

Cover sheet

Title

Personal assistance for children and adolescents (0-18) with physical impairments

Reviewers

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Dates

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Contribution of reviewers

EMW wrote the background and methods with PM and JD. JD developed the search strategy with EMW and PM.

Internal sources of support

None

External sources of support

Unit for Disabilities Issues, The National Board of Health and Welfare (Socialstyrelsen), SWEDEN
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What's new

Dates

Date review re-formatted: //

Date new studies sought but none found: //

Date new studies found but not yet included/excluded: //

Date new studies found and included/excluded: //

Date reviewers' conclusions section amended: //

Date comment/criticism added: //

Date response to comment/criticisms added: //

Text of review

Synopsis

Abstract

Background

Objectives

Search strategy

Selection criteria

Data collection & analysis

Main results

Reviewers' conclusions

Background

Definition of impairments

The International Classification of Impairments, Activities, and Participation (ICIDH-2) refers to *impairment* as loss or abnormalities at the level of body, body part or organ. People may have difficulty performing particular *activities* as a result of impairments, and a person's *participation* in education, social life, work, and other areas may be limited as a result of interactions among impairments, activities, and environment ([WHO 2003](#)). Though the ICIDH-2 refers to adults, except with reference to studies using specific definitions of other terms, this review follows the classification in ICIDH-2, which does not include the terms *disability* or *handicap*.

This review will include children and adolescents with physical impairments. Intellectual impairments and physical impairments affect activities and participation differently; interventions would aim to achieve different outcomes. Young people with intellectual impairments or both physical impairments and intellectual impairments will be considered in other reviews, as will adults and the elderly.

Prevalence of impairments

Around the world, about six hundred million people have impairments ([UN 1990](#)), most of whom live in the developing world. Previous reviews have identified inconsistencies in the measurement of impairments and activity limitations ([UN 1990](#)). In 2003, the European Year of People with Disabilities, a survey found that 16% of Europeans between 16 and 64 have a long-standing health problem or impairment and 5% of Europeans have a 'very severe' long-standing health problem or impairment ([Dupré 2003](#)), but variability in responses across nations suggested that people in different countries interpreted and responded to a standardised questionnaire differently ([Dupré 2003](#)).

Cross-national estimates of impairments and activity limitations in childhood and adolescence are even more variable than national estimates, but it is clear that most impairments are acquired with age and that most are acquired after birth. For example, 82% of Europeans with impairments or long standing health problems acquired them after birth ([Dupré 2003](#)).

A recent American survey (N=13,792) found that 7.3% of people under 18 years old have impairments that restrict their participation in age-appropriate activities ([Newacheck 2004](#)) and about 3.2% of American children attend special schools or classes ([Wenger 1995](#)). Impairments are more prevalent in boys than in girls ([Newacheck 2004](#)) and more prevalent in low-income families than in high-income families ([Newacheck 2004](#), [Un 1990](#)).

Consequences

Proponents of the *social model of disability* regard activity restrictions as caused by societal and structural barriers and stress the need for their removal ([Abberley 1987](#), [Oliver 1990](#)). In addition to structural and environmental changes (e.g. making buildings accessible), the social model emphasises changes in public attitudes towards impairments to encourage increased participation and improved self-esteem.

Participation in age-appropriate activities may be limited for children and adolescents with physical impairments when physical, social and attitudinal environments restrict their involvement ([Hammal 2004](#), [Mihaylov 2004](#)). Impairments may affect the quality of life, health, development, and family

functioning of children and adolescents ([Lavigne 1993](#), [Neely-Barnes 2004](#), [Pit-Ten Cate 2002](#), [Varni 2005](#)). Limited participation in activities may have negative impacts on the mental and physical functioning of children and adolescents and may lead to emotional and behavioural problems.

Total healthcare costs for children and adolescents with impairments may be four times greater than for those without impairments ([Newacheck 2004](#)). However, children and adolescents with impairments require varying degrees of support. For example, 'those in the upper decile of the expenditure distribution accounted for 65% of all charges'. Costs born by families of children and adolescents with the most severe impairments are similarly high; out-of-pocket healthcare expenses (i.e. those not reimbursed by insurance or a health service) for the top 10% of the distribution account for 85% of all out of pocket expenses ([Newacheck 2004](#)).

