NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

NICE Guideline NG74

Intermediate care including reablement

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Contents

Introduction

The Department of Health asked NICE to produce this guideline on intermediate care (including reablement) (see the scope).

Admission to hospital and delays in hospital discharge can create significant anxiety, physical and psychological deterioration and increased dependence. Therefore, multidisciplinary services, which help people recover, regain independence and return home, are vital. In facilitating timely transfer of care from hospital, intermediate care and reablement services aim to maximise people's independence and reduce unnecessary hospital admissions. They also support people who are having increasing difficulty with daily life, and where specific support and rehabilitation is likely to improve their ability to live independently. This is distinguished from the provision of ongoing care and support, which provides assistance with daily tasks to reduce risks and sustain health and wellbeing.

Intermediate care is defined in the National Audit of Intermediate Care in 4 categories: crisis response, home-based intermediate care, bed-based intermediate care and reablement and they respond to a range of health and social care needs.

Figures released in February 2015 show that on 1 day in January 2015, 5246 patients were delayed in hospital, 3597 of which were acute patients (Delayed transfers of care: monthly situation reports, NHS England). The proportion of delays occurring in an acute care setting had increased from 63.8% in January 2014 to 68.7% in January 2015. Emergency admissions to hospital are also increasing. There were 5.4 million emergency admissions in 2013/14 compared with 5.3 million in 2012/13, an increase of 1.5%. Hospital admissions statistics showed a greater increase of people in age groups 60–74 and 75+ in hospital admissions as a whole (57.2% growth in 10 years for the 75+ age group compared with 37.9% for all 'finished consultant episodes'). (Hospital Episode Statistics, admitted patient Care, England 2013-14 Health and Social Care Information Centre).

The Department of Health asked NICE to produce this guideline on intermediate care, including reablement (see the scope). The guideline was developed by a Guideline Committee following a detailed review of the evidence on intermediate care, including reablement. For information on how NICE guidelines are developed, see 'Developing NICE guidelines: the manual' (2014).

This guideline covers all adults (aged 18 and older) using intermediate care, including reablement services in inpatient hospital, community or care home settings.

This guideline considers how person-centred care and support should be planned and delivered during the 4 phases of intermediate care and reablement.

The guideline is for health and social care providers and practitioners delivering intermediate care and reablement, and for people who use the intermediate care and reablement services and their family carers.

This guideline has been developed in the context of a complex and rapidly evolving landscape of guidance and legislation, most notably the Care Act 2014. The Care Act and other legislation describe what organisations must do. This guideline focuses on 'what works', how to fulfil those duties, and how to deliver care and support.

The Care Quality Commission (CQC) use NICE guidelines as evidence to inform the inspection process and NICE quality standards to inform ratings of good and outstanding.

NICE guidance closely related to this guideline:

- Home care – delivering personal care and practical support to older people living in their own homes: NICE guideline NG21.
- Older people with social care needs and multiple long-term conditions: NICE guideline NG22.
- Transition between inpatient hospital settings and community or care home settings for adults with social care needs: NICE guideline NG27.
- Older people – independence and mental wellbeing: NICE guideline NG32.
- Transition between inpatient mental health settings and community and care home settings: NICE guideline NG53.
- Acute medical emergencies in adults and young people in over 16s: service delivery and organisation: NICE guideline in development.
- Service user and carer experience NICE guideline: publication expected January 2018.

We used the methods and processes in Developing NICE guidelines: the manual (2014).

1 Recommendations

People have the right to be involved in discussions and make informed decisions about their care, as described in your care.

Making decisions using NICE guidelines explains how we use words to show the strength (or certainty) of our recommendations, and has information about professional guidelines, standards and laws (including on consent), and safeguarding.

The term 'intermediate care' in this guideline refers to all 4 service models of intermediate care described in terms used in this guideline.

1.1 Core principles of intermediate care, including reablement

1.1.1 Ensure that intermediate care practitioners:

- develop goals in a collaborative way that optimises independence and wellbeing
- adopt a person-centred approach, taking into account cultural differences and preferences.

1.1.2 At all stages of assessment and delivery, ensure good communication between intermediate care practitioners and:

- other agencies
- people using the service and their families and carers.

1.1.3 Intermediate care practitioners should:

- work in partnership with the person to find out what they want to achieve and understand what motivates them
- focus on the person's own strengths and help them realise their potential to regain independence
- build the person’s knowledge, skills, resilience and confidence
- learn to observe and guide and not automatically intervene, even when the person is struggling to perform an activity, such as dressing themselves or preparing a snack
- support positive risk taking.

1.1.4 Ensure that the person using intermediate care and their family and carers know who to speak to if they have any questions or concerns about the service, and how to contact them.

1.1.5 Offer the person the information they need to make decisions about their care and support, and to get the most out of the intermediate care service. Offer this information in a range of accessible formats, for example:

- verbally
- in written format (in plain English)
- in other accessible formats, such as braille or Easy Read
- translated into other languages
- provided by a trained, qualified interpreter.

1.2 Supporting infrastructure

1.2.1 Consider making home-based intermediate care, reablement, bed-based intermediate care and crisis response all available locally. Deliver these services in an integrated way so that people can move easily between them, depending on their changing support needs.

1.2.2 Ensure that intermediate care is provided in an integrated way by working towards the following:

- a single point of access for those referring to the service
- a management structure across all services that includes a single accountable person, such as a team leader
- a single assessment process
- a shared understanding of what intermediate care aims to do
- an agreed approach to outcome measurement for reporting and benchmarking.

1.2.3 Contract and monitor intermediate care in a way that allows services to be flexible and person centred. For recommendations on delivering flexible services, see NICE's guideline on home care.

1.2.4 Ensure that intermediate care teams work proactively with practitioners referring into the service so they understand:

- the service and what it involves

- how it differs from other services
- the ethos of intermediate care, specifically that it aims to support people to build independence and improve their quality of life
- that intermediate care is free for the period of delivery.

1.2.5 Ensure that mechanisms are in place to promote good communication within intermediate care teams. These might include:

- regular team meetings to share feedback and review progress
- shared notes
- opportunities for team members to express their views and concerns.

1.2.6 Ensure that the intermediate care team has a clear route of referral to and engagement with commonly used services, for example:

- general practice
- podiatry
- pharmacy
- mental health and dementia services
- specialist and longer-term rehabilitation services
- housing services
- voluntary, community and faith services
- specialist advice, for example around cultural or language issues.

1.2.7 Consider deploying staff flexibly across intermediate care, where possible following the person from hospital to a community bed-based service or directly to their home.

1.2.8 Ensure that the composition of intermediate care teams reflects the different needs and circumstances of people using the service.

1.2.9 Ensure that intermediate care teams include a broad range of disciplines. The core team should include practitioners with skills and competences in the following:

- delivering intermediate care packages
- nursing
- social work
- therapies, for example occupational therapy, physiotherapy and speech and language therapy

- comprehensive geriatric assessment.

1.3 Assessment of need for intermediate care

This section relates to the assessment of a person's support needs. It could be undertaken by a range of professionals, for example therapists, nursing staff or social workers, working in various locations. It aims to ensure that the type of intermediate care support is appropriate for the person's needs and circumstances.

1.3.1 Assess people for intermediate care if it is likely that specific support and rehabilitation would improve their ability to live independently and they:

- are at risk of hospital admission or have been in hospital and need help to regain independence **or**
- are living at home and having increasing difficulty with daily life through illness or disability.

1.3.2 Do not exclude people from intermediate care based on whether they have a particular condition, such as dementia, or live in particular circumstances, such as prison, residential care or temporary accommodation.

1.3.3 During assessment identify the person's abilities, needs and wishes so that they can be referred for the most appropriate support.

1.3.4 Actively involve people using services (and their families and carers, as appropriate) in assessments for intermediate care and in decisions such as the setting in which it is provided.

1.3.5 When assessing people for intermediate care, explain to them (and their families and carers, as appropriate) about advocacy services and how to contact them if they wish.

1.4 Referral into intermediate care

People may be referred into the services described in this section by either health or social care practitioners. The location of intermediate care will vary depending on how different areas configure the service to meet local circumstances and needs. Intermediate care could be commissioned by either health or social care commissioners, or jointly as part of an integrated working approach.

1.4.1 Consider providing intermediate care to people in their own homes wherever practical, making any adjustments, for example equipment or adaptations, needed to enable this to happen.

1.4.2 Offer reablement as a first option to people being considered for home care, if it has been assessed that reablement could improve their independence.

1.4.3 For people already using home care, consider reablement as part of the review or reassessment process. Be aware that this may mean providing reablement alongside home care. Take into account the person's needs and preferences when considering reablement and work closely with the home care provider.

1.4.4 Consider reablement for people living with dementia, to support them to maintain and improve their independence and wellbeing.

1.4.5 Consider bed-based intermediate care for people who are in an acute but stable condition but not fit for safe transfer home. Be aware that if the move to bed-based intermediate care takes longer than 2 days it is likely to be less successful.

1.4.6 Refer people to crisis response if they have experienced an urgent increase in health or social care needs and:

- the cause of the deterioration has been identified
- their support can be safely managed in their own home or care home
- the need for more detailed medical assessments has been addressed.

1.4.7 The crisis response service should raise awareness of its purpose and function among other local services such as housing and the voluntary sector. This means making sure they understand:

- the service and what it involves
- how it differs from other types of intermediate care
- how to refer to the service.

1.5 Entering intermediate care

1.5.1 Discuss with the person the aims and objectives of intermediate care and record these discussions. In particular, explain clearly:

- that intermediate care is designed to support them to live more independently, achieve their own goals and have a better quality of life
- that intermediate care works with existing support networks, including friends, family and carers
- how working closely together and taking an active part in their support can produce the best outcomes.

1.5.2 When a person starts using intermediate care, give their family and carers:

- information about the service's aims, how it works and the support it will and will not provide
- information about resources in the local community that can support them
- opportunities to express their wishes and preferences, alongside those of the person using the service
- opportunities to ask questions about the service and what it involves.

1.5.3 For bed-based intermediate care, start the service within 2 days of receiving an appropriate referral. Be aware that delays in starting intermediate care increase the risk of further deterioration and reduced independence.

Crisis response

1.5.4 Ensure that the crisis response can be started within 2 hours from receipt of a referral when necessary.

1.5.5 As part of the assessment process, ensure that crisis response services identify the person’s ongoing support needs and make arrangements for the person’s ongoing support.

1.5.6 Establish close links between crisis response and diagnostics (for example, GP, X-ray or blood tests) so that people can be diagnosed quickly if needed.

Person-centred planning

1.5.7 When planning the person’s intermediate care:

- assess and promote the person’s ability to self-manage
- tell the person what will be involved
- be aware that the person needs to give consent for their information to be shared

- tell the person that intermediate care is a short-term service and explain what is likely to happen afterwards.

1.5.8 Carry out a risk assessment as part of planning for intermediate care and then regularly afterwards, as well as when something significant changes. This should include:

- assessing the risks associated with the person carrying out particular activities, including taking and looking after their own medicines
- assessing the risks associated with their environment
- balancing the risk of a particular activity with the person's wishes, wellbeing, independence and quality of life.

For recommendations on supporting people in residential care to take and look after their medicines themselves, see NICE's guidelines on managing medicines in care homes and medicines optimisation.

[This recommendation is adapted from NICE's guideline on home care.]

1.5.9 Complete and document a risk plan with the person (and their family and carers, as appropriate) as part of the intermediate care planning process. Ensure that the risk plan includes:

- strategies to manage risk; for example, specialist equipment, use of verbal prompts and use of support from others
- the implications of taking the risk for the person and the member of staff.

[This recommendation is adapted from NICE's guideline on home care.]

Agreeing goals

1.5.10 Discuss and agree intermediate care goals with the person. Make sure these goals:

- are based on specific and measurable outcomes
- take into account the person's health and wellbeing
- reflect what the intermediate care service is designed to achieve
- reflect what the person wants to achieve both during the period in intermediate care, and in the longer term
- take into account how the person is affected by their conditions or experiences
- take into account the best interests and expressed wishes of the person.

1.5.11 Recognise that participation in social and leisure activities are legitimate goals of intermediate care.

1.5.12 Document the intermediate care goals in an accessible format and give a copy to the person, and to their family and carers if the person agrees to this.

1.6 Delivering intermediate care

1.6.1 Take a flexible, outcomes-focused approach to delivering intermediate care that is tailored to the person's social, emotional and cognitive and communication needs and abilities.

1.6.2 Review people's goals with them regularly. Adjust the period of intermediate care depending on the progress people are making towards their goals.

1.6.3 Ensure that staff across organisations work together to coordinate review and reassessment, building on current assessment and information. Develop integrated ways of working, for example, joint meetings and training and multidisciplinary team working.

1.6.4 Ensure that specialist support is available to people who need it (for example, in response to complex health conditions), either by training intermediate care staff or by working with specialist organisations. [This recommendation is adapted from NICE's guideline on home care.]

1.6.5 Ensure that an intermediate care diary (or record) is completed and kept with the person. This should:

- provide a detailed day-to-day log of all the support given, documenting the person's progress towards goals and highlighting their needs, preferences and experiences
- be updated by intermediate care staff at every visit
- be accessible to the person themselves, who should be encouraged to read and contribute to it
- keep the person, (and their family and carers, as appropriate) and other staff fully informed about what has been provided and about any incidents or changes.

1.6.6 Ensure that intermediate care staff avoid missing visits to people's homes. Be aware that missing visits can have serious implications for the person's health or wellbeing,

particularly if they live alone or lack mental capacity. [This recommendation is adapted from NICE's guideline on home care.]

1.6.7 Contact the person (or their family or carer) if intermediate care staff are going to be late or unable to visit. [This recommendation is adapted from NICE's guideline on home care.]

1.7 Transition from intermediate care

1.7.1 Before the person finishes intermediate care, providers of intermediate care should give them information about how they can refer themselves back into the service, should their needs or circumstances change.

1.7.2 Ensure good communication between intermediate care staff and other agencies. There should be a clear plan for when people transfer between services, or when the intermediate care service ends. This should:

- be documented and agreed with the person and their family or carers
- include contact details for the service
- include a contingency plan should anything go wrong.

For recommendations on communication during transition between services, see NICE's guideline on transition between inpatient hospital settings and community or care home settings for adults with social care needs.

1.7.3 Give people information about other sources of support available at the end of intermediate care, including support for carers.

1.8 Training and development

1.8.1 Ensure that all staff delivering intermediate care understand:

- the service and what it involves
- the roles and responsibilities of all team members
- how it differs from other services
- the ethos of intermediate care, specifically that it aims to support people to build independence
- how to work collaboratively with people to agree person-centred goals
- positive risk taking.

1.8.2 Ensure that intermediate care staff are able to recognise and respond to:

- common conditions, such as diabetes; mental health and neurological conditions, including dementia; frailty; stroke; physical and learning disabilities; sensory loss; and multi-morbidity
- common support needs, such as nutrition, hydration, continence, and issues related to overall skin integrity
- common support needs, such as dealing with bereavement and end of life
- deterioration in the person's health or circumstances.

[This recommendation is adapted from NICE's guideline on home care.]

1.8.3 Provide intermediate care staff with opportunities for:

- observing the work of another member of staff
- enhancing their knowledge and skills in relation to delivering intermediate care
- reflecting on their practice together.

Document these development activities and record that people have achieved the required level of competence.

1.8.4 Ensure that intermediate care staff have the skills to support people to:

- optimise recovery
- take control of their lives
- regain as much independence as possible.

Terms used in this guideline

Bed-based intermediate care

Assessment and interventions provided in a bed-based setting, such as an acute hospital, community hospital, residential care home, nursing home, stand-alone intermediate care facility, independent sector facility, local authority facility or other bed-based setting. Bed-based intermediate care aims to prevent unnecessary admissions to acute hospitals and premature admissions to long-term care, and to support timely discharge from hospital. For most people, interventions last up to 6 weeks. Services are usually delivered by a multidisciplinary team but most commonly by healthcare professionals or care staff (in care homes).

Crisis response

Community-based services provided to people in their own home or a care home. These services aim to avoid hospital admissions. Crisis response usually involves an assessment, and may provide short-term interventions (usually up to 48 hours). Crisis response is delivered by a multidisciplinary team but most commonly by healthcare professionals.

Intermediate care

A range of integrated services that: promote faster recovery from illness; prevent unnecessary acute hospital admissions and premature admissions to long-term care; support timely discharge from hospital; and maximise independent living. Intermediate care services are usually delivered for no longer than 6 weeks and often for as little as 1 to 2 weeks. Four service models of intermediate care are available: bed-based intermediate care, crisis response, home-based intermediate care, and reablement.

Person centred

An approach that puts the person at the centre of their support and goal planning. It is based around the person's strengths, needs, preferences and priorities. It involves treating them as an equal partner and considering whether they may benefit from intermediate care regardless of living arrangements, socioeconomic status or health conditions.

Positive risk taking

This involves balancing the positive benefits gained from taking risks against the negative effects of attempting to avoid risk altogether.

Reablement

Assessment and interventions provided to people in their home (or care home) aiming to help them recover skills and confidence and maximise their independence. For most people interventions last up to 6 weeks. Reablement is delivered by a multidisciplinary team but most commonly by social care practitioners.

For other social care terms see the Think Local, Act Personal Care and Support Jargon Buster.

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2 Research recommendations

The Guideline Committee has made the following recommendations for research.

2.1 Optimal time between referral and starting intermediate care

Research question

What is the optimal time between referral to and starting intermediate care in terms of effectiveness and cost effectiveness and in terms of people's experiences?

Why this is important

Recommendation 1.4.3 states that for bed-based intermediate care, the service should start within 2 days of a referral being received. There is moderate-quality evidence to suggest that if the referral is made from acute care then the person's condition will begin to deteriorate if intermediate care does not start within 2 days. There is no clear evidence about the most effective timescale for people whose referral is being made in different circumstances, for example if they are at home and being referred for home-based intermediate care or reablement to prevent hospital admission or improve independence.

A comparative evaluation is needed to assess outcomes associated with different lengths of time between referral and starting intermediate care, for the home-based and reablement service models. Also, to assess the resource impact and overall cost effectiveness of different waiting times. Effectiveness and cost-effectiveness research should be complemented by qualitative data from people receiving and delivering the service to investigate their views and experiences and the perceived impact on the person's level of independence and quality of life.

Criterion	Explanation
Population	People at home being referred to intermediate care and reablement service
Intervention	Different lengths of time between referral and starting home-based intermediate care and reablement service
Comparators	Length of time longer than 2 days
Outcomes	Health-related quality of life Social-care related quality of life Health and social care service use unplanned hospital readmissions delayed transfers of care inappropriate admission to residential care Service user and carer related experience acceptability

	accessibility satisfaction quality and continuity of care choice and control dignity and independence involvement in decision-making
Study design	Comparative studies including RCTs and cost-effectiveness studies of the specific interventions Qualitative data from service users and practitioners
Timeframe	Comparative studies should be of sufficient duration (for example, 1–2 years) to capture relevant outcomes such as quality of life, health and social service use and the economic impact of the intervention.

2.2 Team composition for home-based intermediate care

Research question

How effective and cost-effective are different approaches, in terms of team structure and composition, to providing home-based intermediate care for adults?

Why this is important

The skill mix and competency of a home-based intermediate care team can influence the quality of care and outcomes. The evidence on views and experiences of home-based intermediate care is exclusively from health and social care practitioners, with no evidence from other care and support practitioners from the community.

Comparative studies are needed to determine the effectiveness and cost effectiveness of different approaches to delivering home-based care and support, in terms of team skills, structure and composition. A better understanding of how these factors influence quality of care could improve outcomes for people who use home-based intermediate care.

Qualitative studies are needed to explore the views and experiences of a wider range of care and support practitioners. This will help practitioners learn about and understand each other's roles, which will improve their delivery and quality of care.

Criterion	**Explanation**
Population	People using home-based intermediate care
Intervention	Different configurations of team skill and staffing structure
Comparators	'Usual' or 'standard' team skills and staffing structure
Outcomes	Health-related quality of life Social-care related quality of life

	Health and social care service use • unplanned hospital readmissions • delayed transfers of care • inappropriate admission to residential care Service user and carer related experience • satisfaction • quality and continuity of care • choice and control • dignity and independence • involvement in decision-making
Social-care related quality of life	Comparative studies including RCTs and cost-effectiveness studies of the specific interventions Qualitative data from community support workers other than health and social care practitioners.
Health and social care service use	Outcomes and service use need to be measured over 1 or 2 years to enable assessment on patient outcomes and the economic impact of intervention

2.3 Crisis response

Research question

What are the barriers and facilitators to providing an effective and cost effective crisis response service, with particular reference to different models for structuring delivery of this service?

Why this is important

There is no evidence on the effectiveness and cost effectiveness of crisis response services. The evidence that is available shows that practitioners and people using this service found the short-term support provided (up to 48 hours) too limited to address the needs of older people. It is also unclear if health and social care practitioners fully understand the purpose of the crisis response service when making referrals.

Comparative studies are needed to evaluate the different approaches to structuring the delivery of crisis response services to improve outcomes.

Cost information is also needed. This needs to be supplemented by qualitative data to explore how well the crisis response service is understood among practitioners.

Criterion	**Explanation**
Population	People using crisis response intermediate care
Intervention	Different approaches to structuring the delivery of crisis response service
Comparators	'Usual' or 'standard' approach

Outcomes	Health-related quality of life Social-care related quality of life Health and social care service use Service user and carer related experience • satisfaction • quality and continuity of care • choice and control • dignity and independence • involvement in decision-making
Study design	Comparative studies including RCTs and cost-effectiveness studies of the specific interventions Qualitative data from service users and practitioners on their understanding of the scope of crisis response
Timeframe	Outcomes and service use need to be measured over 1 or 2 years to enable assessment on relevant patient outcomes and the economic impact of intervention

2.4 Dementia care

Research question

How effective and cost effective is intermediate care including reablement for supporting people living with dementia?

Why this is important

Some intermediate care and reablement services support people living with dementia. However, others specifically exclude people with a dementia diagnosis, because they are perceived as being unlikely to benefit. There is limited evidence on the effectiveness and cost-effectiveness of using intermediate care and reablement to support people with dementia.

There is no evidence on the views and experiences of people living with dementia, their family and carers, or health, social care and housing practitioners, in relation to the support they receive from intermediate care and reablement services.

Comparative effectiveness and cost-effectiveness studies are needed to evaluate the different approaches to delivering support to people with dementia. This will help to ensure that both a person's specialist dementia needs and their intermediate care and reablement needs are accommodated in the most effective way. The studies should include a comparison of care provided by a specialist dementia team with that provided by a generalist team; and access versus no access to memory services. These need to be supplemented with qualitative studies that report

the views and experiences of people living with dementia, their family and carers, and practitioners.

Criterion	Explanation
Population	People with dementia using intermediate care
Intervention	Service with • a dementia specialist team • access to memory services
Comparators	Service with • a generalist team • no access to memory services
Outcomes	Health-related quality of life Social-care related quality of life Health and social care service use Service users, including proxies and carer related experience • acceptability • accessibility • satisfaction • quality and continuity of care • choice and control • dignity and independence • involvement in decision-making
Study design	Comparative studies including RCTs and cost-effectiveness studies of the specific interventions Qualitative data from service users and practitioners
Timeframe	Outcomes and service use need to be measured over 1 or 2 years to enable assessment on relevant patient outcomes and the economic impact of intervention

2.5 Reablement

Research question

How effective and cost effective are repeated periods of reablement, and reablement that lasts longer than 6 weeks?

Why this is important

The evidence that reablement is more effective than home care at improving people's outcomes is based on data from 1 period of reablement. In current practice, people can use reablement repeatedly. There is no evidence on the outcomes and costs for people who use reablement more than once.

In addition, there is no peer-reviewed study that measures the impact of different durations of reablement for different population groups. This is important because, in practice, reablement is funded for up to 6 weeks only. However, some people are offered reablement for a period of more than 6 weeks based on their identified needs. At present there is very limited knowledge about the costs and outcomes of reablement as provided to different population groups, and the optimal duration for these groups.

Longitudinal studies of a naturalistic design with a control group are needed to follow up people who have received reablement several times or over a longer period than 6 weeks, or both.

Comparative studies are also needed to understand the long-term impact of duration on costs and patient outcomes, by comparing 6-week reablement services with services that last longer than 6 weeks.

Criterion	**Explanation**
Population	People using reablement services
Intervention	Repeated use of 1 period of reablement Different durations of reablement
Comparators	Use of 1 period of reablement Longer durations of reablement
Outcomes	Health-related quality of life Social-care related quality of life Health and social care service use Service user and carer related experience • satisfaction • quality and continuity of care • choice and control • dignity and independence • involvement in decision-making
Study design	Longitudinal studies of a naturalistic design with a control group to assess the long-term impact on patient outcomes and costs of the use of more than 1 period of reablement services Comparative studies including RCTs to evaluate the impact on patient outcomes and costs of different durations of use of reablement services Qualitative data from service users and practitioners
Timeframe	Comparative and longitudinal studies should be of sufficient duration (for example, 2–3 years) to capture long-term outcomes such as quality of life, health and social service use and the economic impact

2.6 A single point of access for intermediate care

Research question

How effective and cost effective is introducing a single point of access to intermediate care?

Why this is important

There is evidence that poor integration between health and social care is a barrier to successfully implementing intermediate care. A management structure that has a single point of access can help to improve communication between teams and speed up referral and access to services.

Comparative studies are needed to evaluate the effectiveness and cost effectiveness of introducing a management structure that has a single point of access versus a structure with no single point of access. This will help to reduce the length of time from referral to receipt of intermediate care.

Criterion	Explanation
Population	People using intermediate care
Intervention	Service with a single point of access structure
Comparators	Service with no single point of access structure
Outcomes	Health-related quality of life Social-care related quality of life Health and social care service use Service user and carer related experience • satisfaction • quality and continuity of care • choice and control • dignity and independence • involvement in decision-making
Study design	Comparative studies including RCTs and cost-effectiveness studies of the specific interventions Qualitative data from service users and practitioners
Timeframe	Outcomes and service use need to be measured over 1 or 2 years to enable assessment on patient outcomes and the economic impact of intervention

2.7 Duration and intensity of home-based intermediate care

Research question

How effective and cost effective are different approaches, in terms of duration and intensity, to providing home-based intermediate care for adults?

Why this is important

There is some evidence that people who used home-based intermediate care found their care ended too suddenly at 6 weeks, and poor communication compounded this negative perception. The optimal time limit can differ depending on people's health and care and support needs.

Studies of comparative designs are needed to assess the effectiveness and cost effectiveness of different intensities and durations of home-based intermediate care for people with a range of care needs.

Criterion	Explanation
Population	People using home-based intermediate care
Intervention	Different durations and intensities of home-based intermediate care
Comparators	'Standard' durations and intensities of home-based intermediate care
Outcomes	Health-related quality of life Social-care related quality of life Health and social care service use • unplanned hospital readmissions • delayed transfers of care • inappropriate admission to residential care Service user and carer related experience • satisfaction • quality and continuity of care • choice and control • dignity and independence • involvement in decision-making
Study design	Comparative studies including RCTs and cost-effectiveness studies of the specific interventions Qualitative data from service users and practitioners
Timeframe	Comparative studies should be of sufficient duration (for example, 1–2 years) to capture relevant outcomes such as quality of life, health and social service use and the economic impact of the intervention.

2.8 Support for black and minority ethnic groups

Research question

How effective and cost effective are different approaches to supporting people from black and minority ethnic groups using intermediate care?

Why this is important

Addressing the cultural, language and religious needs of black and minority ethnic groups can remove some of the barriers to accessing support services. There is no evidence on the

effectiveness and cost effectiveness of intermediate care in supporting people from black and minority ethnic groups to access intermediate care and reablement.

Comparative effectiveness and cost-effectiveness studies are needed to evaluate 'what works' in terms of planning and delivering intermediate care for minority groups. This includes all 4 service models of intermediate care. Qualitative data are needed on the views and experiences of people from black and minority ethnic groups, their family, carers, practitioners and voluntary support groups to inform the development of a service that meets the needs of this population.

Criterion	**Explanation**
Population	People from a BME background using intermediate care
Intervention	Specific support services for people from a BME background
Comparators	'Usual' or 'standard' general approach
Outcomes	Health-related quality of life Social-care related quality of life Health and social care service use Service user and carer related experience • acceptability • accessibility • satisfaction • quality and continuity of care • choice and control • dignity and independence • involvement in decision-making
Study design	Comparative studies including RCTs and cost-effectiveness studies of the specific interventions Qualitative data from service users and practitioners
Timeframe	Comparative studies should be of sufficient duration (for example, 1–2 years) to capture relevant outcomes such as quality of life and health and social service use

3 Evidence review and recommendations

We used the methods and processes in Developing NICE guidelines: the manual (2014). Where non-standard methods were used or there were deviations from the manual, and for more information on how this guideline was developed, see Appendix A.

The target group for this guideline was defined as any adult over the age of 18 with experience of intermediate care services. Intermediate care was defined according to the annual National Audit of Intermediate Care, which describes 4 specific service models: home-based intermediate care, bed-based intermediate care, crisis response and reablement. The review questions were based

on the service models, with the first 4 questions examining the effectiveness and cost-effectiveness of the individual models as well as the views and experiences of people using those services, their families or carers and the views and experiences of practitioners. Two further questions examined evidence about information, advice and support for people using intermediate care and their families or carers and evidence about the effectiveness and cost-effectiveness of using intermediate care to support people living with dementia, as well as views and experiences on that topic. These 2 questions applied to all 4 service models described in the National Audit. Finally, review question 7 was added to identify the characteristics of service models and approaches to intermediate care that are associated with improved individual outcomes and experiences. The focus of question 7 was on all 4 service models.

The decision, agreed with the Guideline Committee, to align the reviews with the National Audit of Intermediate Care provided clarity and consistency on a topic where a range of different names are often used to describe the same services within the UK. However, studies did not always explicitly describe the service, so the systematic reviewers endeavoured to discern whether it met the National Audit definitions through the descriptions offered in the full text of the study.

Question-specific searches were used to locate the evidence due to the intervention-specific nature of the topic. In order to focus the screening of the located studies, the reviewers used ‘searching within’ to create a subset of studies from which to screen on title and abstract. They used terms that were specific to the service model under review and which were based on the National Audit definitions. They also used related or alternative terms to ensure relevant studies were not missed as a result of variations in terminology within the UK and in international literature. The effect of adopting the ‘searching within’ approach was that large numbers of the located studies were not screened and this is reflected in the PRISMA chart in Appendix A. Test searches on the unscreened studies gave the reviewers confidence that relevant papers were not missed through taking this approach.

The included studies were critically appraised using tools in the manual and the results tabulated (see Appendix B for tables). Minor amendments were made to some of the checklists to reflect the range of evidence and types of study design considered in the evidence reviews. For more information on how this guideline was developed, including search strategies and review protocols, see Appendix A.

Rating the included studies was complex as the ‘best available’ evidence was often only of moderate quality. Studies were rated for internal and external validity using ++/+/− (meaning good, moderate and low). Where there are 2 ratings (for example, +/−), the first rating applies to internal

validity (how convincing the findings of the study are in relation to its methodology and conduct), and the second rating concerns external validity (how well the study relates to the review question, particularly in terms of setting and population). The internal quality rating is given in the evidence statements with both the internal and external rating reported in the narrative summaries and in the evidence tables in Appendix B.

Economic studies have been rated according to their applicability using ++/+/− and those rated applicable (+) have been rated according to the quality of methodology applied as economic analyses. Such studies are given (in the notation of −, + and ++) an 'economic evidence rating'. Methodological appraisal detailing the limitations of these studies is fully described in Appendix C1.

The critical appraisal of each study takes into account methodological factors to assess internal validity such as:

- whether the method used is suitable to the aims of the study
- whether random allocation (if used) was carried out competently
- sample size and method of recruitment
- transparency of reporting and limitations that are acknowledged by the research team.

Critical appraisal also assesses the external validity of each study, judging the extent to which samples are relevant to the population we are interested in and whether the research question matches the guideline review questions

Evidence rated as of only moderate or low quality may be included in evidence statements, and taken into account in recommendations, where the Guideline Committee independently and by consensus supported its conclusions and thought a recommendation was needed.

A further table reports the details (such as aims, samples) and findings. For full critical appraisal and findings tables, arranged alphabetically by author(s), see Appendix B.

3.1 Delivering home-based intermediate care

Introduction to the review questions

The purpose of the first part of the review question (part a) was to examine the effectiveness and cost-effectiveness of home-based intermediate care interventions designed to support admission avoidance, faster recovery from illness, timely discharge from hospital and to maximise independent living. Part b of the review question sought to identify evidence which described the

self-reported views and experiences of adults with social care needs, their families and unpaid carers about the care and support they receive from a home-based intermediate care service. In particular, the aim was to help the guideline committee to consider whether people who receive care think that their care is personalised and coordinated across social care, inpatient hospital care and primary and community health services. Finally, part c of the review question sought evidence that described the views and experiences of people delivering, organising and commissioning social care, health and housing services, including what works and what does not work well in home-based intermediate care.

For this review question the guideline committee requested an important departure from the deifniton of home based intermediate care given in the National Audit of Intermediate Care (NAIC). Whereas the NAIC specifically excludes single condition rehabilitation, the GC reported that rehabilitation for stroke patients is, in the current practice context, so similar to home based intermediate care that they wished to consider evidence relating to these services. This is highlighted in the review protocol for home based intermediate care.

A good amount of effectiveness evidence was located and the reviewers therefore prioritised the highest level, presenting only the randomised controlled trials (RCTs) to the committee. No systematic reviews were included for review because on examination of the full texts, fewer than 80% of included studies met the inclusion criteria for this review. This is in line with the review protocol.

There was also a moderate amount of views and experiences evidence, with 5 studies describing the perspectives of people using home-based intermediate care, their families or carers and 2 describing the views of practitioners.

Review questions

1a) What is the effectiveness and cost-effectiveness of home-based intermediate care?
1b) What are the views and experiences of people using services, their families and carers in relation to home-based intermediate care?
1c) What are the views and experiences of health, social care and other practitioners about home-based intermediate care?

Summary of the review protocol

The protocol sought to identify studies that would:

- identify the effectiveness and cost-effectiveness of home-based intermediate care

- identify emerging models of home-based intermediate care and associated outcomes
- describe the self-reported views and experiences of adults with social care needs, their families and unpaid carers about the care and support they receive from a home-based intermediate care service including what works and what does not work well
- describe the views and experiences of people delivering, organising and commissioning social care, health and housing services including what works and what does not work well in home-based intermediate care.

Population

For question 1a and 1b: Adults, aged 18 years and older, with experience of home-based intermediate care services and their families, partners and carers. Self-funders and people who organise their own care and who have experience of home-based intermediate care services are included.

For question 1a and 1c: Housing practitioners, social care practitioners (providers, workers, managers, social workers), and health and social care commissioners involved in delivering home-based intermediate care; personal assistants engaged by people with care and support needs and their families.

For question 1a and 1c: General practice and other community-based healthcare practitioners, including GPs, therapists and community/district nurses; hospital ward staff.

Intervention

Community-based, multidisciplinary services provided to people in their own home or in a care home.

Note the following exclusions: single condition rehabilitation (for example, stroke), early supported discharge, general district nursing services and mental health rehabilitation or intermediate care.

Setting

Service users' home, including sheltered housing accommodation, supported housing, temporary accommodation, care (residential and nursing) homes or prisons.

Outcomes

User and carer related outcomes (such as user and carer satisfaction, quality and continuity of care, choice and control, dignity and independence, involvement in decision-making and health and social care related quality of life) and service outcomes such as use of health and social care

services, admission avoidance, delayed transfers of care and rates of hospital readmissions within 30 days (see 1.6 in the scope).

Study design

The study designs which were prioritised for the effectiveness and cost-effectiveness question included: systematic reviews of studies of different models of discharge assessment and care planning; randomised controlled trials of different approaches to discharge assessment and care planning; economic evaluations; quantitative and qualitative evaluations of different approaches; observational & descriptive studies of process; cohort studies, case control and before and after studies; Mixed methods studies.

The study designs which were prioritised for the views and experiences questions included: systematic reviews of qualitative studies on this topic; qualitative studies of user and carer views of social and integrated care; qualitative components of effectiveness and mixed methods studies and observational and cross-sectional survey studies of user experience.

See Appendix A for full protocols.

How the literature was searched

In home-based intermediate care we used search filters that limited results to specific study types such as systematic reviews, meta-analyses, RCTs, cost-effectiveness and qualitative reviews. We combined these with a core search approach, to control the precision of yield from within the largest element of the search strategy, the core subject areas being rehabilitation, intermediate care, occupational therapy and physiotherapy. Finally we combined terms related to both outcomes and time limits, as expressed by the included definitions within the National Audit for Intermediate Care, along with terms surrounding the particular setting (home-based). Searches for the period 2005 - 2015 were initially run in October 2015 and an update search was conducted in July 2016.

See Appendix A for full details of the searches including the rationale for date limits.

How studies were selected

Search outputs (title and abstract only) were stored in EPPI Reviewer 4 – a software program developed for systematic review of large search outputs. A subset was created by searching within the review using terms that were specific to home-based intermediate care, based on the National Audit definitions and terms known to be related or equivalent. This subset of studies was then

screened against an exclusion tool informed by the parameters of the scope. Formal exclusion criteria were developed and applied to each item in the search output, as follows:

- language (must be in English)
- population (must be over 18 years of age and have experience of using home-based intermediate care)
- intervention (must be home-based intermediate care)
- setting (service user's own home, including sheltered housing accommodation, supported housing, temporary accommodation, care [residential and nursing] homes or prisons)
- country (must be UK or other OECD)
- date (must not be published before 2005)
- type of evidence (must be research).

Title and abstract of all research outputs were screened against these exclusion criteria. Those included at this stage were marked for relevance to particular parts of the review question – or flagged as being relevant to one of the other review areas – and retrieved as full texts.

Full texts were again reviewed for relevance and research design. A list of studies excluded on full text can be found in appendix A, organised by exclusion criteria.

If still included, critical appraisal (against NICE tools) and data extraction (against a coding set developed to reflect the review questions) was carried out. The coding was all conducted within EPPI Reviewer 4, and formed the basis of the analysis and evidence tables. All processes were quality assured by double coding of queries, and a random sample of 10%.

'Searching within' created a subset of 5041 studies and in our initial screen (on title and abstract) we found 135 studies which appeared relevant to the review questions on home-based intermediate care. We retrieved and then reviewed full texts and included a total of 19 papers: 12 RCTs and 7 views and experiences studies. The included studies (see below) were critically appraised using NICE tools for appraising different study types, and the results tabulated. Study findings were extracted into findings tables. See Appendix B for full critical appraisal and findings tables.

Narrative summary of the included evidence

In this section, a narrative summary of each included study is provided, followed by a synthesis of the evidence, according to the key outcomes, themes or sub-groups in the form of evidence

statements [p65-9]. The approach to synthesising evidence was informed by the PICO within the review protocol.

Studies reporting effectiveness data (n=13)

Note that due to the heterogenity of the evidence (the studies delivered different interventions to differing populations for differing lengths of time and used different outcome measures), data from each effectiveness study are presented separately, rather than combining them into a single meta-analysis.

1. Aimonino N, Tibaldi V, Barale S et al. (2007) Depressive symptoms and quality of life in elderly patients with exacerbation of chronic obstructive pulmonary disease or cardiac heart failure: preliminary data of a randomized controlled trial. Archives of Gerontology and Geriatrics 44 (Suppl. 1): 7–12

Outline: This RCT, conducted in Italy, was judged to be of low overall quality (−), largely due to poor reporting of key methodological details. The study assessed the effectiveness of a geriatric home hospitalisation service (GHHS) (n=38) versus a general medical ward (GMW) (n=35) in treating patients aged over 75 years with COPD and cardiac heart failure (CHF) after discharge from the emergency department. The geriatric home hospitalisation service is a home-based intervention providing diagnostic and therapeutic treatments by healthcare professionals in patients' homes. It is delivered by a multidisciplinary team, including geriatricians, nurses, physiotherapists, social workers and counsellors, and includes medical consultation. The control intervention comprised inpatient hospital treatment in a medical ward.

Results: At 6 months follow-up, measured using geriatric depression scale (GDS), range 0-30, there was significant improvement in:

Depression rates:

- GHHS 14.25 to 12.44 (reduction of 1.81) vs
- GMW 12.81 to 12.68 (reduction of 0.13) (significant, no p values given).

Quality of life measured using the Nottingham health profile (NHP, the higher the score, the greater the number and severity of problems, range 0-38):

- GHHS 18.89 to 16.79 (improved score of 2.1) vs
- GMW 16.52 to 16.27 (improved score of 0.25) (significant, no p values given).

Hospital readmission rates:

- GHHS: 16.6% vs
- GMW 26.6% (no p values given).

This preliminary study therefore suggests that home-treated patients with COPD or CHF achieved better depression scores, quality of life and a lower rate of hospital readmission after 6 months. However, note that the length of treatment in the GHHS was on average longer than in the GMW (22.3±10.8 days vs GMW 12.6±8.5 days [significant, no p values given]).

2. Bjorkdahl A, Nilsson AL, Grimby G et al. (2006) Does a short period of rehabilitation in the home setting facilitate functioning after stroke? A randomized controlled trial. Clinical Rehabilitation 20: 1038–49

Outline: This RCT conducted in Sweden was given an overall quality rating of 'moderate' (+) although it was judged to have good internal validity (++). The study assessed the impact of a 3-week home rehabilitation regime (n=30; after 1 year n=29) versus a day clinic (n=29) for younger stroke patients after discharge from hospital. The home rehabilitation group received individually tailored training, based on the patient's needs and desires, with a focus on activities in their natural context. Support and information were also provided. The intervention in the day clinic group was aimed mainly at improved functions. Outcomes were assessed at discharge, at 3 weeks, at 3 months and at 1 year.

Results: Improvement occurred at different times for both groups, but overall there was no significant difference between the home group and the day clinic group as both groups improved significantly from discharge to 1-year follow-up, in terms of:

Activities of daily living (measured by AMPS)

At discharge:

Home (n=30); mean 1.00 (SD 0.73) vs clinic (n=29); mean 1.18 (SD 0.57).

At 1 year:

Home (n=29); mean 1.55 (SD 0.76) vs clinic (n=29); mean 1.59 (SD 0.68).

Independence (measured by FIM and IAM)

Functional Independence Measure (motor)

At discharge:

Home (n=30); mean 2.44 (SD 2.08) vs clinic (n=29); mean 2.38 (SD 1.70).

At 1 year:

Home (n=29); mean 3.14 (SD 2.07) vs clinic (n=29); mean 2.99 (SD 1.76).

Functional Independence Measure (social-cognitive)

At discharge:

Home (n=31); mean 2.32 (SD 1.65) vs clinic (n=30); mean 2.43 (SD 1.57).

At 1 year:

Home (n=29); mean 2.68 (SD 1.67) vs clinic (n=29); mean 3.29 (SD 1.50).

Instrumental Activity Measure

At discharge:

Home (n=30); mean -1.8 (SD 1.66) vs clinic (n=29); mean -3.2 (SD 1.10).

At 1 year:

Home (n=29); mean 0.70 (SD 1.63) vs clinic (n=29); mean 1.05 (SD 1.76).

Survival analysis of the interaction between time and group showed earlier improvement for the home group. The costs of the home group were less than half of the costs of the day clinic group.

3. Bjorkdahl A, Nilsson AL, Sunnerhagen KS (2007) Can rehabilitation in the home setting reduce the burden of care for the next-of-kin of stroke victims? Journal of Rehabilitation Medicine 39: 27–32

Outline: This RCT, conducted in Sweden, was judged to be of moderate (+) quality. The study assessed effectiveness in terms of 'burden of care', comparing rehabilitation in the home setting with outpatient rehabilitation. In the home setting, an occupational therapist and a physiotherapist offered individually tailored training, based on the patient's needs and desires. Counselling about the stroke and its consequences was also included. Assessments with the Caregiver Burden Scale were made at 3 weeks, 3 months and 1 year after discharge.

Results: The study reported no significant differences between the 2 groups on any of the assessments in caregiver burden. There was a tendency to a lower burden for the next of kin in

the home group compared with the next of kin in the day clinic group directly after the intervention at 3 weeks. The carer burden of the home group stayed similar from 3 weeks to 1 year, while the day clinic group had a reduced burden over time. For the home group, there were also significant correlations to patient activity/ability level, influencing the care burden index after the intervention.

Overall, a positive effect of counselling was observed, as the home setting burden tends to be lower after the intervention, while outpatient rehabilitation seems to adjust with time, suggesting that counselling reduces burden and the remaining burden is associated with the patient's ability.

4. Crotty M, Giles LC, Halbert J et al. (2008) Home versus day rehabilitation: a randomised controlled trial. Age and Ageing 37: 628–33

Outline: This is a moderate quality study (+) comparing day hospital-based rehabilitation to home-based rehabilitation. Participants were medically stable patients referred for ambulatory rehabilitation at discharge from hospital. Reasons for admission to acute care included stroke, knee replacement or 'other neurological injury'. Some 229 participants were randomised and follow-up took place at 3 months and 6 months (although no statistical data in relation to 6-month outcomes is presented); attrition rates were acceptable. Both interventions are described as high-intensity interdisciplinary rehabilitation based on a medical rehabilitation model and included assessment, case management and goal-setting. The duration of the interventions was not standardised but usually lasted between 4 and 6 weeks. Both also involved support from a rehabilitation medicine physician, dietetics, nursing support, occupational therapy, physiotherapy, psychology, social work and speech therapy. It appears that carers of participants in the day hospital-based programme were offered 1 educational session, however it is not clear if this was the case for carers of participants randomised to the home-based programme.

Results

Service user related outcomes

Between baseline and 3 months follow-up there was no significant difference between groups in change in scores of quality of life (either mental or physical) both measured using the Short Form 36 (statistical data not presented); functional competence in activities of daily living (motor and process) both measured using the Assessment of Motor and Process Skills instrument; maximal quadriceps strength (scale unclear); and mobility measured using the Timed Up and Go test.

Note: statistical data not presented for any of these measures and the significance of between group differences in scores is not reported at all.

Between baseline and 3 months follow-up the study found that participants randomised to the day hospital rehabilitation programme made significantly greater improvements in functional independence (measured using the Functional Independence Measure) than those randomised to the home-based rehabilitation programme (effect size not presented, p=0.03). The study also found that at 3 months follow-up the scores of participants randomised to the day hospital rehabilitation programme on this measure were significantly higher than those randomised to the home-based rehabilitation programme (effect size not presented, p=0.01).

Carer related outcomes

At discharge from the programme, carers of participants randomised to the day hospital programme reported significantly higher carer strain (measured using the Carer Strain Index) than those randomised to the home-based rehabilitation programme (p<0.05); however the between group difference in scores on this measure at 3 months follow-up was not significant (statistical data not presented).

Between baseline and 3 months follow-up there was no significant difference between groups in change in scores of carer quality of life (either mental or physical), both measured using the Short Form 36 (statistical data not presented).

Service outcomes

Participants randomised to day hospital rehabilitation were significantly more likely than those randomised to the home-based programme to be readmitted to hospital over the 6-month follow-up period – relative risk ratio 2.1 (95% CI 1.2 to 3.9; p=0.012).

For participants who were readmitted, there was a significant difference between groups in median time to first readmission, with participants randomised to the day hospital rehabilitation group being readmitted more quickly than those randomised to the home-based rehabilitation programme (25 days vs 49 days, p=0.050).

The authors report narratively that there was no significant interaction between '… the groups and age group, gender, marital status or carer status with respect to time to first readmission' (p632, statistical data not presented).

5. Fjaertoft H, Indredavik B, Magnussen J et al. (2005) Early supported discharge for stroke patients improves clinical outcome. Does it also reduce use of health services and costs? One-year follow-up of a randomized controlled trial. Cerebrovascular Diseases 19: 376–83

Outline: This RCT, conducted in Norway, was judged to be of moderate (+) quality. The study assessed the impact of early supported discharge – in the form of an extended stroke unit service at home (ESUS, n=160) – with the ordinary inpatient stroke unit service (OSUS, n=160) during the first year following a stroke. The ESUS offered a comprehensive follow-up stroke service organised by a coordinating mobile team that followed the patient for the first month after discharge from hospital. They established a programme and support system that allowed the patient to live at home as soon as possible and to continue rehabilitation at home or in a day clinic. The mobile team consisted of a physiotherapist, an occupational therapist, a nurse and the part-time service of a physician. One of the therapists acted as a case manager for the patient. Outcomes assessed were health services use and costs.

Results

- At 1-year follow-up, there was a significant reduction in inpatient stays in the ESUS group compared with the OSUS group (p=0.012), mainly caused by a reduction in the number of inpatient days spent in rehabilitation institutions (12.3 days less p<0.000).
- The use of day care in the ESUS group was significantly higher than that of the OSUS group (p=0.027).
- There was no significant difference between the 2 groups in hospital readmissions or the use of nursing homes.
- There was a trend towards reduced use of home nursing services among the ESUS group (p=0.085).
- There was no difference in the use of other outpatient health services.
- There was a non-significant reduction in the total mean service costs in the ESUS group.

6. Inglis SC, Pearson S, Treen S et al. (2006) Extending the horizon in chronic heart failure: effects of multidisciplinary, home-based intervention relative to usual care. Circulation 114: 2466–73

Outline: This RCT, conducted in Australia, was judged to be of moderate (+) quality. The study assessed the impact of a nurse-led multidisciplinary home-based intervention (HBI) (n=149) vs usual post discharge care (UC, n=148) in elderly patients with congestive heart failure (CHF) initially discharged from short-term hospital care. The aim of HBI was to optimise the management of the patient's chronic disease state(s) and to facilitate the rapid recognition and treatment of potential problems. The multidisciplinary team involved the community pharmacists, primary care physicians, cardiologists, family carers and 'various community services' (no details given). Patients received a structured home visit for assessment within 7–14 days of discharge by a nurse

and pharmacist and received a combination of remedial counselling, introduction of strategies designed to improve treatment adherence, introduction of a simple exercise regimen and incremental monitoring by family/caregivers.

Results: At 7–10 year follow-up, the following outcomes were recorded.

Survival

Median survival in the HBI cohort was almost twice that of UC (40 vs 22 months; p<0.001), with fewer deaths overall (HBI, 77% vs 89%; adjusted relative risk, 0.74; 95% CI, 0.53 to 0.80; p<0.001).

HBI was also associated with prolonged event-free survival (median, 7 vs 4 months; P<0.01).

Hospital activity

Rates of readmission (2.04±3.23 vs 3.66±7.62 admissions; p<0.05) and related hospital stay (14.8+/-23.0 vs 28.4+/-53.4 days per patient per year; p<0.05) were significantly lower in the HBI group.

HBI patients did however have more unplanned readmissions (560 vs 550) but took 7 years to overtake the UC participants.

The authors concluded that a nurse-led multidisciplinary home-based intervention had the potential to extend the horizon of survival of patients with CHF while cost-effectively reducing the frequency of recurrent hospitalisation.

7. Jackson JC, Ely EW, Morey MC et al. (2012) Cognitive and physical rehabilitation of intensive care unit survivors: results of the RETURN randomized controlled pilot investigation. Critical Care Medicine 40: 1088–97

Outline: This is a moderate quality (+) RCT, which despite being conducted in the US is relevant to our review question. The trial, which was a pilot feasibility study, was conducted in 1 site and included 21 general medical/surgical intensive care unit (ICU) survivors (8 in the control group and 13 intervention patients) with either cognitive or functional impairment at hospital discharge. The study aimed to test whether a ‘bundled’ rehabilitation approach combining cognitive, physical and functional rehabilitation could be developed and effectively delivered in the home using novel tele-video technology delivered via social workers. The hypothesis was that this rehabilitation approach would result in greater improvement in cognition and functional outcomes. The intervention lasted

for 3 months and the control group received usual care, comprising of sporadic rehabilitation. Robust, well-validated and objective measures were used to examine cognitive, physical and functional outcomes at baseline and 3-month follow-up and results were adjusted for baseline differences.

Results: At baseline, both groups were generally well matched, with the exception that the control group scored more highly on the severity of illness measures; suffered a larger number of medical co-morbidities; experienced longer ICU hospitalisations and greater duration of mechanical ventilation. None of these differences were statistically significant.

At 3-month follow-up, intervention group patients demonstrated:

- significantly improved cognitive executive functioning on the Tower test (for planning and strategic thinking) vs controls (median [interquartile range], 13.0 [11.5-14.0] vs 7.5 [4.0-8.5]; adjusted $p<0.01$)
- slightly more improvement in physical functioning, measured using the TUG test (lower score are better) (median [interquartile range] 9.0 [8.5 vs 11.8] vs 10.2 [9.2-11.7]; adjusted $p=0.51$)
- better performance (that is, lower score) on 1 of the measures of functional status (Functional Activities Questionnaire) at 3 months vs controls, (median [interquartile range] 1.0 [0.0 -2.5] vs 8.0 [6.0-11.8]; adjusted $p=0.04$).

8. Kalra L, Evans A, Perez I et al. (2005) A randomised controlled comparison of alternative strategies in stroke care. Health Technology Assessment 9: 18

Outline: This is a good (++) quality RCT conducted in the UK. The study assessed the impact of management of stroke after discharge in a stroke unit (SU) (n=152), a ward-based stroke team (ST) (n=153) and at home (HC) (n=152). The following outcomes were measured: mortality, institutionalisation, functional abilities and dependence, hospital anxiety and depression, quality of life, resource use and patients' and carers' satisfaction at 3 months to 1 year after intervention. Patients in the HC group were managed in their own home by a specialist team consisting of a doctor, a nurse and therapists, with support from district nursing and social services for nursing and personal care needs. This support was provided for a maximum of 3 months.

Results: Mortality and institutionalisation at 1 year were significantly lower on the SU compared with the ST or HC patients.

Mortality

- SU (21/152 [14%]) versus ST (45/149 [30%]), p<0.001.
- SU (21/152 [14%]) versus domiciliary care (34/144 [24%]), p=0.03.
- There was no significant difference in mortality rate per se at 1 year between the 3 groups.

Institutionalisation

Significantly fewer patients on the SU died compared with those managed by the ST (13/152 [9%] versus 34/149 (23%), p=0.001.

Functional independence

Stroke survivors managed on the SU showed greater improvement on basic activities of daily living compared with other strategies (change in Barthel Index 10 versus 7, p<0.002).

Poor outcome with domiciliary care was seen in patients with Barthel Index <5 (odds ratio [OR] 10, 95% confidence interval [CI] 2.2 to 45) and incontinence (OR 4, 95% CI 0.8 to 17).

Quality of life

At 3 months this was significantly better in SU and domiciliary care patients (EuroQol score 75 versus 60, p<0.005).

The length of hospital stay was longer in the HC group when compared with the SU or ST group (due to 34% patients in the HC group being admitted to hospital after randomisation). Patients in the ST group and HC groups received significantly less therapy from all disciplines compared with those in the SU group. There was greater satisfaction with care by the patients and their carers with ST or HC than with care on SU.

Overall, in terms of reducing mortality, institutionalisation and dependence after stroke, a domiciliary care or a ward-based specialist stroke team was found to be less effective than stroke units.

9. Mahomed NN, Davis AM, Hawker G et al. (2008) Inpatient compared with home-based rehabilitation following primary unilateral total hip or knee replacement: a randomized controlled trial. Journal of Bone and Joint Surgery – American Volume 90: 1673–80

Outline: This moderate quality (+) study sought to evaluate the effectiveness and cost of home-based, compared with inpatient, rehabilitation following primary total hip or knee joint replacement. A total of 234 participants were randomised to either the home-based group (n=115) or inpatient group (n=119), and followed up at 3 and 12 months. None of the participants were lost to follow-

up. Those allocated to home-based rehabilitation were referred to their Community Care Access Centre and managed along a multidisciplinary pathway that ensured that each participant was seen at home by a physiotherapist within 48 hours of discharge.

Results: Results demonstrated no differences in outcomes at 3 and 12 months after surgery between home-based rehabilitation and inpatient rehabilitation groups, with both showing similar improvements in pain, function and satisfaction. The relative cost of inpatient rehabilitation was found to be 5.7 times the total cost of care for home-based rehabilitation. Consequently, it is concluded that the cost of delivery of care can be significantly reduced by using home-based rehabilitation without compromising quality.

10. Parker SG, Oliver P, Pennington M et al. (2009) Rehabilitation of older patients: day hospital compared with rehabilitation at home. A randomised controlled trial. Health Technology Assessment 13: 39

Outline: This is a moderate quality study (+) from the UK comparing home-based rehabilitation to day hospital based rehabilitation. Participants could be of any age (although the majority were older than 65) and were referred for multidisciplinary services. Some participants had informal carers, the majority of whom were related to the service user.

Eighty-nine participants were randomised and follow-up took place at 3, 6 and 12 months. The study was underpowered (calculations showed that a total sample of 460 participants was required) and due to changes in service configuration, high numbers of people who declined to participate or assessed as ineligible, recruitment ended earlier than planned. As a result 12-month assessments were not conducted for a number of participants.

Details provided in relation to the intervention are minimal however the authors note these were multidisciplinary and that the home-based services usually include at least physiotherapy and occupational therapy input.

Results

Service user related outcomes

At the end of the rehabilitation programme (using the observed case data set) there were no significant differences between groups in:

- therapist-rated level of rehabilitation (measured using the Therapy Outcomes Measure) for impairment (p=0.455); activity (p=0.613); social participation (p=0.421); or wellbeing (p=0.718)

- activities of daily living measured using the Nottingham Extended Activities of Daily Living Scale (total score) at 3 months follow-up (mean estimated difference adjusted for baseline scores, −2.79; 95% CI −7.84 to 1.90; p=0.228); 6 months follow-up (−2.139; 95% CI −6.870 to 2.592; p=0.370); or 12 months follow-up (1.39; 95% CI −6.11 to 8.88; p=0.710)
- anxiety measured using the Hospital Anxiety and Depression Scale at 3 months follow-up (mean estimated difference, adjusted for baseline scores; 0.047; 95% CI −1.466 to 1.559; p=0.951); 6 months follow-up (−0.578; 95% CI −2.409 to 1.253; p=0.530); or at 12 months follow-up (0.223; 95% CI −1.906 to 2.351; p=0.834)
- depression measured using the Hospital Anxiety and Depression Scale at 3 months follow-up (mean estimated difference, adjusted for baseline scores; 1.374; 95% CI −0.039 to 2.786; p=0.056); at 6 months follow-up (1.033; 95% CI −0.441 to 2.507; p=0.166); or at 12 months follow-up (−0.167; 95% CI −2.423 to 2.089; p=0.882)
- health-related quality of life measured using the EUROQUOL 5 dimensions – visual analogue scale at 3 months follow-up (mean estimated difference, adjusted for baseline scores; −2.559; 95% CI −9.371 to 4.254; p=0.456); at 6 months follow-up (1.601; 95% CI −8.809 to 5.607; p=0.659) or at twelve months follow-up (6.315; 95% CI −3.184 to 15.815; p=0.187).

Using the observed case data set, a significant difference was found between groups in favour of the control group in health related quality of life measured using the EUROQUOL 5 dimensions – questionnaire (mean estimated difference, adjusted for baseline scores; 0.122; 95% CI −0.002 to 0.242; p=0.047); however this difference was no longer significant at 6 months follow-up (0.023; 95% CI −0.114 to 0.161; p=0.735); or at 12 months follow-up (0.147; 95% CI −0.051 to 0.345; p=0.141).

