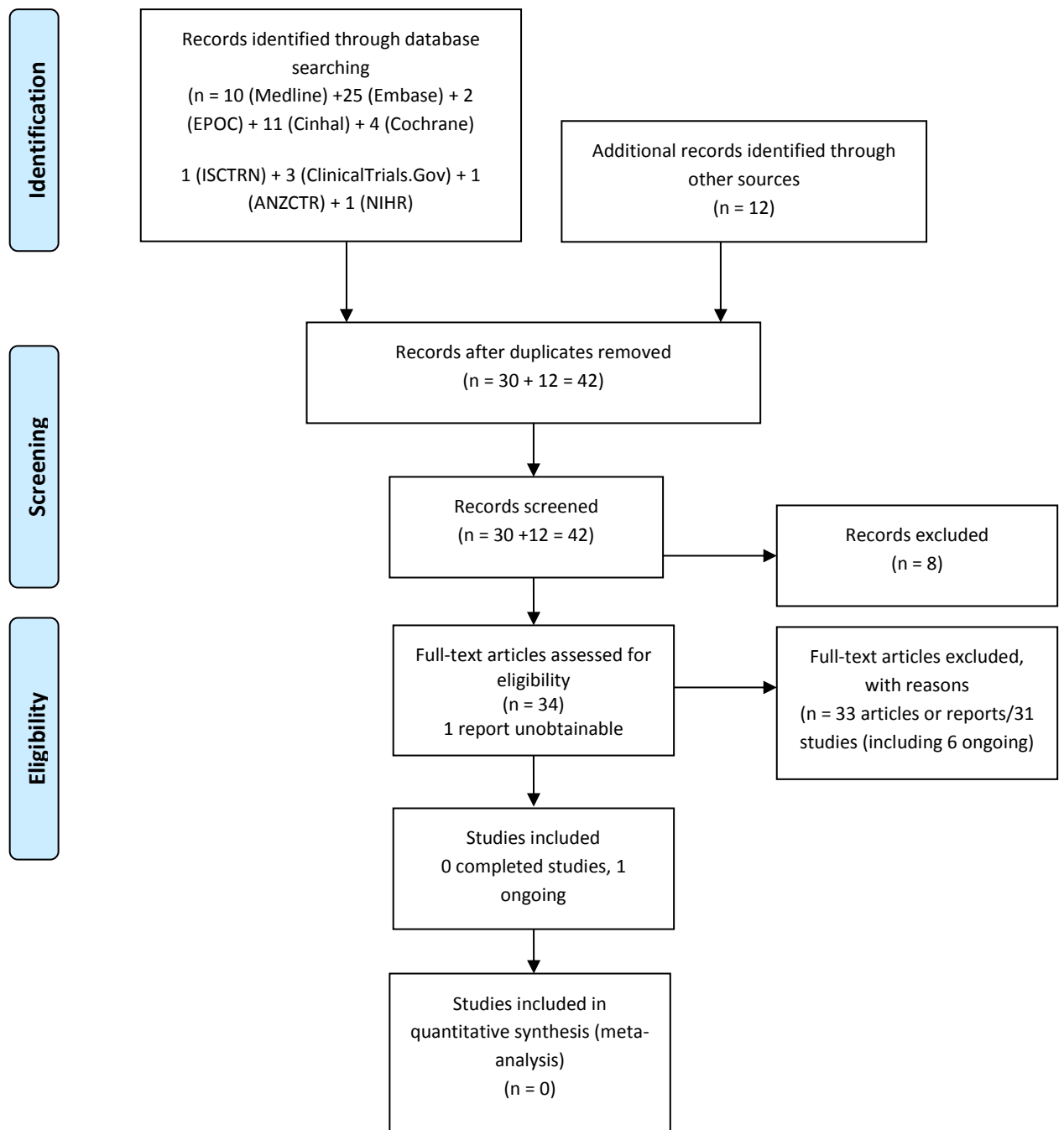


Diagram 1 PRISMA flowchart

Appendix 1

1. exp Home Care Services/ or exp Home Health Aides/ or exp Homemaker Services/
2. (restorat\$ or restorative care or restorative care model or re-ablement or Enhanced Activation Program or re-able\$ or reable\$ or home independence program\$).mp.
3. 1 and 2
4. (randomized controlled trial or controlled clinical trial).pt. or randomized.ab. or placebo.ab. or clinical trials as topic.sh. or randomly.ab. or trial.ti.
5. exp animals/ not humans.sh.
6. "commenton".cm. or systematic review.ti. or literature review.ti. or editorial.pt. or letter.pt. or meta-analysis.pt. or news.pt. or review.pt.
7. 4 not (or/5-6)
8. intervention?.ti. or (intervention? adj6 (reabl? or restor? or community or DESIGN\$ or hospital? or impact? or improv\$ or individuali?e? or individuali?ing or personali?e? or personali?ing or provider? or social? or home? or tailor\$ or target\$ or usual care)).ab.
9. (pre-post or "pre test\$" or pretest\$ or posttest\$ or "post test\$" or (pre adj5 post)).ti,ab.
10. (pre-workshop or post-workshop or (before adj3 workshop) or (after adj3 workshop)).ti,ab.
11. trial.ti. or ((study adj3 aim?) or "our study").ab.
12. (before adj10 (after or during)).ti,ab.
13. ("quasi-experiment\$" or quasiexperiment\$ or "quasi random\$" or quasirandom\$ or "quasi control\$" or quasicontrol\$ or ((quasi\$ or experimental) adj3 (method\$ or study or trial or design\$))).ti,ab,hw.
14. ("time series" adj2 interrupt\$).ti,ab,hw.
15. (time points adj3 (over or multiple or three or four or five or six or seven or eight or nine or ten or eleven or twelve or month\$ or hour? or day? or "more than")).ab.

16. pilot.ti.
17. Pilot projects/
18. (clinical trial or multicenter study).pt.
19. (multicentre or multicenter or multi-centre or multi-center).ti.
20. random\$.ti,ab. or controlled.ti.
21. (control adj3 (area or cohort? or compar? or condition or design or group? or intervention? or participant? or study)).ab. not (controlled clinical trial or randomized controlled trial).pt.
22. "commenton".cm. or systematic review.ti. or literature review.ti. or editorial.pt. or letter.pt. or meta-analysis.pt. or news.pt. or review.pt.
23. exp animals/ not humans.sh.
24. *experimental design/ or *pilot study/ or quasi experimental study/
25. ("quasi-experiment\$" or quasiexperiment\$ or "quasi random\$" or quasirandom\$ or "quasi control\$" or quasicontrol\$ or ((quasi\$ or experimental) adj3 (method\$ or study or trial or design\$))).ti,ab.
26. ("time series" adj2 interrupt\$).ti,ab.
27. (animal/ or animal.hw.) not ((animal/ or animal?.kw,hw. and (human/ or human?.hw,kw.))
28. (book or letter).pt.
29. (or/8-12,15-16,19-21,24-26) not (or/27-28)
30. (or/8-21) not (or/22-23)
31. 3 and 30 [RCT results]
32. 3 and 7 [EPOC results]