All children and adolescents require some level of care. However, children and adolescents with extensive impairments may require many hours of assistance every day in addition to the normal assistance required by their peers. Consequently, family members (notably mothers) may withdraw from work and social life. Caring for a child with severe physical impairments can put great financial and emotional stress on parents and families ([Neely-Barnes 2004](#), [Witt 2001](#)).

Interventions

Increased participation may have positive effects on the social functioning, development, mental and physical health of children and adolescents.

There are many ways to increase participation by children and adolescents with physical impairments. For example, building regulations and school schedules may be designed such that some children and adolescents with impairments can engage in age-appropriate activities with their peers. Clinicians and policymakers can work together to influence policy, discourse, and planning and to apply the social model in support of children and their families ([Colver 2005](#)). However, such broad interventions may not be sufficient to meet all needs. People with severe impairments require interventions tailored to their unique impairments, lifestyles, living arrangements, etc. Assistive devices, physical therapy, education, and human support help young people control their lives appropriately and engage in normal activities.

Personal assistance

Purpose

Personal assistance is support given to children and adolescents with impairments living in normal housing (family homes, school accommodation, etc.) to enable them to participate in mainstream activities in various settings. Personal assistance is directed by users and their representatives and is designed to promote independence and to reduce strain on families. Assistants might help with bathing, dressing, moving around during the day, shopping, etc. Personal assistance is provided by non-professionals; it may aim to improve mental and physical health, but it differs from services by professional healthcare providers (e.g., nurses), with whom users have very different relationships.

Funding and control

Personal assistance may be purchased by governments, insurance providers, or individuals. It may be provided directly or indirectly through payments or vouchers.

Personal assistance differs from voluntary or charitable services, over which users do not have the same control.

Amount and duration

Receipt of personal assistance is dependent on the amount of help required by an individual. For example, personal assistance in Nordic countries is generally provided to people requiring at least 20 hours of help per week, though most users are severely impaired and both require and receive substantially more assistance. Personal assistance is designed for people whose participation in many normal activities would be impossible without help.

While user needs should be assessed periodically, personal assistance is designed for people with permanent impairments. For example, the needs of a teenager with a recently acquired impairment might be different from the needs of a teenager who was impaired from birth and the needs of both might change; personal assistance would be designed to meet their unique needs and would develop with them. In this way, it differs from rehabilitative services and from services provided for fixed periods of time.

Provision

Some form of personal assistance is now available (often by statutory right) in all Nordic countries, most Western European countries, Canada, and the United States. Services in different countries for different users are called by different names, which often relate to legislative categories rather than types of interventions.

Eligibility varies around the world. For example, countries that see services for adults as a 'right' may not be able or willing to provide comprehensive services for children and the elderly, or services for people of different ages may be provided through different mechanisms.

Rules about who may be a personal assistant also vary. For example, some countries allow users to employ family members (e.g., parents) while others do not.

Differences in eligibility affect the number and types of people who receive support and these differences affect the amount and types of support individuals and their families receive. That is, the relative number of people receiving personal assistance and their characteristics vary across countries, insurance schemes, etc.

Ideally, personal assistants should be chosen, trained and managed by users or their representatives. However, the organisation of services and the degree of user control varies around the world and may be affected by the administration of payments, employment laws, etc.

Evidence for the effectiveness of personal assistance

Compared to other interventions, personal assistance may have unique benefits and potential drawbacks. Assistants may help children achieve more academically, but having a personal assistant at school could be stigmatising. Parents of children with impairments might be relieved to have assistants help care for their children, but assistants might interfere with family life and with users' need for privacy, or with parents' own needs to see themselves as adequate carers for their children. Compared to other ways of compensating for particular activity limitations, personal assistance may create unnecessary dependencies for some people ([Agree 2003](#)).

Even if personal assistance is clearly preferred over other services by working adults with physical impairments, groups that are underrepresented in the public discourse about the rights of people with impairments (e.g., children, the elderly, people with intellectual impairments, and people in

rural areas) may prefer other services, particularly since these groups may be more susceptible to abuse and less able to manage employees. For those who require lower levels of assistance or who live in areas that do not have active and large user groups, identifying, hiring, training, managing and paying an assistant could be unattractive or impracticable.