At 6 months follow-up

(Using the observed case data set.) There were no significant differences between groups in activities of daily living measured using the Nottingham Extended Activities of Daily Living mobility subscale (mean estimated difference, adjusted for baseline scores; −0.58; 95% CI −2.59 to 1.42; p=0.564); the kitchen subscale (−0.40; 95% CI −1.90 to 1.11; p=0.601); the domestic subscale (−0.91; 95% CI −2.31 to 0.49; p=0.198); the leisure subscale (−0.11; 95% CI −1.41 to 1.20; p=0.872); or household activities of daily living measured using the Nottingham Extended Activities of Daily Living domestic and kitchen subscales – composite (−1.38; 95% CI −3.88 to 1.12; p=0.273).

At 6 months there were no significant differences between groups in the proportion of participants classifying themselves as having experienced a problem in mobility measured using the

EUROQUOL 5 dimensions mobility domain (adjusted odds ratio 1.16; 95% CI 0.24 to 5.51; p=0.852); usual activities (adjusted odds ratio 0.33; 95% CI 0.09 to 1.23; p=0.100); self-care (adjusted odds ratio 0.65; 95% CI 0.22 to 1.89; p=0.431); pain/discomfort (adjusted odds ratio 2.18; 95% CI 0.64 to 7.41; p=0.212); or anxiety/depression (adjusted odds ratio 0.34; 95% CI 0.11 to 1.05; p=0.060). At 6 months there were no significant differences between groups in the likelihood of being classified as a clinical case of anxiety (adjusted odds ratio 1.22; 95% CI 0.376 to 3.97; p=0.739); or depression (adjusted odds ratio 0.86; 95% CI 0.29 to 2.60; p=0.793).

At 6 months, a post hoc analysis (using both the observed case data set and last observation carried forward data set, adjusting for baseline scores) showed that care provided in the home is not inferior to care provided in day hospital in relation to activities of daily living measured using the Nottingham Extended Activities of Daily Living Scale; health related quality of life measured using both the questionnaire and visual analogue scale of the EUROQUOL 5 dimensions; depression measured using the Hospital Anxiety and Depression Scale. Both analyses found that it was not possible to reject the null hypothesis that home based rehabilitation is inferior to day hospital based rehabilitation in relation to anxiety measured using the Hospital Anxiety and Depression Scale.

Note: detailed statistics not provided. Effect on other outcomes not measured/ not reported.

At 6 months follow-up (using last observation carried forward analysis) there were no significant differences between groups in activities of daily living measured using the Nottingham Extended Activities of Daily Living Scale (total score; mean estimated difference, adjusted for baseline scores; −3.222; 95% CI −7.687 to 1.243; p=0.155); health related quality of life measured using the EUROQUOL 5 dimensions questionnaire (0.011; 95% CI −0.109 to 0.131; p=0.857); health-related quality of life measured using the EUROQUOL 5 dimensions visual analogue scale (−2.937; 95% CI −8.991 to 3.117; p=0.337); anxiety measured using the Hospital Anxiety and Depression Scale (−0.347; 95% CI −1.843 to 1.160; p=0.648). Participants randomised to the intervention group had significantly better scores in relation to depression measured using the Hospital Anxiety and Depression Scale (1.357; 95% CI 0.050 to 2.663; p=0.042).

A repeated measures ANOVA showed the following.

- Activities of daily living measured using the Nottingham Extended Activities of Daily Living Scale (total score) at 6 months: there was no significant between group effect (p=0.898); no significant within group effect (p=0.877); and no significant group × time interaction (p=0.410).

- Anxiety measured using the Hospital Anxiety and Depression Scale at 6 months: there was a significant within group effect (p=0.001); but no significant between group effect (p=0.180) or group × time interaction (p=0.219).
- Depression measured using the Hospital Anxiety and Depression Scale at 6 months: there was a significant within group effect (p=0.017); but no significant between group effect (p=0.725) or group x time interaction (p=0.225).
- Health related quality of life measured using the EUROQUOL 5 dimensions (questionnaire) at 6 months: there was a significant group x time interaction (p=0.002); but no between group effect (p=0.815) or within group effect (p=0.677).
- Health related quality of life measured using the EUROQUOL 5 dimensions (visual analogue scale) at 6 months: there were no significant between group effects (p=0.954); within group effects (p=0.217); or group x time interaction (p=0.956).

The authors compared results derived from different analysis methods and found that mean effects were generally larger when derived from the mixed models for repeated measures analysis of the last observation carried forward data set.

Family or caregiver related outcomes

Using the observed case data set there were no significant differences between groups in level of carer psychological wellbeing measured using the General Health Questionnaire at 3 months follow-up (mean difference −2.04; 95% CI −10.89 to 6.80; p=0.644); 6 months follow-up (mean difference −0.883; 95% CI −10.75 to 8.979; p=0.857); or 12 months follow-up (mean difference −0.239; 95% CI −8.73 to 8.251; p=0.954).

Service outcomes

At 6 months participants in the control group used significantly less primary care than those in the intervention group (p=0.02); however this was no longer significant at 12 months (p=0.44). There were no significant differences between groups at either 6 or 12 months in relation to outpatient visits (p=0.71; p=0.87); emergency ambulance use (p=0.84; p=1); patient transportation service use (p=0.76; p=0.48); home visits – not including GP (p=0.21; p=0.27); drugs in pounds (p=0.61; p=0.46); nursing home stay in days (p=0.32; p=0.63); day care use in days (p=0.61; p=0.37); private care expenditure in pounds (p=0.85; p=0.89); home assistance in pounds (p=0.59; p=0.97); home assistance in pounds excluding outlier participant (p=0.76; p=0.87); informal care in hours (p=0.68; p=0.88).

Over the 12-month follow-up period there were no significant differences between groups in relation to frequency of hospital admissions (odds ratio 0.75; 95% CI 0.62 to 3.47; p=0.383); length of stay for participants who had at least 1 hospital admission (mean difference 9.3 days; 95% CI −12.5 to 31.1 days); duration of stay per hospital admission (control =15.8 days vs intervention =16.4 days; p=0.936).

Over the 12-month follow-up period there was no significant effect of place of care on number of hospital admissions (expβ=0.68; 95% CI 0.41 to 1.12; p=0.130).

11. Thorsen AM, Widen Holmqvist L, Von Koch L (2006) Early supported discharge and continued rehabilitation at home after stroke: 5-year follow-up of resource use. Journal of Stroke and Cerebrovascular Diseases 15: 139–43

Outline: This study was judged to have low internal validity (−). The purpose of the study was to assess the effect of early supported discharge (ESD) services on use of health and social services 5 years after stroke. The intervention was delivered by an outreach team, with 1 therapist coordinating the programme, and tailor-made for each patient – although the main foci of home visits were speech and communication, activities of daily living (ADL) and ambulation. Of the original sample (n=83), 54 participants were followed up 5 years after stroke (attrition rate: 35%; n=29). The remaining participants had either died (n=20) or were 'lost to follow-up' (n=9).

Results: Results demonstrated a significant difference in the mean total length of hospitalisation (51 days in the conventional rehabilitation group vs 32 days in the home rehabilitation group; p=0.2). It was thus concluded that ESD from hospital with continued rehabilitation at home for people with stroke was favourable with regards to resource use.

12. Ytterberg C, Thorsen AM, Liljedahl M et al. (2010) Changes in perceived health between one and five years after stroke: a randomized controlled trial of early supported discharge with continued rehabilitation at home versus conventional rehabilitation. Journal of the Neurological Sciences 294: 86–8

Outline: This RCT follow up study was judged to be of moderate quality (+). The aim was to explore changes in perceived health status in people receiving early supported discharge (ESD) from hospital with continued rehabilitation at home (the 'home rehabilitation group', HRG), compared with those who received conventional rehabilitation (the 'conventional rehabilitation group', CRG), 5 years after stroke. Eighty-three patients were randomly allocated to either the ESD (n=42) or CRG (n=41) groups. At 5 year follow up, there were 30 in the first group and 24 in the second group who were alive / contactable / willing to participate. The intervention was

delivered by an outreach team, with 1 therapist coordinating the program, and tailor-made for each patient – although the main foci of home visits were speech and communication, activities of daily living (ADL) and ambulation.

Results: Of the original sample (n=83), 50 participants were followed up (approximately 40%; n=33 were lost to follow-up). There was no difference between the groups at 1 or 5 years after stroke with regard to perceived health, except for a higher impact in the HRG at 1 year after stroke with regard to communication (p=0.01) and at 5 years after stroke with regard to eating (p=0.04). Perceived health did not change significantly between 1 and 5 years in the HRG, whereas it deteriorated significantly (p=0.05) in the CRG. Body care deteriorated in the CRG (p=0.03) and emotional behaviour was improved in both groups (HRG, p=0.04 and CRG, p=0.04). It may therefore be suggested that the long-term outcome with regards to perceived health status is more favourable after ESD than after conventional rehabilitation.

Studies reporting views and experiences data for people using home-based intermediate care, their families or carers, n=5

1. Ariss S (2014) National Audit of Intermediate Care: patient reported experiences, 2014. Sheffield: University of Sheffield

Outline: This survey was conducted as part of the National Audit of Intermediate Care in 2014. The survey methodology and reporting are rated as low quality (−) although the external validity is good (++) given that the study's research question closely matches review question 1(b) and the population and setting of the study are also well matched with the guideline scope and review question. The survey asked 1 open-ended question, which seems to have been sent to all people using intermediate care in England, although this is not clear. The question was 'Do you feel that there is something that could have made your experience of the service better?' Out of a total of 908 responses, 356 were from users of home-based intermediate care. Responses were also received from users of the other intermediate care service models and these will be reviewed for subsequent review questions. Apart from the service model they use, there is no other information about the survey respondents. The paper provides very little detail about the methods, except to describe the analysis.

Results: Statements about ways that the service might be improved were coded into 8 distinct themes, which emerged from the data. They are listed here in descending order, starting with the one cited most frequently.

1. Joined up, appropriate services

This theme included communication and coordination within and between services. For example, ‘Hours spent on assessment and no one passed on their notes so process very repetitive – exhausting!’. Other issues included timeliness of visits, information about waiting times, continuity of carers, knowledge and information provision about other appropriate services and discharge arrangements, for example ‘When my care was near an end. It was very chaotic. I was told by the carer treatment would be stopped the next day.’ (Note that page numbers do not appear in the document so they cannot be given in support of quotes.)

2. Timing of visits

The timing of visits was often inappropriate, unexpected or inconsistent, and more time or greater frequency of visits was considered necessary. Respondents clearly felt that the intermediate care was service, rather than needs, led: ‘wasn't my fault I needed care at weekend. Just dumped at weekend. What's happened to public services it’s a 24-hour care service now it’s gone to Monday-Friday 9-5.’ People also described how poor communication around visits compromised their control over their daily lives, ‘I know it is hard for the nurses to get here but if you could make it definitely morning or afternoon as I found I had to cancel appointments as I didn't know when they were actually coming am or pm.’

3. Personal communication and attention

Responses on this theme described a lack of appropriate or consistent information about services or care, inappropriate or disrespectful communication, lack of discharge information, and feelings that service users were not being listened to, or their needs understood. There were criticisms about a lack of user involvement in goal planning: ‘I think there is a balance to be struck between user and practitioner in making decisions about body therapy and outcomes, and I don’t think you have that balance right yet.’

4. Length of service

Many respondents reported anxiety or concern about the intermediate care finishing too early, before they feel adequately able to support themselves. Personal health and safety issues were also a concern. For many service users, discharge from the service is seen as an end to their contact with any support services, which could reflect a lack of access to appropriate long-term, low-level support. The service was often perceived to have been terminated too early: ‘I had a broken hip just discharged and received one visit only. I would have liked more longer-term involvement support to regain full mobility asap but a 45 min one-off visit was all I was allowed.

Very poor.' And: 'My legs are weak and shaky. Whilst the carers were here I had more confidence and my walking was improving I would have liked there help for a bit longer.'

5. Staffing

The main concerns were lack of provider continuity, and shortage of staff. These problems had an impact on many other important aspects of care, such as rushed visits, not enough time to share information, unpredictable and inappropriate visit times, inconsistent standards of care and lack of understanding about individuals' needs. Respondents wanted to 'have same person who knew your case'.

6. Personal care

The analysis found no particular themes for home-based intermediate care in relation to personal care, just individual reasons for unmet needs, 'I have not achieved all that was intended [that is] I am unable to go shopping because a) I am unable to walk without 2 sticks and am unable to carry any shopping and b) have not the confidence to go far on my own. So far I have been unable to walk as far as the local shop.'

7. Therapy and assessment

The responses for home-based services specifically mentioned more physiotherapy as an identified area of service improvement, 'I wanted physiotherapy to help me to walk unaided but I was put on a waiting list!'

2. Cobley CS, Fisher RJ, Chouliara N et al. (2013) A qualitative study exploring patients' and carers' experiences of Early Supported Discharge services after stroke. Clinical Rehabilitation 27: 750–7

Outline: This qualitative study, based in the UK, was judged to be of moderate quality (+). Through semi-structured interviews, researchers investigated patients' and carers' experiences of early supported discharge (ESD) services, with a view to informing the future of ESD provision. The study took place in Nottinghamshire and the participants all met the eligibility criteria for the local ESD service, although 2 study groups were used; 1 receiving ESD and the other receiving usual care (because although they met the criteria, they did not live within the geographical boundary for receiving ESD). Usual care comprised conventional community stroke services or no rehabilitation at all. A total of 27 stroke patients were interviewed as well as 15 carers. The researchers conducted thematic analysis across the data sets for the 2 groups and reported the following findings.

Results: Common themes from the ESD interviews.

Satisfaction with rehabilitation exercises

Patients often commented on the benefits of receiving therapeutic sessions both within and outside the home environment: ‘The team were encouraging and motivating and would take me on a walk to make sure I could get on a bus and that I was able to cross the road ...’ (Interview 12; patient, p753).

Home as a better arena for rehabilitation

There was a consensus of preference among participants (15 of 19) for returning to their home environment as soon as possible. Home was described as a more private and individualised arena for rehabilitation, which was more focused toward rehabilitation outcomes: ‘... it was good to be given walks around the house and getting used to things that are here, such as steps and obstacles’ (Interview 3, patient, p753).

Time not being a carer

Respite time for the carer emerged as a significant and prominent theme. Five of 9 reported that the therapeutic sessions between patient and the ESD team enabled them to engage in their own activities. By contrast, 2 carers described feeling housebound because the team was not with the patient long enough to enable sufficient respite.

Speed of response

Sixteen of 19 patients reported feeling positively surprised with the seamless transition between the hospital and home setting, with the first ESD home visit being made within 24 hours of hospital discharge. However 1 participant had to wait several days for the ESD team to make their initial visit: ‘I was left without any help at all from the Thursday to the Monday I sort of had to fend for myself ...’ (Interview 12, patient, p753).

Intensity of therapy

The intensity of rehabilitation, up to 4 visits per day, 7 days per week for a duration of 6 weeks was received very positively by virtually every respondent (18 of 19). The consistency and regularity of visits provided a sense of security during such a life-changing transitional period.

Satisfaction with provision and delivery of equipment

There was a general consensus (10 of 19) among participants that the equipment provided was useful and delivered in a timely manner. Nevertheless, 1 patient found the equipment provided unsuitable and 1 patient was disappointed at being promised aids that never materialised.

Disjointed transition between ESD and future services

Some patients felt that the 6-week cut off from ESD was abrupt. Furthermore, some patients, who transferred onto further services, did not feel that this transition was always well managed: ' ... all of a sudden it's like, "Oh, we've referred you to the hospital again to get the physio", which has took, like, 3 months. So I've had intense physio for 6 weeks and then, for 3 months, I've had nothing' (Interview 2, patient, p754).

Common themes in both cohorts of interviews

Limited support in dealing with carer strain

Many respondents indicated that they felt thrown into the caring role without receiving enough support from the community stroke teams. They stressed the need for services to consider and address carers' issues.

Lack of education and training of carers

Twelve of 15 carers reported being poorly informed regarding the extent of support available after discharge. Carers were neither shown how to physically care for the person nor how to cope with their emotional and psychological needs.

Inadequate provision and delivery of information

In several interviews, both patients (15 of 26) and carers (10 of 14) expressed concerns about their limited understanding of stroke and its causes, secondary preventative measures and lifestyle changes. They also described difficulties in accessing information concerning welfare benefits, carer allowance, statutory and informal support.

3. McLeod E, Bywaters P, Tanner D et al. (2008) For the sake of their health: older service users' requirements for social care to facilitate access to social networks following hospital discharge. British Journal of Social Work 38: 73–90

Outline: This is a moderate quality (+) study of voluntary sector hospital aftercare social rehabilitation projects. The projects, delivered as part of social care after hospital discharge were intended to provide a '…time-limited intervention to help them [service users] restore confidence

and skills lost through injury, bereavement or other trauma or loss', and to 'focus upon motivation and the restoration of valued social roles and networks' (p77). The qualitative study of the 5 social rehabilitation projects provided evidence about the forms of support that older people require after hospital discharge to facilitate re-engagement in social networks. Data collection was via questionnaires and telephone interviews with service users and face-to-face interviews with the 5 project coordinators as well as analysis of service records. The reviewers judge the methods of data collection to be appropriate although linking the analysis of service records to the questionnaire and interview responses would have strengthened the methodology.

Results: Findings were reported under 7 main themes. They consist of aspects of service provision that were found necessary to support older people in accessing social networks following hospital discharge.

1. Safe transition

An essential requirement to older service users re-engaging with social networks following hospital discharge was safe transition between hospital and home. Several project coordinators encountered service users who had been discharged too soon and were too ill to cope at home.

2. Assistance with practical home care/personal care

A large proportion of service users (10 out of 17) identified needing 'low-level' practical assistance in the home from the social rehabilitation (SR) project, for example, vacuuming and general cleaning. They said this not only assisted their recovery by maintaining personal and home care when they were physically incapacitated, but it helped restore their morale when they were socially isolated. Although direct home care provision didn't fit the 'classic' SR service model, project co-ordinators recognised that it was in service users' interests to meet this need, and accepted it as integral to the SR service.

3. Advocacy to assist access to material and social resources

There were several examples in which service users needed social care project workers to act as advocates in negotiations with key organisations and networks, to obtain material and social resources important to their health and well-being, for example, help obtaining benefits.

4. Social care as educational assistance

Unlike advocacy, educational assistance to help service users acquire skills which they have never needed before, or re-acquire skills forgotten or 'lost' through lack of confidence or practice,

was found to be very important. For example, ‘One service user wanted to resume visits to the betting shop which had been the hub of his social life before hospitalisation. However, his seriously impaired mobility necessitated use of a taxi and he had no experience of using taxis. The volunteer provided basic instruction and soon the service user was able to order taxis and resume his former life’ (Project C, p83).

5. Addressing psychological barriers to entry to social networks

Some service users needed assistance to tackle psychological barriers to entry to social networks. Meeting these requirements needed sensitive, painstaking, interpersonal contact on the part of the workers. The processes identified by the study embodied a task-centred approach in that it included the agreement of clearly defined goals reflecting service users’ priorities, and manageable stages of activity to reach such goals.

6. Access to health care organisations and networks

Alongside assistance to access social networks more generally, older service users also required assistance to access specialised healthcare providers. One volunteer provided personal support to ensure that a service user kept up his exercise programme following cardiac surgery.

7. Choice, friendship and time to care

Choice

Service users appreciated the degree of choice in terms of objectives and service delivery offered by the project. The SR approach was anti-ageist, resisting threats to well-being from assumptions that older service users would fit into ‘standard issue’ community care services.

Friendship

Service users’ appreciation of the quality of interpersonal contact that volunteers offered radiated from their feedback, ‘A real person comes into your home and becomes your friend’ (Project A, p85). The prime aim of this project was not to provide a befriending service, but to facilitate access to social networks. However, being socially isolated, the elements of contact with a friend, provided by interaction with project workers, were particularly valued by service users.

Time

Although service users were happy with the frequency and length of visits, averaging 1 to 1.5 hours, weekly, they complained that the duration of the SR service – 6 to 8 weeks, on average –

was too short. Firstly, they still felt unable to cope without assistance when the service ended and secondly, service users regretted the loss of the quality of friendship that had characterised personal contact with project workers.

4. Mitchell F, Dobson C, McAlpine A et al. (2011) Intermediate care: lessons from a demonstrator project in Fife. Journal of Integrated Care 19: 26–36

Outline: This is a low quality (−) study of experiences and outcomes associated with an intermediate care demonstrator project in Fife. Existing intermediate care was provided in people's homes, over a 14-day period by a multidisciplinary team, from health and social work. The demonstrator project aimed to increase the capacity, flexibility and responsiveness of the intermediate care service through workforce development, extended access and pharmacy. As part of the 'extended access' project, interviews with 6 service users were conducted in order to increase user involvement in the development of the intermediate care system. Staff experiences of the extended access service were elicited via a survey. Although the reviewers judged the qualitative approach to be appropriate, there are serious reservations about the internal validity of the study and this is reflect in the low quality rating.

Results

Effectiveness

Thirty-four patients were assessed as part of the extended access hours project. As a result, 11 hospital patients were supported to go home in the out-of-hours period, and 3 were supported to remain at home following a medical emergency, which prevented hospital admission.

User experiences and views

Personalised care

All the patients questioned felt that the service listened to them, and that care and support were provided at a time and a frequency that suited them. The responses indicated that the team delivered a flexible, person-centred service that treated patients with respect.

Feeling safe

All patients said that they felt safe when receiving the intermediate care service, 'I preferred to be at home and felt very safe at home. I felt safe knowing someone was coming in to help me' (p30).

Improvements in activities of daily living

The authors claim that the results provide strong evidence that the service enabled patients to return to their previous level of ability in activities of daily living. Patients commented that they felt more confident in their ability to cope at home.

Social activities

All the patients had returned to the social activities that they had managed before their recent hospital admission, and all those interviewed were managing to get out of their home.

Staff experience and views

Staff were asked what they were able to provide during the extended access hours that could not be done within standard working hours. The responses indicated 'that arranging afternoon discharges from hospital and discharges on Saturdays, and the ability to complete professional assessments during these extended hours, enabled more flexibility in the intermediate care system' (p30-1). Positive comments were made about the advantages of staff working across teams and being able to follow patients through their care journey. Negative comments referred to the difficulties in working across organisational boundaries and being unfamiliar with operational systems.

5. Townsend J, Godfrey M, Moore J (2006) Careful thoughts: recognising and supporting older carers in intermediate care. Research Policy and Planning 24(1): 39–52

Outline: This moderate quality (+) study sought to explore the nature of informal caring relationships, as well as interactions between service users, carers and intermediate care services. A purposive sample of 64 service users and 21 carers was interviewed following discharge from intermediate care, and twice subsequently up to 7 months later to explore changes in perspective over time.

Results: A number of themes were identified regarding both how carers perceived their caring roles (the temporary carer, reciprocal supporter through gentle decline, shared disruptive lives, long term carer, and caregiver as care-receiver), and the service interventions they found helpful or problematic during intermediate care and users' transition to mainstream services (getting the service user going again, personal communication). Carer education also emerged as a theme, in which those who supported relatives reported needing help to learn how to undertake new tasks of personal care and make judgements about the person's progress. In addition, many users reported needing ongoing support following intermediate care, stating that this acted as a gateway to access mainstream services such as home care (baton-passing to mainstream services).

Although support for carers was provided as part of holistic care to service users, the study identified a need to focus on the point of handing over to mainstream services and, in particular, appropriate responses to the differing relational aspects of caregiving.

Studies reporting views and experiences data for practitioners, n=2

1. Chouliara N, Fisher RJ, Kerr M et al. (2014) Implementing evidence-based stroke early supported discharge services: a qualitative study of challenges, facilitators and impact. Clinical Rehabilitation 28: 370–7

Outline: This is a moderate quality study (+) from the UK aiming to report the views of health professionals and commissioners working with a stroke early supported discharge service in relation to the impact of the service and the factors which '… facilitate or impede the implementation of the service' (p370). The study reports the views of a total of 53 professionals working with 2 stroke early supported discharge teams in Nottinghamshire. The roles of participants are described as 'commissioning', 'service management', early supported discharge team leads and team members, stroke physicians, acute stroke unit staff and rehab stroke unit staff.

The interviews aimed to cover 4 main topics: the nature of the participants' involvement with the service; factors which had helped or hindered implementation; impact of the service; and suggested improvements, and the authors report '… considerable overlap in the views of respondents' (p372).

Results

Facilitators to implementation

The following facilitators were identified: flexible eligibility criteria that enables appropriate referrals; services which are adaptable to local healthcare contexts and responsive to the needs of the individual; flexibility in relation to the duration of the intervention (both shorter and longer than 6 weeks); teams which include rehabilitation assistants (to allow more senior members of staff to provide more specialised care); development of strong links with other services (in order to improve identification of patients suitable for referral) through joint meetings and training, as well as staff rotation.

Challenges to implementation

Delays in securing social care packages or involving social care staff can act as a major barrier to the early discharge process, with respondents from 1 team reporting that they had to stop taking

referrals as a result of this ‘bottlenecking’ of patients. Having a social worker on the team was reported to help combat this issue.

- Hospital staff’s scepticism and lack of knowledge in relation to the content of the service and the expected outcomes can lead to unnecessarily long hospital stays.
- There is a lack of consensus regarding the appropriate point for referral to early supported discharge. Some respondents felt this should be made as soon as the individual is admitted to the acute unit, while others felt this period was unsuitable given the fact that recovery was likely to still be ongoing.
- A number of commissioners felt that the role of early supported discharge services in relation to other services in the stroke care pathway needed to be clarified.
- Participants working at both sites identified the lack of community-based specialised services for individuals with more complex needs or greater levels of disability as a challenge. This was felt to sometimes lead to inappropriate referrals.
- A number of respondents felt that information-sharing procedures between hospitals and early supported discharge services needed to improve in order to reduce the potential for duplicated assessments.

Impact of early supported discharge services

The majority of stakeholders viewed early supported discharge as a positive service that is able to reduce hospital stays without hindering rehabilitation. The community-based nature of the service was seen as particularly valuable by some respondents and the specialised care provided was felt to be a defining feature.

Home-based rehabilitation was seen as a useful model of care by many, because it enables a more accurate assessment of the individual to be made in their home environment and has greater scope to be tailored to the needs of the individual.

Some participants felt that early supported discharge services should also aim to address emotional or cognitive difficulties, particularly as these may not have been apparent before discharge. However, there was recognition that these aspects of care could not be comprehensively addressed given the short timescale of the service.

A number of commissioners felt that the evidence base in relation to the effectiveness of early supported discharge services needed to be strengthened, particularly given the economic climate and demand for evidence of improved outcomes.

2. Glasby J, Martin G, Regen E (2008) Older people and the relationship between hospital services and intermediate care: results from a national evaluation. Journal of Interprofessional Care 22: 639–49

Outline: This is a moderate quality (+) qualitative study from the UK, which explored the views of key professionals involved with intermediate care for older people at 1 of 5 sites in England. The study focuses on the relationship between acute and intermediate care services and the perceived difficulties which respondents identified.

Results: The study reports the findings of interviews with 61 participants and focus group(s) involving 21 participants (across all 5 sites).

The authors note that participants generally viewed intermediate care as a positive addition to the spectrum of services which can enable choice and improve quality of life and independence, and that it had grown out of a recognition that there was a '… need to do things differently …' (Authors, p642).

However, both hospital staff and intermediate care staff reported difficulties in the relationship between the 2 services.

Issues for hospital staff

Some respondents felt that intermediate care services had in some instances been set up too rapidly and with only minimal input from hospital staff. Others felt that intermediate care was the latest in a line of new projects that drained funding, shifted the focus from good practice, and were insufficiently evidenced.

There was disagreement regarding the impact intermediate care services could have on acute resources, with some respondents suggesting that clinicians working in hospitals may focus on acute care only and therefore '… lose sight of the whole person …' (Authors, p643). In contrast, other respondents are reported to have felt that this was '… a more appropriate use of expensive acute capacity' (Authors, p643).

Respondents are also reported to have felt that intermediate care services were detached from mainstream services and that this perceived separation, coupled with poor understanding of intermediate care itself by hospital staff and GPs resulted in low uptake. Some participants also felt that overly restrictive eligibility criteria and perceptions of 'cherry-picking' patients contributed to this problem.

Issues for intermediate care staff

Some respondents are reported to have felt that staff in acute settings were slow to adapt to new services, were uncomfortable referring to intermediate care because they saw this as loss of control of 'their' patient, and had little knowledge about services which were available (which the authors note is exacerbated by regular changes in staffing). Respondents were also concerned that hospital staff saw intermediate care solely as a means of reducing pressure on acute care rather than as a service, which was appropriate for some but not all patients.

The authors report that intermediate care staff sometimes felt under pressure to take inappropriate referrals, as a way of ensuring that other professionals accepted the new service.

Suggested solutions to some of the concerns raised by respondents included: greater involvement of geriatricians in intermediate care as a means of minimising the concerns of hospital staff regarding quality of care; joint review of eligibility criteria; rotational posts; greater information and publicity in relation to services; as well as more proactive work by intermediate care staff to identify potential patients and greater in-reach in acute settings (for example, full involvement in discharge meetings). The authors suggest that these solutions were all underpinned by the sense that there needed to be a cultural shift if acute services and intermediate care were to work effectively together.

Economics

No additional economic analysis was carried out for this review question.

Evidence statements (including economic evidence statements)

The evidence statements listed in this section synthesise the key themes across included studies.

HB1	There is some moderate quality evidence that home-based intermediate care that addresses cognitive, emotional and social needs should be favoured over intermediate care that only addresses physical rehabilitation. A moderate quality RCT (Jackson et al. 2012 +) of a combined cognitive and physical rehabilitation approach for ICU survivors found the intervention improved cognitive (statistically significantly), physical and functional ability compared with usual care. A moderate quality study (McLeod et al. 2008 +) identified the importance of teaching people new skills to enable them to return to their hobbies following hospital discharge. Finally a moderate quality study (Chouliara et al. 2014 +) found that practitioners with experience of Early Supported Discharge (ESD) believe the service should address emotional or cognitive difficulties and that these may not be apparent before discharge.
HB2	There is some moderate to low quality evidence about the importance of integrated working to the successful delivery of intermediate care and suggestions about how this can be improved. A low quality study (Mitchell et al. 2011 −) reported negative comments from practitioners about difficulties in working across organisational boundaries and being unfamiliar with operational

	systems. A moderate quality study (Chouliara et al. 2014 +) reported practitioner views that information-sharing systems needed improvement to reduce duplication of assessments. Linked with this, a low quality survey (Ariss 2014) reported service user complaints about a lack information sharing resulting in repeated assessments. Findings from Chouliara et al. (2014 +) suggested integrated working could be improved through joint meetings and training. Finally, a moderate quality study (Cobley et al. 2013 +) reported that service users and carers complained about disjointed transition between ESD and subsequent services.
HB3	There is some moderate quality evidence about the potential effects of home-based intermediate care on family and unpaid carers although the effectiveness evidence is conflicting. A moderate quality RCT (Crotty et al. 2008 +) found that on discharge from the service, carer strain was statistically significantly lower in the home-based rehabilitation service compared with day hospital-based rehabilitation although the between group difference in scores was not significant at the 3-month follow up. Another moderate quality RCT (Parker et al. 2009 +) found no significant difference in carer psychological wellbeing following home-based versus day hospital-based rehabilitation. Qualitative evidence emphasised the importance of addressing carers' needs in the delivery of home-based intermediate care. A moderate quality study (Townsend et al. 2006 +) found that carer education was a requirement to enable them to support the intermediate care process. A moderate quality study (Cobley et al. 2013 +) found that carers felt thrown into the carer role with insufficient support, although this was experienced by carers in the ESD service as well as conventional community stroke services.
HB4	There is some moderate quality evidence that people experience home-based intermediate care as ending too suddenly and poor communication exacerbates negative views about this. A moderate quality study (Cobley et al. 2013 +) found service users who felt the 6-week cut off was too abrupt and often poorly managed, with little warning the service was going to end. Another moderate quality study (McLeod et al. 2008 +) of social rehabilitation found participants complained that the 6–8-week duration was too short and left them unable to cope without assistance. This is reiterated by a low quality survey (Ariss 2014 −) in which home-based intermediate care was often perceived to have been terminated too early before people felt fully recovered or independent. The moderate quality study by Townsend et al. (2006 +) also found that few service users were fully recovered at the end of 6 weeks. Finally, Chouliara et al. (2014 +) reported practitioner views that ESD services should be more flexible in relation to duration, both longer and shorter than 6 weeks, according to people's needs.
HB5	There is a moderate amount of moderate to low quality evidence that home-based intermediate care should be better tailored to people's needs. A moderate quality study (Chouliara et al. 2014 +) reported practitioner views that key to implementing ESD is ensuring services are responsive to the needs of individuals. The same study found that home-based assessment and rehabilitation is key to tailoring goals to the individual and their environment. A moderate quality study (McLeod et al. 2008 +) found that in order to help older people re-enter social networks after hospital discharge, goals needed to be agreed with people themselves and reflect their own priorities. A low quality study (Mitchell et al. 2011 −) found service users and carers valued the intermediate care services in which they felt listened and involved in setting person-centred goals. Conversely, a low quality survey (Ariss 2014 −) reported complaints about poor user involvement in goal setting. Finally, Glasby et al. (2008 +) found that intermediate care practitioners were concerned that hospital staff view intermediate care as a means of reducing pressure on acute care when in fact, the service is not suitable for the needs of all patients.

HB6	There is a small amount of low to moderate quality evidence about the rigidity of the organisation and delivery of home-based intermediate care. A low quality study (Mitchell et al. 2011 −) found that when access to intermediate care was extended through provision outside of 'standard working hours', practitioners could conduct assessments at the weekends and in evenings, increasing responsiveness and facilitating hospital discharge. A low quality survey (Ariss 2014 −) reported negative views about home-based intermediate care being just a 9am-5pm service and providing visits that are too short and delivered at irregular times, another problem that is exacerbated by poor communication. Finally, Glasby et al. (2008 +) reported that some practitioners believe eligibility criteria are too rigidly applied, enabling 'cherry-picking' of certain patients for admission to the service.
HB7	None of the RCTs proved the overall effectiveness of home-based intermediate care compared with control interventions. However there is some evidence of moderate quality that home-based intermediate care performs better on certain outcomes. One moderate quality RCT (Mahomed et al. 2008 +) showed no difference in outcome between home-based rehabilitation compared with inpatient rehabilitation although the cost of delivering home-based rehabilitation was lower. Two moderate quality RCTs (Crotty et al. 2008 +; Parker et al. 2009 +) found some effect on service outcomes, such as a persistently lower risk of readmission to hospital, which favoured home-based rehabilitation compared with day hospital rehabilitation, but there was conflicting evidence about the effects on carers. Crotty et al. (+) found no differences in quality of life for service users and Parker et al. (+) showed improved health-related quality of life in the home-based rehabilitation group on discharge but no between group difference at 6-month follow-up.
HB8	No evidence was found from studies published since 2005 about the views and experiences of housing support or other practitioners in relation to home-based intermediate care. The included studies (Chouliara et al. 2014 +; Glasby et al. 2008 +; McLeod et al. 2008 +; Mitchell et al. 2011 −) only reported views and experiences of health and social care practitioners.
EcHB1	Home-based vs day hospital (different conditions) Evidence from 1 England-based RCT (Parker et al. 2009 ++, n=84), which compared home-based multidisciplinary rehabilitation with wide range of rehabilitation programmes provided at day hospitals, found no significant difference in health-related quality of life at 6 months (mean difference 0.023, 95% CI −0.114 to 0.161, p value 0.735) or 12 months (mean difference 0.147, 95% CI, −0.051 to 0.3450, p value 0.141). There was also no difference in regards to other outcomes (including carers' psychological wellbeing). Neither public costs nor total costs at 6- or 12-month follow-up were significantly different: mean public sector costs at 6 months were £6,139 in the home-based group (measured for n=25) and £4,214 in the bed-based group (measured for n=21); the p value was 0.29. Mean public sector costs at 12 months were £9,977 in the home-based group (measured for n=23) and £7,511 in comparison group (measured for n=13); the respective p value was 0.43. Mean total costs (including costs to patients and carers; based on value of unpaid care £8/hr) at 6 months were £14,330 in intervention group (measured for n=25) and £10,102 in comparison group (measured for n=21); the p value was 0.66. At 12 months costs were £16,105 (measured for n=23) in home-based group vs £23,105 (measured for n=13) in bed-based group with a p value of 0.91. Findings suggest that day hospital and home-based intermediate care equally cost-effective. However, based on exclusion criteria and detail in the discussion section of the paper findings are likely to refer only to certain type of population eligible for multidisciplinary care.
EcHB2	Home-based vs bed-based intermediate care (hip or knee replacement)

	Evidence from one Canadian RCT (Mahomed et al, 2008; n=234; +) compared a home-based multidisciplinary pathway (n=119) with inpatient rehabilitation (n=119); the home-based pathway included nursing, physiotherapy and home support. Both groups showed substantial improvements at 3 and 12 months, with no significant differences between groups with respect to health-related quality of life, clinical outcomes or patient satisfaction scores (p>0.05). Hospital length of stay was slightly higher in the home-based group but this was not significant: 7 days (SD 3 days) vs 6.3 days (SD 2.5 days); p=0.06. Total costs (acute care and rehabilitation) were slighter lower in intervention group but this again was not significant: $11,082 (SD $7,747) vs CG $14,532 (SD$11,555); p<0.01. This difference in total costs was due to significantly lower rehabilitation costs in the intervention group: $891 (SD $1,316) vs $5120 (SD $7552); p<0.001. Findings suggest that home- and bed-based intermediate can be provided equally cost-effective for patients undergoing hip or knee replacement. However, the study had a limited perspective on healthcare costs and did not consider the impact on costs of hospital readmission, social care and unpaid care.
EcHB3	Self-management focused intermediate care (cardiac), home- vs bed-based Two UK RCTs (Jolly et al. 2007 ++, n=525; Taylor et al. 2007 ++, n=104) were identified in this area; both referred to a home-based rehabilitation programme that included the use of a self-management tool called the Heart Manual. The control groups were different between trials: in one trial (1) the control group received multidisciplinary hospital-based rehabilitation and in the other trial (2) standard care referred to different centre-based rehabilitation programmes. In both studies, there were no significant differences in health-related quality of life although scores were slightly worse in the intervention group (1: p=0.57). There were no significant differences in any other clinical outcomes or in psychological wellbeing; the second trial (2), which also measured acceptability (in form of attendance) found that acceptability was higher in the intervention group (p<0.001). In regards to costs, the first study (1) found no significant difference in mean total costs per patient in home-based intermediate care (n=48; £3,279, SD £374) compared with bed-based intermediate care (n=32; £3,201, SD £443). The second study (2) found significantly higher mean costs of the rehabilitation programme in the intervention group: IG £198 (95% CI £189 to £208) vs CG £157 (95% CI £139 to 175); p<0.05. When the costs to patients (in form of out-of-pocket expenditure) were included in the analysis this cost difference was no longer significant. Findings from these 2 high quality studies suggest that home-based intermediate with self-management focus is as cost-effective as bed-based intermediate care without such focus. This refers to cardiac patients after an acute event.
EcHB4	Hospital-at-home versus bed-based acute care (older people) One New Zealand RCT (Harris et al, 2005, n=285 ++) compared hospital-at-home with standard hospital care. Participants were recruited into the hospital-at-home service either from the emergency department before they got admitted to a hospital ward or after they got admitted as part of early discharge. The majority were referred via the latter route. Overall, the study did not find significant differences between groups for any of the primary and secondary outcomes. Cognitive function did not change over time in neither group: diff 0.44 (95% CI −1.38 to 0.35) measured for n=117 in hospital-at-home and n=109 in comparison group. Instrumental Activities of Daily Living (IADL) improved in both groups (from 7.0 to 9.6) with no significant difference between them: diff 0.2 (95% CI -0.65 to 1.04); this was measured for n=214 in hospital-at-home and for n=123 in the bed-based group. Acceptability

	among service users and carers was significantly higher in the hospital-at-home group: The proportion of service users (carers) who rated service 'very good' or 'excellent': 83.0% vs 72.3%; p=0.05 (66.7% vs 41.4%; p=0.004. Carers' strain was significantly lower in the hospital-at-home group: 4.6 (SD 6.2) vs 6.2 (SD 3.7); p=0.02. The mean total costs per patient were significantly higher in the hospital-at-home group: NZ $6,524 vs NZ $3,525 (p<0.0001). This was due to higher cost per day of service, a longer length of hospital stay and a higher readmission rate. There was no significant difference in community care costs. Findings from 1 good quality study thus suggest that hospital-at-home intervention is significantly more costly but more acceptable to patients and carers.

Included studies for these review questions

Aimonino N, Tibaldi V, Barale S et al. (2007) Depressive symptoms and quality of life in elderly patients with exacerbation of chronic obstructive pulmonary disease or cardiac heart failure: preliminary data of a randomized controlled trial. Archives of Gerontology and Geriatrics 44 (Suppl. 1): 7–12

Ariss S (2014) National Audit of Intermediate Care: patient reported experiences, 2014. Sheffield: University of Sheffield

Bjorkdahl A, Nilsson AL, Grimby G et al. (2006) Does a short period of rehabilitation in the home setting facilitate functioning after stroke? A randomized controlled trial. Clinical Rehabilitation 20: 1038–49

Björkdahl A, Nilsson AL, Sunnerhagen KS (2007) Can rehabilitation in the home setting reduce the burden of care for the next-of-kin of stroke victims? Journal of Rehabilitation Medicine 39: 27–32

Chouliara N, Fisher RJ, Kerr M et al. (2014) Implementing evidence-based stroke Early Supported Discharge services: a qualitative study of challenges, facilitators and impact. Clinical Rehabilitation 28: 370–7

Cobley CS, Fisher RJ, Chouliara N et al. (2013) A qualitative study exploring patients' and carers' experiences of Early Supported Discharge services after stroke. Clinical Rehabilitation 27: 750–7

Crotty M, Giles LC, Halbert J et al. (2008) Home versus day rehabilitation: a randomised controlled trial. Age and Ageing 37: 628–33

Fjaertoft H, Indredavik B, Magnussen J et al. (2005) Early supported discharge for stroke patients improves clinical outcome. Does it also reduce use of health services and costs? One-year follow-up of a randomized controlled trial. Cerebrovascular diseases 19: 376–83

Glasby J, Martin G, Regen E (2008) Older people and the relationship between hospital services and intermediate care: results from a national evaluation. Journal of Interprofessional Care 22: 639–49

Inglis SC, Pearson S, Treen S et al. (2006) Extending the horizon in chronic heart failure: effects of multidisciplinary, home-based intervention relative to usual care. Circulation 114: 2466–73

Jackson JC, Ely EW, Morey MC et al. (2012) Cognitive and physical rehabilitation of intensive care unit survivors: results of the RETURN randomized controlled pilot investigation. Critical Care Medicine 40: 1088–97

Kalra L, Evans A, Perez I et al. (2005) A randomised controlled comparison of alternative strategies in stroke care. Health Technology Assessment 9: 18

Mahomed NN, Davis AM, Hawker G et al. (2008) Inpatient compared with home-based rehabilitation following primary unilateral total hip or knee replacement: a randomized controlled trial. Journal of Bone and Joint Surgery – American Volume 90: 1673–80

McLeod E, Bywaters P, Tanner D et al. (2008) For the sake of their health: older service users' requirements for social care to facilitate access to social networks following hospital discharge. British Journal of Social Work 38: 73–90

Mitchell F, Dobson C, McAlpine A et al. (2011) Intermediate care: lessons from a demonstrator project in Fife. Journal of Integrated Care 19: 26–36

Parker SG, Oliver P, Pennington M et al. (2009) Rehabilitation of older patients: day hospital compared with rehabilitation at home. A randomised controlled trial. Health Technology Assessment 13: 39

Thorsen AM, Widen Holmqvist L, Von Koch L (2006) Early Supported Discharge and continued rehabilitation at home after stroke: 5-year follow-up of resource use. Journal of Stroke and Cerebrovascular Diseases 15: 139–43

Townsend J, Godfrey M, Moore J (2006) Careful thoughts: recognising and supporting older carers in intermediate care. Research Policy and Planning 24: 39–52

Ytterberg C, Thorsen AM; Liljedahl M et al. (2010) Changes in perceived health between one and five years after stroke: a randomized controlled trial of early supported discharge with continued

rehabilitation at home versus conventional rehabilitation. Journal of the Neurological Sciences 294: 86–8

3.2 Delivering bed-based intermediate care

Introduction to the review questions

The purpose of the first part of the review question (part a) was to examine the effectiveness and cost-effectiveness of bed-based intermediate care interventions designed to prevent unnecessary acute hospital admissions, premature admissions to long-term care or to receive people from acute hospital settings for rehabilitation and to support timely discharge from hospital. Part b of the review question sought to identify evidence which described the self-reported views and experiences of adults with social care needs, their families and unpaid carers about the care and support they receive from a bed-based intermediate care services. In particular, the aim was to help the guideline committee to consider whether people who receive support think it is personalised and coordinated across social care, inpatient hospital care, bed-based intermediate care settings and primary and community health services. Finally, part c of the review question sought evidence that described the views and experiences of people delivering, organising and commissioning social care, health and housing services including what works and what does not work well in bed-based intermediate care.

A good amount of effectiveness evidence, from a range of countries, was located and the reviewers therefore prioritised the highest level, only presenting RCTs to the committee. No systematic reviews were included for review because on examination of the full texts fewer than 80% of included studies met the inclusion criteria for this review. This is in line with the review protocol.

There was also a moderate amount of views and experiences evidence, describing the perspectives of people using bed-based intermediate care and the perspective of practitioners. Most of the views and experiences evidence was of moderate quality.

Review questions

2a) What is the effectiveness and cost effectiveness of bed-based intermediate care?
2b) What are the views and experiences of people using services, their families and carers in relation to bed-based intermediate care?
2c) What are the views and experiences of health, social care and other practitioners about bed-based intermediate care?

Summary of the review protocol

The protocol sought to identify studies that would:

- identify the effectiveness and cost-effectiveness of bed-based intermediate care
- identify emerging models of bed-based intermediate care and associated outcomes
- describe the self-reported views and experiences of adults with social care needs, their families and unpaid carers about the care and support they receive from a bed-based intermediate care service including what works and what does not work well
- describe the views and experiences of people delivering, organising and commissioning social care, health and housing services including what works and what does not work well in bed-based intermediate care.

Population

For question 2a and 2b: Adults, aged 18 years and older, with experience of bed-based intermediate care services and their families, partners and carers. Self-funders and people who organise their own care and who have experience of bed-based intermediate care services are included.

For question 2a and 2c: Housing practitioners, social care practitioners (providers, workers, managers, social workers), and health and social care commissioners involved in delivering bed-based intermediate care; personal assistants engaged by people with care and support needs and their families.

For question 2a and 2c: General practice and other community-based healthcare practitioners, including GPs, therapists and community/district nurses; hospital ward staff.

Intervention

Bed-based intermediate care services designed to prevent unnecessary acute hospital admissions, premature admissions to long-term care or to receive people from acute hospital settings for rehabilitation and to support timely discharge from hospital.

Note the following exclusions: single condition rehabilitation (for example, stroke) units, general community hospital beds not designated as intermediate care or rehabilitation and mental health rehabilitation beds.

Setting

Acute hospital, community hospital, care (residential and nursing) homes, standalone intermediate care facility, independent sector facility, local authority facility or other bed-based setting or prison.

Outcomes

User and carer related outcomes (such as user and carer satisfaction, quality and continuity of care, choice and control, dignity and independence, involvement in decision-making and health and social care related quality of life) and service outcomes such as use of health and social care services (secondary, primary and community), length of hospital stay, delayed transfers of care, rates of hospital readmissions within 30 days (see 1.6 in the scope) and admissions to care homes.

Study design

The study designs which were prioritised for the effectiveness and cost-effectiveness question included: Systematic reviews of studies of different models of discharge assessment and care planning; randomised controlled trials of different approaches to discharge assessment and care planning; economic evaluations; quantitative and qualitative evaluations of different approaches; observational & descriptive studies of process; cohort studies, case control and before and after studies and mixed methods studies.

The study designs which were prioritised for the views and experiences questions included: systematic reviews of qualitative studies on this topic; Systematic reviews of qualitative studies on this topic; qualitative studies of user and carer views of social and integrated care; qualitative components of effectiveness and mixed methods studies and observational and cross-sectional survey studies of user experience.

See Appendix A for full protocols.

How the literature was searched

In bed-based intermediate care we used search filters that limited results to specific study types such as: systematic reviews, meta-analyses, RCTs, cost-effectiveness and qualitative reviews. We combined these with a core search approach, to control the precision of yield from within the largest element of the search strategy, the core subjects areas being: rehabilitation, intermediate care, occupational therapy and physiotherapy. Finally we combined terms related to both outcomes and time limits, as expressed by the included definitions within the National Audit for Intermediate Care, along with terms surrounding the particular setting (bed-based). Searches for

the period 2005 - 2015 were initially run in October 2015 and an update search was conducted in July 2016.

See Appendix A for full details of the searches including the rationale for date limits.

How studies were selected

Search outputs (title and abstract only) were stored in EPPI Reviewer 4 – a software program developed for systematic review of large search outputs. A subset was created by searching within the review using terms that were specific to bed-based intermediate care, based on the National Audit definitions and terms known to be related or equivalent. This subset of studies was then screened against an exclusion tool informed by the parameters of the scope. Formal exclusion criteria were developed and applied to each item in the search output, as follows:

- language (must be in English)
- population (must be over 18 years of age and have experience of using bed-based intermediate care)
- intervention (must be bed-based intermediate care)
- setting (acute hospital, community hospital, care [residential and nursing] homes, standalone intermediate care facility, independent sector facility, local authority facility or other bed-based setting or prison)
- country (must be UK or other OECD)
- date (must not be published before 2005)
- type of evidence (must be research).

Title and abstract of all research outputs were screened against these exclusion criteria. Those included at this stage were marked for relevance to particular parts of the review question – or flagged as being relevant to one of the other review areas – and retrieved as full texts.

Full texts were again reviewed for relevance and research design. A list of studies excluded on full text can be found in appendix A, organised by exclusion criteria.

If still included, critical appraisal (against NICE tools) and data extraction (against a coding set developed to reflect the review questions) was carried out. The coding was all conducted within EPPI Reviewer 4, and formed the basis of the analysis and evidence tables. All processes were quality assured by double coding of queries, and of a random sample of 10%.

‘Searching within’ created a subset of 5015 studies and in our initial screen (on title and abstract) we found 279 studies, which appeared relevant to the review questions on bed-based intermediate

care. We retrieved and then reviewed full texts and included a total of 12 papers: 7 effectiveness studies and 5 views and experiences studies. The included studies (see below) were critically appraised using NICE tools for appraising different study types, and the results tabulated. Study findings were extracted into findings tables. See Appendix B for full critical appraisal and findings tables.

Narrative summary of the evidence

In this section, a narrative summary of each included study is provided, followed by a synthesis of the evidence, according to the key outcomes, themes or sub-groups in the form of evidence statements [p106-10]. The approach to synthesising evidence was informed by the PICO within the review protocol.

Studies reporting effectiveness data (n=7)

Note that due to the heterogenity of the evidence, data from each effectiveness study are presented separately, rather than combining them into a single meta-analysis.

1. Crotty M, Whitehead CH, Wundke R et al. (2005) Transitional care facility for elderly people in hospital awaiting a long term care bed: randomised controlled trial. British Medical Journal (Clinical Research Edition) 331: 1110–13

Outline: A moderate quality Australian RCT (+) evaluating the impact of a transitional facility providing multidisciplinary care aligned to a medical rehabilitation model. Length of stay was not time-limited, however the median length of stay was 46 days (range 35.5 to 53.6 days). The control group received care as usual in the hospital.

Participants were elderly patients waiting for long-term care placement and assessed as being '… unsuitable for other rehabilitation or community discharge support programmes' (p1). The authors note that nearly 30% had been admitted to hospital as a result of '… musculoskeletal problems such as falls, fractures, and soft tissue injuries' (p3, no further details on reasons for admission are reported).

A total of 320 participants were randomised and follow-up took place at 4 months post-randomisation.

Results

Service user outcomes

At 4-month follow-up, there were no significant differences between groups in relation to service user outcomes. Participants in the intervention group had lower levels of physical function (measured using the modified Barthel Index) than those in the control group, however this difference was not significant (control 56.7 [27.2 SD] vs intervention 55.2 [25.1 SD]; mean difference = 1.5; 95% CI −5.6 to 8.6; p=0.678).

Participants in the intervention group had higher levels of dependency (measured using the Residential Care Scale), however this difference was also non-significant (control 55.6 [23.6 SD] vs intervention 58.7 [22.0 SD]; mean difference =−2.1 95% CI −8.3 to 4.1; p=0.506).

Participants also reported lower quality of life (measured using the Assessment of Quality of Life Scale), however this difference was non-significant (control 22.9 [4.9 SD] vs intervention 24.0 [4.4 SD]; mean difference =−1.1; 95% CI −2.3 to 0.2; p=0.099). The proportion of participants who had died was higher in the intervention group than in the control group, however this difference was also non-significant (control n=28, 27% vs intervention n=59, 28%, statistical data not provided, reported as non-significant by authors).

Service outcomes

There were significant differences between groups in relation to all measures of acute hospital usage with participants in the intervention group spending significantly less time in hospital than those in the control group between admission and discharge (control 43.5 days [95% CI 41.0 to 51.0] vs intervention 32.5 days [95% CI 29.0 to 36.0]; median difference =11 days; 95% CI 6 to 16; p<0.001); between randomisation and discharge (control 16 days [95% CI 13 to 20] vs intervention 6 days [95% CI 5 to 7], median difference =10 days [95% CI 6 to 11]; p<0.001); and when the initial length of stay post-randomisation was combined with lengths of stay arising from readmissions during the follow-up period (control 18 days [95% CI 15-21] vs intervention 7.5 days [95% CI 7.0 to 9.0]; median difference =10.5 days [95% CI 6.0 to 11.0]; p<0.001).

The proportion of participants readmitted to hospital during the follow-up period was higher in the intervention group than in the control group but this difference was not significant (control 25% vs intervention 28%, statistical data not provided, reported as non-significant by authors).

The proportion of participants who were living in their own home was lower in the intervention group than in the control group, however this difference was not significant (control n=9 [9%] vs intervention n=14 [7%], statistical data not provided, reported as non-significant by authors).

Of those participants who were admitted to permanent care (n=224), those in the intervention group took significantly longer to be admitted than those in the control group (control 51.5 days [95% CI 44.0 to 63.0] vs intervention 72.5 days [95% CI 62.0 to 81.9]; median difference =-21 days [95% CI -27 to -6]; p=0.003).

2. Garåsen H, Windspoll R, Johnsen R (2007) Intermediate care at a community hospital as an alternative to prolonged general hospital care for elderly patients: a randomised controlled trial. BioMed Central Public Health 7: 68

Outline: This is a moderate quality (+) study, which aimed to compare the efficacy of intermediate care at a community hospital with standard prolonged care at a general hospital. A total of 142 patients were randomised to either intermediate care (n=72) or standard prolonged care (n=70), although 8 participants randomised for intervention were never transferred due to deterioration of their medical conditions. The intervention was based on individualised intermediate care, focusing on improving physical functioning so that participants would be able to manage independently on returning home. Data were collected 6 months following discharge from intermediate care or care at the general hospital and all participants, including the 8 that did not fully complete the intervention, were analysed in the groups to which they were originally allocated. There were no dropouts except for deaths, which were assessed as part of the study's outcomes.

Results

Service user related outcomes

There were no significant differences in average hospital stay between groups (p=0.79) or deaths (p=0.23).

Service outcomes

At 6 months, 14 participants in the intervention group were readmitted for the same disease, compared to 25 in the comparison group (comprising 32 readmissions), producing a statistically significant difference (mean difference 1.18-6.49 [95% confidence interval], p=0.03).

There were no significant differences in need for nursing homes and home care after 12 months, with 38 (52.8%) from the intervention and 44 (62.9%) from the comparison group still needing long-term home nurse care. There were, however, significantly more participants in the intervention group (n=18; 25%) than in the comparison group (n=7; 10%) who were independent of home care, producing a statistically significant difference (mean difference 0.11-0.88 [95% confidence interval], p=0.02).

3. Garåsen H, Windspoll R, Johnsen R (2008) Long-term patients' outcomes after intermediate care at a community hospital for elderly patients: 12-month follow-up of a randomized controlled trial. Scandinavian Journal of Public Health 36: 197–204

Outline: This is a moderate quality (+) follow-up of the above study, which aimed to compare the efficacy of intermediate care at a community hospital with standard prolonged care at a general hospital. A total of 142 patients were randomised to either intermediate care (n=72) or standard prolonged care (n=70), although 8 participants randomised for intervention were never transferred due to deterioration of their medical conditions. The intervention was based on individualised intermediate care, focusing on improving physical functioning so that participants would be able to manage independently on returning home. All data were collected at discharge from community or general hospitals, and at 6 and 12 months from the time of inclusion, and all participants, including the 8 that did not fully complete the intervention, were analysed in the groups to which they were originally allocated. During follow-up, about a quarter (24.6%) of the included patients died.

Results

Service user related outcomes

The difference in number of deaths between groups was statistically significant. Thirteen (18.1%) patients from the intervention group and 22 (31.4%) from the general hospital group, died within 12-month follow-up (p=0.03).

Service outcomes

At 12-month follow-up, there were no significant differences in number of admissions for both groups (intervention =46 vs comparison =51). Average hospital stay was the same in both groups (12.6 days; mean difference 9.2-16.1 [95% confidence interval] for the intervention group and 7.4-17.8 [95% confidence interval] for the comparison group).

Similarly, there were no significant differences in need for nursing homes and home care after 12 months, with both 32 (54.2%) from the intervention and 32 (66.7%) from the comparison group still needing long-term home nurse care. Slightly more participants in the intervention group (n=10; 28.8%) were independent of home care, in comparison to the general hospital group (n=7; 18.8%).

4. Herfjord JK, Heggestad T, Ersland H et al. (2014) Intermediate care in nursing home after hospital admission: a randomized controlled trial with 1-year follow-up. BMC Research Notes 7: 889

Outline: A moderate quality randomised controlled trial from Norway (+) designed to evaluate the efficacy and safety of early transfer to an intermediate care unit established in a nursing home. Maximum stay was specified as 3 weeks. The control group received care as usual in the hospital.

Individuals were eligible if they were over the age of 70 and had been admitted to a medical or orthopaedic ward from their home. Eligibility criteria also specified that individuals should be circulatory and respiratory stable, and viewed as being able to return to their home within 3 weeks. Exclusion criteria were need for intensive care or surgery, and severe dementia or delirium.

A total of 440 participants were randomised and follow-up took place at 1 year.

Note: Although the authors calculate 'relative effect sizes' these are not included in this summary. Please see evidence tables.

Results

Service user outcomes

At 1 year post-randomisation, mortality was higher in the intervention group than in the control group, however this difference was not significant (control 17.2% vs intervention 22.1%; absolute effect size +4.9%; p=0.29). Post hoc subgroup analysis showed that mortality was also higher for medical patients in the intervention group, however this was also non-significant (control 25.0% vs intervention 25.6%; absolute effect size +0.6%; p=0.99). However, mortality was significantly higher for orthopaedic patients in the intervention group (control 10.3 % vs intervention 25.0%; absolute effect size 14.7%; p=0.049). Similarly, there was a non-significant increased relative risk of mortality for participants in the intervention group (relative risk ratio =1.29, 95% CI 0.85 to 1.94), and for medical patients in the intervention group (relative risk ratio =1.03, 95% CI 0.59 to 1.78). However, relative risk for orthopaedic patients in the intervention group was significantly increased (relative risk ratio =2.43, 95% CI 1.05 to 5.55). The mean number of days alive was significantly lower for orthopaedic patients in the intervention group than for orthopaedic patients in the control group (control 346.9 vs intervention 311.9; 35 days lower; p=0.025). Data in relation to mean number of days alive for all patients or for medical patients are not reported.

Service outcomes

The mean number of days alive and living at home over the 1-year follow-up period was lower in the intervention group than the control group, however this difference was not significant (control 256.5 days [125.1 SD] vs intervention 253.7 days [120.4 SD]; absolute effect size ÷ 2.8 days; p=0.80). This was also the case for medical patients in the intervention group (control 250.4 days

[134.1 SD] vs intervention 249.2 days [123.6 SD]; absolute effect size ÷ 1.2 days; p=0.165); and for orthopaedic patients in the intervention group (control 256.5 days [121.0 SD] vs intervention 233.2 days [128.2 SD]; absolute effect size ÷ 23.3 days; p=0.09).

The mean number of days in hospital (after discharge from the intervention/control treatment) was lower for participants in the intervention group than those in the control group, however this difference was not significant (control 10.5 days [15.2 SD] vs intervention 10.4 days [15.8 SD]; absolute effect size ÷ 0.1 days; p=0.748). This was also the case for medical patients in the intervention group (control 12.9 days [17.2 SD] vs intervention 10.6 days [14.9 SD]; absolute effect size ÷ 2.3 days; p=0.530). For orthopaedic patients in the intervention group, the mean number of days in hospital was higher than that in the control group, however this difference was also non-significant (control 8.2 days [12.7 SD] vs intervention 12.0 days [19.0 SD]; absolute effect size +3.8 days; p=0.536).

The mean number of days in a nursing home was significantly lower for participants in the intervention group than those in the control group (control 55.0 days [91.7 SD] vs intervention 40.6 days [71.4 SD]; absolute effect size ÷ 14.4 days; p=0.046). The mean number of days in a nursing home was also lower for medical patients in the intervention group (control 44.1 days [86.5 SD] vs intervention 37.8 days [62.9 SD]; absolute effect size ÷ 6.3 days; p=0.876); and orthopaedic patients in the intervention group (control 74.7 days [106.0 SD] vs intervention 49.5 days [0.192 SD]; absolute effect size ÷ 25.2 days; p=0.192), however these differences were non-significant.

The mean number of days without home healthcare services was significantly greater for participants in the intervention group than those in the control group (control 70.2 days vs intervention 97.7 days; 27.5 days longer; p=0.027). This was also the case for medical patients in the intervention group (control 53.5 days vs intervention 97.2 days; 52.0 days longer; p=0.01). Data in relation to mean number of days without home healthcare services for orthopaedic patients are not reported.

The proportion of participants in the intervention group who were ‘independent’ of home healthcare services was significantly higher than that in the control group (control 19.9% vs intervention 31.6%; absolute effect size +11.7%; p=0.007). This was also the case for medical patients in the intervention group (control 18.1% vs intervention 35.9%; absolute effect size +17.8%; p=0.011). The proportion of orthopaedic patients who were ‘independent’ of home healthcare services in the intervention group was also higher than that in the control group, however this difference was not significant (control 19.1% vs intervention 30.0%; absolute effect size +10.9%, p=0.219). Similarly, there was a significantly increased relative risk of independence

from home healthcare services for participants in the intervention group (relative risk =1.59, 95% CI 1.11 to 2.27); and for medical patients in the intervention group (relative risk =1.99, 95% CI 1.12 to 3.53). For orthopaedic patients in the intervention group there was a non-significant increased relative risk (relative risk =1.57, 95% CI 0.84 to 2.93).

5. Kalra L, Evans A, Perez I et al. (2005) A randomised controlled comparison of alternative strategies in stroke care. Health Technology Assessment 9:18

Outline: This is a good quality RCT from the UK (n= 457) which assessed the impact of management of stroke after discharge in a stroke unit (SU) (n=152), a ward-based stroke team (ST) (n=153) and home-based care (HC) (n=152) on mortality, institutionalisation, functional abilities and dependence, HAD scores, quality of life, resource use and patients' and carers' satisfaction at 3 months to 1 year after intervention.

Patients in the SU received 24-hour care provided by a specialist multidisciplinary team based on clear guidelines for acute care, prevention of complications, rehabilitation and secondary prevention. Patients in ST received management on general wards with specialist team support. The team undertook stroke assessments and advised ward-based nursing and therapy staff on acute care, secondary prevention and rehabilitation aspects. Patients in the HC group were managed in their own home by a specialist team consisting of a doctor, a nurse and therapists, with support from district nursing and social services for nursing and personal care needs. This support was provided for a maximum of 3 months.

Results

Service user related outcomes

Mortality and institutionalisation at 1 year were significantly lower on SU compared with the ST or HC. The proportion of patients alive without severe disability at 1 year was also significantly higher on the SU compared with the ST or HC. There was no significant difference in mortality rate per se at 1 year between the 3 groups.

After adjusting for confounders, the odds of dying or being institutionalised at 1 year were 3.2 greater for ST patients (ST vs SU: OR 3.2 [95% CI 1.6 to 6.4]; p=0.001), hazard ratio (HR) 2.4 (95% CI 1.4 to 4.2), p=0.002), and 1.8 greater for patients receiving specialist HC when compared with SU care (HC vs SU: OR 1.8 [95% CI 1.0 to 3.8], p=0.03), hazards ratio (HR) 1.7 [95% CI 1.0 to 3.0], p=0.04).

For the survivors, quality of life at 3 months was significantly better in SU and domiciliary care patients than in the ST. There was no significant difference in quality of life score between the 3 groups at 12 month.

There is no significant difference between the 3 groups in HAD scores. The length of hospital stay was longer in the HC group when compared with the SU or ST group (due to 34% patients in the HC group were admitted to hospital after randomisation).

Service use

Patients in the ST group and HC group received significantly less therapy from all disciplines compared with those in the SU group.

Carer related outcomes

There was greater satisfaction with care by the patients and their carers with ST or HC than with care on SU.

In terms of reducing mortality, institutionalisation and dependence after stroke, hospital-based stroke units were found to be more effective than home care or a ward-based specialist stroke team.

6. Stenvall M, Olofsson B, Nyberg L, et al. (2007) Improved performance in activities of daily living and mobility after a multidisciplinary postoperative rehabilitation in older people with femoral neck fracture: a randomized controlled trial with 1-year follow-up. Journal of Rehabilitation Medicine 39: 232–8

Outline: This Swedish study, which sought to investigate the short- and long-term effects of a multidisciplinary postoperative rehabilitation programme in patients with femoral neck fracture, was judged to be of moderate quality (+). A total of 199 patients were randomised to either the intervention (n=102) or comparison (n=97) group, and followed-up at 4 and 12 months. The overall objective of the intervention was to improve performance in activities of daily living and mobility through early mobilisation with daily training. Approximately 20% of participants dropped out of the study (due to withdrawal or death), however, all participants were included in the primary analysis.

Results

Service user related outcomes

Living independently

The intervention group were significantly more likely than the control group to live independently: OR (odds ratio) 0.93 (95% CI 0.32 to 2.73) at discharge, OR 0.68 (95% CI 0.20 to 2.27) at 4 months and OR 0.91 (95% CI 0.32 to 2.56) at 12 months.

A. Independent walking without walking aid indoors

The intervention group were significantly more likely than the control group to walk without a walking aid (adjusted for dementia and depression): OR 2.22 (95% CI 0.99–4.95) at 4 months OR 3.01 (95% CI 1.18 to 7.61) at 12 months.

B. Independent P-ADL (personal ADL)

The intervention group were significantly more likely than the control group to regain P-ADL (adjusted for dementia and depression): OR 2.51 (95% CI 1.00–6.30) at 4 months OR 3.49 (95% CI 1.31 to 9.23) at 12 months.

C. Return to same ADL performance level (using the Katz Index) as before fracture

No significant differences were found between the 2 groups at 4 months (intervention 56/92 [61%] vs control 39/82 [48%], p=0.078). The intervention group were significantly more likely than the control group to return to same ADL before fracture at 12 months (intervention 49/84 [58%] vs control 27/76 [36%], p=0.004).

Service outcomes

A. Length of hospital stay

The intervention group were significantly more likely than the control group to have a shorter inpatient stay: intervention 30 days (SD 18.1) vs comparison 40 days (SD 40.6), p=0.028.

B. Readmission

No significant differences were found between the 2 groups: intervention 4 readmissions vs comparison 5 readmissions, p=0.734, 30 days post-discharge; intervention 38 readmissions vs comparison 30 readmissions, p=0.484 throughout the study period.

C. Mortality

No significant differences were found between the 2 groups at 4 and 12 months: intervention 16 deaths vs comparison 18 deaths (p=0.591) at 12 months.

7. Young J, Green J, Forster A et al. (2007) Postacute care for older people in community hospitals: a multicenter randomized, controlled trial. Journal of the American Geriatrics Society 55: 1995–2002

Outline: A moderate quality RCT from the UK (+) designed to '… compare the effects of community hospital care on independence for older people needing rehabilitation with that of general hospital care' (p1995). The authors note that community hospitals represent '… one type of intermediate care service model …' (p1999) and describe the intervention as '… multidisciplinary team care for older people in community hospitals' (p1995). The intervention was provided across 7 community hospitals in the Midlands and the North of England. Care in these settings is reported to have involved social service professionals and therapists. Medical leadership at the community hospitals was provided by consultant geriatricians and GPs. Average length of stay is reported as between 18 and 30 days, however it seems likely that some participants may have stayed for longer than 30 days and there is no indication that upper limits were specified at any of the sites.

The control group received usual care, which the authors state usually '… consisted primarily of an extended general hospital stay with multidisciplinary care but could include transfer to other postacute services according to existing local operational policies' (p1997). It should be noted that a number of participants in the control group were therefore transferred to an 'intermediate care placement' (n=2), a non-participating community hospital (n=11), and a rehabilitation unit (n=3). The average length of stay in the participating general hospitals was between 7 and 12 days, however, as with the intervention it seems likely that participants may have remained in hospital for longer, particularly given the authors' description of usual care as involving an extended stay.

Participants were elderly patients with an acute illness who had been '… emergently admitted to elderly care departments (4 general hospital sites) or a combined elderly and medical unit (one general hospital site) ...' (p1996).

A total of 490 participants were randomised and follow-up assessments took place 1 week after discharge from the control/intervention and again at 3 and 6 months after randomisation.

Results

Service user related outcomes

One week after discharge from the control/intervention, participants in the intervention group had significantly smaller change scores (baseline to 1 week post-discharge) on a measure of anxiety

(Hospital Anxiety and Depression Scale) than those in the control group (median difference =1, 95% CI 0 to 2, Mann–Whitney U-test p=0.03). Follow-up scores at one week post-discharge showed a difference in favour of the control group (intervention – median score =5 [1–8 IQR] vs control – median score = 4 [2–8 IQR]). There were no differences in median follow-up scores on this measure at 3 months post-randomisation (intervention – median score =4 [2–7 IQR] vs control – median score =4 [2–7 IQR]); or at 6 months post-randomisation (intervention – median score =4 [1–7 IQR] vs control – median score =4 [2–7 IQR]).

There were no differences in follow-up scores on a measure of depression (Hospital Anxiety and Depression Scale) 1 week post-discharge (intervention – median score =6 [3–9 IQR] vs control – median score =6 [4–10 IQR]; or at 3 months post-randomisation (intervention – median score =7 [4–10 IQR] vs control – median score =7 [5–9 IQR]). At 6 months post-randomisation there was a difference between follow-up scores in favour of the intervention (intervention – median score =6 [4-9 IQR] vs control – median score =7 [4–9 IQR]).

There were no differences in follow-up scores on a measure of functional activity restriction (Barthel Index) at 1 week post-discharge (intervention – median score =16 [13–18 IQR] vs control – median score =16 [13–18 IQR]); at 3 months post-randomisation (intervention – median score =16 [12–18 IQR] vs control – median score =16 [13–19 IQR]); or at 6 months post-randomisation (intervention – median score =16 [13–18 IQR] vs control – median score =16 [12–19 IQR]).

At 6 months follow-up, participants in the intervention group had significantly larger change scores (time horizon not reported) on a measure of independence (Nottingham Extended Activities of Daily Living Scale) than those in the control group (mean difference =3.27; 95% CI 0.26 to 6.28; p=0.03). After removal of data from an outlier patient, this difference remained significant (mean difference =2.98; 95% CI 0.06 to 5.91; p=0.046). Mann–Whitney U-tests (after assigning the worst score on this measure to patients who had died) also showed that this difference was significant (p=0.03). There were differences in follow-up scores on this measure in favour of the intervention at 1 week post-discharge (intervention – median score =16 [8–25 IQR] vs control – median score =14 [7–26 IQR]); at 3 months post-randomisation (intervention – median score =19 [7–32 IQR] vs control – median score =17 [7–31 IQR]). At 6 months post-randomisation there were no differences in follow-up scores (intervention – median score =20 [9–32 IQR] vs control – median score =20 [6–32 IQR]).

There were no differences in follow-up scores on a measure of perceived energy levels (Nottingham Health Profile – energy) at 1 week post-discharge (intervention – median score = 61 [24–100 IQR] vs control – median score =61 [24–100 IQR]); at 3 months post-randomisation

(intervention – median score =61 [24–100 IQR] vs control – median score =61 [24–100 IQR]); or at 6 months post-randomisation (intervention – median score =61 [24–100 IQR] vs control – median score =61 [24–100 IQR]).

At 1 week post-discharge there was a difference between follow-up scores on a measure of perceptions of pain (Nottingham Health Profile – pain) in favour of the intervention (intervention – median score =11 [0–42 IQR] vs control – median score =13 [0–45 IQR]). At 3 months post-randomisation there were no differences in follow-up scores (intervention – median score =11 [0–33 IQR] vs control – median score =11 [0–41 IQR]. At 6 months post-randomisation there was a difference in follow-up scores in favour of the control (intervention – median score =11 [0–42 IQR vs control – median score = 9 [0–35 IQR]).

At 1 week post-discharge there was a difference in follow-up scores on a measure of perceived emotional level (Nottingham Health Profile – emotion) in favour of the intervention (intervention – median score =16 [0–39 IQR] vs control – median score =18 [0–45 IQR]). There was also a difference in favour of the intervention at 6 months post-randomisation (intervention – median score =14 [0-33 IQR] vs control – median score =16 [0–38 IQR]); however at 3 months post-randomisation the difference was in favour of the control (intervention - median score =17 [0–44 IQR] vs control – median score = 14 [0–43 IQR]).

There were no differences in follow-up scores on a measure of perceived sleep levels (Nottingham Health Profile – sleep) at 1 week post-discharge (intervention – median score =22 [0–62 IQR] vs control – median score =22 [0–50 IQR]); or at 3 months post-randomisation (intervention – median score =22 [0–62 IQR] vs control – median score =22 [0–50 IQR]). At 6 months post-randomisation there was a difference in scores in favour of the control (intervention – median score =22 [0–62 IQR] vs control – median score =19 [0–45 IQR]).

At 1 week post-discharge there was a difference in follow-up scores on a measure of perceived isolation (Nottingham Health Profile – isolation) in favour of the intervention (intervention – median score =20 [0–35 IQR] vs control – median score =21 [0–23 IQR]). At 3 months post-randomisation there were no differences in scores (intervention – median score =22 [0–42 IQR] vs control – median score =22 [0–39 IQR]). At 6 months post-randomisation there was a difference in scores in favour of the intervention (intervention – median score =0 [0–23 IQR] vs control – median score =22 [0–41 IQR]).

The proportion of participants in the intervention group who had died before the 6 month follow-up assessment was lower than that in the control group, however this difference was not significant

(intervention 26.1% [n=73] vs control 30.5% [n=64]; difference =-4.4%, 95% CI 12.5 to 3.7%; p=0.33.

Service outcomes

The proportion of participants living at home prior to hospital admission who were then admitted to a care home or had died before discharge from the control/intervention hospital was lower in the intervention group than in the control group, however this difference was not significant (intervention 24.9% [n=66] vs control 32.8% [n=66]; difference =−7.9%; 95% CI -16.2 to 0.3; p=0.08).

The proportion of participants living at home prior to hospital admission who were still living at home was higher in the intervention group than in the control group, however this difference was not significant (intervention n=143/254, 56.3% vs n=101/194, 52.1%, difference = 4.2%; -5.1–13.5% 95% CI, p=0.426).

Satisfaction with services

Participants in the intervention group were significantly more likely to agree with the statement 'I am happy with the amount of recovery I have made' (odds ratio =2.12; 95% CI 1.30 to 3.46; p=0.004).

Studies reporting views and experiences data for people using bed-based intermediate care, their families or carers, n=2

1. Ariss S (2014) National Audit of Intermediate Care: patient reported experiences, 2014. Sheffield: University of Sheffield

Outline: This survey was conducted as part of the National Audit of Intermediate Care in 2014. The survey methodology and reporting are rated as low quality (−) although the external validity is good (++) given that the study's research question closely matches review question 2(b) and the population and setting of the study are also well matched with the guideline scope and review question. The survey asked 1 open-ended question, which seems to have been sent to all people using intermediate care in England, although this is not clear. The question was 'Do you feel that there is something that could have made your experience of the service better?' Out of a total of 908 responses, 345 were from users of bed-based intermediate care. Responses were also received from users of the other intermediate care service models and these have or will be reviewed for subsequent review questions. Apart from the service model they use, there is no

other information about the survey respondents. The paper provides very little detail about the methods, except to describe the analysis.

Results: Statements about ways that the service might be improved were coded into 8 distinct themes, which emerged from the data. They are listed here in descending order, starting with those cited most frequently.

(Note: the document does not include page numbers to reference any quotes reported below.)

Personal communication and attention

Comments received in relation to this theme included reports of dissatisfaction with the provision of information regarding services or the care which service users were likely to receive (often reported as inconsistent) as well as the amount of information provided at discharge: ‘I was led to believe that just 3/4 days at rehabilitation centre would be enough but clearly this was incorrect so I did not make sufficient arrangements for my stay for example clothes, financial matter [sic] etc.’ And ‘It would be useful to have a discharge packet giving the available support organization outside of the hospital.’

Other respondents felt that staff had been disrespectful to them or had spoken in an inappropriate manner. Some respondents felt that they had not been listened to, whilst others reported that their needs had not been properly understood. Respondents are also reported to have suggested that communication with the families of service users needed to be improved and that staff should to be more responsive to service users.

Facilities

Comments included in this theme related to entertainment and food as well as the layout of units, and the toilet and washing facilities available:

‘Due to lack of activities, days were long and boring.’

‘Putting rehab clients together on the same floor, instead of mixing them with dementia/nursing home permanent clients.’

‘Not enough privacy for patients during the night commodes.’

The author notes that hydration and nutrition were not always adequately addressed and some respondents reported little consideration of dietary needs:

‘My wife is coeliac and diabetic they had no idea on how or what food she required. Bread and various other foods were supplied by myself.’

Some service users also felt that they would have benefited from access to alternative spaces or to be able to go outside:

‘More activities non available fresh air, a lounge area TV or radio.’

‘I would have liked to be on the ground floor but it was not possible this would have made we [sic] more independent.’

Joined-up and appropriate services

It should be noted that many of the quotes included to support this theme may not relate to bed-based intermediate care, and instead seem more likely to be descriptions of home care/rehabilitation provided in the home. The author reports that comments relating to this theme tended to focus on discharge arrangements and the extent to which services communicated with each other and the impact this had on coordinated care:

‘My daughter was informed that she would be involved in a meeting prior to me coming home, to discuss my needs. This didn’t happen, on my release there was no ‘hand over’ or staff around to speak to my family. More communication between family and staff would benefit your service.’

Other issues brought up by respondents included waiting times and accurate information regarding these, and continuity of care.

The author reports that a small number of comments were received about provision of information on other services and the knowledge of staff regarding these.

Staffing

Many participants are reported to have commented on staff shortages and the need for staff to have specific skills or for certain professions to be involved in care:

‘Staff are all kind, gentle, helpful and full of fun. I think they have too much to do. Could do with more staff.’

The author also highlights that agency workers and night shift staff were sometimes mentioned specifically:

‘Some of the agency nurses not to standard of the permanent nurses who were excellent.’

Personal care

The majority of comments received in relation to this theme are reported to have focused on bathing, help using the toilet and mobility. A number of respondents are reported to have felt that they should have been able to shower more frequently; a number of respondents also suggested that more time should have been devoted to exercise:

‘Yes too much sitting/lying around.’

Some respondents also highlighted assistance at meal times as an area that could be improved:

‘More assistance and care with eating is required. Just cutting up food is not sufficient – help and encouragement is necessary during the whole meal. My husband has very little use in his hands and consequently manages with great difficulty to eat only a small part of every meal.’

‘On a good number of days dad’s food was still in front of him, result losing 3 stones.’

Therapy and assessment

The author highlights that a significant number of comments were made specifically in relation to perceived insufficiencies in the amount of physiotherapy provided. Other respondents commented on the need for more exercise or the assistance they felt they needed to be able to walk. The author suggests that this is indicative of inappropriate skill mixes at some facilities:

‘I would have liked to do more work on the stairs.’

‘More extensive physio, probably may have helped me when I was discharged home. In total had 5 treatments of physio following a total hip replacement!!’

‘More physio visits because that was the main reason for his stay and only had 2 sessions in 2 weeks.’

2. Benten J and Spalding N (2008) Intermediate care: what are service users’ experiences of rehabilitation? Quality in Ageing and Older Adults 9: 4–14

Outline: This is a moderate quality study (+) reporting the experiences of 8 service users discharged from a bed-based intermediate care facility in the East of England. The authors conducted semi-structured interviews with participants, from which 6 themes are reported to have emerged; however this study focuses specifically on rehabilitation and the extent to which this met service user requirements. Although the facilities’ eligibility criteria are not reported by the authors,

all of the participants were over the age of 64 and had stayed at the unit for a minimum of 2 weeks.

The unit was staffed by a discharge coordinator, healthcare assistants, qualified nurses, an occupational therapist, a pharmacy technician, a physiotherapy technician and a ward clerk. A staff grade doctor visited the unit on a daily basis to provide medical cover and additional services were available when requested (such as from a dietician, social worker, or speech and language therapist).

Results

‘Service user understanding’ (p7)

The authors report that none of the participants had received any information regarding intermediate care when they were admitted to hospital, and that all participants had also been unaware of the unit before their transfer there was suggested. Many of the service users were reportedly dissatisfied with the information they subsequently received.

The authors report that when participants were asked why they thought they had been transferred to the facility, many cited their immobility. Other suggestions included access to specialist nurses, or as an interim measure while property adaptations or home care packages were arranged. The authors note that a number of participants suggested the need to free up acute care beds as the main reason for their transfer to the facility (in contrast to an active choice to participate in a rehabilitation programme) and some participants are reported to have referred to themselves as ‘bed-blockers’ (p10).

‘Assessment and goal setting’ (p8)

The majority of participants are reported to have been unaware of any formal assessment of their personal, physical or social needs at admission to the facility and could not recall being involved in setting and prioritising rehabilitation goals. Similarly, participants were unable to explain how staff there had attempted to address their rehabilitation needs and whether their care included an individual treatment plan:

‘My difficulties were not discussed, not that I remember’ (Participant 7, p8).

‘Well I can’t remember them being discussed with me a lot at all really, they simply started looking after me’ (Participant 1, p5).

‘Interventions’ (p8)

The authors note that the culture that participants described at the unit was one of ‘do it yourself’ rather than one of active rehabilitation, with little purposeful activity being undertaken by service users: ‘We walked around if we felt like it’ (Participant 1, p8).

Participants who received physiotherapy are reported to have felt that more should have been provided to them, and a patient who had had a lower limb amputated described his time at the facility ‘… purely in terms of waiting for adaptations to be completed at home’ (Authors, p8).

Provision of occupational therapy was also reported to be mostly limited to home assessment and the provision of equipment, with 2 participants reporting a session in the kitchen in which they made a cup of tea. The authors emphasise that this was the only ‘everyday task’ recalled by participants, and suggest that there was little connection made between needs likely to arise in the participants’ own homes and those activities undertaken at the facility.

The authors also report that some patients had experienced disempowering attitudes at the unit:

‘I have a problem; I am incontinent and have been for years. As I took pads in with me, this was not picked up; I was put down as continent. On the community unit when my pads ran out, one nurse would only give me one pad at a time, others would give me a day’s supply. I am supposed to have five a day and a night pad. It felt very demeaning to have to almost beg for one’ (Participant 2, p8).

‘Transfer home’ (p9)

There were mixed views in relation to discharge from the facility and the authors contrast responses in which transfers were well planned and involved participants’ families, to those in which confusion had arisen:

‘I was given quite a bit of notice … I had the home assessment and then they [daughters] went on holiday. When they came back it was when I came home and one of them came and stayed with me for a couple of days’ (Participant 5, p9).

‘The week before they said I could come home on the Tuesday or Friday and I felt it was more likely to be the Friday. But on the Monday of that week, they said you can go home on the Wednesday’ (Participant 2, p9).

Studies reporting views and experiences data for practitioners, n=3

1. Millar AN, Hughes CM, Ryan C (2015) "It's very complicated": a qualitative study of medicines management in intermediate care facilities in Northern Ireland. Biomed Central Health Services Research 15: 216

Outline: This qualitative study, based in the UK, was judged to be of moderate quality (+). Through semi-structured interviews, researchers investigated healthcare workers' and patients' views and attitudes towards medicines management services in intermediate care facilities in Northern Ireland. A total of 25 healthcare workers and 18 patients who met eligibility criteria were recruited from 12 intermediate care facilities within 3 trusts. Data was triangulated and analysed using a constant comparative approach.

Results: Emergent themes, reached by discussion among all 3 researchers, are summarised.

Concept and reality

Healthcare workers noted the discrepancies between the concept and reality of intermediate care. For example, most identified the service as 'rehabilitation' as they viewed the terminology of intermediate care to be poorly understood in the wider health service: 'It's a new word ... I don't like the term "intermediate care", I would sit more comfortable with it being a medical rehabilitation ward for older people' (HCW22, p4)

Those working in nursing and residential homes felt that although the concept was good, 'from the ground it is not running properly' (HCW5, p5). This was in contrast to patients, who frequently expressed positive attitudes towards the intermediate care setting: 'I think it's this place that has helped me a lot ... you just feel like very at home already' (P5, p5).

Setting and supply

The settings in which intermediate care was delivered were found to be varied, dictating both medical care provision and the prescribing of medicines. For example, many healthcare workers found that 'off-site' supplies posed logistical challenges, delaying the administration of drugs and overall process. Patients, on the other hand, had no knowledge of who was responsible for prescribing their medicines and were not concerned about their supply: 'They just give them to me, I don't know where they come from' (P2, p5).

Responsibility and review

Responsibility for prescribing and reviewing patients' medicines in intermediate care facilities also varied depending on the setting. Self-administration of medicines was not promoted by healthcare workers due to concerns of patient safety: ‘it’s easier for us to just take control, take charge, we know they’re safely stored, we know they’ve got them ...’ (HCW1, p6). Similarly, medication counselling was not routinely provided, as healthcare workers felt that this was not their responsibility and many patients believed this to be unnecessary: ‘I’m one of those people who just takes the doctor’s word for it and assume that he knows best and don't really query it’ (P10, p6).

2. Regen E, Martin G, Glasby J et al. (2008) Challenges, benefits and weaknesses of intermediate care: results from five UK case study sites. Health & Social Care in the Community 16: 629–37

Outline: This is a moderate quality study (+) from the UK exploring views regarding the implementation of intermediate care for elderly people across England. Particular focus is given to the implementation of intermediate care and the benefits and weaknesses of this type of care.

The research involved interviews and focus groups with a total of 82 individuals involved in the strategic development of intermediate care, intermediate care service managers and intermediate care practitioners. Participants worked in the area of 1 of 5 primary care trusts in England.

Results: A range of intermediate care services were provided in these areas, however only data relating to bed-based intermediate care are reported here.

‘Developing intermediate care – challenges’ (p632)

Participants are reported to have identified problems recruiting and retaining both qualified and non-qualified staff as the most significant barriers to the implementation of intermediate care, with inadequate funding and difficulty attracting staff to posts being cited as the main reasons for these.

Non-medical interviewees at 3 sites are reported to have identified a perceived lack of involvement from medical practitioners as a barrier to the implementation and use of intermediate care services. Participants suggested that medical practitioners felt that there was insufficient evidence regarding the effectiveness of intermediate care or thought it potentially discriminated against older people:

‘The more senior members ... of the medical profession could remember days when older people had been warehoused, so to speak, in environments outside hospital because they were not considered worthy of hospital admission and they didn’t want to go back to those days where

people were being basically cared for and denied proper assessment and treatment' (Participant 1, site B, p633).

Some consultant geriatricians reported concerns that intermediate care had been introduced before the evidence base had been established:

'If I need to convince my colleagues, then I think I would need robust evidence. Nowadays, everything is evidence based and unless we develop some evidence and say this is what is happening, it's going to be very difficult to convince the sceptical' (Participant 2, site B, p633).

The expansion of allied health practitioners and nurses into leadership roles had in some cases been interpreted as a sign that medical involvement was not needed at all. However, consultants are reported to have seen lack of medical input as leading to higher costs when unmet medical needs led to longer stays. The authors also report that consultants felt that medical input into intermediate care services made these 'safer', helped to streamline the transition between the acute and intermediate sectors, and reassured other practitioners regarding the care provided:

'It smoothes the working between the acute hospital and the intermediate care unit, and it also means that I can, if you like, reassure colleagues that it's a proper unit, there's proper medical support as well as the multidisciplinary care and my working across the 2 units hopefully re-assures people that communication is good, the pathways of referral are recognised and so on' (Participant 1, site B, p634).

Benefits of intermediate care

Participants across all sites are reported to have identified the potential benefits it offered to service users as its main strength (both in terms of experiences and outcomes). Participants suggested that intermediate care was flexible, holistic, patient centred and responsive, attributes which were often contrasted to those of care provided in hospital. Participants emphasised the home-like environment of intermediate care, which was seen as a means of increasing independence and confidence, in contrast to care in the hospital which was felt to lead to greater dependency.

Multidisciplinary team work was also identified as a potential strength of intermediate care that could benefit both practitioners and service users. Participants emphasised the positive impact that support from colleagues and access to a wide range of professional expertise could have, as well as the opportunity to increase flexibility in roles:

‘We’re multidisciplinary but we’re also very interdisciplinary. But having said that we know our boundaries so as a nurse going out to see a patient, I would carry out my nursing tasks but I wouldn’t just go out there and do my nursing tasks, which would happen on a ward. There wouldn’t be such an overlap [on a ward] as there is within the team ... so if they’re having to carry out an exercise programme then it would be expected of me as a nurse to go through that exercise programme with them on behalf of the physio’ (Participant 5, site A, p634).

Weaknesses of intermediate care

Participants at all sites were reported to comment on the failure of intermediate care to fulfil its potential as a means of alleviating pressures on the health and social care system. Limited beds, operational hours and staffing levels were key issues in relation to this.

Participants at all sites are also reported to have identified poor awareness about intermediate care and difficulties in accessing these services as a challenge to under-use of these services. Some participants also suggested that the eligibility criteria for intermediate care services were too narrow or that these services ‘cherry-picked’ service users, which resulted in an over-reliance on more traditional care:

‘So the experience on the ground, when I talk to people in the hospital and say ... “This looks like intermediate care to me, did you phone last night? You know, we’ve been telling you about it”, he said, “Oh that was no good, I phoned and they weren’t interested”, or “They said they didn’t have any space.” I’m losing faith in intermediate care, I can’t see the point: I get comments like that all the time’ (Participant 5, site E, p635).

A small number of participants suggested that more needed to be done to build stakeholder confidence in intermediate care and to address concerns regarding perceived risk:

‘The big cultural thing we found in particular about the intermediate care beds is hospital staff being prepared to take the risk and discharge somebody to something new that is relatively untested and unknown ... So it is starting to overcome those barriers. Part of it is actually once somebody has put a patient through intermediate care then they have got the confidence to do it again’ (Participant 16, site D, p635).

Another issue raised by participants across all sites was the tendency for intermediate care services to be used inappropriately, with many expressing concern that this was being driven by the need to free up acute care beds rather than providing the care appropriate to enable the individual to recover at their own pace.

3. Thomson D and Love H (2013) Exploring the negative social evaluation of patients by specialist physiotherapists working in residential intermediate care. Physiotherapy 99: 71–7

Outline: This is a moderate quality (+) study from the UK, exploring the views of senior physiotherapists specialising in intermediate care. Participants worked at a range of residential facilities throughout the Greater London area. The study focuses on participants' views regarding service users with a 'negative social evaluation' (that is, those who are 'difficult' or 'challenging'). Five participants took part in focus groups while a further 4 took part in semi-structured interviews.

Results: The authors report that participants identified a number of issues that contributed to a 'negative social evaluation'. Those 'residing' with the service user were alcohol dependency, an inability to accept their condition or adapt, and involvement from families that could obstruct the process of rehabilitation. Those 'residing' within the context of intermediate care were 'labelling', the 6-week model and transfer into the service.

Participants are also reported to have identified a number of 'coping strategies' to address these issues (goal-setting, reflective practice and workforce planning).

Service user categories – alcohol dependency

The authors report that participants expressed frustration in relation to service users who drank alcohol excessively, and were likely to make assumptions based in relation to the service user's social environment and living arrangements, as well as their ability to perform activities of daily living and the treatment outcomes that could be expected:

'Alcoholism is a thing I personally find quite challenging at times. It means generally that they are relatively unkempt, their gait pattern is usually quite poor [and] trying to get them to use any kind of aid is just not a good idea. And you can't educate them; only tell them to stop drinking' (Interview – physiotherapist D, p73).

Participants also emphasised that intermediate care teams were unlikely to possess the skills necessary to help service users overcome their reliance on alcohol.

Service user categories – 'Patients with unrealistic demands due to a failure to accept their situation' (p74)

Participants are reported to have highlighted service user anger regarding their diagnosis as a critical issue:

‘And then it actually hits home that they can’t actually do the things they thought they’d be able to do and they get quite angry that you’re not doing what you should be doing for them or you’re not experienced enough. So clearly [they think] you’re holding them back and you’re not, obviously’ (Interview – physiotherapist D, p74).

Service user categories – ‘A patient with an unhelpful family’ (p74)

Participants regularly commented on the importance of interactions with the families of service users and suggested that family expectations were a key issue:

‘The patient’s family doesn’t kind of help either sometimes. If they think we can get them home and walking, then we need to do it now. Or … we’re being too harsh. “Oh, just leave him in bed, he’s tired, he had a stroke … he needs to rest.” [They] Don’t really understand what we are trying to do’ (Interview – physiotherapist D, p74).

Intermediate care categories – ‘Being labelled/external and internal assumptions’ (p74)

The researchers report that physiotherapists made assumptions about service users and the challenges they may represent based on labels used by other practitioners making referrals to intermediate care:

‘You do start to prejudge people and as soon as someone says you’ve got a complex patient coming to you, immediately it sets off alarm bells and that sets up the way that the whole process starts for them’ (Focus group – physiotherapist 5, p74).

‘Labelling’ service users as ‘chronic pain’ or ‘mental health problems’ were 2 ‘alerts’ to a potentially ‘challenging’ or ‘difficult’ service user.

Intermediate care categories – ‘The 6-week model of intermediate care’ (p74)

The authors report that participants felt it was especially challenging to enable service users to adapt to a sudden loss of function (both emotionally and physically) within 6 weeks:

‘We get told to have someone rehabbed by a certain period or we have to manage our beds and the problem is we have to document a way of saying this patient is not compliant ... There’s … always a ticking clock’ (Focus group – physiotherapist 2, p74).

Intermediate care categories – ‘The process of transition into the service’ (p74)

Participants are reported to have expressed frustration regarding the processes by which service users are referred and transferred into residential intermediate care, and service user understanding of the purpose for transfer was identified as key:

‘Some people just want to go home and don’t understand why they’ve been moved between wards in the hospital and now they’ve come to us completely disorientated … and no one’s told them why they can’t go home they’ve just been sent to us’ (Interview – physiotherapist D, p74).

Coping strategies – workforce planning

Participants described a range of responsibilities within their teams and all are reported to have suggested that support was needed for practitioners working with service users with a ‘negative social evaluation’:

‘In our little team, we all have our own named patients and if we see that somebody is having a bad time, then [we] obviously talk with them and try and support them’ (Interview – physiotherapist D, p75).

Participants also identified emotional intelligence skills as a useful coping strategy.

Collaborative goal-setting and patient engagement

The authors report that participants regularly used collaborative goal-setting to minimise the need to give a service user a ‘negative social evaluation’:

‘You sit down and [say] what are your goals, what have you got to do when you get home, what’s your family [life] like, have you got grandkids, what do you do for them?’ (Focus group – physiotherapist 3, p75).

Reflective practice

Reflective practice was also reported to be a coping strategy used by participants:

‘I think it has quite an emotional impact on people so it’s important to discuss with MDT members and other agencies the best management for these clients and also reflecting on past cases’ (Interview – physiotherapist A, p75).

Economics

We carried out additional economic analysis in this area of bed-based intermediate care. The rationale for doing work in this area is described in the Economic Plan and details of the analysis

are provided in the economic report. The Guideline Committee decided that nurse-led bed-based intermediate care was a form of bed-based intermediate care that was sufficiently applicable to the current context of health and social care provision. Furthermore, the Guideline Committee agreed that in the current context it was a therapist rather than a nurse leading the intermediate care interventions but that the approach was similar and that findings in relation to nurse-led bed-based intermediate care were transferable to a therapist-led model. Economic evidence referred to 2 English studies; details of the 2 studies are summarised in the economic evidence statement (EcBB1) below.

Based on those it was concluded that additional economic analysis was needed in order to derive recommendations about the cost-effectiveness of this type of intervention. In particular, a limited perspective on costs in both studies meant that important resource implications in regards to home care and care home were not included. A Cochrane systematic review by Griffith et al. (2007) had shown that those types of resources were affected and provided data on differences in care home admission at discharge.

Using decision-analytic modelling techniques we compared the difference in costs between nurse-led, bed-based intermediate care and standard care over the period of 1 year. In the model we looked at cost savings over the period of 1 year. Clinical outcomes (here: physical functioning measured with Barthel Index) were found to be either the same between groups or to favour the intervention group, so that it was possible to focus the analysis on potential cost savings. The perspective on costs was the one of the NHS and personal social services (PSS) and included the costs of acute medical ward (nurse-led bed-based) intermediate care, community hospital, home care and care home. Prices were reported in 2014/15 UK pounds sterling. Discounting was not necessary as the time horizon of the model was 1 year. Information on resource use for the initial care episode was taken from Walsh et al. (2005) and information on resource use linked to care home admission (at discharge), early hospital readmission and home care were taken from Griffith et al. (2007). Unit costs were taken from recognised national sources including PSSRU Unit Costs for Health and Social Care (2015), National Audit Report for Intermediate Care (NAIC 2015) and NHS Reference Costs 2014/15.

Results from our analysis suggested that mean costs were £610 lower in the intervention group, but this finding was highly sensitive to changes in some of the parameters. In particular, a delay in discharge from the intermediate care unit by a few days turned the cost savings into a negative cost difference (and thus favouring standard care).

Evidence statements (including economic evidence statements)

The evidence statements listed in this section synthesise the key themes across included studies.

BB1	There is a small amount of evidence of moderate quality that bed-based intermediate care reduces dependence on home care services. A moderate quality RCT (Garåsen et al. 2007 +, 2008 +) found that individualised intermediate care in a community hospital setting resulted in significantly more older people being independent of home care compared with prolonged care in general hospital. This effect, recorded at 6 months post discharge, was still detectable at 12 months, although the difference was no longer statistically significant. A moderate quality study (Herfjord et al. 2014 +) found that, at 12 months, intermediate care provided to older people in a nursing home resulted in significantly more people being independent of home healthcare compared with usual care in a general hospital.
BB2	There is a small amount of evidence of moderate quality about the effect of bed-based intermediate care on hospital readmissions although the data are conflicting and suggest that any effects are not sustained in the long term. A moderate quality RCT (Garåsen et al. 2007 +, 2008 +) found that individualised intermediate care in a community hospital setting resulted in significantly reduced readmissions at 6 months following the intervention, compared with general hospital care. Although a difference still existed at 12 months, it was no longer statistically significant. A moderate quality RCT (Stenvall et al. 2007 +) comparing a multidisciplinary postoperative rehabilitation programme with care in a specialist orthopaedic unit found no difference between the 2 groups in terms of hospital readmissions.
BB3	There is some evidence of good to moderate quality about the effect of bed-based intermediate care on physical functioning, although the data are conflicting. A moderate quality UK RCT (Young et al. 2007 +) found that multidisciplinary care for older people in community hospital resulted in higher ADL scores at discharge and 3 months compared with usual hospital care. The effects were not sustained at 6 months follow-up (significance not tested). The same study found no difference between groups in functional independence at discharge, 3 or 6 months (significance not tested). Another UK RCT (Kalra et al. 2005 ++) comparing management of stroke after discharge in a stroke unit, a ward-based stroke team and through home-based care showed no difference in performance of ADLs between participants at 3 months post intervention. Finally, a moderate quality RCT (Stenvall et al. 2007 +) found that at 4 months, there was no significant difference in ADL score between people using a multidisciplinary postoperative rehabilitation programme compared with care in a specialist orthopaedic unit, following conventional post-operative routines. However by 12 months, the intervention group (multidisciplinary rehabilitation programme) were significantly more likely to return to the same ADL as before their femoral neck fracture.
BB4	There is some evidence of moderate quality that in the experience of service users, bed-based intermediate care facilities fail to promote independence although practitioner views contradict this. A moderate quality study (Millar 2015 +) found that people in intermediate care facilities were not given the opportunity to develop independence in terms of self-medication. A UK survey (Ariss 2014 −) reported service user opinions that bed-based facilities failed to provide stimulating activities for the promotion of independence and also that their needs for rehabilitation were not properly understood. A moderate quality study (Benten and Spalding 2008 +) found that people who had used a bed-based intermediate care facility thought insufficient physiotherapy was provided and the small amount of occupational therapy was unrelated to the activities and challenges they would face at home. On the contrary, a moderate quality UK

	study (Regen et al. 2008 +) reported the views of intermediate care managers and practitioners which endorsed the home like environment as conducive to increasing independence and confidence.
BB5	There is some evidence of moderate quality that there is a lack of understanding about the objective of bed-based intermediate care and this is compounded by poor communication. A moderate quality study (Thomson and Love 2013 +) found that residential intermediate care practitioners felt that families lacked understanding about the objective of regaining independence and instead thought the patient should be 'looked after'. A low quality survey (Ariss 2014 −) reported responses from service users who were given insufficient and inconsistent information about the purpose and length of the bed-based intermediate care service. Similarly a moderate quality study (Benten and Spalding 2008 +) found that participants were dissatisfied with the lack of information received about intermediate care before their transfer to the unit and were not clear why they had been referred. Data also showed a lack of understanding among some practitioners. For example, in a moderate quality study (Regen et al. 2008 +), intermediate care practitioners described a lack of understanding among hospital professionals about the existence of intermediate care or how to refer to the service. Hospital professionals were also concerned about perceived risks which they associated with intermediate care.
BB6	There is some evidence of moderate quality that person-centred goal-setting in bed-based intermediate care could be improved. A study (Thomson and Love 2013 +) of physiotherapists' views reported that in residential intermediate care they routinely use collaborative goal-setting as a means of coping with difficult or challenging residents. Similarly a moderate quality study (Regen et al. 2008 +) of practitioner and manager views found that they perceived intermediate care to be patient centred and responsive. On the contrary, a study of service user experiences demonstrated that the majority of respondents were unaware of any formal assessment of their needs at admission and could not recall being involved in setting rehabilitation goals. A UK survey (Ariss 2014 −) also found that respondents did not feel staff understood their needs, which would be a barrier to person centred goal setting and support.
EcBB1	Nurse-led, bed-based intermediate care Evidence from 2 economic evaluations (Harris et al. 2005 ++; Walsh et al. 2005 ++), which compared nurse-led units (in hospital or on hospital site) with standard care in medical wards, suggested that the intervention led to the same or better outcomes at possibly higher costs. Both studies evaluated costs and outcomes between baseline and follow-up of 6 months. The cost-effectiveness study by Harris et al. (2005 ++, n=175) compared a nursing-led inpatient unit situated in an acute hospital with standard care in medical wards. The intervention led to non-significantly higher mean change (improvement) in physical functioning (including activities of daily living and mobility) measured with the Barthel Index (3.6 vs 2.6; p value not reported). There was no difference in any of the other outcomes, i.e. mortality, discharge destination or readmission (p values not reported). The mean cost per hospital stay (when using a detailed, bottom-up costing approach) was £5,144 in the intervention and £4,100 in the comparison group but the difference (£1,044) was not significant (p=0.15). Using a (less accurate) top-down costing approach (from budget data), mean difference in costs became significant (£1,607, p=0.05). Using a mixed method approach, the mean difference was, again, not significant (£1,019; p=0.142). Mean costs of post-discharge care per week including discharge destination were non-significantly lower in intervention group (£374.9 vs £402, p=0.25). Despite these lower post-discharge costs (indicating a substitution effect between inpatient and community health and social care provision), the greater length of stay led to overall higher total costs. In this study, post-discharge costs were estimated based on information

	recorded in the discharge plan and included occupational, physio- and speech therapists, social workers and dieticians; the study did not specify a time period over which those were collected. Furthermore, the cost perspective was limited to activity of the participating hospital and did not include important costs such as those of care home, home care and hospital readmission. Due to the chosen outcome measure and a limited cost perspective it was not possible to derive final conclusions about the cost-effectiveness of nurse-led bed based intermediate care from this study. In addition, whilst the study presented the incremental cost-effectiveness ratio of £1,044 per point improvement of Barthel Index, this could not be compared with findings from other studies in this or in related areas, since this is not a common way of reporting findings at the moment. The other paper referred to a cost-minimisation study by Walsh et al. (2005 ++, n=238) carried out as part of a multi-centre RCT. The study compared a nurse-led unit located on the site of (but not in) the hospital with care in the general ward. Outcomes measured included length of stay in hospital, physical functioning (measured with the Barthel Index) and destination of discharge. As in Harris et al. (2005 ++) the mean length of hospital stay was significantly longer in the intervention group (41.1 days versus 39.5 days; standard deviations 32 vs 31). Other outcomes did not significantly change (values were not published in this paper but in paper to parent study by Steiner et al. 2001). The study found that initial admission costs were significantly higher in the intervention group (£7,892 vs £4,810; diff CI: +£3,082, CI: £1,161 to £5,002); costs of readmissions were lower during the period measured (6 months follow-up) (£1,444 vs £1,879; diff -435, CI: -£1,406 to -£536); but total costs were still significantly higher (£10,529 vs £7,819; diff +£2,710, CI: £518 to £4,903). Confirming the findings from Harris et al. (2005 ++), post-discharge costs were significantly lower in the intervention group but not low enough to offset the higher costs of the initial hospital and intermediate care episode. Post-discharge costs in Walsh et al. (2005 ++) referred to physiotherapist, outpatient care, primary and community care (including long-term care) over the period of 6 months. Authors concluded that acute hospitals might not be cost-effective settings for nurse-led intermediate care. However, they also explained that the small size of the unit and the location distant from the main hospital site contributed to higher costs. Implementing the intervention in community hospitals may be more appropriate. However, as with Harris et al. the cost perspective was focused primarily on secondary care NHS services and did not include the costs of care home and home care, for example. From both studies it was unclear whether the intervention would offset costs if a follow-up time of more than 6 months and a more comprehensive cost perspective was applied.
EcBB2	Intermediate care in community hospital Evidence was available from 1 UK cost-utility study, (O'Reilly et al. 2008 ++, n=490) carried out alongside a RCT, which compared multidisciplinary post-acute care in a community hospital with multidisciplinary care provided in general hospital. The outcome reported in this paper was health-related quality of life (measured with EQ-5D) that was transformed in quality-adjusted life years (QALYs). There was a non-significant QALY gain in the intervention group at 6 months follow-up of 0.048 (95% CI: -0.028 to 0.123, p=0.214). It was reported in the paper to the parent clinical study that there was a significant improvement in independence (measured via NEADL) in the intervention group (adjusted mean diff. 5.30; 95% CI 0.64 to 9.96) and no significant changes in carers' satisfaction or burden. There was also non-significant difference in mean length of stay, which was 15 days in both groups (IQR 9 to 24/25). Mean total cost were non-significantly higher in the intervention group (mean diff. £720; 95% CI: −£523 to

	£1,964). The bootstrapped mean incremental cost-effectiveness ratio (ICER) was £16,324 per QALY. If the decision-maker was willing to pay £10,000 per QALY, then there was a 47% probability that the community hospital was cost-effective; this increased only slightly to 50% if the decision-maker was willing to pay £30,000.
EcBB3	Short-term rehabilitation unit with integrated health and social care Evidence was identified from 1 UK cost-effectiveness study carried out alongside a RCT (Ellis et al. 2006 ++, n=194), which compared a short-term rehabilitation unit (providing integrated health and social care), with usual care in the community after hospital discharge. The study found higher mean total costs of health and social care in the intervention group (£8,542 vs CG £8,511; no significance values reported). There was no significant difference in survival-at-home time (1.28; 95% CI: 0.81 to 2.03). However, the intervention group was significantly older (p=0.028), indicating that there might have been a beneficial effect. Costs per day living were higher in the intervention group (£31.4 vs £29.9; no significance values reported). Sensitivity analysis showed that usual care was in most scenarios cheaper.

Included studies for these review questions

Ariss S (2014) National Audit of Intermediate Care: patient reported experiences, 2014. Sheffield: University of Sheffield

Benten J and Spalding N (2008) Intermediate care: what are service users' experiences of rehabilitation? Quality in Ageing and Older Adults 9: 4–14

Crotty M, Whitehead CH, Wundke R et al. (2005) Transitional care facility for elderly people in hospital awaiting a long term care bed: randomised controlled trial. British Medical Journal (Clinical Research Edition) 331: 1110–13

Garåsen H, Windspoll R, Johnsen R (2007) Intermediate care at a community hospital as an alternative to prolonged general hospital care for elderly patients: a randomised controlled trial. BioMed Central Public Health 7: 68

Garåsen H, Windspoll R, Johnsen R (2008) Long-term patients' outcomes after intermediate care at a community hospital for elderly patients: 12-month follow-up of a randomized controlled trial. Scandinavian Journal of Public Health 36: 197–204

Herfjord JK, Heggestad T, Ersland H et al. (2014) Intermediate care in nursing home after hospital admission: a randomized controlled trial with one year follow-up. BMC Research Notes 7: 889

Kalra L, Evans A, Perez I et al. (2005) A randomised controlled comparison of alternative strategies in stroke care. Health Technology Assessment 9: 18

Millar AN, Hughes CM, Ryan C (2015) "It's very complicated": a qualitative study of medicines management in intermediate care facilities in Northern Ireland. Biomed Central Health Services Research 15: 216

Regen E, Martin G, Glasby J et al. (2008) Challenges, benefits and weaknesses of intermediate care: results from five UK case study sites. Health & Social Care in the Community 16: 629–37

Stenvall M, Olofsson B, Nyberg L et al. (2007) Improved performance in activities of daily living and mobility after a multidisciplinary postoperative rehabilitation in older people with femoral neck fracture: a randomized controlled trial with 1-year follow-up. Journal of Rehabilitation Medicine 39: 232–8

Thomson D and Love H (2013) Exploring the negative social evaluation of patients by specialist physiotherapists working in residential intermediate care. Physiotherapy 99: 71-7

Young J, Green J, Forster A et al. (2007) Postacute care for older people in community hospitals: a multicenter randomized, controlled trial. Journal of the American Geriatrics Society 55: 1995–2002

3.3 Delivering crisis response intermediate care

Introduction to the review questions

The purpose of the first part of the review question (part a) was to examine the effectiveness and cost-effectiveness of crisis response intermediate care. Part b of the review question sought to identify evidence which described the self-reported views and experiences of adults with social care needs, their families and unpaid carers about the care and support they receive from a crisis response intermediate care service. In particular, the aim was to help the guideline committee to consider whether people who receive support think it is personalised and coordinated across social care, inpatient hospital care and primary and community health services. Finally, part c of the review question sought evidence that described the views and experiences of people delivering, organising and commissioning social care, health and housing services, including what works and what does not work well in crisis response intermediate care.

Only a small amount of evidence was located for this review area, with no effectiveness studies and only 3 papers reporting the views and experiences of people using crisis response and practitioners. All 3 studies were rated as low in terms of their methodological quality, although they had good applicability to the review question.

Review questions

3a) What is the effectiveness and cost-effectiveness of crisis response intermediate care?
3b) What are the views and experiences of people using services, their families and carers in relation to crisis response intermediate care?
3c) What are the views and experiences of health, social care and other practitioners about crisis response intermediate care?

Summary of the review protocol

The protocol sought to identify studies that would:

- identify the effectiveness and cost-effectiveness of crisis response intermediate care
- identify emerging models of crisis response intermediate care and associated outcomes
- describe the self-reported views and experiences of adults with social care needs, their families and unpaid carers about the care and support they receive from a crisis response intermediate care service, including what works and what does not work well
- describe the views and experiences of people delivering, organising and commissioning social care, health and housing services, including what works and what does not work well in crisis response intermediate care.

Population

For question 3a and 3b: Adults, aged 18 years and older, with experience of crisis response intermediate care and their families, partners and carers. Self-funders and people who organise their own care and who have experience of crisis response intermediate care are included.

For question 3a and 3c: Housing practitioners, social care practitioners (providers, workers, managers, social workers), and health and social care commissioners involved in delivering crisis response intermediate care; personal assistants engaged by people with care and support needs and their families.

For question 3a and 3c: General practice and other community-based healthcare practitioners, including GPs, therapists and community/district nurses, hospital ward staff.

Intervention

Community-based, multidisciplinary services provided to people in their own home or in a care home for up to 48 hours (or 2 working days). Includes intermediate care assessment teams, rapid response and crisis resolution.

Note the following exclusions: mental health crisis resolution services, community matrons and active case management teams.

Setting

Service users' home, including sheltered housing accommodation, supported housing, temporary accommodation, care (residential and nursing) homes or prisons.

Outcomes

Person-focused outcomes (health and social care related quality of life; independence, choice and control over daily life; capability to achieve desired person-centred outcomes; user and carer satisfaction; speech, language and communication skills; continuity of care and years of life saved) and service outcomes (use of health and social care services; admission avoidance and need for support from care workers and carers).

Study design

The study designs which were prioritised for the effectiveness and cost-effectiveness question included: systematic reviews of studies of different models of discharge assessment and care planning; randomised controlled trials of different approaches to discharge assessment and care planning; economic evaluations; quantitative and qualitative evaluations of different approaches; observational & descriptive studies of process; cohort studies, case control and before and after studies and mixed methods studies.

The study designs which were prioritised for the views and experiences questions included: systematic reviews of qualitative studies on this topic; qualitative studies of user and carer views of social and integrated care; qualitative components of effectiveness and mixed methods studies; observational and cross-sectional survey studies of user experience.

See Appendix A for full protocols.

How the literature was searched

Due to the lack of specific data on the NAIC service definition of crisis response, 4 broad search groups were devised: search 1 captured immediate (rapid or crisis) responses and needs in any setting but restricted by time limits and date; search 2 captured immediate (rapid or crisis) responses and needs in combination with assessment or referral but restricted by time limits and date; search 3 captured immediate (rapid or crisis) responses and needs in any settings combined with different professional groups but restricted by time limits and date; search 4 captured immediate (rapid or crisis) response and needs in any setting in combination with types of activity

and outcome. Searches for the period 2005 - 2015 were initially run in November 2015 and an update search was conducted in July 2016.

See Appendix A for full details of the searches including the rationale for date limits.

How studies were selected

Search outputs (title and abstract only) were stored in EPPI Reviewer 4 – a software program developed for systematic review of large search outputs. A subset was created by searching within the review using terms that were specific to bed-based intermediate care, based on the National Audit definitions and terms known to be related or equivalent. This subset of studies was then screened against an exclusion tool informed by the parameters of the scope. Formal exclusion criteria were developed and applied to each item in the search output, as follows:

- language (must be in English)
- population (must be over 18 years of age and have experience of using bed-based intermediate care)
- intervention (must be crisis response intermediate care)
- setting (service users' home, including sheltered housing accommodation, supported housing, temporary accommodation, care [residential and nursing] homes or prisons)
- country (must be UK or other OECD)
- date (must not be published before 2005)
- type of evidence (must be research).

Title and abstract of all research outputs were screened against these exclusion criteria. Those included at this stage were marked for relevance to particular parts of the review question – or flagged as being relevant to 1 of the other review areas – and retrieved as full texts.

Full texts were again reviewed for relevance and research design. A list of studies excluded on full text can be found in appendix A, organised by exclusion criteria.

If still included, critical appraisal (against NICE tools) and data extraction (against a coding set developed to reflect the review questions) was carried out. The coding was all conducted within EPPI Reviewer 4, and formed the basis of the analysis and evidence tables. All processes were quality assured by double coding of queries, and a random sample of 10%.

'Searching within' created a subset of 7406 studies and in our initial screen (on title and abstract) we found 39 studies, which appeared relevant to the review questions on bed-based intermediate care. We retrieved and then reviewed full texts and included a total of 3 papers – no effectiveness

studies and 3 views and experiences studies. The included studies (see below) were critically appraised using NICE tools for appraising different study types, and the results tabulated. Study findings were extracted into findings tables.

See Appendix B for full critical appraisal and findings tables.

Narrative summary of the evidence

In this section, a narrative summary of each included study is provided, followed by a synthesis of the evidence, according to the key outcomes, themes or sub-groups in the form of evidence statements [p121-2]. The approach to synthesising evidence was informed by the PICO within the review protocol.

Studies reporting views and experiences data for people using crisis response intermediate care, their families or carers, n=2

1. Beech R, Henderson C, Ashby S et al. (2013) Does integrated governance lead to integrated patient care? Findings from the innovation forum. Health and Social Care in the Community 21: 598–605

Outline: This is a low quality study (−) reporting on '…patients' perceptions of the care received across and within organisational boundaries ...' (p598) in 3 areas where attempts to foster interorganisational integration were taking place. The integration being fostered in the 3 areas was characterised as 'meso- and micro-level integration' (care that is integrated for particular groups, in this case older people) and also continuity of care.

Results: While some of the findings relate to crisis response services, the study was not specifically designed to elicit views on this service model.

Eighteen patients participated in interviews (6 patients from each of the 3 sites). Patients were eligible if they were 'older' and had experienced a stroke, had fallen or had a diagnosis of chronic obstructive pulmonary disease. Hospital- or community-based staff recruited patients using the modified Appropriateness Evaluation Protocol criteria (a tool used to identify '… avoidable acute hospital bed use …' (p599). Interviews were also conducted with carers, as well as professionals involved in the care of the older person (numbers unclear).

The study focuses on the impact of integration but also includes information relating to a rapid response service that appears to meet the definition of crisis response as described in the National Audit of Intermediate Care. However very few details are provided in relation to this service.