As the personal assistance movement gained strength, Ratzka noted that 'there has been surprisingly little in the way of policy evaluation. The work that has been done in this area is restricted to gathering descriptive statistics on number of hours provided by one type of service, number of consumers, staff, and expenditures' (Ratzka 1986). Some research now suggests that personal assistance may meet otherwise unmet needs of people with impairments. Shortly after its introduction, a survey of direct payment recipients in the UK found that 40% had a need for additional hours of personal service while 80% of people receiving other services had a similar need (Zarb 1994). However, traditional reviews have failed to locate many evaluation studies and have not offered a definitive account of international research on personal assistance. A recent report by the Swedish National Board of Health and Welfare (Socialstyrelsen) highlighted the need for a sensitive and exhaustive search for trials and a systematic synthesis of existing studies (Socialstyrelsen 2005).

Objectives

To assess the effectiveness of personal assistance for children and adolescents (0-18) with physical impairments, and the impacts of personal assistance on families and carers, compared to other interventions.

Criteria for considering studies for this review

Types of studies

Randomised controlled trials, quasi-randomised controlled trials and nonrandomised controlled studies of personal assistance compared to other forms of support or to 'no-intervention' (which may include unpaid family care) in which participants were prospectively assigned to study groups and in which control group outcomes were measured concurrently with intervention group outcomes.

Types of participants

Children and adolescents (0-18) living in the community who, due to permanent extensive physical impairments, require assistance to perform tasks of daily living (bathing, eating, getting around, etc.) and participate in normal activities.

With the exception of young people living in student accommodation, young people living outside their own homes (e.g., in private or public institutions for people with impairments) will be excluded.

Children and adolescents with intellectual impairments will be excluded because these impairments affect activities and participation differently.

Types of interventions

Personal assistance is paid individualised human support of at least 20 hours per week that is designed to promote participation of people with permanent impairments.

Comparisons might include, either singly or in combination, family care, institutionalisation, service housing (cluster housing), on-demand services, night patrols, escort services and other alternatives to personal assistance. These will be treated as separate comparisons.

Studies examining different forms of personal assistance (e.g., assistance organised by users compared to assistance organised by others) will be included in the review, though these comparisons will be discussed separately as the outcomes from such studies would not indicate the effectiveness of personal assistance relative to other interventions.

Types of outcome measures

Primary outcomes will include:

- 1) Global quality of life, both (a) generic measures and (b) specific measures designed for people with particular impairments. For example, measures might include the Child Health Questionnaire (CHQ-87; [Landgraf 1997](#)) or the Pediatric Quality of Life Inventory ([Varni 2005](#)).
- 2) User satisfaction. For example, measures might include the Client Satisfaction Inventory ([McMurtry 2000](#)).
- 3) Participation, including sense of control, school attendance, social life, ability to participate in spontaneous activities, time outside the home, and mobility. For example, measures might include the Lifestyle Assessment Questionnaire ([Mackie 1998](#)).

Secondary outcomes will include:

- 1) Health outcomes, including direct measures of muscle strength, disease, injuries, abuse or pain and indirect measures such as hospitalisation, emergency room visits or need for institutionalisation.
- 2) Developmental outcomes, including educational achievement and attainment, university attendance, and cognitive milestones.
- 3) Psychiatric outcomes, including psychological disorders (e.g., anxiety and depression), self-harm, suicide and substance abuse. For example, measures might include the Strengths and Difficulties Questionnaire (SDQ; [Goodman 1999](#), [Goodman 1998](#)).
- 4) Impact on others, including parental (maternal) employment, satisfaction, and quality of family life. For example, measures might include the Short-Form Health Survey (SF-36; [Ware 1992](#)) or the Euroqol ([EuroQol-Group 1990](#)).
- 5) Direct and indirect costs, both immediate and long-term.

Outcome intervals

To account for normal development and the changing impacts of impairments, outcomes will be grouped by length of follow-up (e.g., 1-3 years, 4-6 years, etc.).

The organisation of services is often a complicated task and new users or their representatives must train personal assistants. Outcomes measured during the first year of receiving personal assistance will be considered apart from outcomes measured after one or more years to account for this adjustment period, which may not be representative of personal assistance as a whole.

Search strategy for identification of studies

As we anticipate many relevant documents will be unpublished, a three-part search strategy will be undertaken in order to maximise chances of capturing all relevant literature.

I. Electronic search

Databases will be searched for published and unpublished studies. All electronic searches will be limited to research reported since 1980 because scoping for this project, including a review of relevant laws and policy documents and contacts with international experts, found that widespread personal assistance programmes began in the mid 1990s. Experts have noted that personal assistance was available in some form before the introduction of programmes in the 1990s, but they and the reviewers believe it is extremely unlikely that any relevant trials were conducted before 1980.