Findings

- Some practitioners are reported to have viewed out-of-hours rapid response teams positively as a result of their ability to respond more quickly than out-of-hours GP services.
- Rapid response staff reported difficulties in accessing important health information out of hours, particularly if the patient's community matron or general practitioner was unavailable and access arrangements to centrally held notes or assessments were not in place.
- The authors identify accident and emergency department staff as 'key' to the provision of 'care closer to home' and they note that admission avoidance work within the hospital itself had not always been sensitive to the needs of the patient: 'Two patients recounted episodes in which they were treated in A&E for fractures and discharged home, but apparently without adequate arrangements for follow-up care and support' (p601).

The study also reports that staff at each of the 3 sites who were involved in providing 'care closer to home' felt that '… opportunities were being missed to prevent "avoidable" acute bed use. A key challenge was to ensure that the existence and function of these services was known to potential referrers' (p601).

One patient is quoted as being satisfied with the care provided by a respiratory rapid response team after being referred by a hospital observation ward:

'I just couldn't believe it. It all sort of clicked into place. I thought this is actually going to happen ... I came home and I just couldn't believe it, the phone rang and [they] said "We'll be here in half an hour" – and they were' (Mrs I, Site 2, p602).

The authors suggest in their discussion that there was an 'over-reliance' on traditional referral mechanisms and services at times of crisis. This is attributed to a lack of availability of rapid response services as well as a lack of awareness among some professionals that these types of 'care closer to home' services are available. Patients are also reported to have suggested poor signposting to alternative forms of crisis care as an issue.

2. Oh KM, Warnes AM, Bath P (2009) Effectiveness of a rapid response service for frail older people. Nursing Older People 21: 25–31

Outline: Although this is a low quality (−) mixed methods study it has good applicability to the review question and population. The paper is linked with Oh and Warnes (2009 −) (below) reporting data from the same assessment of the effectiveness of a rapid response service (RRS). In collaboration with GPs, the RRS provides 24-hour assessment and care, in a person's home (or

if necessary, a resource centre or nursing home) with the aim of reducing emergency hospital admissions. The service, which takes referrals for people 60 years of age or above, is provided for a maximum of 7 days and consists of nurses, support workers, a physiotherapist, an occupational therapist, a social worker and clerical support. The aim is to respond to referrals within 2 hours.

Results: This paper reports service use and satisfaction by older people who were supported by the RRS (n=150). Both quantitative and qualitative data were collected using survey questionnaires and interviews.

The changes in service use after discharge indicated that the multidisciplinary RRS team assessment had led to new service referrals for vulnerable older people with chronic conditions. Overall, RRS users were satisfied with RRS staff attitudes and being treated in a home-like environment, they appreciated the rapid response of the RRS team to their needs and the access it provided to social services and follow-up care, including free personal and respite care. People using the RRS were dissatisfied with inappropriate medical investigations, inconvenient facilities and insufficient equipment or material supplies, arrangements for their care and recovery, lack of communication and insufficient or limited duration of care.

Study reporting views and experiences data for practitioners, n=1

3. Oh KM and Warnes AM (2010) A nurse-led rapid response service for frail older people: An assessment. British Journal of Community Nursing 15: 333–40

Outline: This is a low quality study (−) reporting on the results of a postal survey that focused on a nurse-led RRS for frail older people. The authors aimed to report practitioners 'assessments' of the service, and participants included team members as well as other professionals involved with the team. In particular, the authors were interested in professionals' views regarding the type of patient for whom the service was most appropriate, and their views on the service's 'strengths and limitations' (p334).

Results: A total of 120 practitioners responded to the survey (including 15 RRS team members, 78 practitioners involved in referrals or follow-up care such as district nurses, GPs, social workers, and a variety of hospital staff and 27 'other' practitioners involved in the general care of patients accessing the service).

The service is described as a nurse-led 24 hour service providing assessments and care that aimed to reduce the number of emergency admissions to hospital. The team includes nurses, support workers, a physiotherapist and occupational therapist, and a social worker, is supported by clerical staff and is delivered in collaboration with the patient's GP who is required to accept

continuing medical responsibility. The service was designed to respond to the needs of frail older people over the age of 60 and is limited to 7 days if provided in the person's own home (including nursing and residential care homes) or 14 days if provided in a local authority resource centre.

Respondents were instructed to specify older people's health problems for which the service could be an appropriate response, as well as naming 3 positive characteristics and 3 limitations of the service.

Health problems to which the service was thought to be an appropriate response by all practitioners (in order of frequency) were: chest infection or chronic obstructive pulmonary disease; falls; reduced mobility or medical deterioration; mild cerebral vascular accident or transient ischaemic attacks; urinary tract infections; 'emergency social problem'; gastrointestinal infections; mild confusion or early dementia; cellulitis; general ill health after hospital discharge; diabetes; and cardiac failure.

Responses between groups of practitioners were on the whole quite different. Although 'emergency social problem' was the second most frequently cited problem by GPs, and mild confusion or early dementia was the fifth most frequently cited problem by this group, these issues were not suggested at all by members of the RRS.

Positive features of the rapid response service:

The 3 most frequently cited (by all types of practitioners) were:

1. Perceived ability to prevent admission to hospital.

2. Rapid response to the needs of the patient (for example, in terms of nursing, occupational therapy, physiotherapy and social care, or provision of prosthetic equipment and 'free placement').

3. Enabling patients to remain at home.

Limitations of the rapid response service

The most frequently cited limitations were as follows:

1. The service tended to be provided in nursing and residential care homes, which was reportedly perceived as inappropriate. The authors state that this was a concern for GPs and social workers who felt that the service did not have the capacity required to deliver in-home 24-hour care across a wide geographical region. In contrast, RRS members did not raise this concern.

2. The service was being used as a means of achieving ‘free care’. The authors report that this was regularly raised by RRS members and social workers, but was only suggested by a small number of GPs.

3. The service’s eligibility criteria were inappropriate. The authors note that although this was suggested by all types of practitioner, the reasons for suggesting this varied. RRS members are reported to have felt that practitioners based in accident and emergency departments ‘referred anyone’ (p338), and that other practitioners used the service as a means of accessing social services, especially where patients with long-term medical conditions, mental health conditions or social care problems were involved. This was perceived as leading to ‘pointless’ assessments that wasted the time of the team. In contrast, GPs are reported to have viewed the eligibility criteria as too narrow which made it ‘… impossible to provide the full range of intermediate care services …’ (Authors, p338).

4. The innovative multidisciplinary and collaborative features meant that the service only began to work effectively after a significant amount of time had elapsed. This was a concern raised by members of the rapid response team and other practitioners (although not by GPs).

5. The additional work the service generated for GPs. Although this concern was the fifth most frequent response, this was almost entirely as a result of concerns raised by GPs themselves. GPs are reported to have suggested that a shortage of hospital beds led accident and emergency-based professionals to make referrals to the team without consultation, which in turn added to their workload. While extra work without a corresponding increase in remuneration was a concern, some GPs emphasised that their main concern was that they did not have the time to do this extra work rather than that they were not being financially compensated for it.

6. The time-limited nature of the service. This was identified as an issue by GPs and the group of ‘other’ practitioners, although not by members of the RRS. Some respondents are reported to have suggested that the time-limited care ‘… regardless of the stage of the patient’s recovery, was unrealistic and did not meet the needs of older people’ (p339).

Economics

No additional economic analysis was carried out for this review question.

Evidence statements

The evidence statements listed in this section synthesise the key themes across included studies.

CR1	There is a small amount of low quality evidence that practitioners do not appropriately refer people to crisis response intermediate care services. One low quality UK study (Beech et al. 2013 −) reported views that health and social care practitioners missed opportunities to prevent hospital admissions because they neither knew about the existence, nor purpose, of the RRS. Another low quality UK paper (Oh and Warnes 2010 −) reported that health practitioners made referrals to the RRS simply as a means of accessing 'free' social care services.
CR2	There is a small amount of low quality evidence that practitioners and people using services are dissatisfied with the time-limited, short-term support provided by crisis response teams. A low quality UK paper (Oh et al. 2009 −) found that people using the service complained about the lack of support or time-limited nature of the support being delivered. Reporting findings from the same study, another low quality paper (Oh and Warnes 2010 −) showed that some practitioners view the length of the RRS as too limited and unrealistic for addressing the needs of older people.
CR3	No evidence was found from studies published since 2005 about the views and experiences of housing support or other practitioners in relation to crisis response services, as defined by the National Audit of Intermediate Care. The included studies (Beech et al 2013 −; Oh and Warnes 2010 −; Oh et al. 2009 −) gathered only views and experiences of health and social care practitioners.
CR4	No evidence was found from studies published since 2005 about the effectiveness of crisis response services, as defined by the National Audit of Intermediate Care. The included studies (Beech et al. 2013, −; Oh and Warnes 2010 −; Oh et al. 2009 −) gathered only views and experiences data.

Included studies for these review questions

Beech R, Henderson C, Ashby S et al. (2013) Does integrated governance lead to integrated patient care? Findings from the innovation forum. Health and Social Care in the Community 21: 598–605

Oh KM and Warnes AM (2010) A nurse-led rapid response service for frail older people: an assessment. British Journal of Community Nursing 15: 333–40

Oh KM, Warnes AM, Bath P (2009) Effectiveness of a rapid response service for frail older people. Nursing Older People 21: 25–31

3.4 Delivering reablement

Introduction to the review questions

The purpose of the first part of the review question (part a) was to examine the effectiveness and cost-effectiveness of reablement. Part b of the review question sought to identify evidence, which described the self-reported views and experiences of adults with social care needs, their families and unpaid carers, about the care and support they receive from a reablement service. In particular, the aim was to help the guideline committee to consider whether people who receive support think it is personalised and coordinated across social care, inpatient hospital care and

primary and community health services. Finally, part c of the review question sought evidence that described the views and experiences of people delivering, organising and commissioning social care, health and housing services, including what works and what does not work well in reablement. The guideline committee agreed that due to the relatively recent development of reablement, studies published before 2010 should not be included for review.

Overall, a good amount of evidence was located for this review area, including evidence of effectiveness derived from studies within and outside the UK. The level of effectiveness evidence was not as high as for home-based and bed-based intermediate care, so studies with a controlled but not necessarily randomised design were prioritised for review.

The quality of the study methods was mixed, although almost all of them had good relevance to the review question. The perspectives of people using reablement, their carers and families, and also practitioners, are represented in the views studies. It is important to note that 1 UK study of reablement is currently underway and the findings will contribute to future reviews of this guideline.

Review questions

4a) What is the effectiveness and cost-effectiveness of reablement?
4b) What are the views and experiences of people using services, their families and carers in relation to reablement?
4c) What are the views and experiences of health, social care and other practitioners about reablement?

Summary of the review protocol

The protocol sought to identify studies that would:

- identify the effectiveness and cost-effectiveness of reablement
- identify emerging models of reablement and associated outcomes
- describe the self-reported views and experiences of adults with social care needs, their families and unpaid carers about the care and support they receive from a reablement service, including what works and what does not work well
- describe the views and experiences of people delivering, organising and commissioning social care, health and housing services, including what works and what does not work well in reablement.

Population

For question 4a and 4b: Adults, aged 18 years and older, with experience of reablement, and their families, partners and carers. Self-funders and people who organise their own care and who have experience of reablement are included.

For question 4a and 4c: Housing practitioners, social care practitioners (providers, workers, managers, social workers), and health and social care commissioners involved in delivering reablement, personal assistants engaged by people with care and support needs and their families. General practice and other community-based healthcare practitioners, including GPs, therapists and community/district nurses, hospital ward staff.

Intervention

Community-based, multidisciplinary services provided to people in their own home or in a care home for up to 6 weeks (though there will be individual exceptions to the time limit). Includes home care reablement services designed to help people recover skills and confidence to live at home, maximising independence and minimising the need for ongoing home care.

Note the following exclusion: social service providing long-term care packages.

Setting

Service user's home, including sheltered housing accommodation, supported housing, temporary accommodation, care (residential and nursing) homes, bed-based reablement settings or prisons.

Outcomes

Person-focused outcomes (health and social care-related quality of life; independence, choice and control over daily life; capability to achieve desired person-centred outcomes; user and carer satisfaction; speech, language and communication skills; continuity of care and years of life saved) and service outcomes (use of health and social care services; admission avoidance; and need for support from care workers and carers).

Study design

The study designs which were prioritised for the effectiveness and cost-effectiveness question included: Systematic reviews of studies of different models of discharge assessment and care planning; randomised controlled trials of different approaches to discharge assessment and care planning; economic evaluations; quantitative and qualitative evaluations of different approaches; observational & descriptive studies of process; cohort studies, case control and before and after studies and mixed methods studies.

The study designs which were prioritised for the views and experiences questions included: Systematic reviews of qualitative studies on this topic; qualitative studies of user and carer views of social and integrated care; qualitative components of effectiveness and mixed methods studies and observational and cross-sectional survey studies of user experience.

See Appendix A for full protocols.

How the literature was searched

Review 4 consisted of searches on the specific intervention of reablement, as this data set was discrete. Additional related terms were used to increase the yield such as restorative care, enablement and home independence programmes, to create the first search set. We then created a second search set, seeking to extract relevant data from the broad rehabilitation, intermediate care, home care and community care data sets. We then combined the resulting set with time-limited terms such as '6 weeks', 'brief' or 'short term', and finally the second set was combined with the first reablement set and then limited by age factors and language. We did not limit by date, or study type, to ensure the highest yield of data was collected. We also undertook reference harvesting of studies identified in the review protocol development. Searches were initially run in February 2016 and an update search was conducted in July 2016.

See Appendix A for full details of the searches.

How studies were selected

Search outputs (title and abstract only) were stored in EPPI Reviewer 4 – a software program developed for systematic review of large search outputs. A subset was created by searching within the review using terms that were specific to bed-based intermediate care, based on the national audit definitions and terms known to be related or equivalent, such as 'restorative care'. This subset of studies was then screened against an exclusion tool informed by the parameters of the scope. Formal exclusion criteria were developed and applied to each item in the search output, as follows:

- language (must be in English)
- population (must be over 18 years of age and have experience of using bed-based intermediate care)
- intervention (must be reablement)
- setting (service user's home, including sheltered housing accommodation, supported housing, temporary accommodation, care (residential and nursing) homes, bed-based reablement settings or prisons)

- country (must be UK or other OECD)
- date (must not be published before 2010)
- type of evidence (must be research).

Title and abstract of all research outputs were screened against these exclusion criteria. Those included at this stage were marked for relevance to particular parts of the review question – or flagged as being relevant to 1 of the other review areas – and retrieved as full texts.

Full texts were again reviewed for relevance and research design. A list of studies excluded on full text can be found in appendix A, organised by exclusion criteria.

If still included, critical appraisal (against NICE tools) and data extraction (against a coding set developed to reflect the review questions) was carried out. The coding was all conducted within EPPI Reviewer 4, and formed the basis of the analysis and evidence tables. All processes were quality assured by double coding of queries, and a random sample of 10%.

'Searching within' created a subset of 1781 studies and in our initial screen (on title and abstract) we found 54 studies, which appeared relevant to the review questions on bed-based intermediate care. We retrieved and then reviewed full texts and included a total of 14 papers: 7 effectiveness studies and 7 views and experiences studies. The included studies (see below) were critically appraised using NICE tools for appraising different study types, and the results tabulated. Study findings were extracted into findings tables.

See Appendix B for full critical appraisal and findings tables.

Narrative summary of the evidence

In this section, a narrative summary of each included study is provided, followed by a synthesis of the evidence, according to the key outcomes, themes or sub-groups in the form of evidence statements [p158-60]. The approach to synthesising evidence was informed by the PICO within the review protocol.

Studies reporting effectiveness data (n=7)

Note that due to the heterogenity of the evidence, data from each effectiveness study are presented separately, rather than combining them into a single meta-analysis.

1. Dundee City Council and Tayside NHS (2010) Home care enablement service: Evaluation. Dundee: Dundee City Council

Outline: This report of a mixed methods study has been judged as low quality (−) although it has good external validity (++) in relation to the guideline and review question. The study evaluated a pilot 'enablement' scheme in Dundee City Council. The objectives of the service were to maximise service users' long-term independence, choice and quality of life, appropriately minimise the ongoing support required, and thereby minimise the whole-life cost of care. The 6-month pilot was conducted between December 2009 and June 2010. The pilot study aimed to determine the impact of enablement in terms of reducing the number of care hours needed. It also surveyed people's satisfaction with enablement and asked practitioners about the positive and negative aspects of the service. The control group comprised a retrospective trial group who were discharged from hospital at the same time in the previous year. Their progress was tracked for 6 months to compare the changes in care needs between them and the enablement group.

Results

- After 6 weeks of the service the enablement group demonstrated a 51% reduction in the level of service required with a further 43% reduction after 6 months. This compares with a 25.8% reduction after 6 weeks among the control group and then a 1.6% increase in service use after 6 months.
- Forty-five service users did not require any ongoing social care service at the end of the 6-week enablement period; this represents 60% of the service users. None of these service users had since required a service by the time of publication (2010).

Everyone who completed the enablement service was given a survey comprising 11 questions. The results are presented in the evidence tables.

Overview of the qualitative findings from interviews and discussions with practitioners.

Hospital social work team

They gave generally positive feedback about the enablement service. For example, they felt the enablement teams had facilitated a quicker discharge from hospital in most cases. One concern was about the enablement service becoming 'blocked' if they had trouble accessing longer-term care. Therefore people with complex needs were seen as inappropriate for the enablement service.

Enablement social care workers (from verbal feedback during the Care Commission inspection)

They felt that helping people regain independence makes their role fulfilling. They felt the loss of the physiotherapist and her knowledge when her secondment to the enablement service was over.

Independent care providers

Independent providers were not concerned about a lack of contract hours as a result of the enablement scheme. One criticism was that handover from the enablement teams to the external provider could be improved – they noted inconsistency in how this is done.

2. Glendinning C, Jones K, Baxter K et al. (2010) Home care re-ablement services: investigating the longer-term impacts (prospective longitudinal study) York: Social Policy Research Unit, University of York

Outline: This report presents the findings from a moderate quality study (+) of reablement schemes in 5 local authorities in England, compared with people referred to standard home care services in 5 further local authorities. The reablement services were all developed from existing home care services (p31) and predominantly targeted people discharged from hospital (p25). The reablement and home care services were both mainly used by people over 65 years of age.

Although a comparative evaluation, randomisation was not used because participating authorities offered reablement or home care, not both services. Data were collected as people started the reablement service and 9–12 months later, from 2008 to 2010. In addition to referral data (such as FACS level) and sociodemographic data, outcome measures included: self-perceived health; perceived quality of life; health-related quality of life (EQ-5D); and social care outcomes (ASCOT – Adult Social Care Outcomes Toolkit). Quantitative data were supplemented by interviews with managers, observation, focus groups with front-line staff, and interviews with people using reablement and carers. The cost-effectiveness of reablement was also investigated as part of this study and that element is reviewed and presented by the guideline economist.

Results: The qualitative findings from interviews with people using reablement are presented under Wilde and Glendinning (2012). The data from interviews and focus groups with managers and front-line workers are presented under Rabiee and Glendinning (2011).

Quantitative data are provided in detail in the evidence tables. However, overall, the use of reablement was significantly associated with better EQ-5D and ASCOT outcomes compared with traditional home care. The impact was not as strong for ASCOT as it was for the EQ-5D:

EQ-5D (higher scores indicating better health-related quality of life)

- T=1 (baseline; reablement n=619; comparison n=355)

Mean scores: reablement 0.35 vs comparison 0.3

- T=2 (12 months; reablement n=233; comparison n=135)

Mean scores: reablement 0.47 vs comparison 0.32

- Overall mean diff. significantly higher in reablement: 0.1, 95% CI 0.02 to 0.18

ASCOT (higher scores indicating better social care-related quality of life

- T=1 (baseline; reablement n=621; comparison n=357)

Mean scores: reablement 0.77 vs comparison 0.76

- T=2 (12 months; reablement n=238; comparison n=138)

Mean scores: reablement 0.8 vs comparison 0.78

- Overall mean diff. higher in reablement by 0.03, no confidence interval reported

3. Lewin G, Allan J, Patterson C, et al. (2014) A comparison of the home-care and healthcare service use and costs of older Australians randomised to receive a restorative or a conventional homecare service. Health and Social Care in the Community 22: 328–36

Outline: This is an Australian RCT with low internal validity (−) examining the impact of a restorative home care service on care usage and costs. For a full summary of the intervention and trial please see Lewin et al. (2013). However, the guideline committee should note that this paper provides further detail in relation to participants, reporting that the trial was restricted to individuals who lived in the Perth metropolitan area (as the intervention was not provided in rural areas), and did not have a diagnosis of terminal illness. Individuals were also excluded if they had complex support needs for which more than 15 hours per week of home care was required.

Results: Note that only intention to treat analyses are reported here.

Service use in first year

During the first 12 months, intent to treat analyses showed that participants in the intervention group used significantly fewer hours of personal care only (control mean 45.6 [49.3 SD] vs intervention mean 19.1 [27.6 SD]; $p<0.001$) and all forms of care (control mean 116.8 [125.4 SD] vs intervention mean 83.6 [81.9 SD]; $p<0.001$) compared to those in the control group.

Similarly, significantly lower proportions of participants in the intervention group compared to those in the control group were assessed and approved for a higher level of care during the first year

(control n=190 [50.7%] vs intervention n=163 [43.5%]; p=0.048); were receiving ongoing personal care at the first year follow-up (control n=160 [51.6%] vs intervention n=63 [25.2%]; p<0.001); and were in receipt of a new personal care service at the first year follow-up (control n=18 [27.7%] vs intervention n=17 [13.6%]; p=0.017).

Lower proportions of participants in the intervention group compared to those in the control group presented to the emergency department (control n=208 [55.5%] vs intervention n=188 [50.1%]; p=0.143) and were admitted to hospital (control n=218 [58.1%] vs intervention n=206 [54.9%]; p=0.377) during the first year; however, these results were not statistically significant.

Participants in the intervention group who were admitted to hospital during the first year (unplanned) also had shorter episodic lengths of stay (control mean 6.3 [9.9 SD] vs intervention mean 5.4 [9.2 SD]; p=0.092); and shorter cumulative lengths of stay (control mean 18.6 [19.0 SD] vs intervention mean 18.4 [24.2 SD]; p=0.926) compared to those in the control group; however these results were not statistically significant.

There was no significant difference between the intervention or control groups in the difference between the observed rate of death and the expected rate of death (control n=77 (n=75.8) vs intervention n=74 (n=75.2); p=0.840.

Service use in second year

During the second year, intent to treat analyses showed that participants in the intervention group used significantly fewer hours of personal care only (control mean 36.2 [51.5 SD] vs intervention mean 13.4 [31.5 SD]; p<0.001) and all forms of care (control mean 92.5 [137.9 SD] vs intervention mean 50.4 [90.7 SD]; p<0.001) compared to those in the control group.

Similarly, significantly lower proportions of participants in the intervention group compared to those in the control group were receiving ongoing personal care (control n=85 [34.5%] vs intervention n=23 [11.4%]; p<0.001) and were in receipt of a new personal care service (control n=9 [17.3%] vs intervention n=6 [6.0%]; p=0.027) at the second year follow-up.

Lower proportions of participants in the intervention group compared to those in the control group were assessed and approved for a higher level of care (control n=104 [34.9%] vs intervention n=92 [30.6%]; p=0.258); presented to the emergency department (control n=139 [46.6%] vs intervention n=117 [38.9%]; p=0.054); and were admitted to hospital (control n=132 [44.3%] vs intervention n=110 [36.5%]; p=0.053) during the second year; and participants in the intervention group who were admitted to hospital during this period (unplanned) also had a shorter length of

episodic stay compared to those in the control group (control mean 4.4 [9.9 SD] vs intervention mean 3.9 [10.4 SD]; p=0.301).

In contrast, participants in the intervention group who were admitted to hospital during this period (unplanned) had longer cumulative lengths of stay compared to those in the control group (control mean 15.2 [15.4 SD] vs intervention mean 20.6 [27.6 SD]; p=0.055). None of these results were significant.

There was a significant difference between the intervention and control groups in the difference between the observed rate of death and the expected rate of death: control n=62 (n=51.2) vs intervention n=43 (n=53.8); p=0.035.

Overall service use in 24-month period

Over the 24-month follow-up period, intent to treat analyses showed that participants in the intervention group used significantly fewer hours of personal care only (control mean 74.4 [86.6 SD] vs intervention mean 29.8 [52.6 SD]; p<0.001) and all forms of care (control mean 190.3 [230.4 SD] vs intervention mean 124.0 [154.5 SD]; p<0.001) compared to those in the control group. Similarly, a significantly lower proportion of participants in the intervention group were assessed and approved for a higher level of care over the 2-year follow-up period compared to that in the control group (control n=241 [64.3%] vs intervention n=210 [56.0%]; p=0.021).

Lower proportions of participants in the intervention group compared to those in the control group presented to the emergency department (control n=257 [68.5%] vs intervention n=239 [63.7%]; p=0.165) and were admitted to hospital (control n=265 [70.7%] vs intervention n=248 [66.1%]; p=0.182) over the 2-year follow-up period; and participants in the intervention group who were admitted to hospital over the 2-year period (unplanned) had shorter episodic lengths of stay compared to those in the control group (control mean 7.6 [10.9 SD] vs intervention mean 6.8 [10.5 SD]; p=0.161.

In contrast, participants in the intervention group who were admitted to hospital over this period (unplanned) had longer cumulative lengths of stay compared to those in the control group (control mean 22.8 [22.8 SD] vs intervention mean 24.4 [36.4 SD]; p=0.558).

There was no significant difference between the intervention and control groups in the difference between the observed rate of death and the expected rate of death; control n=139 (n=127) vs intervention n=117 (n=129); p=0.133.

Emergency department presentation and hospital admissions (adjusted for carer status, dependency, gender and living arrangements)

Intent to treat analyses showed that participants in the intervention group were less likely to present to an emergency department (odds ratio =0.83 [95% CI 0.62 to 1.11]; p=0.206) and less likely to have an unplanned admission to hospital (odds ratio =0.93 [95% CI 0.69 to 1.26]; p=0.65) during the first year compared to those in the control group, however these results were not statistically significant.

Similar results were seen in the second year, with the intervention group again being less likely to present to an emergency department (odds ratio =0.72 [95% CI 0.52 to 1.01]; p=0.056) and less likely to have an unplanned admission to hospital (odds ratio = 0.74 [95% CI 0.53 to 1.03]; p=0.073) during the second year compared to those in the control group. However the results were not statistically significant.

Similarly, over the whole 24-month follow-up period, participants in the intervention group were less likely to present to an emergency department (odds ratio =0.81 [95% CI 0.60 to 1.10); p=0.183] and less likely to have an unplanned admission to hospital (odds ratio =0.85 [95% CI 0.62 to 1.17]; p =0.316) during the 24-month follow-up period compared to those in the control group, however these results were not statistically significant.

Costs

In a generalised linear model regression of aggregated health and aged care costs over time (adjusting for carer status, dependency, gender and living arrangements), intention to treat analyses showed that the aggregated health and aged care costs of participants in the intervention group were less costly than those of participants in the control group by a factor of 0.92 during the first year (estimated relative reduction =0.92 [95% CI 0.80 to 1.06]; p=0.276); by a factor of 0.85 during the second year (estimated relative reduction =0.85 [95% CI 0.68 to 1.06]; p=0.155); less costly by a factor of 0.89 over the 24-month follow-up period (estimated relative reduction =0.89 [95% CI 0.78 to 1.02]; p=0.083). These results were not statistically significant. For further costs data please see evidence tables and economic evidence tables.

4. Lewin G, De San Miguel K, Knuiman M et al. (2013) A randomised controlled trial of the Home Independence Program, an Australian restorative home-care programme for older adults. Health and Social Care in the Community 21: 69–78

Outline: An Australian RCT with low internal validity (−) evaluating the impact of a restorative home-care programme. Participants were older people eligible to receive state funded care and they required assistance with 1 or more tasks of daily living because of '… an ongoing disability, rather than needing acute or post-acute care …' (p71). Individuals were eligible for the study if they were over the age of 65, had been referred for personal care, did not have a diagnosis of dementia or a progressive neurological disorder, were not receiving palliative care and were able to communicate in English.

The intervention was delivered by the staff of Silver Chain, a care provider based in Western Australia. No details on the background or training level of staff are reported by the authors.

The service is provided for up to 12 weeks or until the service user achieves their goals. The service is described as an 'early intervention' that is designed to optimise functioning, delay functional decline, enable individuals to self-manage chronic disease and promote healthy ageing. It is provided to individuals when they are initially referred for home care services, or to existing service users who request extra care.

Participants in the control group received care as usual (standard home care services from Silver Chain) that included a visit from a care coordinator to assess needs and complete a care plan. The authors report that the most common plan '… included three personal care visits a week to assist with bathing/showering and a fortnightly housecleaning visit that included heavy laundry' (p72).

A total of 750 participants were randomised (with 300 of these participants recruited to a subgroup who participated in more extensive assessments of outcome). Follow-up took place at 3 months and 12 months. Although both as treated and intention to treat analyses were conducted, only the intention to treat results are reported here. See evidence tables for 'as treated' results. Similarly, only those results for which statistical significance testing was conducted are reported here. Please see evidence tables for other data.

Results

Service outcomes at 3 and 12 months (intention to treat)

Logistic regression analysis adjusting for potential baseline confounders ('intention to treat') showed that there was a significant association between group assignment and need for ongoing care with participants in the intervention group being less likely to be in receipt of ongoing personal care than those in the control group in at 3 months (odds ratio =0.18; 95% CI 0.13 to 0.26;

p<0.001) and at 12 months (odds ratio =0.22; 95% CI 0.15 to 0.32; p<0.001). These results were statistically significant.

Note: these analyses excluded participants who died or had a terminal illness, moved out of the area or into residential care, and those who had missing data for any of the variables. The logistic regression analyses also examined the impact of carer availability and activities of daily living dependency and need for ongoing personal care. Although data are provided these are not reported as they do not relate to the impact of the intervention. Other covariates used in this analysis included age, gender, scores on an Instrumental Activities of Daily Living Scale, and living arrangements however data from these analyses are not reported at all.

Service user outcomes

The researchers also used linear regression analyses (adjusted for potential baseline confounders) to examine the impact of the intervention on functional and quality of life outcomes, however this was only examined for those subgroup participants for whom complete data were available ('baseline', 3 months and 12 months) and the data are not reported in full.

The study reports narratively that both groups showed improvement in activities of daily living and instrumental activities of daily living (both assessed using the Primary Assessment Form), mobility (measured using the Timed Up and Go test), fear of falling (measured using the Modified Falls Efficacy Scale), and Quality of life (measured using the Assessment of Quality of Life Scale between baseline and 3 months, and between 3 months and 12 months). It is stated that there were no between group differences in relation to change scores on these outcomes.

The study also reports on participants' 'independence in everyday activities' for those subgroup participants for whom complete data were available.

A significantly higher proportion of the intervention group became independent in showering between baseline and 3 months compared to that in the control group (intervention 60% vs control 23%; $\chi 2[1, n=192] =25.9$, p<0.001); and between baseline and 12 months (intervention 58% vs control 25%; $\chi 2[1, n=192] =16.65$, p<0.001). However it should be noted that participants in the intervention group may have begun to receive their allocated care before those in the comparison group.

5. Lewin G and Vandermeulen S (2010) A non-randomised controlled trial of the Home Independence Program (HIP): an Australian restorative programme for older home-care clients. Health and Social Care in the Community 18: 91–9

Outline: An Australian controlled trial with moderate quality internal validity (+) evaluating the effect of a restorative home-care programme on confidence, functional ability, wellbeing and requirements for ongoing home care. Participants were 'elderly' individuals (over the age of 60) who had been referred for help with personal care or domestic tasks who were found to be eligible for both the Australian Home and Community Care programme and the Home Independence programme (the intervention).

The Home Independence Programme is described as an 'early intervention programme' that is designed to optimise function, delay or prevent further functional decline, enable self-management of chronic diseases and promote healthy ageing. It is specifically designed to be offered to individuals at the point of referral to home care services or to service users who are already in receipt of home care but have requested an increase in support. The service is usually provided for approximately 12 weeks, however this is dependent on success in meeting the service user's goals and it should be noted that some participants may have received support for longer than 12 weeks (the number of which are not reported). The intervention includes 'comprehensive multidimensional assessment', goal-setting in collaboration with the service user and education to enable self-management, healthy ageing, medication management and prevention of accidents or illnesses. Other priorities that can be included are balance, strength and endurance work for mobility, falls prevention, continence management, nutrition management and skin care.

Participants in the control group received standard Home and Community Care programme services. The authors report that the '… most common care plan would include three personal care visits a week to assist with bathing/showering and a fortnightly home help visit to clean and do the heavy laundry' (p94).

Two hundred participants were assigned to either the Home Independence Programme or usual care and follow-up assessments took place at 3 and 12 months.

Results

Service user related outcomes

Activities of daily living (measured using the Primary Assessment Form, higher scores correspond to higher levels of dependency)

The intervention group had a lower total mean score in dependency in activities of daily living compared to the control group at 3 months (intervention 9.3 [SD 0.9] vs control 9.6 [SD 1.7]) and

at 12 months (intervention 9.3 [SD 0.8] vs control 9.6 [SD 1.4]). These results were not significant (p values not reported, described as non-significant by authors).

The intervention group showed significantly greater improvements between baseline and 3 months compared to the control group (z=−3.71, p<0.001) and between baseline and 12 months (z=−2.90, p=0.004).

Linear regression analyses showed that the amount of change in scores on this measure was significantly influenced by group assignment with participants in the intervention group making greater improvements than those in the control group between baseline and 3 months (estimate 0.43; 95% CI 0.12 to 0.74; p=0.006); and between baseline and 12 months (estimate 0.40; 95% CI 0.09 to 0.71; p=0.012).

Instrumental activities of daily living (measured using the Primary Assessment Form, higher scores correspond to higher levels of dependency)

The intervention group had a lower total mean score on a measure of dependency in instrumental activities of daily living compared to the control group at 3 months (intervention 14.8 [SD 3.7] vs control 14.9 [SD 4.1]) and at 12 months (intervention 14.0 [SD 2.8] vs control 14.5 [SD 3.9]). These results were not significant (p values not reported, described as non-significant by authors).

The intervention group showed significantly greater improvements between baseline and 3 months compared to the control group (z=−4.20, p<0.001); and between baseline and 12 months (z=−3.24, p=0.001).

Linear regression analyses showed that the amount of change in scores on this measure was significantly influenced by group assignment with participants in the intervention group making greater improvements than those in the control group between baseline and 3 months (estimate 1.35; 95% CI 0.58 to 2.13; p=0.001); and between baseline and 12 months (estimate 1.32; 95% CI 0.36 to 2.27; p=0.008).

Mobility (measured using the Timed Up and Go test, lower levels of mobility are indicated by slower times)

The intervention group had a quicker mean time on a measure of mobility compared to the control group at 3 months (intervention 19.9 [SD 13.9] vs control 20.8 [SD 11.4]); and at 12 months (intervention 18.9 [SD 6.8] vs control 20.8 [SD 11.2]). These results were not significant (p values not reported, described as non-significant by authors).

The intervention group showed significantly greater improvements between baseline and 3 months compared to the control group (z=−5.98, p<0.001); and between baseline and 12 months compared to the control group (z=−4.58, p<0.001).

Linear regression analyses showed that the amount of change in scores on this measure was significantly influenced by group assignment with participants in the intervention group making greater improvements than those in the control group between baseline and 3 months (estimate 5.44; 95% CI 2.82 to 8.07; p<0.001); and between baseline and 12 months (estimate 4.79; 95% CI 2.20 to 7.38; p<0.001).

Fear of falling (measured using the Modified Falls Efficacy Scale, higher scores correspond to greater levels of confidence)

The intervention group had a significantly higher mean score compared to the control group at 3 months (intervention 8.4 [SD 1.1] vs control 7.9 [SD 1.6]; p=0.034). The intervention group also had a higher mean score on this measure at 12 months however this difference was not significant (intervention 8.3 [SD 1.3] vs control 7.9 [SD 1.7]). P value not reported, described as non-significant by authors.

The intervention group showed significantly greater improvements between baseline and 3 months compared to the control group (z=5.99, p<0.001); and between baseline and 12 months (z=3.62, p<0.001).

Linear regression analyses showed that the amount of change in scores on this measure was significantly influenced by group assignment with participants in the intervention group making greater improvements than those in the control group between baseline and 3 months (estimate −0.85; 95% CI −1.18 to −0.53; p<0.001); and between baseline and 12 months (estimate −0.68; 95% CI −1.14 to −0.21; p=0.005).

Morale (measured using the Philadelphia Geriatric Morale Scale, higher scores correspond to better morale)

The intervention group had a higher mean score compared to the control group at 3 months (intervention 10.4 [SD 3.6] vs control 11.0 [SD 3.7]) and at 12 months (intervention 10.8 [SD 3.4] vs control 10.9 [SD 3. 6]). However, these results were not significant (p values not reported, described as non-significant by authors).

The intervention group showed significantly greater improvements between baseline and 3 months compared to the control group (z=2.41, p=0.016) and between baseline and 12 months (z=2.04, p=0.041).

Linear regression analyses showed that the amount of change in scores on this measure was influenced by group assignment with participants in the intervention group making greater improvements than those in the control group between baseline and 3 months (estimate −0.42; 95% CI −1.28 to 0.43; p=0.333) and between baseline and 12 months (estimate −0.59; 95% CI −1.61 to 0.43; p=0.254); however these results were not significant.

Service outcomes

Service outcomes at 3 months follow up (significance of results not reported)

- At 3 months follow-up, larger numbers of participants in the intervention group compared to those in the control group were classified as no longer requiring care (intervention n=63 vs control n=11); and requiring a lower level of service (intervention n=3 vs control n=0).
- Smaller numbers of participants in the intervention group compared to those in the control group were classified as having unchanged service requirements (intervention n=18 vs control n=67); requiring a higher level of service (intervention n=0 vs control n=13); and as having entered residential care (intervention n=1 vs control n=2).
- An equal number of participants in each group had died (intervention n=4 vs control n=4); and a larger number of participants in the intervention group compared to that in the control group had had their service cancelled or placed on hold (intervention n=9 vs control n=3).

Service outcomes at 12 months follow up (significance of results not reported)

- At 12 months follow-up, larger numbers of participants in the intervention group compared to those in the control group were classified as no longer requiring care (intervention n=57 vs control n=19); and requiring a lower level of service (intervention n=8 vs control n=7).
- Smaller numbers of participants in the intervention group compared to those in the control group were classified as having unchanged service requirements (intervention n=19 vs control n=58); requiring a higher level of service (intervention n=3 vs control n=1); and as having entered residential care (intervention n=2 vs control n=4).
- An equal number of participants in each group had died (intervention n=11 vs control n=11); and there were no participants in either group who had had their service cancelled or placed on hold (intervention n=0 vs control n=0).

6. Tinetti ME, Charpentier P, Gottschalk M et al. (2012) Effect of a restorative model of posthospital home care on hospital readmissions. Journal of the American Geriatrics Society 60: 1521–6

Outline: This is a moderate quality (+) quasi-experimental comparison of readmissions of Medicare recipients of usual home care and a matched group of recipients of a restorative model of home care. The study was conducted in a community setting in Connecticut, USA. Participants were aged 65 and over and had received an episode of Medicare-covered home care between 1 November 1998 and 30 April 2000. Participants were limited to those with an absence of severe cognitive impairment and who did not require total assistance with care.

Results

- Among matched pairs, 13.2% of the intervention group were readmitted to an acute hospital during the period of home care vs 17.6% of the control (usual care). Individuals receiving the restorative model were 32% less likely to be readmitted than those receiving usual care. This difference was not statistically significant (p value 0.10 CI [95%] 0.68 [0.43 to 1.08]).
- Mean length of care episodes: restorative group 20.3 ± 14.8 days vs usual care: 29.1 ± 31.7 days. This represents a statistically significant difference (p<0.001).

Results were similar in unmatched analyses.

7. Tuntland H, Aaslund MK, Espehaug B et al. (2015) Reablement in community-dwelling older adults: a randomised controlled trial. BMC Geriatrics 15: 145

Outline: A Norwegian RCT with good internal validity (+) evaluating the impact of a reablement intervention on '… self-perceived activity performance and satisfaction with performance, physical functioning, and health-related quality of life …' (p2). People who had been referred for home care were assessed for eligibility which was restricted to individuals over the age of 18, who were living in their own home in the municipality, were able to understand Norwegian and had experienced functional decline in at least 1 daily activity. People were excluded if they needed admission to a rehabilitation unit or nursing home, if they had a terminal illness, or if they were assessed (by healthcare providers) as having a moderate or severe cognitive impairment. Baseline scores on outcome measures such as the Timed Up and Go test suggest that the sample was relatively frail with low physical function in comparison to the wider population of 70 to 79-year-olds living in the community.

The reablement intervention is described as multicomponent home based rehabilitation, which is provided for a maximum of 3 months (average length of service reported in the study is 10 weeks). The intervention aims to enable participants to perform daily activities themselves rather than relying on others. An occupational therapist and a physical therapist worked with participants to identify issues that hindered their ability to perform everyday tasks (using the Canadian Occupational Performance Measure), resulting in a rehabilitation plan that underpins the work carried out by home care personnel (trained in the 'ideology' of self-management) and the service user. Participants also received booklets illustrating simple exercises.

Participants in the control group received care as usual which was not time-limited and was provided for more than 3 months where necessary. This usually consisted of 'compensating' services such as assistive technology, meals on wheels, practical help or provision of a safety alarm. It should be noted that 6 participants in the control group received rehabilitation provided by an occupational and/or physical therapist.

Results: Sixty-one participants were randomised and follow-up assessments took place at 3 and 9 months. Results highlighted here are for the overall 9-month study period. For separate 3- and 9-month results, see evidence tables. (For grip strength results, see evidence tables.)

Activity performance (self-reported, measured using the Canadian Occupational Performance Measure, sum score, 1–10, 10=best)

- There was a significant overall treatment effect of 1.5 points in favour of the intervention group (overall treatment effect mean difference = 1.5 [95% CI 0.4 to 2.6]; p=0.01).

Activity satisfaction (self-reported, measured using the Canadian Occupational Performance Measure, sum score, 1–10, 10=best)

- There was a significant overall treatment effect of 1.2 points on a self-reported measure of activity satisfaction in favour of the intervention group (treatment effect mean difference 1.2 [95% CI 0.1 to 2.3]; p=0.04).

Functional mobility (measured in seconds using the Timed Up and Go)

- There was an overall treatment effect of -0.1 seconds on this measure in favour of the intervention group (treatment effect mean difference −0.1 [95% CI −3.8 to 3.5]; p=0.96). These results were not statistically significant.

Health related quality of life – physical fitness (self-reported, measured using COOP/Wonka, scale 1–5, 1=best)

- There was an overall treatment effect of −0.2 points in favour of the intervention group (treatment effect mean difference −0.2 [95% CI −0.6 to 0.2]; p=0.34). These results were not statistically significant.

Health-related quality of life – feelings (self-reported, measured using COOP/Wonka, scale 1–5, 1=best)

- There was no evidence of an overall treatment (treatment effect mean difference 0.0 [95% CI −0.5 to 0.5]; p=0.90). These results were not statistically significant.

Health-related quality of life – daily activities (self-reported, measured using COOP/Wonka, scale 1–5, 1=best)

- There was an overall treatment effect of −0.4 points in favour of the intervention group (treatment effect mean difference −0.4 [95% CI -0.8 to 0.1]; p=0.14). These results were not statistically significant.

Health-related quality of life – social activities (self-reported, measured using COOP/Wonka, scale 1–5, 1=best)

- There was an overall treatment effect of 0.3 points in favour of the control group (treatment effect mean difference 0.3 [95% CI −0.3 to 0.8]; p=0.35). These results were not statistically significant.

Health-related quality of life – change in health (self-reported, measured using COOP/Wonka, scale 1–5, 1=best)

- There was no overall treatment effect (treatment effect mean difference 0.0 [95% CI −0.3 to 0.3]; p=0.78). These results were not statistically significant.

Health-related quality of life – overall health (self-reported, measured using COOP/Wonka, scale 1–5, 1=best.

- There was an overall treatment effect of −0.2 in favour of the intervention group (treatment effect mean difference −0.2 [95% CI −0.6 to 0.2]; p=0.31). These results were not statistically significant.

Studies reporting views and experiences data for people using reablement, their families or carers, n=5

1. Ariss S (2014) National Audit of Intermediate Care: patient reported experiences, 2014. Sheffield: University of Sheffield

Outline: This survey was conducted as part of the National Audit of Intermediate Care in 2014. The survey methodology and reporting are rated as low quality (−) although the external validity is good (++) given that the study's research question closely matches review question 4(b) and the population and setting of the study are also well matched with the guideline scope and review question. The survey asked 1 open-ended question, which seems to have been sent to all people using intermediate care in England, although this is not clear. The question was 'Do you feel that there is something that could have made your experience of the service better?' It is unclear how many responses were made by people using reablement. The abstract cites '1,644 users of reablement services' whereas the main report states that responses from 207 reablement users were received.

Apart from the fact that they have used reablement, there is no other information about the survey respondents. The paper provides very little detail about the methods, except to describe the analysis.

Results: Statements about ways that the service might be improved were coded into 8 distinct themes, which emerged from the data. They are listed here in descending order, starting with those cited most frequently.

Note: the document does not include page numbers to reference any quotes reported below.

Timing of visits

Two main problems were described; the timing of visits was inappropriate or inconsistent and more time or greater frequency of visits were considered necessary: 'Timings varied, between 7am and 10.45am. This was not suitable for my circumstances. I was told this was not a timed service.'

Joined-up and appropriate services

This included continuity of carers, communication and coordination within and between services, timeliness or information about waiting times. Knowledgeability and information provision about other appropriate services, and discharge arrangements were also mentioned.

Personal communication and attention

This included lack of appropriate or consistent information about services or care, and lack of information before and during discharge from the service. Respondents also cited a lack of communication about visit times and changes to schedules: ‘A more proactive approach to advising me about where to go for future help.’

Personal care

There was a lack of consistency regarding standards of care and the tasks the reablement workers could be expected to deliver. Support for leaving the house was a common request: ‘On one occasion the member of staff did not help me to get undressed, I struggled on my own.’

Staffing

Main concerns were lack of provider continuity, and shortage of staff. This impacts on many other important aspects of care, such as rushed visits, not enough time to share information, unpredictable and inappropriate visit times, inconsistent standards of care and lack of understanding about individuals’ needs.

Length of service

Some felt the service finished before they were ready: ‘I feel that the time spent with me was not enough and ended abruptly I am not better than when I left hospital.’

Therapy and assessment

People wanted more physiotherapy: ‘In my particular circumstances a few more sessions at certain times might have helped me to make more secure progress. I had 2 sessions each week but found I could not sustain my confidence to restore mobility with 2 sticks when I was at home alone. However I shall persevere.’

2. Gethin-Jones S (2013) Focus on the micro-relationship in the delivery of care. British Journal of Healthcare Assistants 7: 452–5

Outline: This moderate quality study (+) was judged to have good relevance (++) to the review question and guideline. It was conducted in the UK and used qualitative methods to investigate people’s views during transfer between reablement and on going home care. Thirty people were interviewed using a semi-structured framework. They had all been referred to reablement via hospital discharge and 75% of respondents were considered ‘housebound’.

Results: Three main themes were identified through the data analysis and they all relate to the relationship between the individual and carer.

1. The need for social interaction beyond the delivery of clinical healthcare tasks

People valued the 'neighbour-like' relationships they developed with reablement workers, which led to a good understanding about their needs and preferences. This was in stark contrast with the interaction experienced after handover to the home care service: 'They rush in, do their tasks, change your pads and things and rush out again, and hardly say a word. It's like you're an animal and they are just changing the litter in a pet's cage' (p454).

2. The need for consistent care staff in order to develop a working relationship

The issue of consistency of staff wasn't just important for relationship-building but also for protecting the dignity of people using the services: 'These people [carers] are doing really personal things to you. It's much more undignified getting a total stranger to come in and touch your private parts. It's very upsetting' (p454).

3. The need for the older patient to feel they had some control over how their care was delivered

People valued being asked how they would like their care to be provided, including how their dignity could best be protected. If people felt involved in deciding how their care should be delivered, they felt valued and as though they had a more equal relationship with the carer. One gentleman described being asked by a reablement workers what would be the least upsetting way of having his colostomy bag changed: 'You know that when they are changing your bag [colostomy] that it's not pleasant for you or them and you're embarrassed. It helps when they chat with you as they do it; some workers do it in silence and you can see the disgust on their faces. It makes you feel rotten' (p454).

Overall, people needed to feel they were working with the care staff, which is the essence of reablement, rather than purely having the care done to them.

3. Ghatorae H (2013) Reablement in Glasgow: quantitative and qualitative research. Glasgow: Glasgow City Council

Outline: A mixed methods study with low internal validity (−) exploring the impact of a pilot reablement programme implemented in north-east Glasgow.

Participants included individuals who had recently used the reablement service. The majority appear to be female and over 60 years of age and it appears that the service was provided after discharge from hospital. The study also included practitioners, staff from a company providing the reablement service, members of a rehabilitation team and social work staff. The total sample size is unclear but the study reports that 73 telephone survey interviews (described as quantitative research) were conducted with service users, as well as 4 face-to-face interviews (qualitative research) over a 6-month period with each service user (13 participants took part in these). Eleven professionals are reported to have participated in focus groups (exact details unclear – described as 'cross agency reablement/mainstream staff'); 31 completed the questionnaire and 11 members of staff from Cordia ('… mainstream staff involved in the handover of reablement at the end of the 6 week period', p29) were interviewed.

There are no details provided in relation to the intervention other than the description of it as a reablement service. 'Reablement home carers' deliver the service but there are no details on the experience level or training of these practitioners. Similarly, although the study states that the service was provided for 6 weeks in the homes of service users, no further details are reported in relation to the intervention.

Results: Note that the study includes quantitative data regarding service user outcomes (for example, use of 'mainstream' home care, hospital admission, etc.) However it was derived neither from a randomised nor quasi-experimental research design and has therefore not been reported in line with the 'study type' limits applied to this review question.

Service user views

The majority had received a home visit in relation to reablement less than 24 hours after discharge from hospital and as a result understood what the service 'was about'. Similarly, the majority also reported that they had received written as well as verbal information and confirmed that their reablement goals had been discussed with them.

Ten participants viewed goal-setting positively, with comments such as: 'great for self encouragement and stops deterioration' (p21); 'I was terribly bad at first but things have started to come together again' (p21).

Service users were on the whole positive about the care they had received during the programme, with a number of participants describing reablement staff as 'very helpful and supportive' (p23), and levels of satisfaction were reportedly high during and at the end of the programme.

Participants included in the quantitative research who were now in receipt of ‘mainstream’ home care or were ‘independent in the community’ were asked about their experiences of transition between the 2 services. Responses from those receiving ‘mainstream’ home care varied, with some reporting the process to be ‘smooth and easy’, 1 stating that it was ‘partially smooth with difficulties’ (p25) and 2 others reporting that it was difficult. For 1 carer, the transfer was problematic because she was ‘… unaware her mother had reached the end of reablement. She was initially told her mother would be on reablement for 6 weeks, but it only lasted 4 which caused the daughter problems’ (p26).

Practitioner and professional views

The researchers also held focus group discussions with 11 staff who were asked to identify forces working for and against reablement. Issues identified as ‘forces working against reablement’ included: increased workloads with a lack of corresponding resource increase; poor communication across agencies; ‘inappropriate’ referrals such as people in need of palliative care; duplication of work and assessments; failure to provide the service to all individuals who could benefit; inefficient processes and bureaucratic paperwork; ‘bottlenecking’ in the system; and guidelines that are often changed.

Note: those factors identified as ‘forces working towards reablement’ are not reported.

‘What is working well?’

The author reports that all types of staff understood clearly the aims and objectives of the service and that that goal-setting was generally viewed positively. Over half of the staff participants (54%) are reported to have rated the service as ‘excellent or good’ with 92% of Cordia staff, 33% of social work staff and 22% of North East Rehabilitation Service staff giving this rating. They reported improved job satisfaction and were positive about their training, which they emphasised should be ongoing, ‘... Without training it would have been impossible to take a step back. You get put into the position service users are in and then it makes you think different on how your approach to them would be’ (p30, no details provided in relation to source of quote).

‘What needs to improve?’

For reablement, screening of home carers was an issue with ‘inappropriate’ referrals for service users who did not meet service criteria such as those with dementia, terminal illness or pelvic fractures. They were also reported to have felt that occupational therapy input was ‘too slow’ and that occupational therapists did not consistently update diaries.

Cordia ‘mainstream’ home carers are reported to have expressed concern regarding handovers between reablement and their own team, and it was suggested that the 2 teams should meet face to face at handover to ensure that information was passed on and that reablement diaries might still be useful to mainstream home carers because they contained detailed information on any aids and adaptations in use. They were also frustrated at the fact that they were not allowed to attend reablement meetings or to undertake reablement training.

4. Hjelle KM, Tuntland H, Førland O et al. (2016) Driving forces for home-based reablement: a qualitative study of older adults’ experiences. Health and Social Care in the Community 24

Outline: This good quality study (++), conducted in Norway, is linked to the RCT by Tuntland et al. (2014). Interviews were conducted with 8 intervention participants to understand older people’s experiences of reablement. At least 1 interview took place with all participants and, with some, 2 interviews (at the end of reablement and then again at 1-month follow-up).

Results: A qualitative content analysis was used to analyse the interview data and, as a result, 4 themes emerged (more detail provided in the evidence tables).

1. My willpower is needed

Several described their willpower as being an important factor in the reablement process: ‘It depends on the willpower. Yes, that is what you need, the willpower ... if you sit down, then you’re not going anywhere. You must have the drive to come ahead in life. Goal-setting has been important and my willpower to exercise’ (Participant no. 8, p5).

2. Being with my stuff and my people

With reablement being delivered at home, this gave people autonomy and independence. It meant they could choose when to do their exercises and practise their daily activities in their own time instead of having to attend appointments if the intervention was delivered elsewhere: ‘when you are at home you can do the exercises when you are ready for it, you have the control yourself’ (Participant no. 1, p6).

3. The reablement team is important for me

The team provided essential support – and participants felt it was a real partnership. The 2 sub-themes were:

- encouragement to take responsibility in daily training – respondents saw the benefit of having the reablement team facilitate their daily activities instead of doing things for them. They felt a sense of freedom, being able to carry out activities for themselves instead of waiting for staff to do things for them: '… I used to go for a walk every day, however I don't go down to the main road yet, but I walk a little further each day. It is the freedom to decide yourself when you want to go for a walk. It was like a new life when I could go outside' (Participant no. 8 p6).
- encouragement to feel confident doing everyday activities on one's own – the reablement service encouraged people and supported them to regain confidence in everyday activities. Reablement workers adjusted the support they provided according to how the person was feeling. Reablement workers were seen as the driving force behind people's recovery. However, for some this meant that at the end of the reablement period they were no longer motivated and stopped doing their exercises.

4. Training is physical exercises, not everyday activities

The reablement team perceived the support with activities of daily living to be 'training' but the respondents generally didn't. They viewed the physical exercises as training but felt that the support with activities of daily living was simply 'practising' because this was something they'd done throughout their lives (for example, showering) and they just needed help to become confident in the task again, or to find a new way of carrying it out.

5. Wilde A and Glendinning C (2012) 'If they're helping me then how can I be independent?' The perceptions and experience of users of home-care reablement services. Health and Social Care in the Community 20: 583–90

Outline: This moderate quality (+) paper with good external validity (++) presents evidence from semi-structured interviews conducted in early 2010 with 34 service users and 10 carers from 5 established reablement services in England. The interviews formed part of a larger, mixed methods study into the effectiveness and cost-effectiveness of home-care reablement services (Glendinning et al. 2010). The purpose of the interviews was to gather data about the value of reablement from the perspective of individuals using the service, and carers.

Results: The study identified a lack of understanding of the principles behind reablement, with poor information given to users and carers, so that they experienced some frustration around the novel, goal-centred approach. Those who were unclear about the objective of the service tended to experience reablement as neglectful, failing to adequately care for them or their family member. Those who were most likely to appreciate reablement were those discharged from hospital

following a fall, stroke or other trauma, who could expect to regain more independence – while those with long-term and fluctuating conditions (often referred from community home care services) did not necessarily see the advantage of making gains that might be lost if the condition worsened. Goal-focused reablement also met with resistance among people of ethnic backgrounds where caring was seen as the desirable norm. Finally, 'regaining independence' was felt to be a complex construct and many interviewees wanted it to include more social goals, including going outside the home.

Study reporting views and experiences data for practitioners, n=1

1. Rabiee P and Glendinning C (2011) Organisation and delivery of home care re-ablement: what makes a difference? Health and Social Care in the Community 19: 495–503

Outline: This paper was judged to be of moderate quality (+) and have good relevance to the guideline and the review question (++). The paper reports qualitative data gathered as part of the large mixed methods evaluation of the effectiveness and cost-effectiveness of reablement (Glendinning et al. 2010). In each of the 5 reablement sites, interviews were conducted with senior service managers (n=8) and focus groups were held involving 37 front-line workers. Observations of 26 reablement visits were also carried out in service users' homes. The objective was to identify the features of service delivery and organisation that influence the effectiveness of reablement.

Results: The interviews and focus groups identified a number of factors that managers and front-line workers believed to enhance the effectiveness of reablement.

Service user characteristics

There was a consensus that the people most likely to benefit from reablement were those recovering from falls or strokes. By contrast, it was deemed much harder to ensure major improvements for people with ongoing needs such as people living with dementia or mental health problems. Service users' motivation was also a key factor: 'they've got to want to do it' (p499).

Staff commitment, attitudes and skills

The importance of a reablement approach or attitude came through strongly from the interviews with managers. It was agreed that the ideal reablement worker had a good understanding of the concept of reablement and in practice was able to stand back, observe and assess people's potential for regaining independence, and then provide appropriate support for them to reach their potential. Being able to motivate people was therefore important. Managers agreed that former home-care workers seemed most resistant to the new ways of working in reablement (doing with,

not doing for). It followed that people with least experience of traditional home care were easier to train for reablement. All agreed about the importance of training. Front-line workers reported increased job satisfaction from helping people to regain independence and achieve goals.

Ability of staff to be flexible, prompt, offer continuity of care

All agreed that reablement is a much more dynamic process compared with standard home care. Support should be focused and timely, otherwise people's progress is likely to be undermined. The importance of flexibility in the timing and duration of visits was emphasised and also being able to alter the content of visits at short notice according to the person's changing abilities. In the 4 specialist reablement sites, workers reported having much greater flexibility compared with the site that provided reablement and home care in the same service. In that service, reablement and home care visits lasted the same amount of time and the care workers did not know which people were meant to be receiving which type of support.

Sound, proportionate staff recording

A consistent and thorough recording system was thought to be essential to ensure continuity in the service. Managers felt that notes made at every visit should clearly state what support was provided and what progress the person had made toward their objectives and any risk factors. In practice, this did not seem to be happening in the sites – reablement workers were recording too much or too little detail and never reporting the extent to which the person had been involved in a task or how the nature of the support provided was changing.

Access to equipment and specialist skills in the team

Rapid provision of equipment (grab rails, walking frames) was considered an important part of reablement. Ready access to occupational therapists to cope with demand was seen as more important than necessarily having occupational therapists embedded within the reablement team. Having access to a variety of other skills in the team also helped them to support a wider range of people – for example, people living with dementia or mental health problems.

Expectations of service users and carers

There was a consensus that reablement worked better for people who were newly referred to adult social care. If they had experience of traditional home care, this created unhelpful expectations and resistance to change/improvement. Family members could also be resistant to reablement, preferring an approach that would minimise risk and ensure their relative is cared for. In this

context, reablement workers felt it important to clearly explain the aims and objectives of reablement to people using it, and their families.

Managers and front-line staff agreed that the success of reablement was also linked with the following external factors.

Wide understanding about purpose and vision of service

Everyone in and around the service needed to understand the purpose of reablement, including reablement teams, social services care managers and NHS staff. The reablement managers expressed concern that some care managers were misusing the service, referring people who were unlikely to benefit from reablement but for whom other services were not available.

Access to specialist skills

Having close relationships with, and quick access to, professionals and skills outside the reablement team was thought to make a big difference to the type and quality of support the reablement team could provide. It ensures a wide range of people can be accepted to the service and supported appropriately. It was particularly important to have quick access to physiotherapists and occupational therapists but also care management teams, district nurses and specialists to help people with visual impairments.

Capacity in home care services for intensive intervention

To maintain the required level of turnover in the reablement service it was crucial for home care services to be available to provide support for people with ongoing needs. Where there were problems finding home care services available to take new referrals, people were having to remain in the reablement service for weeks or months longer.

Economics

We carried out additional economic analysis for this review question on reablement. The rationale for doing work in this area is described in the Economic Plan and details of the analysis are provided in the economic report.

In summary, the guideline committee agreed that reablement was an important area to investigate because of the substantial resource implications linked to it as a service that is currently fully funded for people identified as eligible. While it is widely recognised as a good thing to do, its cost-effectiveness has not been proven. Economic evidence in this area referred to 2 studies

(Glendinning et al. 2010, Lewin et al. 2014), details of which are summarised in the economic evidence statement (EcRA1) below.

Based on those studies it was concluded that additional economic analysis was needed in order to derive recommendations about the cost-effectiveness of this type of intervention. In particular, a short-term cost perspective in both studies meant that important resource implications regarding care home and ongoing home care use were not included. Findings from a longitudinal study (Lewin et al. 2013) suggest that reablement has a long-term impact (of up to 3 years) on the ongoing use of home care suggesting that a long-term perspective might be important. In addition to those limitations, the English study (Glendinning et al. 2010) had limitations concerning the study design – the matched control group included a much lower proportion of people discharged from hospital. The second study was a RCT from Australia so the findings related to a different context of health and social care service provision and thus needed translation into the English context.

Using decision-analytic modelling techniques, we compared the difference in costs between reablement and standard home care. The population in the baseline model were older people of 65 years referred to home care; the model followed them over their lifetime until everyone had died. Since reablement has been linked to significant improvements in outcomes compared to standard care, it was possible to focus the analysis on potential cost saving. The perspective on costs was that of the NHS and personal social services (PSS) and included the costs of reablement, costs of home care and hospital costs. Prices were reported in 2014/15 UK pounds sterling. We applied a discount rate to costs of 3.5%. Information on resource use was derived from Lewin et al. (2014), which provided data on the relative risks for ongoing home care use as well as hospital admission between the 2 groups. Unit costs were taken from recognised national sources including PSSRU Unit Costs for Health and Social Care (2015), National Audit Report for Intermediate Care (NAIC 2015) and NHS Reference Costs 2014/15. Other data sources used in the model to transfer data on resource use and unit costs into to an English context, were those of Glennding et al. (2010), the Office of National Statistics, Bardsley et al. (2012), Community Care Statistics (2014/15) and Hospital Episodes Statistics (2013/14).

Results from the analysis suggested that reablement for older people referred to home care was cost-effective. The probability that long-term costs for individuals receiving reablement were lower than those for individuals receiving standard home care was very high at 94.5%. This referred to a starting age of the cohort of 65 years and was based on a model which conservatively assumed a reduced treatment effect linked to the shorter duration of reablement in England and higher mean costs covering the longer duration of intervention of 3 months. The mean net benefit per older

person was £2,061 (95% CI 1,993 to 2,129). This was based on mean costs per person of £56,499 (95% CI 55,690 to 57,307) in the reablement group and £58,559 (95% CI 57,800 to 59,319) in the control.

Evidence statements

The evidence statements listed in this section synthesise the key themes across included studies.

RA1	There is a moderate amount of moderate quality evidence that reablement is more effective when compared with conventional home care. Measured in terms of impact on service use, the evidence is unanimously positive. An evaluation of reablement (Dundee Council 2010 −) and 2 trials of restorative care – 1 randomised (Lewin et al. 2013, 2014 −), 1 controlled (Lewin and Vandermeulen 2010 +) found the intervention group had fewer or no ongoing care needs including at 12-month follow-up compared with usual care. Measured in terms of the effects on quality of life and ADL/IADL performance, the evidence is broadly positive, with the exception of the findings from 1 low quality study. Glendinning et al. (2010 +) found significant improvements in health- and social care-related quality of life and Tuntland et al. (2015 +) also showed positive health-related quality of life effects although they were non-significant. Lewin and Vandermeulen (2010 +) and Tuntland et al. (2015 +) found significant improvements in ADL and IADL performance among the intervention group. By contrast, a low quality Australian RCT (Lewin et al. 2013, 2014 -) found no between-group differences on quality of life and ADL outcomes.
RA2	There is a moderate amount of low and moderate quality data that people with complex needs and end of life care needs should not be referred to reablement. The data is mainly derived from studies about the views and experiences of practitioners. One moderate (Rabiee and Glendinning 2011 +) and 2 low quality studies (Dundee Council 2010 −; Ghatorae 2013 −) reporting the views of reablement managers and front-line workers, found that inappropriate referrals to reablement (including people 'unlikely to benefit' and people with palliative care needs) prevent the required level of turnover through the service. A moderate quality study (Wilde and Glendinning 2012 +) reported that people with long-term fluctuating conditions did not necessarily see the advantage of making gains during reablement that may be lost when their condition worsens.
RA3	There is a small amount of low quality evidence that flexibility in terms of the timing of visits is an important aspect of reablement, although this needs to be clearly communicated to people using the service. A moderate quality study of practitioner views (Rabiee and Glendinning 2011 −) highlighted that, being a dynamic process, reablement should be delivered via flexible, timely visits with the ability to adjust the content and duration at short notice. Although not contradicting this finding, a low quality survey (Ariss 2014 −) warns that any such changes to visit schedules should be clearly communicated to people to avoid negative experiences of being let down and ignored.
RA4	There is some low and moderate quality evidence that the success of reablement is influenced by the team having access to certain skills and competencies. A low quality survey (Ariss 2014 −) reported that people using reablement wanted more access to physiotherapy and a low quality mixed methods study (Dundee Council 2010 −) reported that reablement workers missed the contribution of the physiotherapist after the end of her secondment to the reablement team. A moderate quality study (Rabiee and Glendinning 2011 +) found that quick access to physiotherapy, occupational therapy and particular specialists made a big difference to the type of support that could be

	offered and the study also reported that ready access to equipment was fundamental to the effectiveness of reablement.
RA5	There is some low to moderate evidence that negative experiences of reablement arise through a lack of understanding about the objectives and design of the service. For example, a moderate quality study (Rabiee and Glendinning 2011 +) found that family members can be resistant to reablement, preferring an approach that would minimise risk and ensure their relative is cared for. Similarly, Wilde and Glendinning (2012 +) found that when families did not understand reablement, they thought it was neglectful, failing to provide adequate care. Misunderstandings were also evident in relation to the content and duration of reablement. Ariss (2014 −) reported negative views about not being helped with certain tasks and with the duration of the overall service, a complaint that was also reported by Ghatorae (2013 −).
RA6	There is some moderate and good evidence that reablement workers are fundamentally important in motivating people to achieve their goals. Rabiee and Glendinning (2011 +) reported that the ideal reablement worker is able to stand back, observe people's potential for regaining independence and provide appropriate support for them to reach their potential. This is corroborated by Hjelle et al. (2016 ++) who reported user views about the importance of reablement workers in making them feel confident about performing daily activities on their own.
RA7	There is a small amount of moderate and good quality evidence that reablement services should place greater emphasis on the achievement of social- and leisure-focused goals. A good quality study (Hjelle et al. 2016 ++) found that people using reablement experienced a 'new lease of life' when they were enabled to resume walks outside the home. Wilde and Glendinning (2012 +) reported complaints from people using reablement that the service should include goals focused on going outside the home and resuming leisure activities.
RA8	There is a small amount of moderate and good quality evidence that individual motivation has an important influence on the success of reablement. A good quality study (Hjelle et al. 2016 ++) of older people's reablement experiences found that several people described their willpower as being an important factor in the reablement process. A moderate quality study by Rabiee and Glendinning (2011 +) reported a view among practitioners that service user motivation is key.
RA9	There is no evidence about the effectiveness of reablement in supporting people living with dementia or moderate/severe cognitive impairment or people with end of life care needs. Studies that specifically excluded people with cognitive impairment or dementia were Glendinning et al. (2010 +), Lewin and Vandermeulen (2010 +), Lewin et al. (2013, 2014 −) and Tuntland et al. (2015 +). Those which specifically excluded people with end of life care needs were Lewin and Vandermeulen (2010 +), Lewin et al. (2013, 2014 −) and Tuntland et al. (2015 +).
EcRA1	Economic evidence referred to 2 studies assessed as sufficiently applicable: Glendinning et al. (2010) and Lewin et al. (2014). The England-based study (Glendinning et al. 2010 +, n=974) was a large prospective longitudinal study, which compared reablement offered by different local authority sites with standard home care and found that reablement had a probability to be cost-effective at 12 months of just under 100%. Findings of the sensitivity analysis showed that in a worst-case scenario the probability that reablement was cost-effective was still 70%. Costs included those to the NHS and personal social services. Individuals' health outcomes were measured with the EQ-5D and were significantly greater in the intervention group (mean diff. 0.1, 95% CI 0.02 to 0.18). Total social care costs (without the costs of reablement) were significantly lower in the reablement group than in the comparison group at 10 months (£790 vs £2,240; p<0.001). Total healthcare

	costs were higher in the reablement group (£3,455 vs £3,235) but this was not significant (p>0.05). Overall total costs at 12 months (with imputed missing values) were £7,890 (SD £5,380) in the reablement group and £7,560 (SD £6,090) in the comparison group. The matched control group differed significantly from the intervention group in terms of proportions referred from hospital which was much greater in the reablement group. A wide range of statistical methods were applied to test differences in baseline; a sometimes low reporting quality made it difficult to understand in how far other factors had been appropriately controlled for. However, sensitivity analysis for the costs of reablement and bootstrapping was applied on combined cost-effectiveness results, which increased the reliability of those findings. Altogether, the study had some potentially serious limitations and findings about cost-effectiveness could not directly inform the recommendations. The other study was a RCT carried out in Australia (Lewin et al. 2014 ++, n=750) and compared a reablement intervention, called the Home Independence Program, with standard home and community care. The population were older people of 65 years or above, who were using home care. The intervention had a time limit of 3 months and, in addition to delivering a strongly independence-focused approach, provided access to assistive technology, mobility, self-management, falls prevention, medication, continence and nutrition management programmes as well as assistance with social support. The study was a cost savings analysis which evaluated health and social care service use and respective costs. Mean total home care cost per person over the 2-year period were AU $5,833 in the reablement group versus AU $8,374 in the comparison group (p value not reported); costs of emergency visits over the 2 years were AU $686 in the reablement group versus AU $708 in the comparison group and costs of hospital admissions over the same period were AU $13,369 versus AU $13,675 (p values not reported). Total costs were lower by a factor of 0.83 in the reablement group (RR 0.83; 95% CI 0.72 to 0.99); total costs in the reablement group were AU $19,090 and AU $ 23,428 in the comparison group. The study also evaluated the number of individuals needing personal care and individuals approved for residential care (or equivalent home care package) and found, at study end, a significantly lower number in the intervention group for both outcomes (11.4% vs 34.5%; p<0.001 and 64.3% vs 56%; p=0.021). Altogether the study was of overall good quality; however, the study looked at cost savings in the Australian system so that the transferability of findings on service use would need to be analysed in a UK context.

Included studies for these review questions

Ariss S (2014) National Audit of Intermediate Care: patient reported experiences, 2014. Sheffield: University of Sheffield

Dundee City Council and Tayside NHS (2010) Home care enablement service: evaluation. Dundee: Dundee City Council

Gethin-Jones S (2013) Focus on the micro-relationship in the delivery of care. British Journal of Healthcare Assistants 7: 452–5

Ghatorae H (2013) Reablement in Glasgow: quantitative and qualitative research. Glasgow: Glasgow City Council

Glendinning C, Jones K, Baxter K et al. (2010) Home care re-ablement services: investigating the longer-term impacts (prospective longitudinal study) York: Social Policy Research Unit, University of York

Hjelle KM, Tuntland H, Førland O et al. (2016) Driving forces for home-based reablement: a qualitative study of older adults' experiences. Health and Social Care in the Community 24

Lewin G, Allan J, Patterson C et al. (2014) A comparison of the home-care and healthcare service use and costs of older Australians randomised to receive a restorative or a conventional homecare service. Health and Social Care in the Community 22: 328–36

Lewin G, De San Miguel K, Knuiman M et al. (2013) A randomised controlled trial of the Home Independence Program, an Australian restorative home-care programme for older adults. Health and Social Care in the Community 21: 69-78

Lewin G and Vandermeulen S (2010) A non-randomised controlled trial of the Home Independence Program (HIP): an Australian restorative programme for older home-care clients. Health and Social Care in the Community 18: 91–9

Rabiee P and Glendinning C (2011) Organisation and delivery of home care re-ablement: what makes a difference? Health and Social Care in the Community 19: 495–503

Tinetti ME, Charpentier P, Gottschalk M et al. (2012) Effect of a restorative model of posthospital home care on hospital readmissions. Journal of the American Geriatrics Society 60: 1521–6

Tuntland H, Aaslund MK, Espehaug B et al. (2015) Reablement in community-dwelling older adults: a randomised controlled trial. BMC Geriatrics 15: 145

Wilde A and Glendinning C (2012) 'If they're helping me then how can I be independent?' The perceptions and experience of users of home- care re- ablement services. Health and Social Care in the Community 20: 583–90

3.5 Intermediate care for people living with dementia

Introduction to the review questions

The purpose of the first part of the review question (part a) was to examine the effectiveness and cost-effectiveness of all 4 intermediate care service models for supporting people living with

dementia. Part b of the review question sought to identify evidence which described the self-reported views and experiences of people living with dementia, their families and unpaid carers about the care and support they receive from all 4 intermediate care service models. In particular, the aim was to help the guideline committee to consider whether people living with dementia think their intermediate care is personalised and coordinated across social care, inpatient hospital care and primary and community health services. Finally, part c of the review question sought evidence that described the views and experiences of people delivering, organising and commissioning social care, health and housing services, including what works and what does not work in supporting people living with dementia through intermediate care.

Overall there was only a small amount of evidence, with only 1 low quality effectiveness study and no studies reporting views and experiences. The lack of evidence is likely to reflect the practice situation in England where people with a dementia diagnosis are often excluded from intermediate care, especially reablement services. People living with dementia are also often excluded from research in this area. The lack of evidence had implications for the development of recommendations and the use of other types of evidence, particularly expert witness testimony.

Review questions

5a) What is the effectiveness and cost-effectiveness of intermediate care for supporting people living with dementia?
5b) What are the views and experiences of people living with dementia, their families and carers in relation to intermediate care, including reablement?
5c) What are the views and experiences of health, social care and other practitioners about intermediate care, including reablement, for people living with dementia?

Summary of the review protocol

The protocol sought to identify studies that would:

- identify the effectiveness and cost-effectiveness of the 4 service models of intermediate care for supporting people living with dementia
- identify emerging models and approaches to intermediate care and reablement and associated outcomes for people living with dementia and their carers
- describe the self-reported views and experiences of people living with dementia, their families and carers about the care and support they receive from intermediate care and reablement services, including what works and what does not work well

- describe the views and experiences of people delivering, organising and commissioning social care, health and housing services, including what works and what does not work well in intermediate care and reablement for people living with dementia.

Population

For question 5a and 5b: Adults aged 18 years and older, living with dementia and with experience of intermediate care and reablement. Also, their families, partners and carers. Self-funders and people who organise their own care and who have experience of intermediate care and reablement are included.

For question 5a and 5c: Housing practitioners, social care practitioners (providers, workers, managers, social workers), and health and social care commissioners involved in delivering intermediate care and reablement; personal assistants engaged by people with care and support needs and their families. General practice and other community-based healthcare practitioners, including GPs, therapists and community/district nurses; hospital ward staff.

Intervention

All 4 intermediate care service models (including reablement) as described in the National Audit of Intermediate Care.

Note the following exclusions: mental health crisis resolution services, mental health rehabilitation, general district nursing services, general community hospital beds and social care services providing long-term care packages.

Setting

All settings in which intermediate care and reablement are provided (see 2.3 in the scope).

Outcomes

Person-focused outcomes (health and social care related quality of life; independence, choice and control over daily life; capability to achieve desired person-centred outcomes; user and carer satisfaction; speech, language and communication skills; continuity of care and years of life saved) and service outcomes (use of health and social care services; length of hospital stay; delayed transfers of care from hospital; admission avoidance; admissions to care homes; and need for support from care workers and carers).

Study design

The study designs which were prioritised for the effectiveness and cost-effectiveness question included: systematic reviews of studies of intermediate care and reablement; randomised controlled trials of intermediate care and reablement; economic evaluations; quantitative and qualitative evaluations of different approaches; observational & descriptive studies of process; cohort studies, case control and before and after studies and mixed methods studies.

The study designs which were prioritised for the views and experiences questions included: Systematic reviews of qualitative studies on this topic; qualitative studies of user and carer views of intermediate care and reablement; qualitative components of effectiveness and mixed methods studies and observational and cross-sectional survey studies of user experience.

See Appendix A for full protocols.

How the literature was searched

In review 5 we created a dementia set (1) and a reablement set (2) along with terms for intermediate care to ensure we gathered a broad yield of data on dementia and intermediate care. A rehabilitation set (3) was combined with time and measure limits. The reablement set and rehabilitation set were kept discrete by using the OR operator. Finally we combined the 2 OR search sets (2 and 3) with the dementia set (1). As with review 4 we did not limit by date, or study type, to ensure the highest yield of data was collected. Searches were initially run in March 2016 and an update search was conducted in July 2016.

See Appendix A for full details of the searches.

How studies were selected

Search outputs (title and abstract only) were stored in EPPI Reviewer 4 – a software program developed for systematic review of large search outputs. A subset was created by searching within the review using terms that were specific to bed-based intermediate care, based on the National Audit definitions and terms known to be related or equivalent, such as ‘restorative care’. This subset of studies was then screened against an exclusion tool informed by the parameters of the scope. Formal exclusion criteria were developed and applied to each item in the search output, as follows:

- language (must be in English)
- population (must be over 18 years of age, living with dementia and have experience of using intermediate care)

- intervention (must be 1 of the 4 intermediate care models)
- setting (all settings in which intermediate care and reablement are provided)
- country (must be UK or other OECD)
- date (must not be published before 2005)
- type of evidence (must be research).

Title and abstract of all research outputs were screened against these exclusion criteria. Those included at this stage were marked for relevance to particular parts of the review question – or flagged as being relevant to 1 of the other review areas – and retrieved as full texts.

Full texts were again reviewed for relevance and research design. A list of studies excluded on full text can be found in appendix A, organised by exclusion criteria.

If still included, critical appraisal (against NICE tools) and data extraction (against a coding set developed to reflect the review questions) was carried out. The coding was all conducted within EPPI Reviewer 4, and formed the basis of the analysis and evidence tables. All processes were quality assured by double coding of queries, and a random sample of 10%.

'Searching within' created a subset of 197 studies and in our initial screen (on title and abstract) we found 11 studies which appeared relevant to the review questions on intermediate care for people living with dementia. We retrieved and then reviewed full texts and included just 1 paper reporting effectiveness data. The included study (see below) was critically appraised using NICE tools for appraising different study types, and the results tabulated. Study findings were extracted into a findings table.

See Appendix B for full critical appraisal and findings tables.

Narrative summary of the evidence

In this section, a narrative summary of the included study is provided, followed by a synthesis of the evidence, according to the key outcomes, themes or sub-groups in the form of evidence statements [p168]. The approach to synthesising evidence was informed by the PICO within the review protocol.

Study reporting effectiveness data (n=1)

1. Culverwell A and Milne A (2010) Intermediate care: evaluating a specialist home treatment service. Journal of Dementia Care 18: 32–5

Outline: This report presents the findings from a low quality study (-) of a dementia scheme, the 'Home Treatment Service' (HTS) in East Kent in England. The HTS was set up to provide specialist mental health intermediate care for people living with dementia for a period of up to 12 weeks. The HTS works with complex transitions, particularly where a breakdown in the care situation is imminent. Aims of the HTS are to reduce the need for unnecessary moves, particularly to mental health hospital, and to minimise the level of distress should such moves be required. Objectives of the HTS are to provide a multiprofessional comprehensive assessment of need, which informs the provision of a set of interventions focused on meeting the needs of the user's family carer and/or care staff.

The paper describes a formative evaluation assessing the impact of the HTS on users and carers, and on the use of acute mental health inpatient services – for example, avoidance of unnecessary admissions and promotion of timely discharge. Data were gathered and analysed during the HTS's first full year of activity and after a 6-month follow up period. Data is incorporated from staff records, including key characteristics of the user (and carer) population, severity of dementia, referrers' goals, and the Short Form Camberwell Assessment of Need in the Elderly (CANE). The home care service was mainly used by people over 65 years of age (average age of 85 years).

During its first full year of activity, the HTS worked with 148 completed cases. Referral criteria are specified as: people with dementia with associated complex and multiple needs.

Results

Key findings

- Contrary to expectations, users with moderate or severe dementia achieved as positive a set of outcomes as those with mild dementia; this appears to be the case for users living alone as much as it is for those living with others.
- The HTS works with a relatively high number of clients who die either during the period of intervention or soon after. The number of deaths at 6 months follow-up was 27 (17% of the total). The authors argue this underscores the unanticipated role the HTS played in providing end of life care.
- Timely, focused work with care home staff and relatives can do a lot to reduce challenging behaviours and distress, and maintain a care home placement.
- The learning from a single case can be used more widely to enhance the care of other residents is also an important benefit.

In terms of overall effectiveness, the authors argue it is clear that referrers' goals were largely achieved and similarly a significant proportion of the CANE needs were met.

Economics

No additional economic analysis was carried out for this review question.

Evidence statements

The evidence statements listed in this section synthesise the key themes within the included study.

DE1	There is a small amount of low quality evidence that a time-limited specialist home treatment service for people living with dementia helps to achieve referrers' goals. The included study (Culverwell and Milne 2010 −) found that the goals most frequently achieved were: supporting carer/care staff; avoiding hospital admissions; conducting an assessment of problems/needs; facilitating hospital discharge; supporting a transition; and engaging the user with services.
DE2	There is a small amount of low quality evidence that a time-limited specialist home treatment service for people living with dementia can help to improve people's capacity to live more independently. The 1 included study (Culverwell and Milne 2010 −) found that at 6 months follow-up 44% of people were still living in the same care environment, 37% had moved to a more supported care environment and 19% to a less supported environment.
DE3	No evidence was found from studies published since 2005 about practitioner, service user or carer views and experiences in relation to intermediate care for people living with dementia. The only included study (Culverwell and Milne 2010 −) claimed to investigate the effectiveness of a specialist home treatment service for people living with dementia but the methodological limitations and lack of control seriously undermine our confidence in the findings.

Included study for these review questions

Culverwell A and Milne A (2010) Intermediate care: evaluating a specialist home treatment service. Journal of Dementia Care 18: 32–5

3.6 Intermediate care and reablement – information, advice, advocacy, training and support

Introduction to the review questions

The purpose of the first part of the review question (part a) was to examine the effectiveness and cost-effectiveness of information, advice, advocacy, training and support for people using all 4 intermediate care service models. Part b of the review question sought to identify evidence which described the self-reported views and experiences of adults, their families and carers about the provision of information, advice, advocacy, training and support in relation to intermediate care,

including what works and what does not work well. In particular, the aim was to help the guideline committee to consider whether people who use services think information, advice, advocacy, training and support in relation to intermediate care and reablement are provided in a way that is personalised and coordinated across social care, inpatient hospital care and primary and community health services. Finally, part c of the review question sought evidence that described the views and experiences of people delivering, organising and commissioning social care, health and housing services about information, advice, advocacy, training and support for people using services and their families in relation to intermediate care and reablement.

Overall there was only a small amount of evidence, with only 2 studies reporting views and experiences and none reporting effectiveness. The views of practitioners are not represented in the evidence and there was no evidence at all about advocacy and training in the context of intermediate care. The lack of evidence had implications for the development of recommendations and the use of other types of evidence, including committee consensus.

Review questions

6a) What is the effectiveness and cost-effectiveness of information, advice, advocacy, training and support for people using intermediate care and reablement, and their families and carers?

6b) What are the views and experiences of people using intermediate care and reablement, and their families and carers, about information, advice, advocacy, training and support?

6c) What are the views and experiences of health, social care and other practitioners about information, advice, advocacy, training and support for people using intermediate care and reablement and their families and carers?

Summary of the review protocol

The protocol sought to identify studies that would:

- identify the effectiveness and cost-effectiveness of information, advice, advocacy, training and support for people using intermediate care and reablement, and their families and carers
- identify emerging models and approaches to the provision of information, advice, advocacy, training and support for people using intermediate care and reablement, and their families and carers (and associated outcomes)
- describe the self-reported views and experiences of adults, their families and carers about the provision of information, advice, advocacy, training and support in relation to intermediate care and reablement, including what works and what does not work well

- describe the views and experiences of people delivering, organising and commissioning social care, health and housing services about information, advice, advocacy, training and support for people using services and their families in relation to intermediate care and reablement, including what works and what does not work well.

Population

For question 6a and 6b: Adults, aged 18 years and older, with experience of intermediate care and reablement. Also, their families, partners and carers. Self-funders and people who organise their own care and who have experience of any of the 4 models of intermediate care are included.

For question 6a and 6c: Housing practitioners, social care practitioners (providers, workers, managers, social workers), and health and social care commissioners involved in delivering intermediate care and reablement; personal assistants engaged by people with care and support needs and their families. General practice and other community-based healthcare practitioners, including GPs, therapists and community/district nurses; hospital ward staff.

Intervention

All 4 intermediate care service models (including reablement) as described in the National Audit of Intermediate Care.

Also, information and advisory services (local authority and health). Social work, community health.

Note the following exclusions: mental health crisis resolution services, mental health rehabilitation, general district nursing services, general community hospital beds and social care services providing long-term care packages.

Setting

All settings in which intermediate care and reablement are provided (see 2.3 in the scope) and in which information, advice, advocacy, training and support are available.

Outcomes

Person-focused outcomes (health and social care related quality of life; independence, choice and control over daily life; capability to achieve desired person-centred outcomes; user and carer satisfaction; speech, language and communication skills; continuity of care and years of life saved) and service outcomes (use of health and social care services; length of hospital stay; delayed transfers of care from hospital; admission avoidance; admissions to care homes; and need for support from care workers and carers).

Study design

The study designs which were prioritised for the effectiveness and cost-effectiveness question included: Systematic reviews of studies of intermediate care and reablement; randomised controlled trials of intermediate care and reablement; economic evaluations; quantitative and qualitative evaluations of different approaches; observational & descriptive studies of process; cohort studies, case control and before and after studies and mixed methods studies.

The study designs which were prioritised for the views and experiences questions included: Systematic reviews of qualitative studies on this topic; qualitative studies of user and carer views of intermediate care and reablement; qualitative components of effectiveness and mixed methods studies and observational and cross-sectional survey studies of user experience.

See Appendix A for full protocols.

How the literature was searched

A broad communication search strategy for review 6 was devised, capturing data on information, advice, advocacy or training and support. We combined 3 broad data sets: rehabilitation, education and information communication formats. We combined terms for rehabilitation and information and limited by date to create the final data set. The collection was not bound by the definitions within the Audit for Intermediate Care, meaning time limits that may have provided more focused limited results were not possible to use. Within the test searches for the review protocol we identified that the search needed to be broad enough to capture a variety of related concepts such as self-help in rehabilitation along with advocacy and decision-making but we also identified that the subject matter may be found more in the qualitative area of research, so search filters for study types were tested but issues with combining study type filters with publication type searches deemed them unsuitable for use in this combined field. Searches were initially run in June 2016 and an update search was conducted in July 2016.

See Appendix A for full details of the searches.

How studies were selected

Search outputs (title and abstract only) were stored in EPPI Reviewer 4 – a software program developed for systematic review of large search outputs. A subset was created by searching within the review using terms that were specific to bed-based intermediate care, based on the National Audit definitions and terms known to be related or equivalent, such as ‘restorative care’. This subset of studies was then screened against an exclusion tool informed by the parameters of the

scope. Formal exclusion criteria were developed and applied to each item in the search output, as follows:

- language (must be in English)
- population (must be over 18 years of age and have experience of using intermediate care)
- intervention (must be 1 of the 4 intermediate care models)
- setting (all settings in which intermediate care and reablement are provided and in which information, advice, advocacy, training and support are available)
- country (must be UK or other OECD)
- date (must not be published before 2005)
- type of evidence (must be research).

Title and abstract of all research outputs were screened against these exclusion criteria. Those included at this stage were marked for relevance to particular parts of the review question – or flagged as being relevant to 1 of the other review areas – and retrieved as full texts.

Full texts were again reviewed for relevance and research design. A list of studies excluded on full text can be found in appendix A, organised by exclusion criteria.

If still included, critical appraisal (against NICE tools) and data extraction (against a coding set developed to reflect the review questions) was carried out. The coding was all conducted within EPPI Reviewer 4, and formed the basis of the analysis and evidence tables. All processes were quality assured by double coding of queries, and of a random sample of 10%.

'Searching within' created a subset of 440 studies and in our initial screen (on title and abstract) we found 13 studies which appeared relevant to the review questions on information, advocacy, training and support for people using intermediate care. We retrieved and then reviewed full texts and included just 2 papers reporting views and experiences and no effectiveness data. The included studies (see below) were critically appraised using NICE tools for appraising different study types, and the results tabulated. Study findings were extracted into findings tables.

See Appendix B for full critical appraisal and findings tables.

Narrative summary of the evidence

In this section, a narrative summary of each included study is provided, followed by a synthesis of the evidence, according to the key outcomes, themes or sub-groups in the form of evidence statements [p177]. The approach to synthesising evidence was informed by the PICO within the review protocol.

Studies reporting views and experiences data for people using intermediate care, their families or carers, n=2

1. Ariss S (2015) National Audit of Intermediate Care: patient reported experiences. Sheffield: University of Sheffield School of Health and Related Research Care

Outline: This report presents the findings from a low quality study (−) which reports the views and experiences of people using home- and bed-based intermediate care and reablement. The research design was described as a questionnaire survey with the qualitative data derived from free text comments by the respondents in answer to the question, 'Do you feel that there is something that could have made your experience of the service better?' Very limited methodological details were reported in the study.

Results: Across the 3 categories (bed-based intermediate care, home-based intermediate care and reablement), people with experience of the 3 services perceived similar shortcomings in the service provided, in particular in information provided by staff. This was compounded by poor communication between staff and services.

People with experience of bed-based intermediate care

Respondents said they would like to have consistent information about services or care, especially better information about their condition, medication and pain management. More general information about the facilities and staff was also very important, especially to people who felt less able to ask for information. People preferred this information to be given in written form rather than during verbal exchanges when details could easily be missed or forgotten.

Inclusion and involvement of family members in decision-making about care was perceived as important and respondents said they would like to have more time to speak to staff about their care. Some felt there was a lack of knowledge or understanding of their condition or treatment.

People with experience of home-based intermediate care

Similarly, people with experience of home-based intermediate care reported that a lack of appropriate, consistent information about services and care was a concern. They felt improvement was needed to achieve joined-up, appropriate, timely services, for example about discharge and after care plans. People experienced difficulties around discharge arrangements and after-care planning, owing to lack of responsiveness of, or lack of communication with, after-care services resulting in an extended stay in hospital. They also felt they had very little information about the

services that they were receiving or could have access to. They preferred information to be accurate and timely to avoid delayed discharge from hospital.

People with experience of home-based intermediate care

People with experience of reablement services made similar comments. They would like to see improvement by having a joined-up, appropriate and timely service. They also wanted improvements related to planning and organisation in discharge arrangements on leaving hospital services. They experienced problems stemming from a lack of communication, coordination and organisation within and between services, resulting in a lack of relevant information being passed between colleagues about patients' conditions or situations. They preferred information to be clearly explained and appropriate and timely to avoid delay in discharge.

This report did not provide any relevant data about support, training and advocacy for people using intermediate care and reablement or their families.

2. Hoffmann T and Tooth L (2004) Patient perceptions of the quality of information provided in a hospital stroke rehabilitation unit. British Journal of Occupational Therapy 67: 111–7

Outline: This is a moderate quality study, conducted in Australia, judged to be partly relevant to our review question. In particular, the views and experiences of people who received information after a stroke, from a hospital stroke rehabilitation unit. The study aimed to explore the 'extent, source and format of the information received by stroke patients while undergoing rehabilitation, along with their perceptions of the quality of that information' (p112). To guide data collection and analysis the researchers administered a 20-item questionnaire face-to-face. Interviews were carried out with 15 patients approximately 1.8 months into rehabilitation.

Results

The perspectives of patients

Generally, on returning home, patients received information about activities/exercises, equipment/assistive devices and the prevention of strokes, with very few wanting more information on these topic areas. The majority of patients reported information was given when a family or caregiver was present. Patients commented that there could have been more information on treatment after a stroke, causes of a stroke, stroke support groups, prevention of a stroke and risk factors for stroke. Some patients identified additional topics that were not on the original list, which were medications and their side effects, specific medical information about their type of stroke and

specific symptoms such as dizziness, pain and loss of taste. A vast majority reported that they felt they had not received enough information on these issues.

Most information was given to patients verbally with the main source of information coming from occupational therapists or doctors. Additionally, other health professionals such as physiotherapists, speech and language therapists and social workers, gave information to participants. Almost all respondents stated that receiving information verbally from a health practitioner was their preferred method of dissemination. The only instance of written communication being provided was on 2 topics – emotional problems and the impact of stroke on relationships.

The perception of information received was generally positive, with participants rating 1–10 on the following areas: satisfaction with written information (9); ease of reading and understanding (8.5); relevance (8); satisfaction with non-written information (8); how the information assisted them to cope with life after the stroke (8); and ease of access (5). General comments were positive, for example 'giving them the information they needed' (n=8) and 'making it easier for them to do what was expected during recovery' (n=6). One participant commented that, 'I felt more safe and more confident after things were explained to me'. Another commented, 'it [the information] gave guidelines and helped to decrease my fears and anxieties' (p114).

The research team analysed 25 materials, which were generally fact sheets, brochures or posters from stroke organisations (n=14), government departments (n=5), hospital departments (n=5) and pharmaceutical companies (n=1). The SMOG readability level of the 25 materials was at an equivalent grade of level 12 of education (SD 1.5, range 10–15): 8% at grade 10, 36% at grade 11, 24% at grade 12, 8% at grade 13 and 12% each at grades 14 and 15.

Economics

No additional economic analysis was undertaken for this review question.

Evidence statements

The evidence statements listed in this section synthesise the key themes across included studies.

IN1	There is a small amount of evidence that people using intermediate care and reablement wish to receive information in writing as well as verbally. A low quality study (Ariss 2015 −) reported that people using bed-based intermediate care wanted information about facilities, staff and their condition to be provided in writing due to the risk of forgetting details given verbally. A moderate quality study (Hoffman and Tooth 2004 +) showed that during stroke rehabilitation people preferred to receive information verbally from health practitioners.

IN2	There is a small amount of low quality evidence that poor information provision causes problems before and during transfers of care from hospital. The survey by Ariss (2015 −) reported that people experienced difficulties with discharge arrangements owing to a lack of communication with after-care services and a lack of information about potential sources of support following transfer from hospital.
IN3	There is a small amount of evidence that people using intermediate care and reablement services receive inadequate information relating to their condition and treatment plans. The survey by Ariss (2015 −) reported that insufficient information was given to people about their condition, medication and pain management. During stroke rehabilitation, people also said they needed more information about the symptoms and causes of stroke, about the prevention of further episodes and about medication (Hoffman and Tooth 2004 +).
IN4	No evidence was found from studies published since 2005 about the provision of advocacy or training for people using intermediate care and reablement services.

Included studies for these review questions

Ariss S (2015) National Audit of Intermediate Care: patient reported experiences. Sheffield: University of Sheffield School of Health and Related Research Care

Hoffmann T and Tooth L (2004) Patient perceptions of the quality of information provided in a hospital stroke rehabilitation unit. British Journal of Occupational Therapy 67: 111–17

3.7 What characteristics of intermediate care and reablement service models and approaches are associated with improving outcomes?

Introduction to the review question

Review question 7 was added to identify the characteristics of service models and approaches to intermediate care that are associated with improved individual outcomes and experiences. The guideline committee specifically requested that the question should focus on a broader concept of intermediate care than the specific definitions in the National Audit. The objective was to try and locate additional data about the aspects of service design and delivery that help or hinder implementation of intermediate care without being restricted to the 4 service models. The guideline committee also requested broadening the study design criteria to capture process and service evaluations rather than limiting effectiveness studies to research with a controlled design.

The purpose of the first part of the review question (part a) was to examine the characteristics of intermediate care and reablement service models and approaches that are associated with improving outcomes for adults using these services and their families. Part b of the review question sought to identify what adults using intermediate care and reablement services, their

carers and families, consider to be the important characteristics of service models and approaches. Similarly, part c sought evidence to show what health, social care and other practitioners consider are the important characteristics of intermediate care and reablement service models and approaches.

Overall there was a moderate amount of evidence with good relevance to the review question. The quality of the studies was mainly moderate although some were rated as low. The studies provided data on associations between intermediate care characteristics and outcomes, including from the perspective of people using intermediate care, and practitioners. The guideline committee acknowledged the different study designs for the 'effectiveness' question and they considered the implications, in terms of certainty, for the development of recommendations.

Review questions

7a) What characteristics of intermediate care and reablement service models and approaches are associated with improving outcomes for adults using these services and their families?
7b) What do adults using intermediate and reablement care services, their carers and families, consider to be the important characteristics of service models and approaches?
7c) What do health, social care and other practitioners consider are the important characteristics of intermediate care and reablement service models and approaches?

Summary of the review protocol

The protocol sought to identify studies that would:

- identify the characteristics of service models and approaches to intermediate care and reablement that are associated with improving individual outcomes and experiences
- identify what helps and hinders implementation of intermediate care and reablement service models
- identify what helps and hinders the fulfilment of intermediate care and reablement goals.

Population

For question 7a and 7b: Adults, aged 18 years and older, with experience of intermediate care services and their families, partners and carers. Self-funders and people who organise their own care and who have experience of intermediate care services are included.

For question 7a and 7c: Housing practitioners, social care practitioners (providers, workers, managers, social workers), and health and social care commissioners involved in delivering

intermediate care; personal assistants engaged by people with care and support needs and their families.

For question 7a and 7c: Primary care and other community-based healthcare practitioners, including GPs, therapists and community/district nurses; hospital ward staff.

Intervention

Community- or bed-based, multi/interdisciplinary support designed to avoid hospital admission and facilitate hospital discharge. Services also support the development of skills and confidence to maximise independence.

Note the following exclusions: single condition rehabilitation (for example, stroke), early supported discharge, general district nursing services and mental health rehabilitation.

Setting

Service users' homes, including sheltered housing accommodation, supported housing, temporary accommodation, care (residential and nursing) homes or prisons. For bed-based intermediate care, also acute and community hospitals or stand-alone intermediate care facilities.

Note the following exclusions: general community hospital beds not designated as intermediate care/rehabilitation, mental health rehabilitation beds.

Outcomes

Reported associations (quantitative or qualitative) between service features and service outcomes, including user and carer related outcomes (such as user and carer satisfaction; quality and continuity of care; choice and control; dignity and independence, involvement in decision-making; and health and social care related quality of life) and service outcomes (such as use of health and social care services; admission avoidance; delayed transfers of care; and rates of hospital readmissions within 30 days).

Study design

The study designs which were prioritised for the effectiveness and cost-effectiveness question included: process evaluations; service evaluations; quantitative and qualitative evaluations of different approaches; observational & descriptive studies of process; cohort studies, case control and before and after studies; national audits and mixed methods studies.

The study designs which were prioritised for the views and experiences questions included: systematic reviews of qualitative studies on this topic; qualitative studies of user and carer views of

social and integrated care; qualitative components of effectiveness and mixed methods studies; observational and cross-sectional survey studies of user and carer experience; national audits reporting service user, carer and practitioner views and mixed methods studies

See Appendix A for full protocols.

How the literature was searched

The seventh review question was added after all questions (including the update search) had been completed in July 2016. Terms for intermediate care were consistently used across all of the existing review questions and therefore no new search strategy was created to answer the review question. Reviewers searched within the existing data from all reviews on intermediate care in a combined reference management review library (all questions 1–6 and update searches). The information specialist provided additional searches (run in August 2016) on audits of intermediate care and rehabilitation to supplement existing review data.

The mapping update searches covered all questions for a 1-year date period. Two broad search groups on rehabilitation were combined with a study type filter and limited by date, seeking to collect a broader group of studies that may have been missed by previous individual (focused) question searches, by creating a sensitive (study type) data set that provided a short-term check and balance, to ensure all relevant studies within those groups had been collected across all database sources for the whole review.

See Appendix A for full details of the searches including the rationale for date limits.

How studies were selected

Search outputs (title and abstract only) from all of the 6 other reviews (for questions 1–6) plus the updated searches were stored in EPPI Reviewer 4 – a software program developed for systematic review of large search outputs. A subset was created by searching within the review using terms that were specific to intermediate care service models and approaches as well as terms known to be related or equivalent. This subset of studies was then screened against an exclusion tool informed by the parameters of the scope. Formal exclusion criteria were developed and applied to each item in the search output, as follows:

- language (must be in English)
- population (must be over 18 years of age and have experience of using intermediate care)

- intervention (must be community or bed-based, multi/interdisciplinary support designed to avoid hospital admission and facilitate hospital discharge; services must also support the development of skills and confidence to maximise independence)
- setting (all settings in which intermediate care and reablement are provided)
- country (must be UK or other OECD)
- date (must not be published before 2005)
- type of evidence (must be research).

Title and abstract of all research outputs were screened against these exclusion criteria. Those included at this stage were marked for relevance to particular parts of the review question – or flagged as being relevant to 1 of the other review areas – and retrieved as full texts.

Full texts were again reviewed for relevance and research design. A list of studies excluded on full text can be found in appendix A, organised by exclusion criteria.

If still included, critical appraisal (against NICE tools) and data extraction (against a coding set developed to reflect the review questions) was carried out. The coding was all conducted within EPPI Reviewer 4, and formed the basis of the analysis and evidence tables. All processes were quality assured by double coding of queries, and of a random sample of 10%.

'Searching within' created a subset of 1359 studies and in our initial screen (on title and abstract) we found 29 studies which appeared relevant to the review questions on service models and approaches to intermediate care. We retrieved and then reviewed full texts and included 8 papers reporting views and experiences and data about associations between intermediate care and the outcomes of interest. The included studies (see below) were critically appraised using NICE tools for appraising different study types, and the results tabulated. Study findings were extracted into findings tables.

See Appendix B for full critical appraisal and findings tables.

Narrative summary of the evidence

In this section, a narrative summary of each included study is provided, followed by a synthesis of the evidence, according to the key outcomes, themes or sub-groups in the form of evidence statements [p200-2]. The approach to synthesising evidence was informed by the PICO within the review protocol.

Studies reporting data about associations between service models and approaches to intermediate care and individual or service outcomes, n=2

Note that due to the heterogenity of the evidence, data from both effectiveness studies are presented separately, rather than combining them into a single meta-analysis.

1. Ariss S, Enderby P, Smith T et al. (2015) Secondary analysis and literature review of community rehabilitation and intermediate care: an information resource. Southampton: National Institute for Health Research

Outline: This is a systematic review focused on UK studies and was considered to be low in methodological quality (−), although of medium relevance to research question 7 (+). It aimed to examine the effectiveness of different models of intermediate care and, supported by secondary data analysis, explored the team-level factors which were associated with the greatest benefits for patients in terms of health status, also highlighting the challenges and weaknesses that would hinder the fulfilment of intermediate care and reablement goals. It included 5 studies (Bird 2010; Blewett 2010; Burton 2009; Dixon 2010; Regen 2008).

Results: The findings showed that interdisciplinary team working in intermediate care with older people may be associated with better outcomes for patients. The characteristics of service approaches, which were associated with improved patient outcomes, were as follows.

1. Delivery of care by interprofessional care teams – team factors such as team composition, team tenure, regular team meetings, task allocation, cohesiveness and open communication contributed to reduced average length of stay (Blewett 2010).

2. Increased skill mix (that is, increasing the number of different disciplines in the team by 1) in intermediate care teams was associated with a reduction in service costs. A higher ratio of support staff to qualified staff may be associated with greater improvements in quality of life according to EQ-5D scores (Dixon 2010).

3. The use of ‘integrated care facilitators’ to improve coordination of care reduced emergency readmissions, hospital readmission, length of stay and mortality in people with COPD and CHF when compared with not having an integrated care facilitator. The health facilitators undertook a comprehensive assessment of needs using established disease-specific assessment tools. The assessment results were discussed at a case conference and an individual care plan was developed from these discussions. The facilitator then provided information, education and advice to the patient and facilitated the patient’s access to the services they required, including making appointments and ensuring the care was delivered in an appropriate way for the client (Bird 2010).

4. Delivery of stroke rehabilitation using an interprofessional team approach was perceived to contribute to better care for patients. This interprofessional team approach included team working, multidisciplinary rounds, supervision and personal development reviews, education and training, leadership, a holistic approach to care, communication and strong interpersonal relationships. Rotation, co-location of team members and risk aversion of nursing staff were identified as potential confounding factors (Burton 2009).

5. The aspects of intermediate care which would help to fulfil the intermediate care and reablement goals, and were perceived to be beneficial to patients, included the services operating as interdisciplinary teams, providing flexibility, patient-centeredness, promotion of independence and a 'home-like' environment (Regen 2008).

6. The challenges and weaknesses that would hinder the fulfilment of intermediate care and reablement goals included workforce and funding shortages, poor collaboration between health and social care agencies and lack of support and involvement from clinicians; also insufficient capacity and problems of access and awareness between mainstream care and intermediate care services, all of which would hinder the fulfilment of the intermediate care and reablement goals (Regen 2008).

7. Finally, the secondary analysis found that an increased skill mix and higher proportions of clinical and domiciliary support workers in intermediate care teams were significantly associated with improvements in impairment scores.

2. Smith T, Harrop D, Enderby P et al. (2013) Exploring differences between different intermediate care configurations: a review of the literature. Sheffield: Sheffield Hallam University, University of Sheffield

Outline: This is a moderate quality (+) systematic literature review, which aimed to explore the relationship between different team characteristics and patient outcomes in intermediate care. It therefore has good relevance (++) to review question 7.

The researchers used 20 databases to try to locate empirical studies of the impact of team-level characteristics on patient- and service-level outcomes. The search focused on 5 facets:

1. interdisciplinary working
2. teams
3. outcomes
4. intermediate care

5. older people.

In terms of inclusion criteria, the review included published accounts (any study type) of intermediate care team working and considered studies that described and/or evaluated the interdisciplinary team-level factors that were associated with the greatest benefits for intermediate care patients. The definition of interdisciplinary team working was defined as ‘work groups that include more than two professional groups or disciplines working together with a common purpose’ (p6) The review aimed to identify themes and conceptual models of team-level factors that were associated with better outcomes for patients. Studies were considered if they used any objective measure of change in patient outcomes resulting from a planned intervention ‘which had the objective of either introducing interdisciplinary team working where it was previously not present, or changing interdisciplinary team working methods’ (p6).

Results: Only 4 papers directly addressed interdisciplinary, intermediate care teams. Nevertheless, most of the papers mention team characteristics that are associated with positive patient outcomes or staff satisfaction. Those ‘team characteristics’ said to be associated with positive outcomes are listed below along with the number of papers in which they are cited:

- supervision and personal development, promote and reward – 2 papers
- education and training – 2 papers
- co-location of team members – 1 paper
- appropriate staff/skill mix – 1 paper
- recruit staff with IdT skills – 1 paper
- patient-centredness – 3 papers
- holistic approach – 3 papers
- delivery of care at home – 1 paper
- systematic approach to quality – 1 paper
- interdisciplinary team working – 4 papers
- interdisciplinary team leadership – 2 papers
- team tenure (longer is better) – 2 papers
- team meetings (regular) – 4 papers
- multidisciplinary rounds – 1 paper
- multidisciplinary notes – 1 paper
- effective communication – 3 papers
- interpersonal relationships – 1 papers
- flat team structure – 1 paper

- team integration – 1 paper
- goal and outcome focus – 1 paper.

Qualitative studies in the review found ‘indicative evidence that a number of team process variables contribute to better patient care. These include team meetings, inter-team communication, task delegation, role collaboration, patient orientation, team ownership, shared team culture, and clear leadership’ (p27).

Studies reporting views and experiences data for people using intermediate care, their families or carers, n=3

1. Dixon S, Nancarrow SA, Enderby PM et al. (2015) Assessing patient preferences for the delivery of different community-based models of care using a discrete choice experiment. Health Expectations 18: 1204–14

Outline: This was a moderate quality study (+) of the hypothetical choices intermediate care service users would make, about the way intermediate care services could be provided to them. The research used a discrete choice experiment (DCE), conducted as a survey, where service users were offered 4 hypothetical choices in 3 dimensions of the intermediate care service they could receive: location (home, hospital, outpatients or nursing home), frequency (service provided 1, 3, 7 or 15 times per week) and principal caregiver (support worker, therapist, nurse or doctor). The researchers set a target of 200 participants in the study, but achieved only 77. Participants were all aged 65 or older, had been discharged home from hospital, and were from 1 out of 6 teams in an unidentified UK city. Although all were living at home, some were receiving intermediate care as an outpatient. Non-English speakers and those with severely impaired cognitive functioning were excluded. The study does not state whether there was any attrition of those who had agreed to participate.

The service users' functioning on the Therapy Outcomes Measures Scale (TOMS) and health-related quality of life (EQ-5D) were measured, and regression analysis was used to draw conclusions about how intermediate care preferences varied when these factors were taken into account. (TOMS measures service user care needs and functioning in relation to impairment, activity, social participation and wellbeing on a scale of 0 to 5, with lower scores indicating higher levels of impairment. The EQ-5D is a quality of life measure based on service user responses, on a scale of −0.6 to 1, with −0.6 indicating the worst possible health.)

Results: A strong preference for receiving care at home was expressed among all groups, and location of intermediate care is identified in the study as the factor participants are most likely to

identify as being of high importance. Those with higher levels of medical or support needs were more likely to prefer higher levels of contact, although contact at 3 or 7 times per week was generally preferred to 15 times per week. There was some variation in terms of what caregiver option was preferred, which the study suggests indicates that 'where there is the option for a single health-care provider to address multiple health-care needs, this is preferable to allowing several different service providers to enter the patient's home' (p1211).

Outcomes – service user preferences

In the regression analysis, data is provided on how the care preferences of the respondents vary according to their EQ-5D and TOMS scores. In order to allow comparisons to be made, the preferences are shown firstly for all respondents, and then for the following subgroups of respondents: those scoring EQ-5D >0.5; those scoring EQ-5D <0.5; those whose TOMS measure is less than 3; those whose TOMS measure is greater than or equal to 3; LoC <2; and LoC >1 (LoC data omitted from this summary, as insufficient data provided about what the quoted values mean for interpretation of the measurement).

A baseline measure is selected for each parameter, against which participants' preferences can be measured. The baseline preference has a coefficient of zero, with a negative coefficient suggesting a variable is less preferred than the baseline option, and positive coefficients showing that it is more preferred. The selected baseline options are: care at home; once a week; with support worker as principal carer.

For all respondents, the coefficients are: outpatients -0.39, p value 0.003; hospital −0.77, p value <0.001; nursing home −0.95, p value <0.001; 1 contact pw 0.00; 3 contacts pw 0.02, p value 0.869; 7 contacts pw 0.03, p value 0.792; 15 contacts −0.28, p value 0.018; support worker 0.00; nurse 0.22, p value 0.241; therapist 0.27, p value 0.295; doctor 0.08, p value 0.701.

For EQ5D >0.5: home 0.00; outpatients −0.24, p value 0.095; hospital −0.64, p value <0.001; nursing home −0.80, p value <0.001; 1 contact pw 0.00; 3 contacts pw −0.1, p-value 0.927; 7 contacts pw −0.6, p value 0.666; 15 contacts pw −0.34, p value 0.009; support worker 0.00; nurse 0.241, p value 0.08; therapist 0.20, p value 0.498; doctor −0.01, p value 0.962.

EQ5D <0.5: home 0.00; outpatients −1.0, p value 0.002; hospital −1.18, p value 0.002; nursing home −1.72, p value <0.001; 1 contact pw 0.00; 3 contacts pw 0.14, p value 0.674; 7 contacts pw 0.61, p value 0.068; 15 contacts pw 0.02, p value 0.938; support worker 0.00; nurse 1.06, p value 0.039; therapist 0.65, p value 0.293; doctor 0.42, p value 0.369.

Any TOMS <3: home 0.00; outpatients −0.31, p value 0.125; hospital −0.32, p value 0.143; nursing home −0.73, p value 0.000; 1 contact pw 0.00; 3 contacts pw 0.01, p value 0.942; 7 contacts pw 0.18, p value 0.360; 15 contacts pw −0.16, p value 0.367; support worker 0.00; nurse 0.33, p value 0.220; therapist 0.43, p value 0.234; doctor 0.28, p value 0.324.

All TOMS >3: home 0.00; outpatients −0.69, p value <0.001; hospital −1.27, p value <0.001; nursing home −1,35, p value <0.001; 1 contact pw 0.00; 3 contacts pw −0.06, p value 0.730; 7 contacts pw −0.14, p value 0.407; 15 contacts pw −0.48, p value 0.005; support worker 0.00; nurse 0.10, p value 0.708; therapist 0.02, p value 0.955; doctor −0.23, p value 0.460.

The study uses the combined coefficients to rank the 64 possible permutations of care package in order of service user preference. Full details of the rankings are not provided, but could be worked out using the table showing the regression analysis data. The highest ranked permutation is care at home, 7 times per week, with a therapist as principal carer, which has a linear predicted value of 0.30, and a 95% confidence interval of LPV −0.27 to 0.88. The lowest ranked is care being provided in a residential home 15 times per week by a support worker, which has LPV −1.23 and 95% CI of LPV of −1.60 to −0.86.

2. Pearson M, Hunt H, Cooper C et al. (2015) Providing effective and preferred care closer to home: a realist review of intermediate care. Health & Social Care in the Community 23: 577–93

Outline: This moderate quality (+) study was a realist review, a form of systematic review which aims to investigate complex policy interventions in order to find out what works and in what circumstances. The aim here was to identify what works in intermediate care provision, in order to provide information that would help service providers in making the best decisions about where to provide intermediate care and giving service users choice.

Results: The review identified 38 relevant studies, 33 by UK authors, 2 each from Sweden and Australia and 1 from the US. Seventeen were dated pre-2005, the rest 2005 or later. Thirty studies gave the number of participants, and the total in these studies was 3896, with the number of number in each study ranging from 8 to 2253. The median number of participants was 37.5.

A variety of qualitative data collection methods were used in these studies, with 15 using just interviews and a further 12 interviews combined with at least 1 other method. The other methods used in the studies were ethnography, commentary, observation, mixed methods evaluation, survey, case studies, focus groups, documentary analysis, workshops and field notes.

The study aims to identify ways to improve the effectiveness of procedures for delivering person-centred intermediate care, and describes its findings as a 'roadmap' for delivering this service. It does not prioritise particular features as being more important, or distinguish between necessary and sufficient causes, but suggests that as well as informing service design it could also be used as a 'diagnostic checklist' (p589) to improve currently existing services.

Findings

The study recommended that person-centred intermediate care could be made most effective by: making sure the service user remains the central focus; involving service users and their carers collaboratively in decision-making about intermediate care, including the place where it was to be provided; making sure this happens at organisational and practitioner level, to help service users develop confidence that their input will be listened to and influential on service delivery; ensuring that the goal is delivering 'proactive, holistic and person-centred care' (p590) rather than responding to crises and economic drivers. Service providers should recognise that service users and their carers may have reasons for making particular choices which practitioners are unaware of or do not consider – for example, service users may in some circumstances prefer not to receive intermediate care at home, because of the meaning 'home' holds for them as a place where they can enjoy social activities, while practitioners would prefer to provide a home-based service.

3. Wilson A, Richards S, and Camosso-Stefinovic J (2007) Older people's satisfaction with intermediate care: a systematic review. Reviews in Clinical Gerontology 17: 199–218

Outline: This is a low (−) quality systematic review. It reviews studies which consider the satisfaction expressed by older intermediate care service users, and includes details of 31 studies, of which 6 date from 2005 to 2007, and 25 were published between 1993 and 2004. Sixteen are UK studies, with 5 being Australian, 2 each from New Zealand and the USA, and 1 each from Sweden, Spain, Norway, Thailand and Canada, with the country of 1 not identified.

Results: The studies included are divided into 3 separate groups, with separate findings tables. Fifteen studies are RCTs, 5 are studies which are not randomised, 3 of which make comparisons with a control group, and 11 are grouped together as case series and qualitative studies. The report refers to and references 2 systematic reviews, but the findings of these 2 systematic reviews are not presented in the findings tables. However, the report does state that these were systematic reviews of RCTs, and found that service user satisfaction was rated higher by those being provided with intermediate care than by those receiving inpatient care.

The review found that of the 18 studies comparing intermediate care with usual care, there were statistically significant better satisfaction scores in 13, in favour of intermediate care. There was no difference in the other studies, so no preference in any for usual or hospital care. A strong preference for home-based care emerged wherever preference measures were used.

Care at home was also seen in qualitative studies as being more convenient, more comfortable and with a more personal delivery of care. However, service users' top priorities were recovery and survival, ahead of location of care. Patients with some conditions felt safer in hospital, even where there was clinical evidence showing that outcomes were no different, regardless of location.

In RCTs, Rudd (1997) found 79% receiving intermediate care vs 65% in control group were satisfied with hospital care (p=0.032); 58% receiving intermediate care were satisfied with therapy provision vs 51% (p=0.29); 56% vs 50% were satisfied with community support (p=0.44); and 59% vs 48% were satisfied in general (p=0.14). Holmqvist (1998) found the intermediate care group had higher satisfaction for 'active participation in programme planning' (p=0.021), but in other domains there was no difference. Shepperd (1998) provided the percentage difference in satisfaction with intermediate care vs control for different treatments (95% CI): hip 36 (17, 55); knee 34 (15, 54); hysterectomy 19 (8, 30); elderly medical 41 (20, 62). For COPD it states no difference, and so CI data not provided. Richards (1998) found more favourable response from those receiving intermediate care to 'discussions with staff' (47.4% vs 27.7%) but no difference in other questions.