No language restrictions will be imposed on any results from any search attempts, although most databases will be searched in English. Latin American and Caribbean Health Sciences Literature (LILACs) will be searched using Spanish and Portuguese terms and Scandinavian databases will be searched in appropriate languages.

No filters based on methodology will be applied because test searches indicated that such filters might eliminate relevant studies.

The authors worked with a reference group of users, clinicians, policymakers, and analysts ([Jackson 2005](#)) to develop this protocol and search strategy. The group recommended a highly *sensitive* search (one that will likely to capture all relevant reports) rather than a more *specific* one (a search that would identify fewer irrelevant papers).

The following databases will be searched electronically:

Biomedical databases

Cochrane Central Register of Controlled Trials (CENTRAL)

MEDLINE

CINAHL (Cumulative Index to Nursing and Allied Health Literature)

EMBASE

LILACs (Latin American and Caribbean Health Sciences Literature)

Social sciences databases

ASSIA (Applied Social Science Index & Abstracts)

BIDS (International Bibliography of the Social Sciences [IBSS] on Bath Information and Data Services [BIDS])

C2-SPECTR (The Campbell Collaboration's Social, Psychological, Educational and Criminological Trials Register)

Dissertations Abstracts A (Dissertation Abstracts International A: The Humanities and Social Sciences)

EconLit

ERIC (Educational Resources Information Center)

PsycINFO

Sociological Abstracts

SIGLE search (System for Information on Grey Literature in Europe)

Scandinavian databases

Artikelsök

DIVA

Handicat

Hicat

LIBRIS

LIBRIS Uppsök

SveMed+

Danbib

Medline will be searched using the following terms:

1 Home Care Services/

2 Activities of Daily Living/

3 Personal Health Services/

4 (personal adj2 assist\$).mp. [mp=title, original title, abstract, name of substance word, subject heading word]

5 (personal adj2 care\$).mp. [mp=title, original title, abstract, name of substance word, subject heading word]

6 exp Homemaker Services/

7 independent living.mp.

8 direct assistance.mp.

9 direct payment.mp.

10 Caregivers/

11 (allowanc\$ or fee or fees or financ\$ or fund\$ or money\$ or monies\$ pay\$ or paid or remunerat\$ salar\$ or wage\$).mp. [mp=title, original title, abstract, name of substance word, subject heading word]

12 state-support\$.mp. [mp=title, original title, abstract, name of substance word, subject heading word]

13 state support\$.mp. [mp=title, original title, abstract, name of substance word, subject heading word]

14 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9

15 10 and (11 or 12 or 13 or 14)

16 14 or 15 (25461)

17 limit 16 to yr=1980-2005

Similar terms will be used to search other databases.

Scandinavian databases will be searched using index terms or free text terms, depending on the database's functionality, including:

ADL (Svenska MeSH)

Assistansreformen

Assistenter: handikappade

Dagliga livets aktiviteter

Funktionshindrade (Svenska MeSH)

Handikapplagstiftning

Handikappolitik

Handikappreformen

Lagen om assistansersättning

Lagen om stöd och service till vissa funktionshindrade
Lagstiftning Handikappade
LASS LSS LSS-insatser
Personer med funktionshinder - hem och bostäder (Svenska ämnesord)
Personer med funktionshinder - vård och omsorg (Svenska ämnesord)
Personlig assistant
Personlig assistans (Svenska ämnesord)
Personliga assistenter: handikappade
Psykiskt funktionshindrade (Svenska MeSH)
Psykiskt utvecklingsstörda (Svenska MeSH)
Psykiatrireformen
Rörelsehindrade (Svenska MeSH)

II. Personal communications

Appropriate government departments, non-governmental organisations, non-profit groups, advocacy groups, user groups, and experts in the field will be contacted and listed in an appendix to the review. These approaches and any replies will be documented by the authors. Additionally, impairment-oriented email lists (list-servs) will be sent a letter requesting assistance in locating studies.

The reviewers will contact authors of all included and excluded studies to request details of ongoing and unpublished studies.

III. Hand searching

Reference lists from previous reviews and from all included and excluded studies will be searched.

Relevant websites, including those maintained by users, governments, other agencies, and academics will be searched.