Caplan (1999), using lower scores to denote greater satisfaction, found mean greater satisfaction with intermediate care than with control group treatment: intermediate care 1.1 (95% CI 1.1, 1.2), control 2.0 (1.7, 2.3), (p<0.000). Wilson 2001 found responses to 5 questions favoured intermediate care over control (p<0.05), but for 1 question there was no difference. Ojoo (2002) found no between-group difference in mean score: intervention 91.7%, control 88.1% (p=NS). Intervention group favoured home care 96.3% vs 59.3% (p=0.001). Crotty (2002) found no difference between groups in median satisfaction scores. Hernandez found higher mean satisfaction scores in the intermediate care group, 8.0 vs 7.5 (p<0.03). Bauz-Holter (2004) found satisfaction ratings of 75% vs 48% favouring intermediate care (p=0.06).

Corwin (2004) found no difference in overall satisfaction (p=0.12), but intermediate care patients scored more highly on location of care (p<0.0001) and intermediate care recipients' preference for home care was stronger (p<0.0001). Donelly (2004) found higher satisfaction scores in the intermediate care group: mean satisfaction (SD) was 10.72 (1.44) vs 9.70 (2.09) and mean overall satisfaction was 50.0 (9.66) vs 11.19 (42.62) (p=0.001). Wells (2002) found no differences in

satisfaction scores for all dimensions (p=NS), but more intermediate care service users would opt for the care they received again (88% vs 69%, p<0.0001). Harris (2005) found a higher percentage of intermediate care recipients rated services good or excellent: 83.0 vs 72.5 (p=0.05), 95.7 vs 91.3 not feeling under pressure (p=NS) and 94.8 vs 96.5 would recommend to others (p=NS). Caplan (2006) found mean (SD) scores higher in the intermediate care group: 4.66 (0.64) vs 4.06 (0.94) (p=0.0057).

In non-randomised studies, O'Cathain (1994) found no difference between intermediate care and control groups in satisfaction. Rink (1998) compared before and after participating in the scheme: pre-scheme 50% complained about transport and 40% about time of day of discharge; afterwards, 17% and 15%. There was no difference in satisfaction with medication or adequacy of care plan on discharge. Boston (2001) found higher satisfaction from the intermediate care group in response to 19/20 questions across all domains (staff, communication, facilities, other) (p<0.05). Leff (2006) found higher satisfaction with the intermediate care group in 5 domains (physicians p=0.007, other staff p=0.042, convenience/comfort p=0.0003, admission p=0.0003 and overall satisfaction p=0.034), but no significant difference in 4 domains (nurses, pain control, safety, discharge), and no difference in the percentage of those who would choose care in the same setting again or who would recommend to others.

Studies reporting views and experiences data for practitioners, n=3

1. Barton P, Bryan S, Glasby J et al. (2006) A national evaluation of the costs and outcomes of intermediate care services for older people: final report. Birmingham: University of Birmingham Health Services Management Centre

Outline: This mixed methods study was considered to be moderately relevant to research question 7 (+) and the methodological quality was also judged as moderate (+). The study aimed to assess the views of intermediate care practitioners on the facilitators and barriers in the development and implementation of intermediate care in the UK. Qualitative data were collected from a survey of intermediate care coordinators (n=106, response rate of 46%) and from interviews with intermediate care practitioners (n=82) in 5 study sites providing intermediate care; also from a satisfaction survey with people who used intermediate care services in the study sites.

Results: The following facilitators were identified in the development of intermediate care services.

1. An effective partnership working between health (PCTs) and social services organisations at both operational and strategic levels. This was the most important lever in facilitating the development of intermediate care in local contexts.
2. The independent and voluntary sectors could be considered as part of the solution to capacity pressures, although greater clarity is needed regarding the role of sheltered housing in the context of under- and inappropriate use.
3. The increased engagement and involvement of medical staff (i.e. GPs and hospital doctors) is a priority.
4. Promotion of intermediate care by the government among the general public and professionals (via the dissemination of evidence) is crucial.
5. Promotion of awareness of intermediate care to healthcare professionals and better preparing them to work in this environment (via education, rotations etc.).
6. The creation of a single point of access (SPA) for intermediate care services.

The following barriers/challenges to developing and implementing intermediate care were identified (p136).

1. Variation and confusion about what is and what is not intermediate care and in how the definition of intermediate care had been interpreted – some viewed intermediate care almost exclusively in terms of rehabilitation, with relatively little attention paid to nursing or social care contributions, resulting in an ongoing process of negotiation between the PCTs and county-wide social services, which had failed to reach a consensus, causing delay.
2. Poor partnership working, insufficient or short-term funding and workforce problems (staff shortages and difficulties in recruiting staff). Fragmentation and poor integration with other services, in particular between health and social care, will impact upon the ability of intermediate care to deliver patient-centred care and contribute towards health and social care systems as a whole.
3. Cultural differences in practice between health and social care professionals.
4. Deficiencies in capacity and ‘whole-systems’ working were perceived to have compromised the ability of intermediate care to achieve its objectives. Limited operating hours, staff shortages and insufficient access to mainstream services were attributed to inadequacies in the funding and infrastructure required to support intermediate care. This resulted in ‘blocks’ in the system (intermediate care users not being able to move on to mainstream home care and long-term care due to shortages of these types of provision).

5. The relationship between intermediate care and mainstream services – lack of awareness, resistance, concerns about effectiveness and the inability of intermediate care services to respond positively to referrals have meant that intermediate care has not been used to its full potential or has been used inappropriately at times (such as the default position taken by GPs to admit patients to hospitals instead of intermediate care).
6. Lack of out-of-hours intermediate care provision
7. The challenges of delivering intermediate care in large, rural areas: time, distance and transport as issues.
8. Government's use of targets and performance measures regarding intermediate care with a focus on activity (number of beds) rather than patient outcomes could negatively influence the patient-centred approach to care.

Levels of satisfaction among people who used the intermediate care services were high. They identified and appreciated the aspects of intermediate care which were person-centred (able to talk to staff, being treated with kindness, being well-informed and prepared about their care, especially the promotion of becoming independent) and the efficiency of the care received (equipment for care available, well-coordinated team work), which would help contribute to the fulfilment of intermediate care and reablement goals. The aspect of care with the lowest satisfaction was timing of discharge, that is, the intermediate care service 'finishing too early' for them.

2. Elbourne HF and le May A (2015) Crafting intermediate care: one team's journey towards integration and innovation. Journal of Research in Nursing 20: 56–71

Outline: This is a moderate quality (+) study of the impact of providing person-centred intermediate care (PCIC) in a nursing home over a 12-month period, during the first 2 years after the unit providing PCIC was opened. It is stated that the premise for this model of PCIC was 'that older people should be cared for by people who appreciate their need for privacy and respect their dignity and freedom of choice in all situations' (p57), but it does not provide examples of how this model was put into practice during the study period. Effect on service users was measured using the Barthel Index (BI) 100, which measures a person's ability to function independently, at the points when service users arrived and when they left the nursing home (the higher the score, the greater the likelihood of being able to manage at home). Service users were also interviewed on arrival and departure, and asked to answer a questionnaire rating their satisfaction with the care and support services they received.

Results: Data on the change in the BI 100 were collected for 74 service users, semi-structured interviews were conducted with 94 service users, and 59 service user satisfaction questionnaires were completed. The follow-up time for the BI 100 score varied according to length of stay in the unit, which ranged from 1 to 105 days. In addition, semi-structured interviews were carried out with 8 staff, and with 4 key participants who were in senior roles in the project. These focused on the functioning of the staff group.

Sixty-four service users showed improved functioning on the BI 100 score, while the scores of 4 of them showed no change, and 5 showed decreased functioning. The mean score (with SD in brackets) on the BI 100 scale improved from 53.95 (19.1) to 78.2 (14.2). Quantitative data from the questionnaires also showed that service users were predominantly 'satisfied with the amount of recovery they made during their stay (91.6%)' (p63), 'felt that they became more independent' (96.5%) (p63) and 'believed the team treated them with kindness, dignity and respect' (96.7%) (p63).

A number of dissatisfactions with the functioning of the staff group and the running of the unit emerged from the interviews with the staff group. However, this did not have much impact on service users' perceptions of the way they worked, with 88% of service users believing the team was highly effective and worked well together.

Service user related outcomes

Measures of central tendency and dispersion were calculated in analysing the quantitative data, and a single-tail paired-sample t-test applied to measurements taken using the BI 100 scores. Service users were assessed on admission with scores of minimum 3 and maximum 88, mean (SD) 53.95 (19.1), and on discharge minimum 28, maximum 100, mean (SD) 78.2 (14.2). The change in BI 100 scores was: minimum score −28, maximum score 76, mean (SD) 24.3 (19.6), correlation 0.350, p=<0.001.

Sixty-four service users had a marked improvement in their level of functioning, 5 had a reduced level and 4 had no change in their BI 100 scores, with their scores of 64, 84, 85 and 85 remaining the same. There are a further 10 service users who were not given a score but where it may be presumed to have decreased, as 9 returned to hospital and 1 died. The study states that 74.1% of service user participants were discharged to their own homes. It does not provide specific data about post-PCIC destination for the remaining 25.9%, although it may be presumed that the 9 service users who returned to hospital and 1 who died in the nursing home were among them.

Of the service users, 91.6% stated that they were satisfied with the amount of recovery they made during their stay, 96.5% felt they became more independent and 96.7% believed the team treated them with kindness, dignity and respect. A balanced scorecard diagram appears to show that around 90% rated as good or excellent the PCIC unit's performance in terms of 'Value for money – the service received adapted to meet my needs and preferences' (p62), but no precise data or further information is provided.

Staff group outcomes

Several issues with the way the staff group was functioning emerged from their interviews, due in their view to: inappropriate referrals from local transferring hospitals, who had not been educated about the services and resources the unit provided; inadequate information for staff group about the theoretical model they were working to and the responsibilities of multidisciplinary team members; factionalism within the team; clashes of ideologies – for example, between a professional duty to encourage service users to participate in rehabilitation and a unit ethos of respecting their choice not to participate; incompatibility between the regulator CSCI's requirements of the unit as a registered nursing home and their functioning as an intermediate care unit; concern that instability, arising from the departure of 2 out of 4 key members of the initial staff group, was leading to the initial vision, aims and goals of the unit being lost; a concern that professional power struggles were leading to professional judgements being ignored; and a perception that autocratic leadership was manipulating the multidisciplinary team meetings. However, service users perceived the team as being highly effective at improving their functional abilities, and 88% of service users believed the team worked well together. It appears that practitioner dissatisfaction did not have much impact on the service users' experience of the care and support services being provided.

3. Nancarrow SA, Booth A, Ariss S et al. (2013) Ten principles of good interdisciplinary team work. Human Resources for Health 11

Outline: This is a qualitative study with a UK focus. It has been judged as moderate quality (+) and moderately relevant to review question 7 (+). The aim of the study was to identify the attributes of a good interdisciplinary team in the context of community rehabilitation and intermediate care. To achieve this, the researchers drew on 2 sources of knowledge: a systematic review of interdisciplinary team work and the perceptions of intermediate care staff collated at facilitated workshops.

Findings from the 2 sources of knowledge were triangulated and 10 characteristics of a good interdisciplinary team were identified and then reformulated as competency statements. However, it is important to note that for the purposes of answering review question 7, the data derived from the systematic review have not been extracted or critically appraised. This is because the focus of the systematic review was on interdisciplinary team working in general and not specifically on intermediate care. This part of the study does not therefore meet the inclusion criteria of the review protocol for question 7. Instead, the focus of the data extraction and critical appraisal for this study is on the data derived from workshop discussions with intermediate care workers.

Results: These are the findings from the workshops. They are the characteristics which intermediate care team members believed to be associated with a 'good team'.

1. Good communication – referring to intra-team communication. Team members need to feel as though communication is two-way. They need to be able to listen as well as be able to speak out. Being a part of a large team seems to make communication more difficult.
2. Respecting/understanding roles – the importance of respecting and understanding the roles of other team members, including the boundaries of each role.
3. Appropriate skill mix – teams value diversity and they need input from a range of staff with complementary skills and experiences.
4. Quality and outcomes of care – ensuring quality and outcomes of care is an important component of a good team. It's therefore important to have systems for capturing patient outcomes. Team members emphasised the importance of setting targets, defining outcomes, following-up patients and providing feedback to other services – for example, about the appropriateness of referrals.
5. Appropriate team processes and resources – staff need to have time and space to be able to make sensitive phone calls with privacy and appropriate procedures and systems are needed, for example, induction processes, policies, paperwork. The patient's pathway and the integration of the team with wider services are also seen as important procedural issues.
6. Clear vision – important for establishing appropriate referral criteria into the team.
7. Flexibility – described as an important individual attribute so that team members can respond to people's constantly changing needs. The service also needs to be flexible in terms of eligibility criteria.
8. Leadership and management – the importance of a good leader was cited by all teams.
9. Team culture, camaraderie and team support – the importance of team culture was the largest theme. Trust, reliability, commitment and support were the most commonly raised themes.
10. Training and development opportunities – continuing professional development.

11. External image of the service – included external marketing, which is important for managing referrals and the workload of the team.

12. Personal attributes – for example, approachability, ability to compromise, empathy, confidentiality, patience, personal responsibility etc.

13. Individual rewards and opportunities – individual returns have a positive impact on team work.

Economics

No additional economic analysis was undertaken for this review question.

Evidence statements

The evidence statements listed in this section synthesise the key themes across included studies.

SM1	There is a moderate amount of evidence that intermediate care teams which include a range of skills – including interdisciplinary teams – are associated with positive outcomes. The quality of the evidence is mainly moderate. Secondary analysis by Ariss et al (2015 −) found that increased skill mix was significantly associated with improvements in impairment scores among people using intermediate care. A literature review by Smith et al. (2013 +) found that all located papers cited 'interdisciplinary team working' as a characteristic associated with positive outcomes. Barton (2006 +) also reported that people using intermediate care appreciated when the service was delivered via well-coordinated team work. Finally, studies by Nancarrow (2013 +) and Elbourne (2015 +) emphasise that in the context of interdisciplinary team working it is important for members to have a clear understanding of everyone's roles and responsibilities.
SM2	There is some evidence that good communication within teams is associated with improved intermediate care outcomes. The quality of this evidence is moderate. A literature review by Smith et al. (2013 +) found that nearly half of included papers cited communication, relationships and regular team meetings as characteristics associated with positive outcomes. Nancarrow (2013 +) found that team culture, team support and camaraderie were associated with good intermediate care teams. Reflecting this, staff from an intermediate care service said that a lack of information for staff about the model of the service was a cause of the problems being experienced within their team (Elbourne and Le May 2015 +).
SM3	There is a moderate amount of evidence that a clear understanding about intermediate care among other health professionals is key to ensuring that appropriate referrals are made to the service. The quality of the evidence is mainly moderate. The Ariss review (2015 −) identified challenges to the successful fulfilment of intermediate care goals which included problems of access and awareness between 'mainstream care' and intermediate care services. Staff in the Elbourne and Le May study (2015 +) said there were problems with the functioning of their team due to inappropriate referrals from local hospitals because health colleagues were not educated about the nature of intermediate care. Staff in the Nancarrow et al. study (2013 +) also said there was a need for better external marketing of intermediate care to ensure appropriate referrals and manage workload. Barton et al. (2006 +) also reported that there needs to be improved awareness of intermediate care among other health professionals, which would ensure more appropriate referrals.

SM4	There is some evidence that positive outcomes are achieved when intermediate care is person-centred. The quality of the evidence is mainly moderate. The Smith et al. review (2013 +) located a small number of papers which cited patient-centredness as a characteristic associated with positive intermediate care outcomes. A review by Pearson et al. (2015 +) reported that intermediate care could be made most effective by ensuring the service user is the central focus and involving them and their carers in collaborative decision-making. Similarly, Wilson (2007 −) located a study that found higher satisfaction among people using intermediate care if they had actively participated in programme planning.
SM5	There is a moderate amount of evidence that people believe it is important for intermediate care to be provided in the home setting. The quality of this evidence is mainly moderate. The review by Wilson et al. (2007 −) located a study which reported a strong preference among people using intermediate care for the service to be provided at home. Dixon et al.'s discrete choice experiment (2013 +) also found that receiving intermediate care at home was preferred option among all respondents. The Ariss review (2015 −) located a study that found a number of aspects which would help fulfil intermediate care goals, including delivery of the service in a 'home-like' environment. Arguably this would not have to be people's own homes and indeed Pearson et al. (2015 +) pointed out that in some circumstances people may prefer not to receive intermediate care at home because of the meaning they attach to their 'home' as a place they can enjoy rather than be 'treated in'.
SM6	There is a small amount of evidence that poor integration between health and social care is a barrier to successfully implementing intermediate care. The quality of the evidence is low to moderate. The Ariss review (2015 −) found that poor collaboration between health and social care is a barrier to the fulfilment of intermediate care goals. Echoing this, Barton et al. (2006 +) identified effective partnership working between health and social services – at both operational and strategic levels – as the most important lever in facilitating the development of intermediate care in local contexts.

Included studies for these review questions

Ariss S, Enderby P, Smith T et al. (2015) Secondary analysis and literature review of community rehabilitation and intermediate care: an information resource. Southampton: National Institute for Health Research

Barton P, Bryan S, Glasby J et al. (2006) A national evaluation of the costs and outcomes of intermediate care services for older people: final report. Birmingham: University of Birmingham Health Services Management Centre

Dixon S, Nancarrow SA, Enderby PM et al. (2015) Assessing patient preferences for the delivery of different community-based models of care using a discrete choice experiment. Health Expectations 18: 1204–14

Elbourne HF and le May A (2015) Crafting intermediate care: one team's journey towards integration and innovation. Journal of Research in Nursing 20: 56–71

Nancarrow SA, Booth A, Ariss S et al. (2013) Ten principles of good interdisciplinary team work. Human Resources for Health 11

Pearson M, Hunt H, Cooper C et al. (2015) Providing effective and preferred care closer to home: a realist review of intermediate care. Health & Social Care in the Community 23: 577–93

Smith T, Harrop D, Enderby P et al. (2013) Exploring differences between different intermediate care configurations: a review of the literature. Sheffield: Sheffield Hallam University, University of Sheffield

Wilson A, Richards S, and Camosso-Stefinovic J (2007) Older people's satisfaction with intermediate care: a systematic review. Reviews in Clinical Gerontology 17: 199–218

3.8 Evidence to recommendations

This section of the guideline details the links between the guideline recommendations, the evidence reviews, expert witness testimony and the Guideline Committee discussions. Section 3.8 provides a summary of the evidence sources for each recommendation. Section 3.9 provides substantive detail on the evidence for each recommendation, presented in a series of linking evidence to recommendations (LETR tables).

Summary map of recommendations to sources of evidence

Recommendation	Evidence statements and other supporting evidence (expert witness testimony, Guideline Committee consensus)
Core principles of intermediate care	
1.1.1 Ensure that intermediate care practitioners: • develop goals in a collaborative way that optimises independence and wellbeing • adopt a person-centred approach, taking into account cultural differences and preferences.	SM4 + GC consensus
1.1.2 At all stages of assessment and delivery, ensure good communication between intermediate care practitioners and: • other agencies • people using the service and their families and carers..	IN2 + GC consensus
1.1.3 Intermediate care practitioners should:	RA6 and RA8

Recommendation	Evidence statements and other supporting evidence (expert witness testimony, Guideline Committee consensus)
• work in partnership with the person to find out what they want to achieve and understand what motivates them • focus on the person's own strengths and help them realise their potential to regain independence • build the person's knowledge, skills, resilience and confidence • learn to observe and guide and not automatically intervene, even when the person is struggling to perform an activity, such as dressing themselves or preparing a snack • support positive risk-taking.	
1.1.4 Ensure that the person using intermediate care and their family and carers know who to speak to if they have any questions or concerns about the service, and how to contact them.	HB2
1.1.5 Offer the person the information they need to make decisions about their care and support. Offer the person the information they need to make decisions about their care and support, and to get the most out of the intermediate care service. Offer this information in a range of accessible formats, for example: • verbally • in written format (in plain English) • in other accessible formats, such as braille or Easy Read • translated into other languages • provided by a trained, qualified interpreter.	HB2 + GC consensus
Supporting infrastructure	
1.2.1 Consider making home-based intermediate care, reablement, bed-based intermediate care and crisis response all available locally. Deliver these services in an integrated way so that people can move easily between them, depending on their changing support needs.	SM6 + GC consensus, EcHB1, EW (NAIC)
1.2.2 Ensure that intermediate care is provided in an integrated way by working towards the following: • a single point of access for those referring to the service • a management structure across all services that includes a single accountable person, such as a team leader • a single assessment process	SM6 + GC consensus

Recommendation	Evidence statements and other supporting evidence (expert witness testimony, Guideline Committee consensus)
• a shared understanding of what intermediate care aims to do • an agreed approach to outcome measurement for reporting and benchmarking.	
1.2.3 Contract and monitor intermediate care in a way that allows services to be flexible and person centred. For recommendations on delivering flexible services, see NICE's guideline on home care.	HB6
1.2.4 Ensure that intermediate care teams work proactively with practitioners referring into the service so they understand: • the service and what it involves • how it differs from other services • the ethos of intermediate care, specifically that it aims to support people to build independence and improve their quality of life • that intermediate care is free for the period of delivery.	BB5
1.2.5 Ensure that mechanisms are in place to promote good communication within intermediate care teams. These might include: • regular team meetings to share feedback and review progress • shared notes • opportunities for team members to express their views and concerns.	SM2
1.2.6 Ensure that the intermediate care team has a clear route of referral to and engagement with commonly used services, for example: • general practice • podiatry • pharmacy • mental health and dementia services • specialist and longer-term rehabilitation services • housing services • voluntary, community and faith services • specialist advice, for example around cultural or language issues.	CR1, SM1, SM6, EW (NAIC) and EW (STARRS)
1.2. 7 Consider deploying staff flexibly across intermediate care, where possible following the person from hospital to a community bed based service or directly to their home	SM1

Recommendation	Evidence statements and other supporting evidence (expert witness testimony, Guideline Committee consensus)
1.2.8 Ensure that the composition of intermediate care teams reflects the different needs and circumstances of people using the service.	CR1, SM1 + GC consensus
1.2.9 Ensure that intermediate care teams include a broad range of disciplines. The core team should include practitioners with skills and competences in the following: • delivering intermediate care packages • nursing • social work • therapies, for example occupational therapy, physiotherapy and speech and language therapy • comprehensive geriatric assessment.	EW (STARRS)
1.2 Assessment of need for intermediate care	
1.3.1 Assess people for intermediate care if it is likely that specific support and rehabilitation would improve their ability to live independently and they: • are at risk of hospital admission or have been in hospital and need help to regain independence or • are living at home and having increasing difficulty with daily life.	GC consensus
1.3.2 Do not exclude people from intermediate care based on whether they have a particular condition, such as dementia, or live in particular circumstances, such as prison, residential care or temporary accommodation.	DE1, DE2, EW (DD) + GC consensus
1.3.3 During assessment identify the person's abilities, needs and wishes so that they can be referred for the most appropriate support.	GC consensus
1.3.4 Actively involve people using services (and their families and carers, as appropriate) in assessments for intermediate care and in decisions such as the setting in which it is provided.	SM4
1.3.5 When assessing people for intermediate care, explain to them (and their families and carers, as appropriate) about advocacy services and how to contact them if they wish	GC consensus
Referral into intermediate care	
1.4.1 Consider providing intermediate care to people in their own homes wherever practical, making any adjustments, for example equipment or adaptations, needed to enable this to happen.	BB4, SM5 + GC consensus, EcHB1, EcHB4, EcBB2
1.4.2 Offer reablement as a first option to people being considered for home care, if it has	RA1 + GC consensus and EcRA1

Recommendation	Evidence statements and other supporting evidence (expert witness testimony, Guideline Committee consensus)
been assessed that reablement could improve their independence.	
1.4.3 For people already using home care, consider reablement as part of the review or reassessment process. Be aware that this may mean providing reablement alongside home care. Take into account the person's needs and preferences when considering reablement and work closely with the home care provider.	RA1 + GC consensus and EcRA1
1.4.4 Consider reablement for people living with dementia, to support them to maintain and improve their independence and wellbeing.	DE1, DE2, EW (DD)
1.4.5 Consider bed-based intermediate care for people who are in an acute but stable condition but not fit for safe transfer home. Be aware that if the move to bed-based intermediate care takes longer than 2 days it is likely to be less successful.	BB4 and EcBB1
1.4.6 Refer people to crisis response if they have experienced an urgent increase in health or social care needs and: • the cause of the deterioration has been identified • their support can be safely managed in their own home or care home • the need for more detailed medical assessments has been addressed	CR1 + GC consensus and EW (STARRS)
1.4.7 The crisis response service should raise awareness of its purpose and function among other local services such as housing and the voluntary sector. This means making sure they understand: • the service and what it involves • how it differs from other types of intermediate care • how to refer to the service	CR1 + GC consensus and EW (STARRS)
Entering intermediate care	
1.5.1 Discuss with the person the aims and objectives of intermediate care and record these discussions. In particular, explain clearly: • that intermediate care is designed to support them to live more independently,	BB5

Recommendation	Evidence statements and other supporting evidence (expert witness testimony, Guideline Committee consensus)
achieve their own goals and have a better quality of life • that intermediate care works with existing support networks, including friends, family and carers • how working closely together and taking an active part in their support can produce the best outcomes.	
1.5.2 When a person starts using intermediate care, give their family and carers: • information about the service's aims, how it works and the support it will and will not provide • information about resources in the local community that can support them • opportunities to express their wishes and preferences, alongside those of the person using the service • opportunities to ask questions about the service and what it involves.	HB4 + GC consensus, BB5, HB3
1.5.3 For bed-based intermediate care, start the service within 2 days of receiving an appropriate referral. Be aware that delays in starting intermediate care increase the risk of further deterioration and reduced independence.	SM3, EW (NAIC)
Crisis response	
1.5.4 Ensure that the crisis response can be started within 2 hours from receipt of a referral when necessary.	CR1 + GC consensus, EW (STARRS), EW (NAIC)
1.5.5 As part of the assessment process, ensure that crisis response services identify the person's ongoing support needs and make arrangements for the person's ongoing support.	EW (STARRS)
1.5.6 Establish close links between crisis response and diagnostics (for example, GP, X-ray or blood tests) so that people can be diagnosed quickly if needed.	CR1 + GC consensus, EW (STARRS)
Person centred planning	
1.5.7 When planning the person's intermediate care:	HB3 + GC consensus

Recommendation	Evidence statements and other supporting evidence (expert witness testimony, Guideline Committee consensus)
• assess and promote the person's ability to self-manage • tell the person what will be involved • be aware that the person needs to give consent for their information to be shared • tell the person that intermediate care is a short-term service and explain what is likely to happen afterwards.	
1.5.8 Carry out a risk assessment as part of planning for intermediate care and then regularly afterwards, as well as when something significant changes. This should include: • assessing the risks associated with the person carrying out particular activities, including taking and looking after their own medicines • assessing the risks associated with their environment • balancing the risk of a particular activity with the person's wishes, wellbeing, independence and quality of life. For recommendations on supporting people in residential care to take and look after their medicines themselves, see NICE's guidelines on managing medicines in care homes and medicines optimisation. [This recommendation is adapted from NICE's guideline on home care.]	BB1 + GC consensus
1.5.9 Complete and document a risk plan with the person (and their family and carers, as appropriate) as part of the intermediate care planning process. Ensure that the risk plan includes: • strategies to manage risk; for example, specialist equipment, use of verbal prompts and use of support from others • the implications of taking the risk for the person and the member of staff. [This recommendation is adapted from NICE's guideline on home care.]	BB1 + GC consensus
Agreeing goals	
1.5.10 Discuss and agree intermediate care goals with the person. Make sure these goals:	BB6, DE1, DE2, SM4, EW (DD), EcHB3 + GC consensus.

Recommendation	Evidence statements and other supporting evidence (expert witness testimony, Guideline Committee consensus)
• are based on specific and measurable outcomes • take into account the person's health and wellbeing • reflect what the intermediate care service is designed to achieve • reflect what the person wants to achieve both during the period in intermediate care, and in the longer term • take into account how the person is affected by their conditions or experiences • take into account the best interests and expressed wishes of the person.	
1.5.11 Recognise that participation in social and leisure activities are legitimate goals of intermediate care.	RA7
1.5.12 Document the intermediate care goals in an accessible format and give a copy to the person, and to their family and carers if the person agrees to this.	HB2 + GC consensus
1.6 Delivering intermediate care	
1.6.1 Take a flexible, outcomes-focused approach to delivering intermediate care that is tailored to the person's social, emotional and cognitive needs and abilities.	HB1 + GC consensus, DE1, DE2, EW (DD)
1.6.2 Review people's goals with them regularly. Adjust the period of intermediate care depending on the progress people are making towards their goals.	DE1, DE2, EW (DD) + GC consensus
1.6.3 Ensure that staff across organisations work together to coordinate review and reassessment, building on current assessment and information. Develop integrated ways of working, for example, joint meetings and training and multidisciplinary team working.	SM6 + GC consensus
1.6.4 Ensure that specialist support is available to people who need it (for example, in response to complex health conditions), either by training intermediate care staff or by working with specialist organisations. [This recommendation is adapted from NICE's guideline on home care.]	DE1, EW (STARRS), EW (DD) + GC consensus plus EcHB4
1.6.5 Ensure that an intermediate care diary (or record) is completed and kept with the person. This should: • provide a detailed day-to-day log of all the support given, documenting the person's	HB2

Recommendation	Evidence statements and other supporting evidence (expert witness testimony, Guideline Committee consensus)
progress towards goals and highlighting their needs, preferences and experiences • be updated by intermediate care staff at every visit • be accessible to the person themselves, who should be encouraged to read and contribute to it • keep the person, (and their families and carers, as appropriate) and other staff fully informed about what has been provided and about any incidents or changes.	
1.6.6 Ensure that intermediate care staff avoid missing visits to people's homes. Be aware that missing visits can have serious implications for the person's health or wellbeing, particularly if they live alone or lack mental capacity. [This recommendation is adapted from NICE's guideline on home care.].	RA3
1.6.7 Contact the person (or their family or carer) if intermediate care staff are going to be late or unable to visit. [This recommendation is adapted from NICE's guideline on home care.]	RA3
1.7 Transition from intermediate care	
1.7.1 Before the person finishes intermediate care, providers of intermediate care should give them information about how they can refer themselves back into the service, should their needs or circumstances change.	IN2
1.7.2 Ensure good communication between intermediate care staff and other agencies. There should be a clear plan for when people transfer between services, or when the intermediate care service ends. This should: • be documented and agreed with the person and their family or carers • include contact details for the service • include a contingency plan should anything go wrong. For recommendations on communication during transition between services, see NICE's guideline on transition between inpatient hospital settings and community or care home settings for adults with social care needs.	IN2
1.7.3 Give people information about other sources of support available at the end of intermediate care, including support for carers.	IN2
1.8 Training and development	

Recommendation	Evidence statements and other supporting evidence (expert witness testimony, Guideline Committee consensus)
1.8.1 Ensure that all staff delivering intermediate care understand: • the service and what it involves • the roles and responsibilities of all team members • how it differs from other services • the ethos of intermediate care, specifically that it aims to support people to build independence • how to work collaboratively with people to agree person-centred goals • positive risk-taking.	SM1
1.8.2 Ensure that intermediate care staff are able to recognise and respond to: • common conditions, such as diabetes; mental health and neurological conditions, including dementia; frailty; stroke; physical and learning disabilities; sensory loss; and multi-morbidity • common support needs, such as nutrition, hydration, continence, and issues related to overall skin integrity • common support needs, such as dealing with bereavement and end of life • deterioration in the person's health or circumstances. [This recommendation is adapted from NICE's guideline on home care.]	DE1, EW (DD) + GC consensus.
1.8.3 Provide intermediate care staff with opportunities for: • observing the work of another member of staff • enhancing their knowledge and skills in relation to delivering intermediate care • reflecting on their practice together. Document these development activities and record that people have achieved the required level of competence.	RA4, SM1 + GC consensus
1.8.4 Ensure that intermediate care staff have the skills to support people to: • optimise recovery • take control of their lives • regain as much independence as possible.	RA6

3.9 Evidence to recommendations

Topic/section heading	Core principles of intermediate care
Recommendations	1.1.1 Ensure that intermediate care practitioners: • develop goals in a collaborative way that optimises independence and wellbeing • adopt a person-centred approach, taking into account cultural differences and preferences. 1.1.2 At all stages of assessment and delivery, ensure good communication between intermediate care practitioners and: • other agencies • people using the service and their families and carers. 1.1.3 Intermediate care practitioners should: • work in partnership with the person to find out what they want to achieve and understand what motivates them • focus on the person's own strengths and help them realise their potential to regain independence • build the person's knowledge, skills, resilience and confidence • learn to observe and guide and not automatically intervene, even when the person is struggling to perform an activity, such as dressing themselves or preparing a snack • support positive risk-taking. 1.1.4 Ensure that the person using intermediate care and their family and carers know who to speak to if they have any questions or concerns about the service, and how to contact them. 1.1.5 Offer the person the information they need to make decisions about their care and support, and to get the most out of the intermediate care service. Offer this information in a range of accessible formats, for example: • verbally • in written format (in plain English) • in other accessible formats, such as braille or Easy Read • translated into other languages • provided by a trained, qualified interpreter.

Research recommendations	The guideline committee agreed the following research recommendation to strengthen evidence about information sharing via a single point of access to intermediate care: Research rec 6. How effective and cost effective is introducing a single point of access to intermediate care?
Review questions	1: Home-based intermediate care 1(a) What is the effectiveness and cost effectiveness of home-based intermediate care? 1(b) What are the views and experiences of people using services, their families and carers in relation to home-based intermediate care? 1(c) What are the views and experiences of health, social care and other practitioners about home-based intermediate care RQ2 Bed-based intermediate care 2(a) What is the effectiveness of bed-based intermediate care? 2(b) What are the views and experiences of people using services and their carers in relation to bed-based intermediate care? 2(c) What are the views and experiences of health, social care and other practitioners in relation to bed-based intermediate care? RQ4 Reablement 4(a) What is the effectiveness of reablement? 4(b) What are the views and experiences of people using services and their carers in relation to reablement? 4(c) What are the views and experiences of health, social care and other practitioners in relation to reablement? 6 Information, advice, advocacy, training and support for people using intermediate care and reablement and their carers 6(a) What is the effectiveness and cost effectiveness of information, advice, advocacy, training and support for people using intermediate care and reablement? 6(b) What are the views and experiences of people using intermediate care and reablement, their families and carers about information, advice, advocacy, training and support? 6(c) What are the views and experiences of health, social care and other practitioners about information, advice, advocacy, training and support for people using intermediate care and reablement and their families and carers?
Quality of evidence	Evidence for recommendation 1.1.1 came from review question 7 about service models and approaches to intermediate care. The quality of the evidence was mainly moderate but some studies were rated with low internal validity. The perspectives of people using intermediate care and practitioners were represented in a total of 6 views and experiences studies. Only 2 studies demonstrating the association between approaches to intermediate care and outcomes were included and the fact that these were neither systematic reviews nor controlled evaluations provides less certainty in the findings. Nevertheless, guideline committee consensus provided a stronger basis on which to develop recommendation 1.1.1 Recommendation 1.1.2 was based on evidence from the review about information, advocacy, advice, training and support for people using intermediate care. Only a small amount of evidence

	was located and the 2 studies were rated as moderate and low in terms of their internal validity. Both studies provided data about views and experiences, with no evidence of effectiveness. The small amount of evidence meant that recommendations, which stem form this review area, relied on being strengthened by guideline committee consensus, as with 1.3.4. Evidence for recommendation 1.1.3 came from the reablement review, in which a good amount of data were located. The 7 effectiveness studies all had good relevance to the review question but their internal validity was mixed and included 3 low quality studies. The 6 views and experiences studies represented the perspectives of people using reablement, their families and carers and also practitioners involved in providing the service. They were mixed quality, with 2 low quality studies, 3 moderate and 1 study rated as good. Recommendations 1.1.4 and 1.1.5 were based on the review of home-based intermediate care. Overall, a good amount of evidence was located for this review, including 11 effectiveness studies, all of which were RCTs, mainly of moderate quality. Data were derived from studies from a range of countries, with just 1 from the UK. The views and experiences data on the other hand were all derived from UK studies, of which there were 7 – mainly moderate or low in terms of their internal validity. The perspectives of people using home-based intermediate care, their families as well as practitioners were represented.
Economic considerations	Although no economic evidence was available to inform recs 1.1.1 to 1.1.3, the Guideline Committee was mindful of potential costs and resource use when making the recommendations. The Guideline Committee discussed the resource implications in relation to person-centred goal-setting, which addressed cognitive, social and emotional needs. The Guideline Committee concluded that this was mainly about referring to existing support and services so that there should not be substantial resource implications. Although no economic evidence was available to inform recs 1.1.4 and 1.1.5, the Guideline Committee was mindful of potential costs and resource use when making the recommendations. In particular, the Guideline Committee discussed the importance of a single point of access in regards to resource implications. They developed a research recommendation requesting that future research should examine the cost-effectiveness of a single point of access for intermediate care service.
Evidence statements – numbered evidence statements from which the recommendations were developed	SM4: There is some evidence that positive outcomes are achieved when intermediate care is person-centred. The quality of the evidence is mainly moderate. The Smith et al. review (2013 +) located a small number of papers, which cited patient-centredness as a characteristic associated with positive intermediate care outcomes. A review by Pearson et al. (2015 +) reported that intermediate care could be made most effective by ensuring the service user is the central focus and involving them and their carers in collaborative decision-making. Similarly, Wilson (2007 −) located a study that found higher satisfaction among people using intermediate care if they had actively participated in programme planning. (1.1.1) IN2: There is a small amount of low quality evidence that poor information provision causes problems before and during

	transfers of care from hospital. The survey by Ariss (2015 −) reported that people experienced difficulties with discharge arrangements owing to a lack of communication with after care services and a lack of information about potential sources of support following transfer from hospital. (rec 1.1.2) RA6: There is some moderate and good evidence that reablement workers are fundamentally important in motivating people to achieve their goals. Rabiee and Glendinning (2011 +) reported that the ideal reablement worker is able to stand back, observe people's potential for regaining independence and provide appropriate support for them to reach that potential. This is corroborated by Hjelle et al. (2016 ++) who reported user views about the importance of reablement workers in making them feel confident about performing daily activities on their own. (rec 1.1.3) RA8: There is a small amount of moderate and good quality evidence that individual motivation has an important influence on the success of reablement. A good quality study (Hjelle et al. 2016 ++) of older people's reablement experiences found that several people described their willpower as being an important factor in the reablement process. A moderate quality study by Rabiee and Glendinning (2011 +) reported a view among practitioners that service user motivation is key. (rec 1.1.3) RA5: There is some low to moderate evidence that negative experiences of reablement arise through a lack of understanding about the objectives and design of the service. For example, a moderate quality study (Rabiee and Glendinning 2011 +) found that family members can be resistant to reablement, preferring an approach that would minimise risk and ensure their relative is cared for. Similarly, Wilde and Glendinning (2012 +) found that when families did not understand reablement, they thought it was neglectful, failing to provide adequate care. Misunderstandings were also evident in relation to the content and duration of reablement. Ariss (2014 −) reported negative views about not being helped with certain tasks and with the duration of the overall service, a complaint that was also reported by Ghatorae (2013 −). (rec 1.1.3) HB2: There is some moderate to low quality evidence about the importance of integrated working to the successful delivery of intermediate care and suggestions about how this can be improved. A low quality study (Mitchell et al. 2011 −) reported negative comments from practitioners about difficulties in working across organisational boundaries and being unfamiliar with operational systems. A moderate quality study (Chouliara et al. 2014 +) reported practitioner views that information-sharing systems needed improvement to reduce duplication of assessments. Linked with this, a low quality survey (Ariss 2014 −) reported service user complaints about a lack information-sharing resulting in repeated assessments. Findings from Chouliara et al. (2014 +) suggested integrated working could be improved through joint meetings and training. Finally, a moderate quality study (Cobley et al. 2013 +) reported that service users and carers complained about disjointed transition between early supported discharge and subsequent services. (recs 1.1.4, 1.1.5)
Other considerations	Recommendation 1.1.1 was based on evidence statement SM4, which highlighted evidence that positive intermediate care outcomes are associated with delivering support in a way that is

	person-centred. This was supported by guideline committee consensus that it is vital to tailor intermediate care to the needs and preferences of individuals. In the context of intermediate care the group agreed it is therefore important to actively involve people in agreeing goals. Recommendation 1.1.2 is based on evidence statement IN2 and guideline committee consensus. The guideline committee agreed there should be a recommendation about information provided on discharge from hospital (see later recs). However, on the basis of their expertise they agreed that good communication between agencies and with people using intermediate care and their families should be ensured at all stages, including during assessment. Recommendation 1.1.3 is based on evidence statements RA6 and RA8. RA6 and RA8 were considered together and some guideline committee members noted that there is a lot of research on patient activation and motivation, both generally and in terms of specific populations (e.g. stroke patients). However there was concern about limiting reablement to only the motivated and caution noted that sometimes it can be difficult to tell who is motivated, and that motivation can be affected by a wide range of factors. The guideline committee was however clear that on the basis of the evidence, motivation has an important role to play (RA8) and intermediate care staff are vital in encouraging positive behaviour and attitudes among people using the service (RA6). On the basis of their own expertise, they felt that this applies in all the intermediate care service models and is not limited to reablement. Recommendation 1.1.4 is based on evidence statement HB2. The guideline committee concurred with the evidence, and discussed the ways in which poor integration and communication can adversely affect the people using the service. In order to try and overcome this, from the individual's point of view, the guideline committee felt it was important for the person to have a specific individual within the intermediate care service whom they could contact with questions and concerns. Recommendation 1.1.5 is based on discussions in relation to evidence statement HB2 and was made via guideline committee consensus. Following from discussions about the importance of ensuring people having access to clear and consistent information, the guideline committee agreed to develop a recommendation, which is specific to the information needs of people using reablement. They were also keen to ensure this information provided in an accessible format, according to the requirements of the NHS accessible information standard.

Topic/section heading	**Supporting infrastructure**
Recommendations	1.2.1 Consider making home-based intermediate care, reablement, bed-based intermediate care and crisis response all available locally. Deliver these services in an integrated way so

	that people can move easily between them, depending on their changing support needs. 1.2.2 Ensure that intermediate care is provided in an integrated way by working towards the following: • a single point of access for those referring to the service • a management structure across all services that includes a single accountable person, such as a team leader • a single assessment process • a shared understanding of what intermediate care aims to do • an agreed approach to outcome measurement for reporting and benchmarking. 1.2.3 Contract and monitor intermediate care in a way that allows services to be flexible and person centred. For recommendations on delivering flexible services, see NICE's guideline on home care. 1.2.4 Ensure that intermediate care teams work proactively with practitioners referring into the service so they understand: • the service and what it involves • how it differs from other services • the ethos of intermediate care, specifically that it aims to support people to build independence and improve their quality of life • that intermediate care is free for the period of delivery. 1.2.5 Ensure that mechanisms are in place to promote good communication within intermediate care teams. These might include: • regular team meetings to share feedback and review progress • shared notes • opportunities for team members to express their views and concerns. 1.2.6 Ensure that the intermediate care team has a clear route of referral to and engagement with commonly used services, for example: • general practice • podiatry • pharmacy • mental health and dementia services • specialist and longer-term rehabilitation services • housing services • voluntary, community and faith services • specialist advice, for example around cultural or language issues.
Research recommendations	The Guideline Committee agreed the following research recommendation to strengthen evidence about how to improve access and referral between services: Research rec 6. How effective and cost-effective is introducing a single point of access to intermediate care?

	The Guideline Committee also agreed the following research recommendation to strengthen evidence about the optimum team composition for intermediate care. Research rec 2. How effective and cost-effective, in terms of team structure and composition, are different approaches to providing home-based intermediate care for adults?
Review questions	1: Home-based intermediate care 1(a) What is the effectiveness and cost effectiveness of home-based intermediate care? 1(b) What are the views and experiences of people using services, their families and carers in relation to home-based intermediate care? 1(c) What are the views and experiences of health, social care and other practitioners about home-based intermediate care? 2: Bed-based intermediate care 2(a) What is the effectiveness of bed-based intermediate care? 2(b) What are the views and experiences of people using services and their carers in relation to bed-based intermediate care? 2(c) What are the views and experiences of health, social care and other practitioners in relation to bed-based intermediate care? 3: Crisis response intermediate care 3(a) What is the effectiveness of crisis response intermediate care? 3(b) What are the views and experiences of people using services and their carers in relation to crisis response intermediate care? 3(c) What are the views and experiences of health, social care and other practitioners in relation to crisis response intermediate care? 7: Service models and approaches for Intermediate care and reablement 7(a) What characteristics of intermediate care and reablement service models and approaches are associated with improving outcomes for adults using these services and their families? 7(b) What do adults using intermediate and reablement care services, their carers and families consider to be the important characteristics of service models and approaches? 7(c) What do health, social care and other practitioners consider are the important characteristics of intermediate care and reablement service models and approaches?
Quality of evidence	Recommendations 1.2.1 is based on evidence from review question 7 about service models and approaches to intermediate care. The quality of the evidence was mainly moderate, but some studies were rated with low internal validity. The perspectives of people using intermediate care and practitioners were represented in a total of 6 views and experiences studies. Only 2 studies demonstrating the association between approaches to intermediate care and outcomes were included and the fact that these were neither systematic reviews nor controlled evaluations provides less certainty in the findings. Nevertheless, guideline committee consensus – as well as testimony from the NAIC expert witness provided a stronger basis on which to develop recommendation 1.2.1.

	Recommendations 1.2.2, 1.2.5 and 1.2.6 are based on the review for question 7 about service models and approaches to intermediate care. The quality of the evidence was mainly moderate but some studies were rated with low internal validity. The perspectives of people using intermediate care and practitioners were represented in a total of 6 views and experiences studies. Only 2 studies demonstrating the association between approaches to intermediate care and outcomes were included and the fact that these were neither systematic reviews nor controlled evaluations provides less certainty in the findings. Nevertheless, guideline committee consensus – as well as testimony from the expert witness (NAIC) provided a stronger basis on which to develop recommendations. Recommendation 1.2.3 is based on the review of home-based intermediate care. Overall, a good amount of evidence was located for this review, including 11 effectiveness studies, all of which were RCTs, mainly of moderate quality. Data were derived from studies from a range of countries, with just 1 from the UK. The views and experiences data on the other hand were all derived from UK studies, of which there were 7 – mainly moderate or low in terms of their internal validity. The perspectives of people using home-based intermediate care, their families as well as practitioners were represented. Recommendation 1.2.4 is based on the bed-based intermediate care review, which included 7 effectiveness studies, all of which were RCTs and judged to be of mainly moderate quality. The effectiveness evidence mainly related to intermediate care and rehabilitation in hospital settings and was from a range of countries, including 2 studies from the UK. Five views and experiences studies provided data about the perspectives of people using bed-based intermediate care as well as practitioners. Those studies were mainly moderate quality and all were UK based. Recommendation 1.2.6 was based on the crisis response review (as well as the review for question 7). Only a small amount of evidence was included in this review and it only provided low quality data about views and experiences. No effectiveness evidence was located and for this reason the guideline committee combined it with evidence from other reviews and drew on expert testimony so it could contribute to the development of recommendations.
Economic considerations	In regards to recommendation 1.2.1, economic evidence suggests that home-based intermediate care could be as cost-effective as bed-based intermediate care. However, intermediate care might need to be provided with full capacity in order to be cost-effective. Providing all service models might not always be cost-effective though, in particular in rural areas as it is possible that the economic modelling may change and then a choice would need to be made by commissioners, in consultation with the public, as to which aspects of health care cannot afford to be provided. Although no economic evidence was available to inform recommendations 1.2.2 to 1.2.6, the Guideline Committee were mindful of potential costs and resource use when making the recommendations. In particular, the Guideline Committee was concerned that whilst recommendation 1.2.2 was important to secure effective and safe care, it would be difficult to achieve this

	with current capacity and resources. The Guideline Committee were concerned about affordability. They also emphasised the importance of access to specialist services noting that this was necessary in order to achieve the recommendations without major additional resources.
Evidence statements – numbered evidence statements from which the recommendations were developed	SM6: There is a small amount of evidence that poor integration between health and social care is a barrier to successfully implementing intermediate care. The quality of the evidence is low to moderate. The Ariss review (2015 −) found that poor collaboration between health and social care is a barrier to the fulfilment of intermediate care goals. Echoing this, Barton et al (2006 +) identified effective partnership working between health and social services – at both operational and strategic levels – as the most important lever in facilitating the development of intermediate care in local contexts (recs 1.2.1, 1.2.2, 1.2.6). HB6: There is a small amount of low to moderate quality evidence about the rigidity of the organisation and delivery of home-based intermediate care. A low quality study (Mitchell et al. 2011 −) found that when access to intermediate care was extended through provision outside of 'standard working hours', practitioners could conduct assessments at the weekends and in evenings, increasing responsiveness and facilitating hospital discharge. A low quality survey (Ariss 2014 −) reported negative views about home based intermediate care being just a 9am–5pm service and providing visits that are too short and delivered at irregular times, another problem that is exacerbated by poor communication. Finally, Glasby et al. (2008 +) reported that some practitioners believe eligibility criteria are too rigidly applied, enabling 'cherry-picking' of certain patients for admission to the service. (rec 1.2.3) BB5: There is some evidence of moderate quality that there is a lack of understanding about the objective of bed-based intermediate care and this is compounded by poor communication. A moderate quality study (Thomson and Love 2013 +) found that residential intermediate care practitioners felt that families lacked understanding about the objective of regaining independence and instead thought the patient should be 'looked after'. A low quality survey (Ariss 2014 −) reported responses from service users who were given insufficient and inconsistent information about the purpose and length of the bed-based intermediate care service. Similarly a moderate quality study (Benten and Spalding 2008 +) found that participants were dissatisfied with the lack of information received about intermediate care before their transfer to the unit and were not clear why they had been referred. Data also showed a lack of understanding among some practitioners. For example, in a moderate quality study (Regen et al. 2008 +), intermediate care practitioners described a lack of understanding among hospital professionals about the existence of intermediate care or how to refer to the service. Hospital professionals were also concerned about perceived risks which they associated with intermediate care (rec 1.2.4). SM2: There is some evidence that good communication within teams is associated with improved intermediate care outcomes. The quality of this evidence is moderate. A literature review by Smith et al (2013 +) found that nearly half of included papers cited

	communication, relationships and regular team meetings as characteristics associated with positive outcomes. Nancarrow (2013 +) found that team culture, team support and camaraderie were associated with good intermediate care teams. Reflecting this, staff from an intermediate care service said that a lack of information for staff about the model of the service was a cause of the problems being experienced within their team (Elbourne and Le May 2015 +). (rec 1.2.5) CR1: There is a small amount of low quality evidence that practitioners do not appropriately refer people to crisis response intermediate care services. One low quality UK study (Beech et al. 2013 −) reported views that health and social care practitioners missed opportunities to prevent hospital admissions because they neither knew about the existence nor purpose of the rapid response service. Another low quality UK paper (Oh and Warnes 2010 −) reported that health practitioners made referrals to the rapid response service simply as a means of accessing 'free' social care services. (rec 1.2.6) SM1: There is a moderate amount of evidence that intermediate care teams which include a range of skills – including interdisciplinary teams – are associated with positive outcomes. The quality of the evidence is mainly moderate. Secondary analysis by Ariss (2015 −) found that increased skill mix was significantly associated with improvements in impairment scores among people using intermediate care. A literature review by Smith et al. (2013 +) found that all located papers cited 'interdisciplinary team working' as a characteristic associated with positive outcomes. Barton (2006 +) also reported that people using intermediate care appreciated when the service was delivered via well coordinated team work. Finally, studies by Nancarrow (2013 +) and Elbourne (2015 +) emphasise that in the context of interdisciplinary team working it is important for members to have a clear understanding of everyone's roles and responsibilities. (rec 1.2.6) EcHB1 Evidence from 1 England-based RCT (Parker et al. 2009 ++, n=84), which compared home-based multidisciplinary rehabilitation with wide range of rehabilitation programmes provided at day hospitals, found no significant difference in health-related quality of life at 6 months (mean difference 0.023, 95% CI −0.114 to 0.161, p value 0.735) or 12 months (mean difference 0.147, 95% CI, −0.051 to 0.3450, p value 0.141). There was also no difference in regards to other outcomes (including carers' psychological wellbeing). Neither public costs nor total costs at 6- or 12-month follow-up were significantly different: mean public sector costs at 6 months were £6,139 in the home-based group (measured for n=25) and £4,214 in the bed-based group (measured for n=21); the p value was 0.29. Mean public sector costs at 12 months were £9,977 in the home-based group (measured for n=23) and £7,511 in comparison group (measured for n=13); the respective p value was 0.43. Mean total costs (including costs to patients and carers; based on value of unpaid care £8/hr) at 6 months were £14,330 in intervention group (measured for n=25) and £10,102 in comparison group (measured for n=21); the p value was 0.66. At 12 months costs were £16,105 (measured for n=23) in home-based group vs £23,105 (measured for n=13) in bed-based group with a p value of 0.91. Findings suggest that day hospital and home-based

	intermediate care equally cost-effective. However, based on exclusion criteria and detail in the discussion section of the paper findings are likely to refer only to certain type of population eligible for multidisciplinary care. (rec 1.2.1)
Other considerations	Recommendation 1.2.1 is based on SM6 and guideline committee consensus, plus EcHB1 and testimony from the expert witness from the National Audit Benchmarking Group. SM6 indicates that silo working between the different sectors across which intermediate care operates really impedes successful implementation. The NAIC expert witness also highlighted the importance of all 4 service models being available to meet the spectrum of local need. The committee concluded that not only should all 4 models be available they should be organised in a way that enables referral between them and goes at least some way to addressing the organisational barriers cited in SM6. Economic evidence suggested no significant differences in costs or outcomes between home- and bed based intermediate care suggesting that both service models could be offered without economic implications. However, capacity issues locally might inform the cost-effectivenss. Recommendation 1.2.2 is based on evidence statement SM6 and guideline committee consensus. The guideline committee concurred with the evidence statement, which highlighted poor integration as a barrier to successfully implementing intermediate care. They reached consensus that a single point of access, shared management structure and single assessment process are key to improving integrated intermediate care and are 'implementable' in practice. Recommendation 1.2.3 is based on evidence statement HB6. In light of this evidence, the guideline committee talked about the issues of flexible service provision, continuity of carers (pros and cons) and familiarity of provider. They talked about the importance of care being needs-led and not service-led and the potential conflicts between provider needs (and payments) and the needs of the service user. Aware of relevant recommendations in the NICE home care guideline, they agreed it should be cross-referenced here as it covered the important point about flexibility, which is identified as a problem in HB6. Recommendation 1.2.4 is based on evidence statement BB5. Evidence statement BB5 identified a lack of understanding about bed-based intermediate care among other practitioners including those referring into the service. The result could be inappropriate referrals or missed opportunities for referrals and the positive outcomes they could have achieved. The guideline committee felt that as well as practitioners referring to the service needing to find out more about it, intermediate care teams should also make their service understood, particularly in terms of how it differs from other services and the fact that there is no charge to the individual or their families. Recommendation 1.2.5 is based on evidence statement SM2. The guideline committee agreed about the importance of good communication within intermediate care teams, particularly in terms of regular updates and reviews about the progress people are making toward their agreed goals. They highlighted that the onus is on management to facilitate good communication – and

	that it is not only the responsibility of people working within the service. They therefore made specific suggestions for mechanisms that would facilitate good communication and these are listed in the recommendation. Recommendation 1.2.6 is based on evidence statements CR1, SM1 and SM6. It is also supported by EW (NAIC) and EW (STARRS). The guideline committee agreed with the evidence, which highlights the importance of a range of skills being available to support people using intermediate care. The guideline committee also agreed that having different professionals work together and learn from each other enhances the service and this was endorsed by expert witness (NAIC) and expert witness (STARRS). Practitioners with these skills do not necessarily need to be a part of the core team but it is important they are accessible, with a clear route of referral. For these reasons, the guideline committee agreed 1.2.6, which includes a list of important services to which intermediate care teams should easily be able to refer, including specialist services for BME communities.

Topic/section heading	**Supporting infrastructure continued**
Recommendations	1.2.7 Consider deploying staff flexibly across intermediate care, where possible following the person from hospital to a community bed based service or directly to their home. 1.2.8 Ensure that the composition of intermediate care teams reflects the different needs and circumstances of people using the service. 1.2.9 Ensure that intermediate care teams include a broad range of disciplines. The core team should include practitioners with skills and competences in the following: • delivering intermediate care packages • nursing • social work • therapies, for example occupational therapy, physiotherapy and speech and language therapy • comprehensive geriatric assessment.
Research recommendations	The Guideline Committee agreed the following research recommendation to address gaps in evidence about the optimum team composition for intermediate care: Research rec 2. How effective and cost effective, in terms of team structure and composition, are different approaches to providing home-based intermediate care for adults?
Review questions	RQ3 Crisis response intermediate care 3(a) What is the effectiveness of crisis response intermediate care? 3(b) What are the views and experiences of people using services and their carers in relation to crisis response intermediate care? 3(c) What are the views and experiences of health, social care and other practitioners in relation to crisis response intermediate care?

	RQ4 Reablement 4(a) What is the effectiveness of reablement? 4(b) What are the views and experiences of people using services and their carers in relation to reablement? 4(c) What are the views and experiences of health, social care and other practitioners in relation to reablement? RQ7: Service models and approaches for Intermediate care and reablement 7(a) What characteristics of intermediate care and reablement service models and approaches are associated with improving outcomes for adults using these services and their families? 7(b) What do adults using intermediate and reablement care services, their carers and families consider to be the important characteristics of service models and approaches? 7(c) What do health, social care and other practitioners consider are the important characteristics of intermediate care and reablement service models and approaches?
Quality of evidence	Recommendation 1.2.7 is based on evidence from review question 7 about service models and approaches to intermediate care. The quality of the evidence was mainly moderate, but some studies were rated with low internal validity. The perspectives of people using intermediate care and practitioners were represented in a total of 6 views and experiences studies. Only 2 studies demonstrating the association between approaches to intermediate care and outcomes were included and the fact that these were neither systematic reviews nor controlled evaluations provides less certainty in the findings. Nevertheless, guideline committee consensus – as well as testimony from the NAIC expert witness provided a stronger basis on which to develop recommendation. Recommendation 1.2.8 is based on discussions about the evidence located for the crisis response review and the review about service models and approaches. Only a small amount of evidence was included in the review and it only provided low quality data about views and experiences. No effectiveness evidence was located and for this reason the guideline committee drew on expert testimony combined with group consensus to arrive at recommendation 1.2.8. The quality of the evidence reviewed for service models and approaches was mainly moderate, but some studies were rated with low internal validity. The perspectives of people using intermediate care and practitioners were represented in a total of 6 views and experiences studies. Only 2 studies demonstrating the association between approaches to intermediate care and outcomes were included and the fact that these were neither systematic reviews nor controlled evaluations provides less certainty in the findings. Nevertheless, guideline committee consensus – as well as testimony from the NAIC expert witness provided a stronger basis on which to develop recommendation. Recommendation 1.2.9 is based on testimony from the NAIC expert witness, which outlined the make up of a rapid response team, which evidently achieves positive outcomes at the individual and system level. Combined with their own expertise, the guideline committee felt this was a sound basis for recommending the skills required in a core intermediate care team.

Economic considerations	Although no economic evidence was available to inform these guideline recommendations, the Guideline Committee was mindful of potential costs and resource use when making the recommendations.
Evidence statements – numbered evidence statements from which the recommendations were developed	SM1 There is a moderate amount of evidence that intermediate care teams which include a range of skills – including interdisciplinary teams – are associated with positive outcomes. The quality of the evidence is mainly moderate. Secondary analysis by Ariss (2015 −) found that increased skill mix was significantly associated with improvements in impairment scores among people using intermediate care. A literature review by Smith et al. (2013 +) found that all located papers cited 'interdisciplinary team working' as a characteristic associated with positive outcomes. Barton (2006 +) also reported that people using intermediate care appreciated when the service was delivered via well-coordinated team work. Finally, studies by Nancarrow (2013 +) and Elbourne (2015 +) emphasise that in the context of interdisciplinary team working it is important for members to have a clear understanding of everyone's roles and responsibilities. (rec 1.2.7) CR1: There is a small amount of low quality evidence that practitioners do not appropriately refer people to crisis response intermediate care services. One low quality UK study (Beech et al. 2013 −) reported views that health and social care practitioners missed opportunities to prevent hospital admissions because they neither knew about the existence nor purpose of the rapid response service. Another low quality UK paper (Oh and Warnes 2010 −) reported that health practitioners made referrals to the rapid response service simply as a means of accessing 'free' social care services. (rec 1.2.8)
Other considerations	Recommendation 1.2.7 is based on evidence statement SM1, which highlighted the importance of intermediate care teams having a good mix of skills and of interdisciplinary working within those teams. The guideline committee agreed with this finding and felt that one way of ensuring that skills are shared and that staff understand the function of different models would be for them to work in different teams. Recommendation 1.2.8 is based on guideline committee consensus prompted by evidence statement CR1 as well as SM1 from the service models and approaches review. In relation to CR1, the committee discussed the skill mix of a crisis response intermediate care team as another explanation for unsuccessful outcomes. They noted that, in practice, the composition of crisis – or rapid – response teams normally results from the team having been developed in response to local crises (e.g. 'bottlenecks' in the system). The guideline committee noted that the teams would need to be able to support people with a whole range of needs/impairments and this was reinforced by the evidence synthesised in SM1 about the ideal composition of teams. For example, Ariss et al (2015) found 'Patients who received care from an interprofessional team had significantly shorter lengths of stay than patients receiving care by a traditional model. Smith et al (2013)'s systematic review of relationships between different team characteristics and patient outcomes in intermediate care found that among team characteristics believed to be associated with positive patient outcomes there were patient

	centredness, taking an holistic approach, interdisciplinary teamworking, and being goal and outcome focus. So without being overly prescriptive with this recommendation, the GC wanted to be clear that all the service models should be composed of teams reflecting those characteristics and discussions therefore culminated in 1.2.8. The guideline committee agreed that both these recommendations (1.2.7 and 1.2.8) about team composition actually apply to all 4 service models and should not be restricted to crisis response intermediate care. Recommendation 1.2.9 is based on expert testimony from STARRS witness. In light of the expert witness testimony (STARRS) the guideline committee agreed to reference, as examples, the sorts of practitioners that should be included in a crisis response team, using the STARRS composition and reflecting the need for medical skills (including prescribing), social work and generic/core competencies.

Topic/section heading	**Assessment of need for intermediate care**
Recommendations	1.3.1 Assess people for intermediate care if it is likely that specific support and rehabilitation would improve their ability to live independently and they: • are at risk of hospital admission or have been in hospital and need help to regain independence or • are living at home and having increasing difficulty with daily life through illness or disability. 1.3.2 Do not exclude people from intermediate care based on whether they have a particular condition, such as dementia, or live in particular circumstances, such as prison, residential care or temporary accommodation. 1.3.3 During assessment identify the person's abilities, needs and wishes so that they can be referred for the most appropriate support. 1.3.4 Actively involve people using services (and their families and carers, as appropriate) in assessments for intermediate care and in decisions such as the setting in which it is provided. 1.3.5 When assessing people for intermediate care, explain to them (and their families and carers, as appropriate) about advocacy services and how to contact them if they wish.
Research recommendations	The Guideline Committee agreed the following research recommendation to address gaps in evidence about intermediate care and reablement for people living with dementia: Research rec 4. How effective and cost-effective are intermediate care and reablement for supporting people living with dementia?
Review questions	2 Bed-based intermediate care 2(a) What is the effectiveness of bed-based intermediate care? 2(b) What are the views and experiences of people using services and their carers in relation to bed-based intermediate care?

	2(c) What are the views and experiences of health, social care and other practitioners in relation to bed-based intermediate care? 4 Reablement 4(a) What is the effectiveness of reablement? 4(b) What are the views and experiences of people using services and their carers in relation to reablement? 4(c) What are the views and experiences of health, social care and other practitioners in relation to reablement? RQ5 Dementia and intermediate care or reablement 5(a) What is the effectiveness and cost-effectiveness of intermediate care and reablement for people living with dementia? 5(b) What are the views and experiences of people living with dementia, their families and carers in relation to intermediate care and reablement? 5(c) What are the views and experiences of health, social care and other practitioners about intermediate care and reablement for people living with dementia? 6 Information, advice, advocacy, training and support for people using intermediate care and reablement and their carers 6(a) What is the effectiveness and cost effectiveness of information, advice, advocacy, training and support for people using intermediate care and reablement? 6(b) What are the views and experiences of people using intermediate care and reablement, their families and carers about information, advice, advocacy, training and support? 6(c) What are the views and experiences of health, social care and other practitioners about information, advice, advocacy, training and support for people using intermediate care and reablement and their families and carers? RQ7: Service models and approaches for Intermediate care and reablement 7(a) What characteristics of intermediate care and reablement service models and approaches are associated with improving outcomes for adults using these services and their families? 7(b) What do adults using intermediate and reablement care services, their carers and families consider to be the important characteristics of service models and approaches? 7(c) What do health, social care and other practitioners consider are the important characteristics of intermediate care and reablement service models and approaches?
Quality of evidence	Evidence for recommendation 1.3.2 was derived from the review focused on intermediate care for people living with dementia. The review identified only 1 study, which provided evidence of effectiveness but which was rated as low quality. No data about views and experiences were located. In light of this paucity of evidence the guideline committee invited an expert witness and also made recommendations by using their own expertise to strengthen the small amount of evidence. The testimony provided by the expert witness corroborated the evidence and guideline committee expertise by explaining how his enhanced reablement

	service for people living with dementia achieved outcomes in terms of improved independence and quality of life. Recommendation 1.3.4 was based on the review about service models and approaches to intermediate care and their associations with outcomes. The quality of the evidence was mainly moderate but some studies were rated with low internal validity. The perspectives of people using intermediate care and practitioners were represented in a total of 6 views and experiences studies. Only 2 studies demonstrating the association between approaches to intermediate care and outcomes were included and the fact that these were neither systematic reviews nor controlled evaluations provides less certainty in the findings. Nevertheless the guideline committee used their expertise to strengthen the evidence (e.g. in SM4) and agreed to use it as a basis for developing 1.3.4 Recommendation 1.3.5 was based on evidence from the review about information, advocacy, advice, training and support for people using intermediate care. Only a small amount of evidence was located and the 2 studies were rated as moderate and low in terms of their internal validity. Both studies provided data about views and experiences, with no evidence of effectiveness. The small amount of evidence meant that recommendations, which stem form this review area, relied on being strengthened by guideline committee consensus, as with 1.3.5.
Economic considerations	Although no economic evidence was available to inform these guideline recommendations, the Guideline Committee was mindful of potential costs and resource use when making the recommendations. This referred to costs linked to the additional time required for involving people using services and their family and carers on the one hand and the potentially avoided long-term costs linked to poor quality of care on the other hand. Involvement and advocacy should be provided as part of effective and safe care independent of the economic rationale. The Guideline Committee agreed that research was needed to examine the cost-effectiveness of intermediate care approaches for people with dementia.
Evidence statements – numbered evidence statements from which the recommendations were developed	DE1: There is a small amount of low quality evidence that a time-limited specialist home treatment service for people living with dementia helps to achieve referrers' goals. The included study (Culverwell and Milne 2010 −) found that the goals most frequently achieved were: supporting carer/care staff, avoiding hospital admissions, conducting and assessment of problems/needs, facilitating hospital discharge, supporting a transition and engaging the user with services. (rec 1.3.2) DE2: There is a small amount of low quality evidence that a time-limited specialist home treatment service for people living with dementia can help to improve people's capacity to live more independently. The included study (Culverwell and Milne 2010 −) found that at 6 months follow-up 44% of people were still living in the same care environment, 37% had moved to a more supported care environment and 19% to a less supported environment. (rec 1.3.2) SM4: There is some evidence that positive outcomes are achieved when intermediate care is person-centred. The quality of the evidence is mainly moderate. The Smith et al. review (2013 +) located a small number of papers which cited patient-

	centredness as a characteristic associated with positive intermediate care outcomes. A review by Pearson et al. (2015 +) reported that intermediate care could be made most effective by ensuring the service user is the central focus and involving them and their carers in collaborative decision-making. Similarly, Wilson (2007 −) located a study that found higher satisfaction among people using intermediate care if they had actively participated in programme planning. (rec 1.3.4) IN2: There is a small amount of low quality evidence that poor information provision causes problems before and during transfers of care from hospital. The survey by Ariss (2015 −) reported that people experienced difficulties with discharge arrangements owing to a lack of communication with after care services and a lack of information about potential sources of support following transfer from hospital. (rec 1.3.5)
Other considerations	Recommendation 1.3.1 is based on GC consensus that there is a need for clarity about who should be assessed for their potential to benefit from intermediate care. The group agreed that the clearest way of doing this which would be most applicable in the practice context would be to tie it in with the definition of intermediate care according to the National Audit of Intermediate Care. Recommendation 1.3.2 is based on evidence statements DE1, DE2, EW (DD) and guideline committee consensus. The findings from (Culverwell and Milne 2010 −) resonated with the guideline committee's experience from practice and, while they recognised the limitations of the study they agreed it was reasonable to develop a recommendation based on a combination of the evidence and their own expertise. There was a strong theme within the discussion that people with dementia often do not have access to, or are not referred to, certain types of intermediate care because of their dementia. The guideline committee felt strongly that this was not good practice given that people with dementia could benefit from support of this type. This recommendation was reviewed following expert witness testimony (DD) about specialist reablement for people living with dementia. The testimony supported the point that people should not be excluded from intermediate care on the basis of a particular diagnosis, such as dementia. Recommendation 1.3.3 is based on GC consensus. Having reviewed the draft recommendations the group agreed to emphasise the importance of conducting an assessment of the need for intermediate care to establish which of the 4 service models would best meet their needs and wishes. Recommendation 1.3.4 is based on evidence statement SM4, which emphasises the importance of intermediate care being person-centred. The guideline committee agreed with this evidence and through discussion and group consensus they developed a recommendation about ensuring this person-centred approach begins at the point of assessing people for onward referral to intermediate care. They agreed that in order to ensure assessment is truly person-centred then all reasonable adjustments should be made so that people understand the options being considered.

	Recommendation 1.3.5 is based on guideline committee consensus in the context of discussions around the review about information, advice, advocacy, training and support. The group discussed how access to advocacy is important throughout the intermediate care process and for people from all local communities. The group discussed the resource implications to ascertain whether it is achievable for everyone being assessed for intermediate care to be told how to access advocacy services. However, members cited requirements of the Care Act and agreed this recommendation should therefore be made.

Topic/section heading	**Referral into intermediate care**
Recommendations	1.4.1 Consider providing intermediate care to people in their own homes wherever practical, making any adjustments, for example equipment or adaptations, needed to enable this to happen. 1.4.2 Offer reablement as a first option to people being considered for home care, if it has been assessed that reablement could improve their independence. 1.4.3 For people already using home care, consider reablement as part of the review or reassessment process. Be aware that this may mean providing reablement alongside home care. Take into account the person's needs and preferences when considering reablement and work closely with the home care provider. 1.4.4 Consider reablement for people living with dementia, to support them to maintain and improve their independence and wellbeing. 1.4.5 Consider bed-based intermediate care for people who are in an acute but stable condition but not fit for safe transfer home. Be aware that if the move to bed-based intermediate care takes longer than 2 days it is likely to be less successful. 1.4.6 Refer people to crisis response if they have experienced an urgent increase in health or social care needs and: • the cause of the deterioration has been identified • their support can be safely managed in their own home or care home • the need for more detailed medical assessments has been addressed. 1.4.7 The crisis response service should raise awareness of its purpose and function among other local services such as housing and the voluntary sector. This means making sure they understand: • the service and what it involves • how it differs from other types of intermediate care • how to refer to the service.
Research recommendations	The Guideline Committee agreed the following research recommendations to strengthen evidence about crisis response services and address gaps in evidence about the optimal time after referral for starting intermediate care, and intermediate care for people living with dementia:

	Research rec 1. What is the optimal time between referral to the and starting intermediate care in terms of effectiveness and cost effectiveness and in terms of people's experiences? Research rec 3. How effective and cost effective are crisis response services? Research rec 4. How effective and cost-effective are intermediate care services for supporting people living with dementia?
Review questions	2 Bed-based intermediate care 2(a) What is the effectiveness of bed-based intermediate care? 2(b) What are the views and experiences of people using services and their carers in relation to bed-based intermediate care? 2(c) What are the views and experiences of health, social care and other practitioners in relation to bed-based intermediate care? 3: Crisis response intermediate care 3(b) What are the views and experiences of people using services and their carers in relation to crisis response intermediate care? 3(c) What are the views and experiences of health, social care and other practitioners in relation to crisis response intermediate care? 4. Reablement 4(a) What is the effectiveness of reablement? 4(b) What are the views and experiences of people using services and their carers in relation to reablement? 4(c) What are the views and experiences of health, social care and other practitioners in relation to reablement? 5. Dementia and intermediate care or reablement 5(a) What is the effectiveness and cost-effectiveness of intermediate care and reablement for people living with dementia? 5(b) What are the views and experiences of people living with dementia, their families and carers in relation to intermediate care and reablement? 5(c) What are the views and experiences of health, social care and other practitioners about intermediate care and reablement for people living with dementia?
Quality of evidence	Recommendations 1.4.1 and 1.4.5 are both in part informed by the review on bed-based intermediate care, which included 7 effectiveness studies, all of which were RCTs and judged to be of mainly moderate quality. The effectiveness evidence mainly related to intermediate care and rehabilitation in hospital settings and was from a range of countries, including 2 studies from the UK. Five views and experiences provided data about the perspectives of people using bed-based intermediate care as well as practitioners. Those studies were mainly moderate quality and all were UK based. Recommendation 1.4.1 is also based on the review of service models and approaches to intermediate care and their associations with outcomes. The quality of the evidence was mainly moderate but some studies were rated with low internal validity. The perspectives of people using intermediate care and practitioners were represented in a total of 6 views and experiences studies. Only 2 studies demonstrating the

	association between approaches to intermediate care and outcomes were included and the fact that these were neither systematic reviews nor controlled evaluations provides less certainty in the findings. Nevertheless the guideline committee combined the evidence with findings from other review areas (in this case bed-based intermediate care) and used their expertise to strengthen the evidence and use it as a basis for developing 1.4.1. Recommendations 1.4.2 and 1.4.3 are based on the reablement review in which a good amount of data were located. The 7 effectiveness studies all had good relevance to the review question but their internal validity was mixed and they included 3 low quality studies. It is these effectiveness studies on which recommendations 1.4.2 and 1.4.3 were based. Recommendation 1.4.4 is based on the review of evidence about the use of intermediate care to support people living with dementia. The review identified only 1 study, which provided evidence of effectiveness but which was rated as low quality. No data about views and experiences were located. In light of this paucity of evidence, the guideline committee invited an expert witness and also made recommendations (including 1.4.4) by using their own expertise to strengthen the small amount of evidence. The testimony provided by the expert witness corroborated the evidence and guideline committee expertise by explaining how his enhanced reablement service for people living with dementia achieved outcomes in terms of improved independence and quality of life. 1.4.6 and 1.4.7 were both based on the crisis response review. Only a small amount of evidence was included in the review and it only provided low quality data about views and experiences. No effectiveness evidence was located and for this reason the committee drew on expert testimony combined with group consensus to arrive at recommendations 1.4.6 and 1.4.7.
Economic considerations	Recommendations were informed by the economic evidence statements as well as additional economic modelling. Economic evidence statements (EcHB1 and 2) suggested that intermediate care could be provided at home without compromising clinical outcomes or increasing costs. Based on economic rationale, both forms of intermediate care might be offered. However, the reviewed studies referred to specific populations so that it was not clear whether findings could be generalised and applied to other forms of intermediate care. The GC decided that economic evidence on hospital-at-home schemes (EcHB4) could not inform the recommendation on home-based intermediate care. This was based on GC consensus that only certain forms of hospital-at-home schemes could be considered intermediate care and that this only referred to older people with very clinical needs; they also agreed that current practice had changed since the publication of the study. Overall, there was no evidence that home based intermediate care would be more costly than bed based intermediate care. Although costs of the two models of care only present part of the relevant costs that need to be considered when making decisions based on an economic rationale, it may be useful to note that the costs for home-based intermediate care are considerably lower than the ones for bed-based intermediate care: The NAIC 2015

	report estimated that the costs per service user were £1,205 for home based intermediate care and £5,672 for bed based intermediate care. This referred to mean lengths of 29.3 days for home based and 26.8 days for bed based intermediate care. It was not clear from the evidence (EcBB1) whether nurse-led bed-based intermediate care could be provided cost-effectively (when compared with standard care). Additional economic analysis was thus carried out in this area and suggested that nurse-led intermediate care could be offered cost neutral or cost saving. However, findings were highly sensitive, in particular in regards to a delay in discharge from acute wards. This could suggest that in the context of existing capacity problems the cost-effective provision of nurse-led bed-based is difficult to achieve. Evidence suggested that intermediate care could be provided cost-effectively in a community hospital (compared with acute care). However the GC decided that this evidence could not be used to inform recommendations because the comparison group did not reflect current practice as standard practice included intermediate care). (1.4.1, 1.4.5) Recommendations 1.4.2 and 1.4.3 were informed by economic evidence from economic evidence statements as well as from the additional economic analysis carried out. Evidence statements on reablement referred to 2 studies including 1 English study, which showed that reablement was likely to be cost-effective. However, the study had potentially serious methodological limitations and findings could therefore not directly inform the recommendations. The second study, which showed that reablement led to cost savings, was of high quality but took place in Australia where reablement was provided over a longer time horizon and findings on resource use and cost savings related to a different system of service provision. Thus additional economic analysis was carried out. Findings showed that reablement compared with standard home care was cost-saving. This was due to a reduction in the need for ongoing home care as well as a reduction in hospital admissions. The guideline committee agreed that the finding of the analysis should lead to 2 recommendations: a stronger one, which referred to the same population of people referred to home care, and a slightly weaker one, which referred to people already using home care. While there is currently no evidence to confirm this, economic considerations (1.4.6, 1.4.7) might include a potential reduction in unplanned and inappropriate (emergency) hospital admissions and a shift of costs from health to social care. The Guideline Committee identified the need to carry out research on the cost-effectiveness of crisis response services.
Evidence statements – numbered evidence statements from which the recommendations were developed	BB4: There is some evidence of moderate quality that in the experience of service users, bed-based intermediate care facilities fail to promote independence, although practitioner views contradict this. A moderate quality study (Millar 2015 +) found that people in intermediate care facilities were not given the opportunity to develop independence in terms of self-medication. A UK survey (Ariss 2014 −) reported service user opinions that bed-based facilities failed to provide stimulating activities for the promotion of independence and also that users' needs for rehabilitation were not properly understood. A moderate quality study (Benten and Spalding 2008 +) found that people who had

	used a bed-based intermediate care facility thought insufficient physiotherapy was provided and the small amount of occupational therapy was unrelated to the activities and challenges they would face at home. To the contrary, a moderate quality UK study (Regen et al. 2008 +) reported the views of intermediate care managers and practitioners, which endorsed the home-like environment as conducive to increasing independence and confidence. (recs 1.4.1 and 1.4.5) SM5: There is some evidence that positive outcomes are achieved when intermediate care is person-centred. The quality of the evidence is mainly moderate. The Smith et al. review (2013 +) located a small number of papers which cited patient-centredness as a characteristic associated with positive intermediate care outcomes. A review by Pearson et al. (2015 +) reported that intermediate care could be made most effective by ensuring the service user is the central focus and involving them and their carers in collaborative decision-making. Similarly, Wilson (2007 −) located a study that found higher satisfaction among people using intermediate care if they had actively participated in programme planning. (rec 1.4.1) EcHB1 Home-based vs day hospital (different conditions) Evidence from 1 England-based RCT (Parker et al. 2009 ++, n=84), which compared home-based multidisciplinary rehabilitation with a wide range of rehabilitation programmes provided at day hospitals, found no significant difference in health-related quality of life at 6 months (mean difference 0.023, 95% CI −0.114 to 0.161, p value 0.735) or 12 months (mean difference 0.147, 95% CI, −0.051 to 0.3450, p value 0.141). There was also no difference in regards to other outcomes (including carers' psychological wellbeing). Neither public costs nor total costs at 6- or 12-month follow-up were significantly different: mean public sector costs at 6 months were £6,139 in the home-based group (measured for n=25) and £4,214 in the bed-based group (measured for n=21); the p value was 0.29. Mean public sector costs at 12 months were £9,977 in the home-based group (measured for n=23) and £7,511 in comparison group (measured for n=13); the respective p value was 0.43. Mean total costs (including costs to patients and carers; based on value of unpaid care £8/hr) at 6 months were £14,330 in intervention group (measured for n=25) and £10,102 in comparison group (measured for n=21); the p value was 0.66. At 12 months costs were £16,105 (measured for n=23) in home-based group vs £23,105 (measured for n=13) in bed-based group with a p value of 0.91. Findings suggest that day hospital and home-based intermediate care were equally cost-effective. However, based on exclusion criteria and detail in the discussion section of the paper findings are likely to refer only to certain type of population eligible for multidisciplinary care. (rec 1.4.1) EcHB2 Home-based vs bed-based intermediate care (hip or knee replacement) Evidence was available from 1 Canadian RCT ((Mahomed et al. 2008 +, n=234) which compared a home-based multidisciplinary pathway (n=119) with inpatient rehabilitation (n=119); the home-based pathway included nursing, physiotherapy and home support. Both groups showed substantial improvements at 3 and

	12 months, with no significant differences between groups with respect to health-related quality of life, clinical outcomes or patient satisfaction scores (p>0.05). Hospital length of stay was slightly higher in the home-based group but this was not significant: 7 days (SD 3 days) vs 6.3 days (SD 2.5 days); p=0.06. Total costs (acute care and rehabilitation) were slighter lower in the intervention group but this again was not significant: $11,082 (SD $7,747) vs CG $14,532 (SD$11,555); p<0.01. This difference in total costs was due to significantly lower rehabilitation costs in the intervention group: $891 (SD $1,316) vs $5120 (SD $7552); p<0.001. Findings suggest that home- and bed-based intermediate care can be provided equally cost-effectively for patients undergoing hip or knee replacement. However, the study had a limited perspective on healthcare costs and did not consider the impact on costs of hospital readmission, social care and unpaid care. (rec 1.4.5) EcHB4 Hospital-at-home versus bed-based acute care (older people) One New Zealand RCT (Harris et al. 2005 ++, n=285) was identified as sufficiently applicable. In this study participants were referred to the hospital-at-home service either from the emergency department before they got admitted to a hospital ward or after they got admitted as part of early discharge. The majority were referred via the latter route. Overall, the study did not find significant differences between groups for any of the primary and secondary outcomes. Cognitive function did not change over time in either group: diff 0.44 (95% CI −1.38 to 0.35) measured for n=117 in hospital-at-home and n=109 in comparison group. Instrumental activities of daily living (IADL) improved in both groups (from 7.0 to 9.6) with no significant difference between them: diff 0.2 (95% CI −0.65 to 1.04); this was measured for n=214 in hospital-at-home and for n=123 in the bed-based group. Acceptability among service users and carers was significantly higher in the hospital-at-home group: the proportion of service users (carers) who rated the service 'very good' or 'excellent': 83.0% vs 72.3%; p=0.05 (66.7% vs 41.4%; p=0.004). Carers' strain was significantly lower in the hospital-at-home group: 4.6 (SD 6.2) vs 6.2 (SD 3.7); p=0.02. The mean total costs per patient were significantly higher in the hospital-at-home group: NZ$6,524 vs NZ$3,525 (p<0.0001). This was due to higher cost per day of service, a longer length of hospital stay and a higher readmission rate. There was no significant difference in community care costs. Findings from this study suggest that this very specific form of intermediate care, a hospital-at-home intervention, is significantly more costly but more acceptable to patients and carers (rec 1.4.1). EcBB1 Nurse-led, bed-based intermediate care Evidence from 2 economic evaluations (Harris et al. 2005 ++; Walsh et al. 2005 ++), which compared nurse-led units (in hospital or on hospital site) with standard care in medical wards, suggested that the intervention led to the same or better outcomes at possibly higher costs. Both studies evaluated costs and outcomes between baseline and follow-up of 6 months. The cost-effectiveness study by Harris et al. (2005 ++, n=175)

	compared a nursing-led inpatient unit situated in an acute hospital with standard care in medical wards. The intervention led to non-significantly higher mean change (improvement) in physical functioning (including activities of daily living and mobility) measured with the Barthel Index (3.6 vs 2.6; p value not reported). There was no difference in any of the other outcomes – i.e. mortality, discharge destination or readmission (p values not reported). The mean cost per hospital stay (when using a detailed, bottom-up costing approach) was £5,144 in the intervention and £4,100 in the comparison group, but the difference (£1,044) was not significant (p=0.15). Using a (less accurate) top-down costing approach (from budget data), mean difference in costs became significant (£1,607; p=0.05). Using a mixed methods approach, the mean difference was, again, not significant (£1,019; p=0.142). Mean costs of post-discharge care per week including discharge destination were non-significantly lower in intervention group (£374.9 vs £402; p=0.25). Despite these lower post-discharge costs (indicating a substitution effect between inpatient and community health and social care provision), the greater length of stay led to overall higher total costs. In this study, post-discharge costs were estimated based on information recorded in the discharge plan and included occupational, physio- and speech therapists, social workers and dieticians; the study did not specify a time period over which these costs were collected. Furthermore, the cost perspective was limited to activity of the participating hospital and did not include important costs such as those of care home, home care and hospital readmission. Due to the chosen outcome measure and a limited cost perspective it was not possible to derive final conclusions about the cost-effectiveness of nurse-led bed-based intermediate care from this study. In addition, while the study presented the incremental cost-effectiveness ratio of £1,044 per point improvement of Barthel Index, this could not be compared with findings from other studies in this or in related areas, since this is not a common way of reporting findings at the moment. The other paper referred to a cost-minimisation study by Walsh et al. (2005 ++, n=238) carried out as part of a multi-centre RCT. The study compared a nurse-led unit located on the site of (but not in) the hospital with care in the general ward. Outcomes measured included length of stay in hospital, physical functioning (measured with the Barthel Index) and destination of discharge. As in Harris et al. (2005, ++) the mean length of hospital stay was significantly longer in the intervention group (41.1 days versus 39.5 days; standard deviations 32 vs 31). Other outcomes did not significantly change (values were not published in this paper but in a paper describing the parent study by Steiner et al. 2001). The study found that initial admission costs were significantly higher in the intervention group (£7,892 vs £4,810; diff CI: +£3,082, CI: £1,161 to £5,002); costs of readmissions were lower during the period measured (6 months follow-up) £1,444 vs £1,879 (diff −435, CI: −£1,406 to −£536); but total costs were still significantly higher (£10,529 vs £7,819; diff +£2,710, CI: £518 to £4,903). Confirming the findings from Harris et al. (2005, ++), post-discharge costs were significantly lower in the intervention group but not low enough to offset the higher costs of the initial hospital and intermediate care episode. Post-discharge costs in Walsh et al. (2005 ++) referred to physiotherapist, outpatient care, primary

	and community care (including long-term care) over the period of 6 months. Authors concluded that acute hospitals might not be cost-effective settings for nurse-led intermediate care. However, they also explained that the small size of the unit and the location distant from the main hospital site contributed to higher costs. Implementing the intervention in community hospitals may be more appropriate. However, as with Harris et al., the cost perspective was focused primarily on secondary care NHS services and did not include the costs of care home and home care for example. Based on the findings from those two studies it was unclear whether the nurse-led bed based intermediate care would offset costs if a follow-up time of more than 6 months and a more comprehensive cost perspective was applied. (rec 1.4.5) EcBB2 Evidence was available from 1 UK cost-utility study (O'Reilly et al. 2008 ++), which compared multi-disciplinary post-acute care in a community hospital with multi-disciplinary care provided in general hospital. The outcome reported in this paper was health-related quality of life (measured via EQ-5D) that was transformed in quality-adjusted life years (QALYs). There was a non-significant QALY gain in the intervention group at 6 months follow-up of 0.048 (95% CI: −0.028 to 0.123, p=0.214). It was reported in the paper to the parent clinical study that there was a significant improvement in independence (measured via NEADL) in the intervention group (adjusted mean diff. 5.30; 95% CI 0.64 to 9.96) and no significant changes in carers' satisfaction or burden. There was also no significant difference in mean length of stay, which was 15 days in both groups (IQR 9 to 24/25). Mean total cost were non-significantly higher in the intervention group (mean diff £720; 95% CI: −£523 to £1,964. The bootstrapped mean incremental cost-effectiveness ratio (ICER) was £16,324 per QALY. If the decision maker was willing to pay £10,000 per QALY, then there was a 47% probability that the community hospital was cost-effective; this increased only slightly to 50% if the decision-maker was willing to pay £30,000 (rec 1.4.1). RA1: There is a moderate amount of moderate quality evidence that reablement is more effective when compared with conventional home care. Measured in terms of impact on service use, the evidence is unanimously positive. An evaluation of reablement (Dundee Council 2010 −) and 2 trials of restorative care – 1 randomised (Lewin et al. 2013, 2014 −), 1 controlled (Lewin and Vandermeulen 2010 +) – found the intervention group had fewer or no ongoing care needs including at 12-month follow-up compared with usual care. Measured in terms of the effects on quality of life and ADL/IADL performance, the evidence is broadly positive, with the exception of the findings from 1 low quality study. Glendinning et al. (2010 +) found significant improvements in health- and social care-related quality of life and Tuntland et al. 2015 (+) also showed positive health-related quality of life effects although they were non-significant. Lewin and Vandermeulen (2010 +) and Tuntland et al. (2015 +) found significant improvements in ADL and IADL performance among the intervention group. By contrast, a low quality Australian RCT (Lewin et al. 2013, 2014 −) found no difference between group

	differences on quality of life and ADL outcomes (recs 1.4.2, 1.4.3). DE1: There is a small amount of low quality evidence that a time-limited specialist home treatment service for people living with dementia helps to achieve referrers' goals. The included study (Culverwell and Milne 2010 −) found that the goals most frequently achieved were: supporting carer/care staff, avoiding hospital admissions, conduct and assessment of problems/needs, facilitating hospital discharge, supporting a transition and engaging the user with services (rec 1.4.4). DE2: There is a small amount of low quality evidence that a time-limited specialist home treatment service for people living with dementia can help to improve people's capacity to live more independently. The included study (Culverwell and Milne 2010 −) found that at 6 months follow-up 44% of people were still living in the same care environment, 37% had moved to a more supported care environment, and 19% to a less supported environment (rec 1.4.4). EcRA1 Evidence was available from 2 studies, Glendinning et al. (2010 +, n=974) and Lewin et al. (2014 ++, n=750). The England-based study (Glendinning et al. 2010) was a large prospective longitudinal study, which compared reablement offered in different local authority sites with standard home care and found that reablement had a probability to be cost-effective at 12 months of just under 100%. Findings of the sensitivity analysis showed that, in a worst-case scenario the probability that reablement was cost-effective was still 70%. Costs included those to the NHS and personal social services. Individuals' health outcomes were measured with the EQ-5D and were significantly greater in the intervention group (mean diff 0.1, 95% CI 0.02 to 0.18). Total social care costs (without the costs of reablement) were significantly lower in the reablement group than in the comparison group at 10 months (£790 vs £2,240; $p<0.001$). Total health care costs were higher in the reablement group (£3,455 vs £3,235) but this was not significant ($p>0.05$). Overall total costs at 12 months (with imputed missing values) were £7,890 (SD £5,380) in the reablement group and £7,560 (SD £6,090) in the comparison group. The matched control group differed significantly from the intervention group in terms of proportions referred from hospital, which was much greater in the reablement group. A wide range of statistical methods were applied to test differences in baseline; a sometimes low reporting quality made it difficult to understand how far other factors had been appropriately controlled for. However, sensitivity analysis for the costs of reablement and bootstrapping was applied on combined cost-effectiveness results, which increased reliability of those findings. Altogether, the study had some potentially serious limitations and findings about cost-effectiveness could not directly inform the recommendations. The other study was an RCT carried out in Australia (Lewin et al. 2014) and compared a reablement intervention, called the Home Independence Program, with standard home and community care. The population referred to older people of 65 years or above, who were using home care. The intervention had a time limit of 3 months and, in addition to delivering a strongly independence-focused approach, provided access to assistive

	technology, mobility, self-management, falls prevention, medication, continence and nutrition management programmes as well as assistance with social support. The study was a cost savings analysis which evaluated health and social care service use and respective costs. Mean total home care costs per person over the 2-year period were AU $5,833 in the reablement group vs AU $8,374 in the comparison group (p value not reported); costs of emergency visits over the 2 years were AU $686 in the reablement group vs AU $708 in the comparison group and costs of hospital admissions over the same period were AU $13,369 vs AU $13,675 (p values not reported). Total costs were lower by a factor of 0.83 in the reablement group (RR 0.83; 95% CI 0.72 to 0.99); total costs in the reablement group were AU $19,090 and AU $ 23,428 in the comparison group. The study also evaluated the number of individuals needing personal care and individuals approved for residential care (or equivalent home care package) and found, at study end, a significantly lower number in the intervention group for both outcomes (11.4% vs 34.5%; p<0.001 and 64.3% vs 56%; p=0.021). Altogether the study was of overall good quality, however, it looked at cost savings in the Australian system so that the transferability of findings on service use would need to be analysed in a UK context. Furthermore, it is important to note that the study referred to an average intervention period of 3 months whereas reablement in England is typically provided for 6 weeks (1.5 months). Additional economic analysis was carried out to address these issues. (recs 1.4.2 and 1.4.3) CR1: There is a small amount of low quality evidence that practitioners do not appropriately refer people to crisis response intermediate care services. One low quality UK study (Beech et al. 2013 −) reported views that health and social care practitioners missed opportunities to prevent hospital admissions because they neither knew about the existence nor purpose of the rapid response service. Another low quality UK paper (Oh and Warnes 2010 −) reported that health practitioners made referrals to the rapid response service simply as a means of accessing ‘free’ social care services (recs 1.4.6, 1.4..7).
Other considerations	Recommendation 1.4.1 is based on evidence statement BB4 plus guideline committee consensus, evidence statement SM5 and evidence statements EcHB1, EcHB4 and EcBB2. The evidence reported in BB4 is somewhat conflicting in the sense that practitioners endorsed bed-based services while people with experience of using them felt that the environment did not lend itself to regaining independence. The guideline committee discussed this evidence and agreed that in their experience people always prefer to use intermediate care in their own homes. Therefore they felt that even if outcomes are similar in both settings, home-based intermediate care should always be considered as the preferred option and every effort should be made to provide intermediate care there, rather than in a bed-based setting. The guideline committee felt this was corroborated by SM5, which states that more positive outcomes are achieved when intermediate care is person-centred. They reasoned that person-centred includes providing the service in the individual’s preferred setting – namely, their home. Exceptions follow in recommendation 1.4.5

	Recommendation 1.4.2 is based on evidence statement RA1 plus guideline committee consensus and EcRA1. The guideline committee felt that the evidence provided a sound basis on which to recommend that reablement should be offered when people are being considered for home care. They agreed that the evidence demonstrates better outcomes experienced by people using reablement compared with those using home care. However the guideline committee also agreed that professional judgement should be involved in deciding whether reablement is likely to benefit the individual and that this should also be taken into account. In this context 'benefit the individual' refers to improving independence. Recommendation 1.4.3 was also based on guideline committee consensus about evidence statement RA1 as well as EcRA1 and the results of economic analysis, reported in the Economic Report. Due to the strength of the evidence about the effectiveness of reablement compared with home care, the guideline committee felt that everyone should have the opportunity to benefit from reablement, even if they are already using a home care service. The GC discussed this at length and agreed that the populations (being referred for home care and already using home care) were sufficiently similar and that the recommendation being made in 1.4.3 was also highly likely to apply to those already using home care. It's worth noting that the population in the model (underpinning 1.4.3) refers to those being referred to home care but that is primarily because of how the RCT from which effectiveness data were taken was designed, not based on a rationale that people referred are more likely to benefit than those already using it. Finally, given the potential upheaval caused by introducing reablement after a long period of home care the recommendation also highlights that people's preferences should be taken into account as it may not be something they want. Recommendation 1.4.4 is based on evidence statements DE1 and DE2 as well as the expert witness for Dementia (DD). The guideline committee noted that the results of the study showed a positive impact of the service for people living with both mild-moderate and severe dementia. This evidence was reviewed following expert witness testimony (DD) which supported the view that people at all stages of dementia could benefit from reablement. In recognition of the small amount of evidence on which this recommendation is based (albeit supported by expert testimony), the guideline committee agreed to use the word 'consider'. Recommendation 1.4.5 is based on evidence statement BB4 and group discussions, supported by findings from economic analysis reported in EcBB1. Despite the agreement that home is the preferred setting for intermediate care, the guideline committee conceded that, in some circumstances, bed-based intermediate care would be a suitable option. Evidence to support this was identified in BB4, which reported a small amount of evidence that bed-based intermediate care reduces dependence on home care, compared with care in a general hospital setting. The circumstances in which it was agreed that bed-based intermediate care might be a suitable option were when the person still required bed-based

	rehabilitation to improve their confidence and strength to carry out activities of daily living. In addition to BB4 and group discussions, this recommendation was also supported by findings from economic analysis, reported in EcBB1. Recommendations 1.4.6 and 1.4.7 are both based on evidence statement CR1 plus guideline committee consensus and testimony from an expert witness (STARRS). The guideline committee felt that the evidence reported in CR1 echoed their practice experiences and they discussed specific examples of practitioners failing to refer to crisis or rapid response teams or referring to them inappropriately. The expert witness testimony led the group to also reference the importance of assessing whether someone can be supported safely in their own home via the crisis response service. Although the avoidance of a hospital admission is a key concern, the group agreed that the person's safety and the likelihood of benefiting from crisis response are also key considerations. Recommendation 1.4.7 was also developed to try and address the problem highlighted in evidence statement CR1 of practitioners failing to understand the nature and purpose of crisis response and therefore making inappropriate referrals. This was also backed up by the expert witness (STARRS), who referred to the importance of access criteria and eligibility being clearly understood by other practitioners.

Topic/section heading	**Entering intermediate care**
Recommendations	1.5.1 Discuss with the person the aims and objectives of intermediate care and record these discussions. In particular, explain clearly: • that intermediate care is designed to support them to live more independently, achieve their own goals and have a better quality of life • that intermediate care works with existing support networks, including friends, family and carers • how working closely together and taking an active part in their support can produce the best outcomes. 1.5.2 When a person starts using intermediate care, give their family and carers: • information about the service's aims, how it works and the support it will and will not provide • information about resources in the local community that can support them • opportunities to express their wishes and preferences, alongside those of the person using the service • opportunities to ask questions about the service and what it involves. 1.5.3 For bed-based intermediate care, start the service within 2 days of receiving an appropriate referral. Be aware that delays in starting intermediate care increase the risk of further deterioration and reduced independence.

Research recommendations	The Guideline Committee agreed the following research recommendation to address gaps in evidence about the optimal time after referral for starting intermediate care: Research rec 1. What is the optimal time between referral to the and starting intermediate care in terms of effectiveness and cost effectiveness and in terms of people's experiences?
Review questions	1: Home-based intermediate care 1(a) What is the effectiveness and cost effectiveness of home-based intermediate care? 1(b) What are the views and experiences of people using services, their families and carers in relation to home-based intermediate care? 1(c) What are the views and experiences of health, social care and other practitioners about home-based intermediate care? 2: Bed-based intermediate care 2(a) What is the effectiveness of bed-based intermediate care? 2(b) What are the views and experiences of people using services and their carers in relation to bed-based intermediate care? 2(c) What are the views and experiences of health, social care and other practitioners in relation to bed-based intermediate care? 7: Service models and approaches for Intermediate care and reablement 7(a) What characteristics of intermediate care and reablement service models and approaches are associated with improving outcomes for adults using these services and their families? 7(b) What do adults using intermediate and reablement care services, their carers and families consider to be the important characteristics of service models and approaches? 7(c) What do health, social care and other practitioners consider are the important characteristics of intermediate care and reablement service models and approaches?
Quality of evidence	Recommendation 1.5.1 was based on the review of bed-based intermediate care, which included 7 effectiveness studies, all of which were RCTs and judged to be mainly moderate quality. The effectiveness evidence mainly related to intermediate care and rehabilitation in hospital settings and was from a range of countries, including 2 studies from the UK. Five views and experiences provided data about the perspectives of people using bed-based intermediate care as well as practitioners. Those studies were mainly moderate quality and all were UK based. Recommendation 1.5.2 (bullet points 1, 2 and 3) was based on the home-based intermediate care review area. Overall, a good amount of evidence was located for this review, including 11 effectiveness studies, all of which were RCTs, mainly of moderate quality. Data were derived from studies from a range of countries, with just 1 from the UK. The views and experiences data on the other hand were all derived from UK studies, of which there were 7, mainly moderate or low in terms of their internal validity. The perspective of people using home-based intermediate care, their families as well as practitioners were represented. Recommendation 1.5.2 (bullet point 4) was based on the bed-based intermediate care review, which included 7 effectiveness studies, all of which were RCTs and judged to be mainly of moderate quality. The effectiveness evidence mainly related to

	intermediate care and rehabilitation in hospital settings and was from a range of countries, including 2 studies from the UK. Five views and experiences studies provided data about the perspectives of people using bed-based intermediate care as well as practitioners. Those studies were mainly of moderate quality and all were UK based. Recommendation 1.5.3 is based on evidence from review question 7 about service models and approaches to intermediate care. The quality of the evidence was mainly moderate but some studies were rated with low internal validity. The perspectives of people using intermediate care and practitioners were represented in a total of 6 views and experiences studies. Only 2 studies demonstrating the association between approaches to intermediate care and outcomes were included and the fact that these were neither systematic reviews nor controlled evaluations provides less certainty in the findings. Nevertheless, guideline committee consensus, economic analysis and testimony from the expert witness (NAIC) provided a stronger basis on which to develop recommendation 1.5.3.
Economic considerations	Recommendation 1.5.3 was informed by findings from the additional economic analysis that was carried out for nurse-led bed-based intermediate care. The Guideline Committee discussed the analysis with regard to potential cost savings linked to this form of intermediate care that were highly sensitive in regard to the length of stay in acute care. Findings from the analysis suggested that intermediate care might be only cost-effective if there was no delay from the acute setting. Current practice – as evidenced by the NAIC (2015) – includes an average delay of 3 days before people get referred to bed-based intermediate care. The guideline committee discussed the transferability of findings from the economic analysis to (bed-based) intermediate care and agreed that on economic grounds a delay of the referral to intermediate care was likely to reduce cost-effectiveness and might lead to an increase in costs. Although no economic evidence was available to inform the other recommendations, the Guideline Committee was mindful of potential costs and resource use when making the recommendations. The Guideline Committee discussed the resource implications in relation to person-centred goal-setting, which addressed cognitive, social and emotional needs. The Guideline Committee concluded that this was mainly about referring to existing support and services so that there should not be substantial resource implications.
Evidence statements – numbered evidence statements from which the recommendations were developed	BB5: There is some evidence of moderate quality that there is a lack of understanding about the objective of bed-based intermediate care and this is compounded by poor communication. A moderate quality study (Thomson and Love 2013 +) found that residential intermediate care practitioners felt that families lacked understanding about the objective of regaining independence and instead thought the patient should be 'looked after'. A low quality survey (Ariss 2014 −) reported responses from service users who were given insufficient and inconsistent information about the purpose and length of the bed-based intermediate care service. Similarly a moderate quality study (Benten and Spalding 2008 +) found that participants were dissatisfied with the lack of information received about

	intermediate care before their transfer to the unit and were not clear why they had been referred. Data also showed a lack of understanding among some practitioners. For example, in a moderate quality study (Regen et al. 2008 +) intermediate care practitioners described a lack of understanding among hospital professionals about the existence of intermediate care or how to refer to the service. Hospital professionals were also concerned about perceived risks which they associated with intermediate care. (rec 1.5.1) HB3: There is some moderate quality evidence that people experience home-based intermediate care as ending too suddenly and poor communication exacerbates negative views about this. A moderate quality study (Cobley et al. 2013 +) found service users who felt the 6-week cut off was too abrupt and often poorly managed, with little warning the service was going to end. Another moderate quality study (McLeod et al. 2008 +) of social rehabilitation found participants complained that the 6–8-week duration was too short and left them unable to cope without assistance. This is reiterated by a low quality survey (Ariss 2014 −) in which home-based intermediate care was often perceived to have been terminated too early before people felt fully recovered or independent. The moderate quality study by Townsend et al. 2006 (+) also found that few service users were fully recovered at the end of 6 weeks. Finally, Chouliara et al. (2014 +), reported practitioner views that early supported discharge services should be more flexible in relation to duration, both longer and shorter than 6 weeks, according to people's needs. (rec 1.5.2) BB5: There is some evidence of moderate quality that there is a lack of understanding about the objective of bed-based intermediate care and this is compounded by poor communication. A moderate quality study (Thomson and Love 2013 +) found that residential intermediate care practitioners felt that families lacked understanding about the objective of regaining independence and instead thought the patient should be 'looked after'. A low quality survey (Ariss 2014 −) reported responses from service users who were given insufficient and inconsistent information about the purpose and length of the bed-based intermediate care service. Similarly, a moderate quality study (Benten and Spalding, 2008 +) found that participants were dissatisfied with the lack of information received about intermediate care before their transfer to the unit and were not clear why they had been referred. Data also showed a lack of understanding among some practitioners. For example, in a moderate quality study (Regen et al. 2008 +), intermediate care practitioners described a lack of understanding among hospital professionals about the existence of intermediate care or how to refer to the service. Hospital professionals were also concerned about perceived risks which they associated with intermediate care. (rec 1.5.2) HB3: There is some moderate quality evidence about the potential effects of home-based intermediate care on family and unpaid carers, although the effectiveness evidence is conflicting. A moderate quality RCT (Crotty et al. 2008 +) found that on discharge from the service, carer strain was statistically significantly lower in the home-based rehabilitation service compared with day hospital-based rehabilitation, although the between-group difference in scores was not significant at the 3-

	month follow up. Another moderate quality RCT (Parker et al. 2009 +) found no significant difference in carer psychological wellbeing following home-based versus day hospital-based rehabilitation. Qualitative evidence emphasised the importance of addressing carers' needs in the delivery of home-based intermediate care. A moderate quality study (Townsend et al, 2006 +) found that carer education was a requirement to enable them to support the intermediate care process. A moderate quality study (Cobley et al. 2013 +) found that carers felt thrown into the carer role with insufficient support, although this was experienced by carers in the early supported discharge service as well as conventional community stroke services. (rec 1.5.2) SM3: There is a moderate amount of evidence that a clear understanding about intermediate care among other health professionals is key to ensuring that appropriate referrals are made to the service. The quality of the evidence is mainly moderate. The Ariss review (2015 −) identified challenges to the successful fulfilment of intermediate care goals which included problems of access and awareness between 'mainstream care' and intermediate care services. Staff in the Elbourne and Le May study (2015 +) said there were problems with the functioning of their team due to inappropriate referrals from local hospitals because health colleagues were not educated about the nature of intermediate care. Staff in the Nancarrow et al. study (2013 +) also said there was a need for better external marketing of intermediate care to ensure appropriate referrals and manage workload. Barton et al. (2006 +) also reported that there needs to be improved awareness of intermediate care among other health professionals, which would ensure more appropriate referrals. (rec 1.5.3)
Other considerations	Recommendation 1.5.1 was based on evidence statement BB5, which identified 2 main problems relating to a lack of information, the first being that people and families are not given information about the nature of the service to which they are being referred. The other problem stemming from a lack of information is that people and families will tend to expect the intermediate care service to provide care rather than be supporting the individual to regain or maximise independence. The guideline committee discussed the need to therefore manage people's expectations about what intermediate care is for, and what it can and cannot do. They talked about involving families in this discussion and making clear what families and carers need to do to support rehabilitation. Although the evidence statement was specifically about bed-based intermediate care the group reached consensus that the recommendation should apply to all 4 service models. Recommendation 1.5.2 is based on evidence statement HB4 and guideline committee consensus plus BB5 and HB3. In realtion to HB4 the group discussed the fact that some of this evidence is specific to cardiac and stroke patients but they felt they could extrapolate from the evidence to make recommendations for people using or requiring home-based intermediate care more generally. They noted that the evidence states that carers need to be considered in the context of delivering home-based intermediate care and, on the basis of their expertise, they agreed. However, they also felt that considerations for the carer should not be placed above the needs of the service user in deciding whether to provide home-based intermediate care. The

	group finally decided to recommend that families are provided with advice and information about the home-based intermediate care service and are also signposted to other local support services for families and carers. In realtion to BB5 the group discussed that sometimes people using intermediate care see the service as '6 weeks free care' rather than an intervention approach to support independence, which also requires the person to actively participate and work towards agreed goals. They discussed the need for a recommendation about communicating the distinctive nature of intermediate care, specifically its focus on goal-setting and building independence – the ethos of helping people to do things themselves. They agreed the recommendation applies equally across all 4 service models and not just bed-based intermediate care, on which this evidence was based. Finally, HB3 states that in delivering home-based intermediate care, family and carer needs should be considered, for example, carer education was a requirement to enable them to support the intermediate care process and that carers felt thrown into the carer role with insufficient support. The guideline committee therefore agreed that the needs and wishes of families and carers should be incorporated in the goal planning process – albeit with the consent of the person using intermediate care. Since goal planning is critical to intermediate care more broadly, the group did not want to limit the recommendation to home-based intermediate care, which was the focus of HB3. Recommendation 1.5.3 is based on evidence statement SM3 and the expert witness (NAIC). In discussing the evidence in SM3, the guideline committee agreed it would be important to try and improve and standardise the speed with which intermediate care teams respond to referrals. They also wished to clarify that requiring teams to respond within a specific time frame would depend on the referral being appropriate in the first place. In reaching agreement about the time frame, the guideline committee discussed the findings of the economic analysis, which showed that intermediate care is more cost-effective the sooner the service begins as well as the aspiration set out in the National Audit of Intermediate Care for response times to be within 2 days. The guideline committee also discussed widely known clinical knowledge about muscle deterioration in older people and the need for timely rehabilitation. They agreed to emphasise this within the recommendation itself. The committee did however realise that making this recommendation would have resource implications and would probably require a shift in funds from acute to intermediate care. They felt this would be unproblematic because this redployment of resources is already happening in many areas of England.

Topic/section heading	**Entering intermediate care continued (crisis response)**
Recommendations	1.5.4 Ensure that the crisis response can be started within 2 hours from receipt of a referral when necessary. 1.5.5 As part of the assessment process, ensure that crisis response services identify the person's ongoing support needs and make arrangements for the person's ongoing support.

	1.5.6 Establish close links between crisis response and diagnostics (for example, GP, X-ray or blood tests) so that people can be diagnosed quickly if needed.
Research recommendations	The Guideline Committee agreed the following research recommendation to address gaps in evidence about crisis response intermediate care: Research rec 3. How effective and cost-effective are crisis response services?
Review questions	3: Crisis response intermediate care 3(b) What are the views and experiences of people using services and their carers in relation to crisis response intermediate care? 3(c) What are the views and experiences of health, social care and other practitioners in relation to crisis response intermediate care?
Quality of evidence	Recommendations 1.5.4, 1.5.5, and 1.5.6 are all based on the crisis response review. Only a small amount of evidence was included in the review and it only provided low quality data about views and experiences. No effectiveness evidence was located and for this reason the guideline committee drew on expert testimony combined with group consensus to arrive at all 3 recommendations.
Economic considerations	Economic considerations referred to resource implications linked to additional capacity required in order for intermediate care services (including crisis response services) to respond to crisis within 2 hours. The Guideline Committee agreed that at the moment it could be difficult for intermediate care services to respond when several referrals were made at once. They also agreed that for rural areas it could be difficult to implement a 2-hours response. There was no economic evidence, which could have shed additional light on this issue.
Evidence statements – numbered evidence statements from which the recommendations were developed	CR1: There is a small amount of low quality evidence that practitioners do not appropriately refer people to crisis response intermediate care services. One low quality UK study (Beech et al. 2013 −) reported views that health and social care practitioners missed opportunities to prevent hospital admissions because they neither knew about the existence nor purpose of the rapid response service. Another low quality UK paper (Oh and Warnes 2010 −) reported that health practitioners made referrals to the rapid response service simply as a means of accessing 'free' social care services (recs 1.5.4, 1.5.6).
Other considerations	Recommendation 1.5.4 is based on evidence statement CR1 as well as guideline committee consensus, expert witness (STARRS) + and expert witness (NAIC). In discussions about CR1, the committee agreed that problems arise not only when referrals are made inappropriately but also when referrals are not responded to quickly enough. Given that referrals are made in the context of an urgent increase in a person's care and support needs, it is vital for the crisis response service to be initiated quickly. The guideline committee had a long discussion about the most appropriate time requirement to be included in the recommendation and took advice both from the expert witness (STARRS) and expert witness (NAIC). The group reached the crisis referral time of 2 hours by consensus.

	Recommendation 1.5.5 is based on testimony from the expert witness (STARRS) in relation to the crisis response review. The expert witness cited particular problems (for the service and the individual) when the crisis – or rapid – response service cannot refer on to other services required to provide ongoing support. This therefore led the guideline committee to agree a recommendation to attempt to address this problem. Recommendation 1.5.6 is based on evidence statement CR1 as well as guideline committee consensus and testimony from the expert witness (STARRS). Following on from discussions about the timeliness of commencing the crisis response service, the guideline committee reflected on the testimony of the expert witness (STARRS), which described the importance of links with acute care to access diagnostics. As well as identifying health conditions, this would support recommendation 1.5.5 by enabling timely planning for ongoing support services.

Topic/section heading	**Entering intermediate care continued (person-centred planning)**
Recommendations	1.5.7 When planning the person's intermediate care: • assess and promote the person's ability to self-manage • tell the person what will be involved • be aware that the person needs to give consent for their information to be shared • tell the person that intermediate care is a short-term service and explain what is likely to happen afterwards. 1.5.8 Carry out a risk assessment as part of planning for intermediate care and then regularly afterwards, as well as when something significant changes. This should include: • assessing the risks associated with the person carrying out particular activities, including taking and looking after their own medecines • assessing the risks associated with their environment • balancing the risk of a particular activity with the person's wishes, wellbeing, independence and quality of life. For recommendations on supporting people in residential care to take and look after their medicines themselves, see NICE's guidelines on managing medicines in care homes and medicines optimisation. [This recommendation is adapted from NICE's guideline on home care.] 1.5.9 Complete and document a risk plan with the person (and their family and carers, as appropriate) as part of the intermediate care planning process. Ensure that the risk plan includes:

	• strategies to manage risk; for example, specialist equipment, use of verbal prompts and use of support from others • the implications of taking the risk for the person and the member of staff. [This recommendation is adapted from NICE's guideline on home care.]
Research recommendations	The Guideline Committee did not prioritise this as an area on which to make research recommendations.
Review questions	1: Home-based intermediate care 1(a) What is the effectiveness and cost effectiveness of home-based intermediate care? 1(b) What are the views and experiences of people using services, their families and carers in relation to home-based intermediate care? 1(c) What are the views and experiences of health, social care and other practitioners about home-based intermediate care 2: Bed-based intermediate care 2(a) What is the effectiveness of bed-based intermediate care? 2(b) What are the views and experiences of people using services and their carers in relation to bed-based intermediate care? 2(c) What are the views and experiences of health, social care and other practitioners in relation to bed-based intermediate care?
Quality of evidence	Recommendations 1.5.7 was based on the home-based intermediate care review area. Overall, a good amount of evidence was located for this review, including 11 effectiveness studies, all of which were RCTs, mainly of moderate quality. Data were derived from studies from a range of countries, with just 1 from the UK. The views and experiences data on the other hand were all derived from UK studies, of which there were 7, mainly moderate or low in terms of their internal validity. The perspective of people using home-based intermediate care, their families as well as practitioners were represented. Recommendations 1.5.8 and 1.5.9 stem from discussions about the best-based intermediate care review, which included 7 effectiveness studies, all of which were RCTs and judged to be mainly moderate quality. The effectiveness evidence mainly related to intermediate care and rehabilitation in hospital settings and was from a range of countries, including 2 studies from the UK. Five views and experiences studies provided data about the perspectives of people using bed-based intermediate care as well as practitioners. Those studies were mainly moderate quality and all were UK based.
Economic considerations	Although no economic evidence was available to inform these guideline recommendations, the Guideline Committee was mindful of potential cost and resource implications when making the recommendations. They discussed that the implementation of the recommendations will require additional staff time and thus increase costs. However, they also thought that some long-term costs associated with poor quality of care or misconception about the aims of the intervention might be avoided. To ensure safe and effective practice, person-centred care, communication and

	information-sharing as recommended above should be implemented independently of the economic rationale.
Evidence statements – numbered evidence statements from which the recommendations were developed	HB4: There is some moderate quality evidence about the potential effects of home-based intermediate care on family and unpaid carers although the effectiveness evidence is conflicting. A moderate quality RCT (Crotty et al, 2008 +) found that on discharge from the service, carer strain was statistically significantly lower in the home-based rehabilitation service compared with day hospital-based rehabilitation although the between-group difference in scores was not significant at the 3-month follow up. Another moderate quality RCT (Parker et al. 2009 +) found no significant difference in carer psychological wellbeing following home-based versus day hospital-based rehabilitation. Qualitative evidence emphasised the importance of addressing carers' needs in the delivery of home-based intermediate care. A moderate quality study (Townsend et al. 2006 +) found that carer education was a requirement to enable them to support the intermediate care process. A moderate quality study (Cobley et al. 2013 +) found that carers felt thrown into the carer role with insufficient support, although this was experienced by carers in the early supported discharge service as well as conventional community stroke services. (rec 1.5.7) BB1: There is some moderate to low quality evidence about the importance of integrated working to the successful delivery of intermediate care and suggestions about how this can be improved. A low quality study (Mitchell et al. 2011 −) reported negative comments from practitioners about difficulties in working across organisational boundaries and being unfamiliar with operational systems. A moderate quality study (Chouliara et al. 2014 +) reported practitioner views that information-sharing systems needed improvement to reduce duplication of assessments. Linked with this, a low quality survey (Ariss 2014 −) reported service user complaints about a lack information-sharing resulting in repeated assessments. Findings from Chouliara et al. (2014 +) suggested integrated working could be improved through joint meetings and training. Finally, a moderate quality study (Cobley et al. 2013 +) reported that service users and carers complained about disjointed transition between early supported discharge and subsequent services. (recs 1.5.8, 1.5.9)
Other considerations	Recommendation 1.5.7 is based on evidence statement HB3 and guideline committee consensus. The guideline committee discussed the '6-week limit' referred to in the evidence and noted that some people do not need this amount of time while others need longer. They noted that the issue relates not to the timescale itself but to the management of the end of a service, including communication and continuity. The guideline committee agreed to focus on aspects of the service that it is vital for people to understand from the very beginning as well as other issues (such as consent and cultural preferences) that need to be taken into account during planning for the service. If these are addressed, the guideline committee felt confident that the problems highlighted in HB3 and witnessed through their own experiences would be addressed. Finally, the group agreed that the recommendation should apply equally to all 4 service models and not be limited to home-based intermediate care.