Methods of the review

Trial selection strategy

From the resultant list of articles, outcome evaluations about people with impairments will be identified through electronic and hand searches. Two authors (EMW and PM) will check titles for relevance. When a title appears potentially relevant, both authors will examine the abstract. If one author feels an abstract might be relevant, the full article will be obtained. Two authors will examine the remaining papers to determine eligibility. Study authors will be contacted if further information could resolve initial disagreements about inclusion. Remaining disagreements will be discussed with the third reviewer (JD). If a consensus cannot be reached, the Coordinating Editor of the CDPLPG will be consulted. A flowchart of the process of trial selection will be made in accordance with the QUORUM statement ([Moher 1999](#)).

Data management

Data extraction

Data extraction will be conducted independently by two authors (EMW and PM) using a specially developed data extraction form.

Data collection

When more than two treatment arms are included in the same trial, all arms will be described.

The following data will be collected for all trial arms:

- 1) Descriptive data, including participant demographics (age, gender, type and extent of impairments, baseline measures of school achievement, social and economic status);
- 2) Intervention characteristics (including delivery, duration, and within-intervention variability);
- 3) Other interventions received;
- 4) Outcome measures listed above.

The following data will be collected for all studies:

- 1) *Programme differentiation* ([Dane 1998](#), [MRC 2000](#)), including crossover between groups and the differences between the interventions received; and
- 2) Context.

Methodological quality

Two reviewers (EMW and PM) will independently assign each included study to a quality category described in the Cochrane Handbook ([Higgins 2005](#)) where:

- (A) indicates adequate concealment of the allocation (for example, by telephone randomisation, or use of consecutively numbered, sealed, opaque envelopes);
- (B) indicates uncertainty about whether the allocation was adequately concealed (for example, where the method of concealment is not known);
- (C) indicates that the allocation was definitely not adequately concealed (for example, open random number lists or quasi-randomisation such as alternate days, odd/even date of birth, or hospital number)
- (D) random allocation not used.

Studies in all quality categories will be considered for inclusion in the review and meta-analyses. Though well-designed nonrandomised studies sometimes come to the same conclusions as randomised trials, nonrandomised studies are most likely to arrive at different conclusions about an intervention's effects when groups are different at the outset ([Deeks 2003](#)). In studies classified as 'B' (unclear), 'C' (inadequate), and 'D' (nonrandom) the pre-treatment assessment and the allocation of participants will be described in the *description of studies* to identify differences between intervention and control groups that may have existed at baseline.

Existing scales for measuring the quality of controlled trials have not been properly developed, are not well-validated and are known to give differing (even opposing) ratings of trial quality in systematic reviews ([Moher 1995](#)). At present, evidence indicates that 'scales should generally not be used to identify trials of apparent low quality or high quality in a given systematic review. Rather, the relevant methodological aspects should be identified a priori and assessed individually' ([Juni 2001](#)).

The following components will be considered in the description of studies:

- 1) Allocation bias (Was group assignment determined randomly or might it have been related to outcomes or the interventions received?);
- 2) Performance bias (Could the services provided have been influenced by something other than the interventions being compared?);
- 3) Detection bias (Were outcomes influenced by anything other than the constructs of interest,

including biased assessment or the influence of exposure on detection?);
4) Report bias (Were the outcomes, measures and analyses selected a priori and reported completely? Were participants biased in their recall or response?);
5) Attrition bias (Could deviations from protocol, including missing data and dropout, have influenced the results?) ([Delgado-Rodriguez 04, Juni 2001](#)); and
6) Outcome validity (Were the outcome measures objective, validated for the population, reported directly by the user or obtained through official records, etc.?).

Multiple arms

All eligible outcome measures for all trial arms will be reported in the review.

If two or more eligible intervention groups are compared to an eligible control, thus requiring that the reviewers choose a single intervention group for comparison or inclusion in a meta-analysis, the most intense service or the service that best follows the goals of personal assistance (e.g., services that give users more control) will be included in the meta-analysis.

If a single eligible intervention group is compared to multiple eligible control groups, 'no-treatment' controls will be chosen over other groups for comparison and inclusion in meta-analyses. For studies that do not have no-treatment condition, the most common intervention will be chosen to maximise the external validity of the results.

Multiple measures

When a single study provides multiple measures of the same outcome, separate analyses will be performed.

Missing data

When necessary, the corresponding author will be contacted to supply any unreported data (e.g., group means and standard deviations (SDs), details of dropouts, and details of interventions received by the control group). Other authors will be contacted if necessary. If a study reports outcomes only for participants completing the trial or only for participants who followed the protocol, authors will be contacted and asked to provide additional information to permit an intention-to-treat analyses.

Data synthesis

Outcome data

RevMan 4.2 will be used to perform the following calculations.

Within studies, relative risks (RRs) and 95% confidence intervals (CIs) will be calculated for comparisons of dichotomous outcome measures. Mean differences, standardised mean differences (SMDs) and 95% CIs will be calculated for comparisons of continuous outcome measures.

Meta-analyses may be conducted to combine comparable outcome measures across studies. All overall effects will be calculated using inverse variance methods. Random-effects models will be used because studies may include somewhat different treatments or populations. Outcome measures will be grouped by length of follow-up.

Dichotomous outcome measures may be combined by calculating an overall RR and 95% CI.

Continuous outcome measures (including scale data) may be combined when means and standard deviations or complete significance testing statistics are available, unless statistical tests assuming normality would be inappropriate. For example, for scales beginning with a finite number (such as 0), effect estimates will not be combined unless a mean is greater than its standard deviation (otherwise the mean would be very unlikely to be an appropriate measure of the centre of the distribution).

If continuous outcomes are measured identically across studies, an overall weighted mean difference (WMD) and 95% CI may be calculated. If the same continuous outcome is measured differently across studies, an overall standardised mean difference (SMD) and 95% CI may be calculated ([Higgins 2005](#)). SMDs will be calculated using Hedges g .

Types of analyses

Studies in which participants are analysed as members of the groups to which they were originally assigned (*intention-to-treat* analysis), studies that include only those participants who were willing or able to provide data (*available-case* analysis), and studies that analyse participants who adhered to the study's design (*per-protocol* analysis; [Higgins 2005](#)) will be analysed separately. Studies in which the reasons for excluding participants from analyses can not be determined from relevant reports or through contact with the authors will be considered with per-protocol analyses.

Homogeneity

The consistency of results will be assessed using the I^2 statistic ([Higgins 2002](#), [Higgins 2003](#)). If there is evidence of heterogeneity (Q -statistic ≥ 0.1 coupled with an I^2 value of 25% or greater), the authors will consider sources according to pre-specified subgroup analyses and sensitivity analyses (below) but will not calculate an overall estimate of effect size. If the primary studies are judged to be substantially heterogeneous even within these subgroupings, only a descriptive analysis will be conducted.

Subgroup analyses

Large numbers of subgroups may lead to misleading conclusions and are best kept to a minimum ([Counsell 1994](#), [Oxman 1992](#), [Yusuf 1991](#)). If possible, this review will include separate effect estimates for the following subgroups:

1) Organisation of services

Personal assistance organised by users or their representatives (e.g., through *direct payment* schemes) will be considered apart from personal assistance organised and managed by others (e.g., social workers or government agencies).

2) Place of residence

The review will report separate effects for young people living with their parents and young people living on their own.

3) Acquisition of impairment

Separate effects will be reported for children and adolescents who had an impairment from birth, who had a long-standing impairment, and who recently acquired an impairment.

4) Amount of assistance

The number of hours of assistance received per week is related to user needs, which are determined

by social context, the availability of other services, severity of impairments, etc. Separate effect estimates will be reported for users receiving different levels of assistance (e.g., 20-50 hours, 51-80 hours, more than 80 hours).

Assessment of bias

Sensitivity analyses will investigate the influence of lower quality studies (i.e., those rated C and D on allocation concealment) on the results of the review.

To investigate the possibility of bias, including publication bias, funnel plots will be drawn ([Deeks 2005](#), [Egger 1997](#), [Sterne 2001](#)). In the event of asymmetry, the reviewers will seek input from methodologists, including the Cochrane and Campbell Collaboration Methods Groups, on appropriate analyses.

Graphs

When meta-analyses are performed, data will be entered into RevMan in such a way that the area to the left of the 'line of no effect' indicates a favourable outcome for personal assistance.

Qualitative data

Qualitative data from included studies may be included to better understand the delivery of interventions, uptake by participants, and context.

Description of studies

Methodological quality of included studies

Results

Discussion

Reviewers' conclusions

Implications for practice

Implications for research

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