	Recommendations 1.5.8 and 1.5.9 are both based on discussions stemming from evidence statement BB1, although not directly linked with it. The guideline committee recognised the problems around information-sharing between intermediate care and other services, particularly in the context of assessments. This led the guideline committee to discussions concerning assessment and safety and they wished to develop recommendations in this area but recognised they would not be directly supported by the evidence. They felt that positive risk-taking is a significant gap in this guideline (and in the underpinning evidence) and therefore looked to the NICE home care guideline from where they wished to adopt and adapt recommendations about risk assessments. It was on this basis that 1.5.9 was developed and links to the home care guideline are provided with the recommendations.

Topic/section heading	**Entering intermediate care continued (agreeing goals)**
Recommendations	1.5.10 Discuss and agree intermediate care goals with the person. Make sure these goals: • are based on specific and measurable outcomes • take into account the person's health and wellbeing • reflect what the intermediate care service is designed to achieve • reflect what the person wants to achieve both during the period in intermediate care, and in the longer term • take into account how the person is affected by their conditions or experiences • take into account the best interests and expressed wishes of the person. 1.5.11 Recognise that participation in social and leisure activities are legitimate goals of intermediate care. 1.5.12 Document the intermediate care goals in an accessible format and give a copy to the person, and to their family and carers if the person agrees to this.
Research recommendations	The Guideline Committee did not prioritise this as an area on which to make research recommendations.
Review questions	1: Home-based intermediate care 1(a) What is the effectiveness and cost-effectiveness of home-based intermediate care? 1(b) What are the views and experiences of people using services, their families and carers in relation to home-based intermediate care? 1(c) What are the views and experiences of health, social care and other practitioners about home-based intermediate care 2: Bed-based intermediate care 2(a) What is the effectiveness of bed-based intermediate care? 2(b) What are the views and experiences of people using services and their carers in relation to bed-based intermediate care?

	2(c) What are the views and experiences of health, social care and other practitioners in relation to bed-based intermediate care? 4: Reablement 4(a) What is the effectiveness of reablement? 4(b) What are the views and experiences of people using services and their carers in relation to reablement? 4(c) What are the views and experiences of health, social care and other practitioners in relation to reablement?
Quality of evidence	Recommendation 1.5.10 is based on the bed-based intermediate care review, the dementia review and review question 7 about service models and approaches to intermediate care. The quality of the evidence reviewed for question 7 was mainly moderate but some studies were rated with low internal validity. The perspectives of people using intermediate care and practitioners were represented in a total of 6 views and experiences studies. Only 2 studies demonstrating the association between approaches to intermediate care and outcomes were included and the fact that these were neither systematic reviews nor controlled evaluations provides less certainty in the findings. The bed-based review included 7 effectiveness studies, all of which were RCTs and judged to be of mainly moderate quality. The effectiveness evidence mainly related to intermediate care and rehabilitation in hospital settings and was from a range of countries, including 2 studies from the UK. Five views and experiences studies provided data about the perspectives of people using bed-based intermediate care as well as practitioners. Those studies were mainly of moderate quality and all were UK based. The review of evidence about intermediate care for people living with dementia identified only 1 study, which provided evidence of effectiveness but which was rated as low quality. No data about views and experiences were located. In light of this paucity of evidence the guideline committee developed 1.5.10 by using their own expertise combined with evidence from other reviews. Recommendation 1.5.11 is based on the reablement review, in which a good amount of data were located. The 7 effectiveness studies all had good relevance to the review question but their internal validity was mixed and they included 3 low quality studies. The 6 views and experiences studies represented the perspectives of people using reablement, their families and carers and also practitioners involved in providing the service. They were of mixed quality, with 2 low quality studies, 3 moderate quality and 1 study rated as good. Recommendations 1.5.12 is based on the home-based intermediate care review. Overall, a good amount of evidence was located for this review, including 11 effectiveness studies, all of which were RCTs, mainly of moderate quality. Data were derived from studies from a range of countries, with just 1 from the UK. The views and experiences data on the other hand were all derived from UK studies, of which there were 7 – mainly moderate or low in terms of their internal validity. The perspectives of people using home based intermediate care, their families as well as practitioners were represented

Economic considerations	The Guideline Committee was mindful of potential costs and resource use when making the recommendations about person-centred service provision and on balance they felt there were likely to be long-term economic benefits linked to better quality of care.
Evidence statements – numbered evidence statements from which the recommendations were developed	BB6: There is some evidence of moderate quality that person-centred goal-setting in bed-based intermediate care could be improved. A study (Thomson and Love 2013 +) of physiotherapists' views reported that in residential intermediate care they routinely use collaborative goal-setting as a means of coping with difficult or challenging residents. Similarly, a moderate quality study (Regen et al. 2008 +) of practitioner and manager views found that they perceived intermediate care to be patient-centred and responsive. On the contrary, a study of service user experiences demonstrated that the majority of respondents were unaware of any formal assessment of their needs at admission and could not recall being involved in setting rehabilitation goals. A UK survey (Ariss 2014 −) also found that respondents did not feel staff understood their needs, which would be a barrier to person-centred goal-setting and support (rec 1.5.10). DE1: There is a small amount of low quality evidence that a time-limited specialist home treatment service for people living with dementia helps to achieve referrers' goals. The 1 included study (Culverwell and Milne 2010 −) found that the goals most frequently achieved were: supporting carer/care staff; avoiding hospital admissions; conducting an assessment of problems/needs; facilitating hospital discharge; supporting a transition; and engaging the user with services (rec 1.5.10). DE2: There is a small amount of low quality evidence that a time-limited specialist home treatment service for people living with dementia can help to improve people's capacity to live more independently. The 1 included study (Culverwell and Milne 2010 −) found that, at 6 months follow-up, 44% of people were still living in the same care environment, 37% had moved to a more supported care environment and 19% to a less supported environment. (rec 1.5.10) SM4: There is some evidence that positive outcomes are achieved when intermediate care is person-centred. The quality of the evidence is mainly moderate. The Smith et al. review (2013 +) located a small number of papers which cited patient-centredness as a characteristic associated with positive intermediate care outcomes. A review by Pearson et al. (2015 +) reported that intermediate care could be made most effective by ensuring the service user is the central focus and involving them and their carers in collaborative decision-making. Similarly, Wilson (2007 −) located a study that found higher satisfaction among people using intermediate care if they had actively participated in programme planning. (rec 1.5.10) RA7: There is a small amount of moderate and good quality evidence that reablement services should place greater emphasis on the achievement of social- and leisure-focused goals. A good quality study (Hjelle et al. 2016 ++) found that people using reablement experienced a 'new lease of life' when they were enabled to resume walks outside the home. Wilde and Glendinning (2012 +) reported complaints from people using reablement that the service should include goals focused on

	going outside the home and resuming leisure activities. (rec 1.5.11) HB2: There is some moderate to low quality evidence about the importance of integrated working to the successful delivery of intermediate care and suggestions about how this can be improved. A low quality study (Mitchell et al. 2011 −) reported negative comments from practitioners about difficulties in working across organisational boundaries and being unfamiliar with operational systems. A moderate quality study (Chouliara et al. 2014 +) reported practitioner views that information-sharing systems needed improvement to reduce duplication of assessments. Linked with this, a low quality survey (Ariss 2014 −) reported service user complaints about a lack information-sharing resulting in repeated assessments. Findings from Chouliara et al. (2014 +) suggested integrated working could be improved through joint meetings and training. Finally, a moderate quality study (Cobley et al. 2013 +) reported that service users and carers complained about disjointed transition between early supported discharge and subsequent services. (rec 1.5.12) EcHB3 There is some high quality economic evidence on the importance of self-management focused intermediate care from the area of cardiac rehabilitation. Two UK RCTs (Jolly et al. 2007 ++, n=525; Taylor et al. 2007 ++, n=104) evaluated costs and outcomes of a home-based rehabilitation programme that included the use of a self-management tool called the Heart Manual. The control groups were different between trials: in 1 trial the control group was multidisciplinary hospital-based rehabilitation (1) and in the second trial (2) it included different centre-based rehabilitation programmes. In both studies, there were no significant differences in health-related quality of life although scores were slightly worse in the intervention group (1); p=0.57. There were no significant differences in any other clinical outcomes or in psychological wellbeing; the second trial (2), which also measured acceptability (in form of attendance) found that acceptability was higher in the intervention group (p<0.001). The first study found no significant difference in mean total costs per patient in home-based intermediate care (n=48; £3,279, SD £374) compared with bed-based intermediate care (n=32; £3,201, SD £443). The second study found significantly higher mean costs of rehabilitation programme in the home-based intermediate care group: £198 (95% CI £189 to £208) vs CG £157 (95% CI £139 to £175); p<0.05. When the costs to patient were included in the analysis this cost difference was no longer significant. Findings from these 2 high quality studies suggest that home-based intermediate care with a self-management focus is as cost-effective as bed-based intermediate care without such a focus. However, this refers to cardiac patients after an acute event and transferability to other areas was less clear. (rec 1.3.11)
Other considerations	Recommendation 1.5.10 is based on evidence statements BB6, DE1, DE2, SM4, EW (DD), EcHB3 and guideline committee consensus. In light of BB6 the guideline committee discussed ways of ensuring that intermediate care would successfully promote independence and goal-setting was seen as being central to this. They agreed goal-setting should reflect the person, where they

	live and what their preferences are. Although this evidence related to bed-based intermediate care, the guideline committee felt it was a crucial element of all 4 service models so the recommendation should apply to intermediate care more broadly. On the basis of their expertise, the guideline committee suggested that it would be important for the goals to be 'SMART' so they agreed for this to stipulated. The evidence reported in DE1 and DE2, which highlighted the benefits of intermediate care for people living with dementia, also led the guideline committee to ensure that goal-setting should be done in a way that was appropriate to that population (e.g. accounting for best interests and being sensitive to different conditions). Finally, this recommendation was supported by SM4, which highlights the importance of intermediate care being person-centred; hence goal-setting should focus on the person's strengths and preferences. Recommendation 1.5.11 is based on evidence statement RA7, which emphasises the importance of addressing people's social goals as well as goals around improving their physical independence. The guideline committee noted that this is in line with the Care Act, which stipulates that all aspects of wellbeing should be addressed. The group did however recognise that social and leisure needs alone should not be the basis of a referral to intermediate care. Placing the recommendation in a section of the guideline where the person has already been referred into the service is intended to illustrate that their social and leisure goals would be established as part of the goal planning process within the intermediate care service. In other words, social and leisure goals are addressed in the broad context of all other goals but should be considered to be just as important. Finally, the group felt that the recommendation should apply to intermediate care in general, not just reablement. Recommendation 1.5.12 is also based on evidence statement HB2 and guideline committee consensus. In discussing HB2, the group agreed that one of the biggest problems linked with poor integration relates to sharing relevant information about the person. One study, contribituing to HB2, found that service users complained there was a lack information-sharing resulting in repeated assessments and another that service users and carers complained about disjointed transition between early supported discharge and subsequent services.The group discussed the difficulty of different information being kept in different places and the need for up-to-date data about a person's care and support, their preferences and their progress.

Topic/section heading	**Delivering intermediate care**
Recommendations	1.6.1 Take a flexible, outcomes-focused approach to delivering intermediate care that is tailored to the person's social, emotional and cognitive needs and abilities. 1.6.2 Review people's goals with them regularly. Adjust the period of intermediate care depending on the progress people are making towards their goals.

	1.6.3 Ensure that staff across organisations work together to coordinate review and reassessment, building on current assessment and information. Develop integrated ways of working, for example, joint meetings and training and multidisciplinary team working. 1.6.4 Ensure that specialist support is available to people who need it (for example, in response to complex health conditions), either by training intermediate care staff or by working with specialist organisations. [This recommendation is adapted from NICE's guideline on home care.]
Research recommendations	The Guideline Committee agreed the following research recommendation to address gaps in evidence about the optimum length of an intermediate care service: Research rec 5. How effective and cost-effective are repeated periods of reablement and periods of reablement that last longer than 6 weeks? The Guideline Committee also agreed the following research recommendation to address gaps in evidence about using intermediate care as a means of supporting people living with dementia: Research rec 4. How effective and cost-effective is intermediate care for supporting people living with dementia?
Review questions	5: Dementia and intermediate care or reablement 5(a) What is the effectiveness and cost-effectiveness of intermediate and reablement for people living with dementia? 5(b) What are the views and experiences of people living with dementia, their families and carers in relation to intermediate care and reablement? 5(c) What are the views and experiences of health, social care and other practitioners about intermediate care and reablement for people living with dementia?
Quality of evidence	Evidence for recommendation 1.6.1 came from the review of home-based intermediate care. Overall, a good amount of evidence was located for this review, including 11 effectiveness studies, all of which were RCTs, mainly of moderate quality. Data were derived from studies from a range of countries, with just 1 from the UK. The views and experiences data on the other hand were all derived from UK studies, of which there were 7, mainly moderate or low in terms of their internal validity. The perspectives of people using home-based intermediate care, their families as well as practitioners were represented. Recommendations 1.6.1, 1.6.2 and 1.6.4 are all based on the review of evidence for using intermediate care to support people living with dementia. The review identified only 1 study, which provided evidence of effectiveness but which was rated as low quality. No data about views and experiences were located. In light of this paucity of evidence the guideline committee invited an expert witness and also made these recommendations by using their own expertise to strengthen the small amount of evidence. Recommendation 1.6.3 is based on evidence from review question 7 about service models and approaches to intermediate care. The quality of the evidence was mainly moderate but some studies were rated with low internal validity. The perspectives of

	people using intermediate care and practitioners were represented in a total of 6 views and experiences studies. Only 2 studies demonstrating the association between approaches to intermediate care and outcomes were included and the fact that these were neither systematic reviews nor controlled evaluations provides less certainty in the findings. Nevertheless, guideline committee consensus provided a stronger basis on which to develop recommendation 1.6.3
Economic considerations	Economic evidence was available, which showed that home-based intermediate care in the form of hospital-at-home schemes could be effective for people with complex health conditions compared with acute care, but that additional costs were incurred. Generally, the guideline committee agreed that there were likely to be resource implications if intermediate care staff were providing flexible and specialist support. Additional costs could for example be linked to training. The guideline committee thus decided to derive recommendations that requested utilising existing specialist resources. The Guideline Committee discussed the resource implications in relation to person-centred goal-setting that addressed cognitive, social and emotional needs. The Guideline Committee concluded that this was mainly about referring to existing support and services so that there should not be substantial resource implications.
Evidence statements – numbered evidence statements from which the recommendations were developed	HB1: There is some moderate quality evidence that home-based intermediate care that addresses cognitive, emotional and social needs should be favoured over intermediate care that only addresses physical rehabilitation. A moderate quality RCT (Jackson et al. 2012 +) of a combined cognitive and physical rehabilitation approach for ICU survivors found the intervention improved cognitive (statistically significantly), physical and functional ability compared with usual care. A moderate quality study (McLeod et al. 2008 +) identified the importance of teaching people new skills to enable them to return to their hobbies following hospital discharge. Finally, a moderate quality study (Chouliara et al. 2014 +) found that practitioners with experience of early supported discharge (ESD) believe the service should address emotional or cognitive difficulties and that these may not be apparent before discharge. (rec 1.6.1) DE1: There is a small amount of low quality evidence that a time-limited specialist home treatment service for people living with dementia helps to achieve referrers' goals. The 1 included study (Culverwell and Milne 2010 −) found that the goals most frequently achieved were: supporting carer/care staff; avoiding hospital admissions; conducting an assessment of problems/needs; facilitating hospital discharge; supporting a transition; and engaging the user with services. (recs 1.6.1, 1.6.2, 1.6.4) HB2: There is some evidence of moderate quality that in the experience of service users, bed-based intermediate care facilities fail to promote independence, although practitioner views contradict this. A moderate quality study (Millar 2015 +) found that people in intermediate care facilities were not given the opportunity to develop independence in terms of self-medication. A UK survey (Ariss 2014 −) reported service user opinions that bed-based facilities failed to provide stimulating activities for the

	promotion of independence and also that their needs for rehabilitation were not properly understood. A moderate quality study (Benten and Spalding 2008 +) found that people who had used a bed-based intermediate care facility thought insufficient physiotherapy was provided and the small amount of occupational therapy was unrelated to the activities and challenges they would face at home. On the contrary, a moderate quality UK study (Regen et al. 2008 +) reported the views of intermediate care managers and practitioners, which endorsed the home-like environment as conducive to increasing independence and confidence. (rec 1.6.3) SM6: There is a small amount of evidence that poor integration between health and social care is a barrier to successfully implementing intermediate care. The quality of the evidence is low to moderate. The Ariss review (2015 −) found that poor collaboration between health and social care is a barrier to the fulfilment of intermediate care goals. Echoing this, Barton et al. (2006 +) identified effective partnership working between health and social services – at both operational and strategic levels – as the most important lever in facilitating the development of intermediate care in local contexts (rec 1.6.3). DE2: There is a small amount of low quality evidence that a time-limited specialist home treatment service for people living with dementia can help to improve people's capacity to live more independently. The 1 included study (Culverwell and Milne 2010 −) found that at 6 months follow-up 44% of people were still living in the same care environment, 37% had moved to a more supported care environment and 19% to a less supported environment (recs 1.6.1, 1.6.2). EcHB4 Hospital-at-home versus acute care (older people) One New Zealand RCT (Harris et al. 2005 ++, n=285) was identified as sufficiently applicable. In this study participants were referred to the hospital-at-home service either from the emergency department before they got admitted to a hospital ward or after they got admitted as part of early discharge. The majority were referred via the latter route. Overall, the study did not find significant differences between groups for any of the primary and secondary outcomes. Cognitive function did not change over time in either group: diff 0.44 (95% CI −1.38 to 0.35) measured for n=117 in hospital-at-home and n=109 in comparison group. Instrumental activities of daily living (IADL) improved in both groups (from 7.0 to 9.6) with no significant difference between them: diff 0.2 (95% CI −0.65 to 1.04); this was measured for n=214 in hospital-at-home and for n=123 in the bed-based group. Acceptability among service users and carers was significantly higher in the hospital-at-home group: the proportion of service users (carers) who rated service 'very good' or 'excellent': 83.0% vs 72.3%; p=0.05 (66.7% vs 41.4%; p=0.004). Carers' strain was significantly lower in the hospital-at-home group: 4.6 (SD 6.2) vs 6.2 (SD 3.7); p=0.02. The mean total costs per patient were significantly higher in the hospital-at-home group: NZ $6,524 vs NZ $3,525 (p<0.0001). This was due to higher cost per day of service, a longer length of hospital stay and a higher readmission rate. There was no significant difference in community care costs.

	Findings from 1 good quality study suggest that hospital-at-home intervention is significantly more costly but more acceptable to patients and carers. (rec 1.6.4)
Other considerations	Recommendation 1.6.1 is based on evidence statement HB1 as well as group consensus. The evidence statement demonstrates the importance of addressing all of a person's needs, not simply focusing on their physical needs. The committee firmly agreed with this. The guideline committee focused on Jackson et al. (2012 +) in particular and felt that the results should be treated with caution because of the lack of blinding in the study design, the small sample size and the fact that it was conducted in the US. They nevertheless agreed with the findings and felt that they were strengthened by their own supporting experience and expertise. The guideline committee also discussed the relevance of the Care Act to these issues and agreed about the importance of having a recommendation which followed the Care Act principles around wellbeing. Finally, the committee noted very similar evidence had been identified in the context of the other intermediate care service models so they agreed the recommendation should apply to intermediate care in general. Recommendation 1.6.1 is also informed by evidence statements DE1, DE2, EW (DD) and strengthened by guideline committee consensus – as is recommendation 1.6.2. The evidence statements suggested that intermediate care can achieve positive outcomes for people living with dementia. The expert witness (DD) supported this research although the testimony emphasised the need to take a flexible, outcomes-focused approach and to constantly review progress against agreed goals to see whether positive outcomes were being achieved. Although this evidence and the expert testimony related to people living with dementia, the guideline committee agreed that given the importance of taking a person-centred approach to intermediate care, this flexibility should apply to everyone using the service. They therefore agreed 1.6.1 and 1.6.2 and with 1.6.2 they wished to emphasise that this flexibility meant that for some people the service should extend beyond 6 weeks. Recommendation 1.6.3 is based on evidence statement SM6 as well as guideline committee consensus. The guideline committee discussed the problems of poor integration highlighted in SM6 and debated how they could be tackled. They noted particular problems caused for people when services are not integrated. These included poor information-sharing and duplication of assessments, which informed the development of recommendation 1.6.3. Recommendation 1.6.4 is also based on evidence statement DE1, plus expert witness (STARRS), expert witness (DD) and guideline committee consensus and EcHB4. The guideline committee agreed that practitioners working across intermediate care settings need to have an awareness of a range of specialist conditions, including dementia, and access to expertise. This recommendation was reviewed following expert witness testimony (DD) which supported the need for intermediate care services for people living with dementia to be able to access specialist support. Aware of a similar

	recommendation in the NICE home care guideline, the guideline committee agreed to adopt and adapt it for this guideline. The guideline committee also identified the need for additional research in this area to identify the most effective and cost-effective way to support people living with dementia through intermediate care.

Topic/section heading	**Delivering intermediate care (continued)**
Recommendations	1.6.5 Ensure that an intermediate care diary (or record) is completed and kept with the person. This should: • provide a detailed day-to-day log of all the support given, documenting the person's progress towards goals and highlighting their needs, preferences and experiences • be updated by intermediate care staff at every visit • be accessible to the person themselves, who should be encouraged to read and contribute to it • keep the person, (and their families and carers, as appropriate) and other staff fully informed about what has been provided and about any incidents or changes. 1.6.6 Ensure that intermediate care staff avoid missing visits to people's homes. Be aware that missing visits can have serious implications for the person's health or wellbeing, particularly if they live alone or lack mental capacity. [This recommendation is adapted from NICE's guideline on home care.] 1.6.7 Contact the person (or their family or carer) if intermediate care staff are going to be late or unable to visit. [This recommendation is adapted from NICE's guideline on home care.]
Research recommendations	The Guideline Committee did not prioritise this as an area on which to make research recommendations.
Review questions	4. Reablement 4(a) What is the effectiveness of reablement? 4(b) What are the views and experiences of people using services and their carers in relation to reablement? 4(c) What are the views and experiences of health, social care and other practitioners in relation to reablement?
Quality of evidence	Recommendations 1.6.5 was based on the review of home-based intermediate care. Overall, a good amount of evidence was located for this review, including 11 effectiveness studies, all of which were RCTs, mainly of moderate quality. Data were derived from studies from a range of countries, with just 1 from the UK. The views and experiences data on the other hand were all derived from UK studies, of which there were 7 – mainly moderate or low in terms of their internal validity. The perspectives of people using home-based intermediate care, their families as well as practitioners were represented. Recommendations 1.6.6 and 1.6.7 are both based on the reablement review in which a good amount of data were located. The 7 effectiveness studies all had good relevance to the review question but their internal validity was mixed and they included 3 low quality studies. The 6 views and experiences studies

	represented the perspectives of people using reablement, their families and carers and also practitioners involved in providing the service. They were mixed quality with 2 low quality studies, 3 moderate and 1 study rated as good.
Economic considerations	Although no economic evidence was available to inform these guideline recommendations, the Guideline Committee were mindful of potential costs and resource use when making the recommendations. There might be resource implications if additional capacity is required from intermediate care services. However, these might be offset by economic benefits linked to better quality care including reduction in A&E attendances and use of crisis services.
Evidence statements – numbered evidence statements from which the recommendations were developed	HB2: There is some moderate to low quality evidence about the importance of integrated working to the successful delivery of intermediate care and suggestions about how this can be improved. A low quality study (Mitchell et al. 2011 −) reported negative comments from practitioners about difficulties in working across organisational boundaries and being unfamiliar with operational systems. A moderate quality study (Chouliara et al. 2014 +) reported practitioner views that information-sharing systems needed improvement to reduce duplication of assessments. Linked with this, a low quality survey (Ariss 2014 −) reported service user complaints about a lack information-sharing resulting in repeated assessments. Findings from Chouliara et al. (2014 +) suggested integrated working could be improved through joint meetings and training. Finally, a moderate quality study (Cobley et al. 2013 +) reported that service users and carers complained about disjointed transition between early supported discharge and subsequent services. (recs 1.6.5) RA3: There is a small amount of low quality evidence that flexibility in terms of the timing of visits is an important aspect of reablement although this needs to be clearly communicated to people using the service. A moderate quality study of practitioner views (Rabiee and Glendinning 2011 −) highlighted that, being a dynamic process, reablement should be delivered via flexible, timely visits with the ability to adjust the content and duration at short notice. Although not contradicting this finding, a low quality survey (Ariss 2014 −) warns that any such changes to visit schedules should be clearly communicated to people to avoid negative experiences of being let down and ignored. (recs 1.6.6, 1.6.7)
Other considerations	Recommendation 1.6.5 is based on evidence statement HB2. In discussing the problems around poor integration and information-sharing, the guideline committee agreed that the main problem to be solved relates to sharing relevant information about the person. The group discussed the difficulty of different information being kept in different places and the need for up-to-date data about a person's care and support and their progress towards goals. Aware of a recommendation about record-keeping

	from the NICE home care guideline, the guideline committee agreed to adopt and adapt it for use in this guideline. Recommendations 1.6.6 and 1.6.7 are based on evidence statement RA3. The guideline committee discussed and agreed on the importance of clear communication about timing of visits and the relationship between length of visit and what the visit aimed to achieve. Timing of visits should depend on the goal of the visit and the important point in the context of intermediate care is about how the time is used to work toward agree goals rather than a strict, rigid arrangement. Nevertheless, the guideline committee recognised the importance of reliability and communication if staff are going to be late or for some reason miss the visit. They therefore agreed recommendations 1.6.6 and 1.6.7 to attempt to address the problems highlighted in RA3. Although the evidence relates to reablement, the guideline committee agreed the principles should apply across intermediate care more broadly.

Topic/section heading	**Transition from intermediate care**
Recommendations	1.7.1 Before the person finishes intermediate care, providers of intermediate care should give them information about how they can refer themselves back into the service, should their needs or circumstances change. 1.7.2 Ensure good communication between intermediate care staff and other agencies. There should be a clear plan for when people transfer between services, or when the intermediate care service ends. This should: • be documented and agreed with the person and their family or carers • include contact details for the service • include a contingency plan should anything go wrong. For recommendations on communication during transition between services, see NICE's guideline on transition between inpatient hospital settings and community or care home settings for adults with social care needs. 1.7.3 Give people information about other sources of support available at the end of intermediate care, including support for carers.
Research recommendations	The Guideline Committee agreed the following research recommendation to strengthen evidence about how to improve access and referral between services: Research rec 6. How effective and cost-effective is introducing a single point of access to intermediate care?
Review questions	6: Information, advice, advocacy, training and support for people using intermediate care and reablement and their carers 6(a) What is the effectiveness and cost effectiveness of information, advice, advocacy, training and support for people using intermediate care and reablement?

	6(b) What are the views and experiences of people using intermediate care and reablement, their families and carers about information, advice, advocacy, training and support? 6(c) What are the views and experiences of health, social care and other practitioners about information, advice, advocacy, training and support for people using intermediate care and reablement and their families and carers?
Quality of evidence	These recommendations are all based on evidence from the review about information, advocacy, advice, training and support for people using intermediate care. Only a small amount of evidence was located and the 2 studies were rated as moderate and low in terms of their internal validity. Both studies provided data about views and experiences, with no evidence of effectiveness. The small amount of evidence meant that recommendations, which stem form this review area, relied on being strengthened by guideline committee expertise and experience, as with 1.7.1 to 1.7.3.
Economic considerations	Although no economic evidence was available to inform these guideline recommendations, the Guideline Committee were mindful of potential costs and resource use when making the recommendations. The Guideline Committee discussed that the cost linked to additional time required to provide information at discharge was likely to be offset by reductions in costs linked to prevented, inappropriate A&E attendances or referrals back into the service.
Evidence statements – numbered evidence statements from which the recommendations were developed	IN2: There is a small amount of low quality evidence that poor information provision causes problems before and during transfers of care from hospital. The survey by Ariss (2015 −) reported that people experienced difficulties with discharge arrangements owing to a lack of communication with after care services and a lack of information about potential sources of support following transfer from hospital. (recs 1.7.1, 1.7.2, 1.7.3)
Other considerations	Recommendations 1.7.1, 1.7.2 and 1.7.3 are based on evidence statement IN2. Although the evidence statement is only informed by 1 low quality study, the guideline committee concurred with it and believed it reflects existing problems in practice. Therefore they agreed there should be recommendations about the information provided at the end of the intermediate care service. First, they felt it was important for people to be able to refer themselves back into the service if they felt it would benefit them in the future (1.7.1), Next, aware of the NICE guideline on transitions between hospital and the community, the guideline committee wishes to refer to the relevant recommendations which promote the principles of good communication at the transition points between services (1.7.2). Finally the guideline committee agreed with the evidence that people need to have information about other available services (or aftercare) and they also felt it was important to address carers' needs in this context as well. They therefore agreed recommendation 1.7.3.

Topic/section heading	**Training and development**

Recommendations	1.8.1 Ensure that all staff delivering intermediate care understand: • the service and what it involves • the roles and responsibilities of all team members • how it differs from other services • the ethos of intermediate care, specifically that it aims to support people to build independence • how to work collaboratively with people to agree person-centred goals • positive risk-taking. 1.8.2 Ensure that intermediate care staff are able to recognise and respond to: • common conditions, such as diabetes; mental health and neurological conditions, including dementia; frailty; stroke; physical and learning disabilities; sensory loss; and multi-morbidity • common support needs, such as nutrition, hydration, continence, and issues related to overall skin integrity • common support needs, such as dealing with bereavement and end of life • deterioration in the person's health or circumstances. [This recommendation is adapted from NICE's guideline on home care.] 1.8.3 Provide intermediate care staff with opportunities for: • observing the work of another member of staff • enhancing their knowledge and skills in relation to delivering intermediate care • reflecting on their practice together. Document these development activities and record that people have achieved the required level of competence. 1.8.4 Ensure that intermediate care staff have the skills to support people to: • optimise recovery • take control of their lives • regain as much independence as possible.
Research recommendations	The Guideline Committee also agreed the following research recommendation to strengthen the evidence about the optimum skill mix in intermediate care teams: Research rec 1. How effective and cost-effective, in terms of team structure and composition, are different approaches to providing home-based intermediate care for adults?
Review questions	4: Reablement 4(a) What is the effectiveness of reablement? 4(b) What are the views and experiences of people using services and their carers in relation to reablement? 4(c) What are the views and experiences of health, social care and other practitioners in relation to reablement? 5: Dementia and intermediate care or reablement 5(a) What is the effectiveness and cost effectiveness of intermediate and reablement for people living with dementia?

	5(b) What are the views and experiences of people living with dementia, their families and carers in relation to intermediate care and reablement? 5(c) What are the views and experiences of health, social care and other practitioners about intermediate care and reablement for people living with dementia? 7: Service models and approaches to intermediate care 7 (a) What characteristics of intermediate care and reablement service models and approaches are associated with improving outcomes for adults using these services and their families? 7 (b) What do adults using intermediate and reablement care services, their carers and families consider to be the important characteristics of service models and approaches? 7 (c) What do health, social care and other practitioners consider are the important characteristics of intermediate care and reablement service models and approaches?
Quality of evidence	Recommendations 1.8.1 and 1.8.3 are based on the evidence from review question 7 about service models and approaches to intermediate care. The quality of the evidence was mainly moderate but some studies were rated with low internal validity. The perspectives of people using intermediate care and practitioners were represented in a total of 6 views and experiences studies. Only 2 studies demonstrating the association between approaches to intermediate care and outcomes were included and the fact that these were neither systematic reviews nor controlled evaluations provides less certainty in the findings. Nevertheless, guideline committee consensus – as well as expert testimony – provided a stronger basis on which to develop these recommendations. Recommendation 1.8.2 is based on the review focused on intermediate care for people living with dementia. The review identified only 1 study, which provided evidence of effectiveness but which was rated as low quality. No data about views and experiences were located. In light of this paucity of evidence the guideline committee invited an expert witness and also made recommendations (including 1.8.2) by using their own expertise to strengthen the small amount of evidence. Recommendation 1.8.3 was based on the reablement review (as well as the service models review). The review of reablement located a good amount of data. The 7 effectiveness studies all had good relevance to the review question but their internal validity was mixed and they included 3 low quality studies. The 6 views and experiences studies represented the perspectives of people using reablement, their families and carers and also practitioners involved in providing the service. They were mixed quality with 2 low quality studies, 3 moderate quality and 1 study rated as good. Recommendation 1.8.4 is based on evidence from the reablement review in which a good amount of data were located. The 7 effectiveness studies all had good relevance to the review question but their internal validity was mixed and included 3 low quality studies. The 6 views and experiences studies represented the perspectives of people using reablement, their families and carers and also practitioners involved in providing the service.

	They were mixed quality with 2 low quality studies, 3 moderate and 1 study rated as good.
Economic considerations	Although no economic evidence was available to inform these guideline recommendations, the guideline committee were mindful of potential costs and resource use when making the recommendations. The committee agreed that there were costs linked to providing opportunities for interprofessional learning and having interdisciplinary teams. However, this was likely to be offset by better quality of care and even reduced length of stay.
Evidence statements – numbered evidence statements from which the recommendations were developed	SM1: There is a moderate amount of evidence that intermediate care teams which include a range of skills – including interdisciplinary teams – are associated with positive outcomes. The quality of the evidence is mainly moderate. Secondary analysis by Ariss (2015 −) found that increased skill mix was significantly associated with improvements in impairment scores among people using intermediate care. A literature review by Smith et al. (2013 +) found that all located papers cited 'interdisciplinary team working' as a characteristic associated with positive outcomes. Barton (2006 +) also reported that people using intermediate care appreciated when the service was delivered via well-coordinated team work. Finally, studies by Nancarrow (2013 +) and Elbourne (2015 +) emphasise that in the context of interdisciplinary team working it is important for members to have a clear understanding of everyone's roles and responsibilities. (rec 1.8.1) DE1: There is a small amount of low quality evidence that a time-limited specialist home treatment service for people living with dementia helps to achieve referrers' goals. The included study (Culverwell and Milne 2010 −) found that the goals most frequently achieved were: supporting carer/care staff; avoiding hospital admissions; conducting and assessment of problems/needs; facilitating hospital discharge; supporting a transition; and engaging the user with services (rec 1.8.2). RA4: There is some low and moderate quality evidence that the success of reablement is influenced by the team having access to certain skills and competencies. A low quality survey (Ariss 2014 −) reported that people using reablement wanted more access to physiotherapy and a low quality mixed methods study (Dundee Council, 2010 −) reported that reablement workers missed the contribution of the physiotherapist after the end of her secondment to the reablement team. A moderate quality study (Rabiee and Glendinning 2011 +) found that quick access to physiotherapy, occupational therapy and particular specialists made a big difference to the type of support that could be offered and the study also reported that ready access to equipment was fundamental to the effectiveness of reablement. (rec 1.8.3) RA6: There is some moderate and good evidence that reablement workers are fundamentally important in motivating people to achieve their goals. Rabiee and Glendinning (2011 +) reported that the ideal reablement worker is able to stand back, observe people's potential for regaining independence and provide appropriate support for them to reach potential. This is corroborated by Hjelle et al. (2016 ++) which reported user views about the importance of reablement workers in making them feel confident about performing daily activities on their own. (rec 1.8.4)

Other considerations	Recommendation 1.8.1 is based on evidence statement SM1. The group focused on the importance of inter disciplinary teams having a clear understanding of everyone's roles and responsibilities. The guideline committee felt that to promote this, all intermediate care staff should be clear about the overall objectives of their service, of how they are distinct from other services and of what they each do and each contribute. Recommendation 1.8.2 is based on evidence statement DE1 and EW (DD) plus guideline committee consensus. The guideline committee agreed that practitioners working across intermediate care settings need to have an awareness of a range of specialist conditions, including dementia, and access to relevant expertise. The testimony from the expert witness (DD) supported the need to be able to access specialist input. Aware of a recommendation in the NICE home care guideline about the need for staff to be able to recognise common conditions experienced by the population of interest, the committee agreed to adopt and adapt to this guideline. They agreed that staff working in intermediate care needed to be trained to recognise other conditions, as well as dementia, so the list was agreed by consensus. Recommendation 1.8.3 was based on evidence statement RA4 and SM1 plus guideline committee consensus. The committee discussed skill mix and competence. They also discussed how reablement teams had developed over time – often from former home care services – and the need to ensure that staff have the competences to support people in an outcomes-focused way. The most important thing is that the teams have access to relevant skills either within the team or via links with it. The group discussed competency and training of care staff to have the necessary skills around reablement, and the challenges of achieving this. They noted there is little formal training on reablement available for care staff, so learning is mainly via supervision and shadowing. The guideline committee discussed reflective practice and understanding each other's jobs as means of learning and sharing skills and increasing the team's competencies for supporting people to meet their goals. The committee agreed the recommendation should apply to all intermediate care staff. Recommendation 1.8.4 is based on evidence statement RA6. The guideline committee agreed that in light of evidence about the important role played by staff in motivating people, a recommendation was required for staff to have the skills to be able to do this. Although the evidence was specifically about reablement, the guideline committee agreed that staff in all 4 intermediate care service models should have these skills and therefore the recommendation should apply more broadly.

4 Implementation: getting started

NICE has produced tools and resources to help you put this guideline into practice.

Some issues were highlighted that might need specific thought when implementing the recommendations. These were raised during the development of this guideline. They are:

- Ensuring an integrated approach to intermediate care. Currently, the 4 service models of intermediate care tend to operate separately, delivered by different staff and funded from different budgets. Moving to a more integrated approach for planning, funding and delivery of all 4 models, including transferable assessments that are accepted across all services, would improve the experience for people using the services. However, such changes may be difficult to achieve.
- Starting bed-based intermediate care services within 2 days (and crisis response within 2 hours) of receiving an appropriate referral. Rapid provision of the right intermediate care service will benefit people using the services, and may help reduce pressure on hospital beds. However, this approach will prove challenging in light of the current financial pressures and demands on the services.
- Making sure the aims, objectives and purpose of intermediate care are understood by people using the services, their families, and professionals from the wider health and social care system. There is currently a lack of understanding that the term 'intermediate care' includes intermediate care services funded by the healthcare system and reablement services funded by social care. In addition, there is low awareness that active rehabilitation or reablement is quite different from ongoing care and support.
- Developing leadership that promotes clarity of purpose and good communication within each service, and provides guidance and support to staff. This leadership will help staff working in intermediate care services to deliver a service focused on enabling and supporting independence, and optimising wellbeing.

Putting recommendations into practice can take time. How long may vary from guideline to guideline, and depends on how much change in practice or services is needed. Implementing change is most effective when aligned with local priorities.

Changes should be implemented as soon as possible, unless there is a good reason for not doing so (for example, if it would be better value for money if a package of recommendations were all implemented at once).

Different organisations may need different approaches to implementation, depending on their size and function. Sometimes individual practitioners may be able to respond to recommendations to improve their practice more quickly than large organisations.

Here are some pointers to help organisations put NICE guidelines into practice:

1. Raise awareness through routine communication channels, such as email or newsletters, regular meetings, internal staff briefings and other communications with all relevant partner organisations. Identify things staff can include in their own practice straight away.

2. Identify a lead with an interest in the topic to champion the guideline and motivate others to support its use and make service changes, and to find out any significant issues locally.

3. Carry out a baseline assessment against the recommendations to find out whether there are gaps in current service provision.

4. Think about what data you need to measure improvement and plan how you will collect it. You may want to work with other health and social care organisations and specialist groups to compare current practice with the recommendations. This may also help identify local issues that will slow or prevent implementation.

5. Develop an action plan, with the steps needed to put the guideline into practice, and make sure it is ready as soon as possible. Big, complex changes may take longer to implement, but some may be quick and easy to do. An action plan will help in both cases.

6. For very big changes, include milestones and a business case, which will set out additional costs, savings and possible areas for disinvestment. A small project group could develop the action plan. The group might include the guideline champion, a senior organisational sponsor, staff involved in the associated services, finance and information professionals.

7. Implement the action plan with oversight from the lead and the project group. Big projects may also need project management support.

8. Review and monitor how well the guideline is being implemented through the project group. Share progress with those involved in making improvements, as well as relevant boards and local partners. Taking part in the National Audit of Intermediate Care (NAIC) will help to provide a benchmark for measuring progress and will add to the national data on intermediate care.

NICE provides a comprehensive programme of support and resources to maximise uptake and use of evidence and guidance. See our into practice pages for more information.

Also see Leng G, Moore V, Abraham S, editors (2014) Achieving high quality care – practical experience from NICE. Chichester: Wiley.

5 References

Aimonino N, Tibaldi V, Barale S et al. (2007) Depressive symptoms and quality of life in elderly patients with exacerbation of chronic obstructive pulmonary disease or cardiac heart failure: preliminary data of a randomized controlled trial. Archives of Gerontology & Geriatrics (Suppl 1) 7–12

Ariss S (2014) National Audit of Intermediate Care: patient reported experiences, 2014. Sheffield: University of Sheffield

Ariss S, Enderby P, Smith T et al. (2015) Secondary analysis and literature review of community rehabilitation and intermediate care: an information resource. Southampton: National Institute for Health Research 3(1)

Barton P, Bryan S, Glasby J et al. (2006) A national evaluation of the costs and outcomes of intermediate care services for older people: final report. Birmingham: University of Birmingham Health Services Management Centre

Beech R, Henderson C, Ashby S et al. (2013) Does integrated governance lead to integrated patient care? Findings from the innovation forum. Health and Social Care in the Community 21: 598–605

Benten J and Spalding N (2008) Intermediate care: what are service users' experiences of rehabilitation? Quality in Ageing and Older Adults 9: 4–14

Bjorkdahl A, Nilsson A, Gunnar G et al. (2006) Does a short period of rehabilitation in the home setting facilitate functioning after stroke? A randomized controlled trial. Clinical Rehabilitation 20: 1038–49

Björkdahl A, Nilsson AL, Sunnerhagen KS (2007) Can rehabilitation in the home setting reduce the burden of care for the next-of-kin of stroke victims? Journal of Rehabilitation Medicine (Stiftelsen Rehabiliteringsinformation) 39: 27–32

Chouliara N, Fisher RJ, Kerr M et al. (2014) Implementing evidence-based stroke early supported discharge services: a qualitative study of challenges, facilitators and impact. Clinical Rehabilitation 28: 370–7

Cobley CS, Fisher RJ, Chouliara N et al. (2013) A qualitative study exploring patients' and carers' experiences of early supported discharge services after stroke. Clinical Rehabilitation 27: 750–7

Crotty M, Giles LC, Halbert J et al. (2008) Home versus day rehabilitation: a randomised controlled trial. Age & Ageing 37: 628–33

Crotty M, Whitehead CH, Wundke R et al. (2005) Transitional care facility for elderly people in hospital awaiting a long term care bed: randomised controlled trial. British Medical Journal (Clinical Research Edition) 331: 1110–13

Culverwell A and Milne A (2010) Intermediate care: evaluating a specialist home treatment service. Journal of Dementia Care 18: 32–5

Dawson A, Bowes A, Kelly F et al. (2015) Evidence of what works to support and sustain care at home for people with dementia: a literature review with a systematic approach. BMC Geriatrics 15: 59

Dixon S, Nancarrow SA, Enderby PM et al. (2015) Assessing patient preferences for the delivery of different community-based models of care using a discrete choice experiment. Health Expectations 18: 1204–14

Dundee City Council and Tayside NHS (2010) Home care enablement service: Evaluation. Dundee: Dundee City Council

Elbourne HF and le May A (2015) Crafting intermediate care: one team's journey towards integration and innovation. Journal of Research in Nursing 20: 56–71

Fjaertoft H, Indredavik B, Magnussen J et al. (2005) Early supported discharge for stroke patients improves clinical outcome. Does it also reduce use of health services and costs? One-year follow-up of a randomized controlled trial. Cerebrovascular Diseases 19: 376–83

Garåsen H, Windspoll R, Johnsen R (2007) Intermediate care at a community hospital as an alternative to prolonged general hospital care for elderly patients: a randomised controlled trial. BioMed Central Public Health 7: 68

Garåsen H, Windspoll R, Johnsen R (2008) Long-term patients' outcomes after intermediate care at a community hospital for elderly patients: 12-month follow-up of a randomized controlled trial. Scandinavian Journal of Public Health 36: 197–204

Gethin-Jones S (2013) Focus on the micro-relationship in the delivery of care. British Journal of Healthcare Assistants 7: 452–5

Ghatorae H (2013) Reablement in Glasgow: quantitative and qualitative research. Glasgow: Glasgow City Council

Glasby J, Martin G, Regen E (2008) Older people and the relationship between hospital services and intermediate care: results from a national evaluation. Journal of Interprofessional Care 22: 639–49

Glendinning C, Jones K, Baxter K et al. (2010) Home care re-ablement services: investigating the longer-term impacts (prospective longitudinal study). York: Social Policy Research Unit, University of York

Herfjord JK, Heggestad T, Ersland H et al. (2014) Intermediate care in nursing home after hospital admission: a randomized controlled trial with one year follow-up. BMC Research Notes 7: 889

Hjelle KM, Tuntland H, Førland O et al. (2016) Driving forces for home-based reablement; a qualitative study of older adults' experiences. Health and Social Care in the Community 24

Hoffmann T and Tooth L (2004) Patient perceptions of the quality of information provided in a hospital stroke rehabilitation unit. British Journal of Occupational Therapy 67: 111–17

Inglis SC, Pearson S, Treen S et al. (2006) Extending the horizon in chronic heart failure: effects of multidisciplinary, home-based intervention relative to usual care. Circulation 114: 2466–73

Jackson JC, Ely EW, Morey MC et al. (2012) Cognitive and physical rehabilitation of intensive care unit survivors: results of the RETURN randomized controlled pilot investigation. Critical care medicine 40: 1088–97

Kalra L, Evans A, Perez I et al. (2005) A randomised controlled comparison of alternative strategies in stroke care. Health Technology Assessment 9(18)

Lewin G, Allan J, Patterson C, et al. (2014) A comparison of the home-care and healthcare service use and costs of older Australians randomised to receive a restorative or a conventional homecare service. Health and Social Care in the Community 22: 328–36

Lewin G, De San Miguel K, Knuiman M et al. (2013) A randomised controlled trial of the Home Independence Program, an Australian restorative home-care programme for older adults. Health and Social Care in the Community 21: 69–78

Lewin G and Vandermeulen S (2010) A non-randomised controlled trial of the Home Independence Program (HIP): an Australian restorative programme for older home-care clients. Health and Social Care in the Community 18: 91–9

Mahomed NN, Davis AM, Hawker G et al. (2008) Inpatient compared with home-based rehabilitation following primary unilateral total hip or knee replacement: a randomized controlled trial. Journal of Bone & Joint Surgery – American Volume 90: 1673–80

McLeod E, Bywaters P, Tanner D et al. (2008) For the sake of their health: older service users' requirements for social care to facilitate access to social networks following hospital discharge. British Journal of Social Work 38: 73–90

Millar AN, Hughes CM, Ryan C (2015) "It's very complicated": a qualitative study of medicines management in intermediate care facilities in Northern Ireland. Biomed Central Health Services Research 15: 216

Mitchell F, Dobson C, McAlpine A et al. (2011) Intermediate care: lessons from a demonstrator project in Fife. Journal of Integrated Care 19: 26–36

Nancarrow SA, Booth A, Ariss S, et al. (2013) Ten principles of good interdisciplinary team work. Human Resources for Health 11(19)

Oh KM and Warnes AM (2010) A nurse-led rapid response service for frail older people: an assessment. British Journal of Community Nursing 15: 333–40

Oh KM, Warnes AM, Bath P (2009) Effectiveness of a rapid response service for frail older people. Nursing Older People 21: 25–31

Parker SG, Oliver P, Pennington M et al. (2009) Rehabilitation of older patients: day hospital compared with rehabilitation at home. A randomised controlled trial. Health Technology Assessment 13(39)

Pearson M, Hunt H, Cooper C et al. (2015) Providing effective and preferred care closer to home: a realist review of intermediate care. Health & social care in the community 23: 577–93

Rabiee P and Glendinning C (2011) Organisation and delivery of home care re-ablement: What makes a difference? Health and Social Care in the Community 19: 495–503

Regen E, Martin G, Glasby J et al. (2008) Challenges, benefits and weaknesses of intermediate care: results from five UK case study sites. Health & Social Care in the Community 16: 629–63

Smith T, Harrop D, Enderby P et al. (2013) Exploring differences between different intermediate care configurations: a review of the literature. Sheffield: Sheffield Hallam University, University of Sheffield

Stenvall M, Olofsson B, Nyberg L, et al. (2007) Improved performance in activities of daily living and mobility after a multidisciplinary postoperative rehabilitation in older people with femoral neck fracture: a randomized controlled trial with 1-year follow-up. Journal of Rehabilitation Medicine 39: 232–8

Thomson D and Love H (2013) Exploring the negative social evaluation of patients by specialist physiotherapists working in residential intermediate care. Physiotherapy 99: 71–7

Thorsen AM, Widen Holmqvist L, von Koch L (2006) Early supported discharge and continued rehabilitation at home after stroke: 5-year follow-up of resource use. Journal of Stroke and Cerebrovascular Diseases 15: 139–43

Tinetti ME, Charpentier P, Gottschalk M et al. (2012) Effect of a restorative model of posthospital home care on hospital readmissions. Journal of the American Geriatrics Society 60: 1521–6

Townsend J, Godfrey M, Moore J (2006) Careful thoughts: recognising and supporting older carers in intermediate care. Research Policy and Planning 24: 39–52

Tuntland H, Aaslund MK, Espehaug B et al. (2015) Reablement in community-dwelling older adults: a randomised controlled trial. BMC Geriatrics 15(145)

Wilde A and Glendinning C (2012) ‘If they’re helping me then how can I be independent?’ The perceptions and experience of users of home-care re-ablement services. Health and Social Care in the Community 20: 583–90

Wilson A, Richards S, and Camosso-Stefinovic J (2007) Older people's satisfaction with intermediate care: a systematic review. Reviews in Clinical Gerontology 17: 199–218

Wong WP, Feng J, Pwee KH et al. (2012) A systematic review of economic evaluations of cardiac rehabilitation. MC Health Services Research 12(243)

Young J, Green J, Forster A et al. (2007) Postacute care for older people in community hospitals: a multicenter randomized, controlled trial. Journal of the American Geriatrics Society 55: 1995–2002

Ytterberg C, Thorsen AM, Liljedahl M et al. (2010) Changes in perceived health between one and five years after stroke: a randomized controlled trial of early supported discharge with continued rehabilitation at home versus conventional rehabilitation. Journal of the Neurological Sciences 294: 86–8

6 Related NICE guidance

To find out what NICE has said on topics related to this guideline, see our web pages on:

Home care: delivering personal care and practical support to older people living in their own homes: NICE guideline (NG21).

Older people with social care needs and multiple long term conditions NICE guideline (NG22)

Transition between inpatient hospital settings and community or care home settings for adults with social care needs NICE guideline (NG27)

Older people – independence and mental wellbeing NICE guideline (NG32)

Transition between inpatient mental health settings and community and care home settings NICE guideline (NG53)

Acute medical emergencies in adults and young people in over 16s: service delivery and organisation NICE guideline. In development.

Service user and carer experience NICE guideline. Publication expected January 2018.

7 Contributors and declarations of interests

Members of the Committee and other contributors to the guideline declared any relevant interests in line with the conflicts of interest policy.

The Guideline Committee

Kate Burgess

Commissioning, Policy & Information Manager, Lancashire County Council

Sarah Cambridge

Principal Occupational Therapist, Devon County Council

Dee Christie

Chair of Guideline Committee. Retired – previously Operations Manager, Independent Living, West Sussex County Council

Pam Enderby

Emeritus Professor, Community Rehabilitation, University of Sheffield

Antoinette Foers

Carer

Rosa Hui

Person using services. Director of Bristol & Avon Chinese Women's Group

Lisa Langford

Community Health and Social Care Occupational Therapist, Gloucestershire Care Services NHS Trust

Marion Lockett

Reablement Team Manager – Mid Surrey, Surrey County Council

John Murray

Person using services

Andrew Nwosu

Regional Allied Health Professions Lead, NHS England (London region)

Caroline Ryder-Jones

Occupational Therapy Clinical Lead – Dementia Reablement, Tees, Esk and Wear Valleys NHS Foundation Trust

Laura Stuart-Neil

Lead for Allied Health Professionals & Quality Improvement, NELFT NHS Foundation Trust. Formerly Frailty Programme Manager, UCL Partners

Kathleen Sutherland-Cash
Person using services. Equalities Consultant, Start Ability Services

Terence Turner
Owner and Chairman, Everycare (MK & Beds) Limited

Claire Waddell
Clinical Manager and Clinical Lead, Southwark Enhanced Rapid Response Team

Phillip Whitehead
Research Fellow, University of Nottingham

Co-opted members

The following people were not full members of the guideline committee but were co-opted onto the group for 1 or more meetings to provide expert input to developing recommendations:

Eileen Burns
Consultant Physician, Medicine for the Elderly and President, British Geriatrics Society

NICE Collaborating Centre for Social Care technical team

A technical team at the NICE Collaborating Centre for Social Care was responsible for this guideline throughout its development. It prepared information for the guideline committee, drafted the guideline and responded to consultation comments.

Amanda Edwards
Director

Beth Anderson
Senior Lead

Jennifer Francis
Lead Reviewer

Zenette Abrahams
Project Manager

Marjorie Edwards
Project Manager (December 2014 to December 2015)

Irene Kwan
Reviewer

Annette Bauer
Economist

David Roth
Research Assistant

Ted Barker
Research Assistant

Paul DS Ross
Senior Information Specialist (Lead) (05/12/14 – 04/07/17)

Naila Dracup
Information Specialist (05/12/14 - 20/08/15)

Nina Kennedy
Information Specialist (14/09/15 – 08/11/15)

Caroline Coomber
Information Specialist (09/03/16 – 30/04/16)

Mavis Taylor
Project Co-ordinator

Joanna Lenham
Implementation Lead

NICE social care team

Fiona Glen
Programme Director – Health and Social Care Quality Programme

Jane Silvester
Associate Director

Justine Karpusheff
Guideline Programme Manager

Nick Staples

Guideline Project Manager

Danielle Conroy

Guideline Coordinator

Peter O'Neill

Technical Lead

Sarah Richards

Economist

Helen Jaques, Leonie Gregson

Editors

Declarations of interests

The following members of the Guideline Development Group made declarations of interest. All other members of the Group stated that they had no interests to declare.

Committee member	Interest declared	Type of interest	Decision taken
Andrew Nwosu	Directorship of a consultancy company, limited by shares (AB Therapy services) this company has in the past worked with both social care and health sector providers. Within the social care sector provided training for staff around reablement, within the health sector on a consultancy basis for NHSIQ. However the company's main contracts are within the private sector (Centrica) and are in the realm of ergonomics/biomechanics so do not compromise the applicant in respect of the current guideline consultations.	Personal financial (non-specific)	No action needed
Dee Christie	Clinical Advisor to Care Quality Commission	Personal financial (non-specific)	No action needed

Dee Christie	NICE Fellow	Personal non-financial (non-specific)	No action needed
Pamela Enderby	Received royalties from five books related to outcome measurement and assessment.	Personal financial (non-specific)	No action needed
Pamela Enderby	On the steering committee of NAIC. I have no income from this and possibly no other personal benefits.	Personal non-financial (non-specific)	No action needed
Pamela Enderby	Trustee of Royal College of Speech an Language Therapists	Personal non-financial (non-specific)	No action needed
Pamela Enderby	Member of Society of Research in Rehabilitation	Personal non-financial (non-specific)	No action needed
Pamela Enderby	Member of British Society of Rehabilitation	Personal non-financial (non-specific)	No action needed
Pamela Enderby	Received funding from NIHR to undertake research related to intermediate care	Personal financial (non-specific)	No action needed
Rosa Hui	Member of Centre for Ageing Better Inequalitites Advisory Group.	Personal non-financial (non-specific)	No action needed
Kathleen Sutherland-Cash	Owner of a business and works as an Equalities Consultant providing information, support and advice to disabled people, people with long term health conditions, statutory, voluntary and private sector organisations.	Personal financial (non-specific)	No action needed
Kathleen Sutherland-Cash	Responsible for hosting a national Work Advice Service for the Association of Disabled Professionals and their Disabled Entrepreneurs Network. Work has, at times, involved challenging statutory authorities (NHS, DWP and local councils) to ensure that disabled people's needs are met appropriately and policies and procedures are being correctly applied. Involved in supporting many disabled people to make	Personal non-financial (non-specific)	No action needed

	formal complaints about inappropriate health/social care practice and decisions. This is unpaid.		
Kathleen Sutherland-Cash	Asked to speak on breaking down the barriers to effective person centred support at Dementia 2020 in April 2016 and at Palliative & End of Life Care: Supporting Patient Choice in October 2016. This is unpaid.	Personal non-financial (non-specific)	No action needed
Kathleen Sutherland-Cash	She has undertaken some work with SCIE in relation to the local implementation of the NCCSC guideline on transition between inpatient hospital settings and community or care home settings for adults with social care needs, and is a member of their Co-Production, Equalities and Human Rights Steering Group.	Personal financial (non-specific)	No action needed
Kathleen Sutherland-Cash	Also undertaken published research into the principles of the social model of disability in relation to people with learning difficulties (‘learning disabilities’) and their life stories.	Personal non-financial (non-specific)	No action needed
Laura Stuart-Neil	At the commencement of the guideline Laura worked for UCL Partners where she managed a portfolio of projects related to older people, including some with a reablement or independence focus. These projects involved working with health, social care and third sector organisations often using quality improvement methodology. Some of this work was funded by research grants.	Non-personal financial (non-specific)	No action needed
Laura Stuart-Neil	Laura co-authored 'I'm still me: a narrative for co-ordinated support for older people' published in	Personal non-financial (non-specific)	No action needed

	December 2014 and discussed the results of this research via blogs and twitter.		
Phillip Whitehead	Previously held an NIHR Doctoral Research Fellowship focusing on 'Occupational Therapy in Homecare Reablement'. Author of publications (systematic review and randomised controlled trial) on reablement which are likely to be of relevance to the committee.	Personal non-financial (non-specific)	No action needed
Phillip Whitehead	Publications: Whitehead, PJ, Walker, MF, Parry, RH, Latif, Z, Mcgeorge, ID and Drummond, AER, 2016. Occupational Therapy in HomEcare Re-ablement Services (OTHERS): results of a feasibility randomised controlled trial BMJ Open. 6, e011868 Whitehead PJ, Worthington EJ, Parry RH, Walker MF and Drummond AER, 2015. Interventions to reduce dependency in personal activities of daily living (ADL) in community-dwelling adults who use homecare services: A systematic review. Clinical Rehabilitation. 29(11), 1064-76	Personal non-financial (non-specific)	No action needed
Phillip Whitehead	Member of Council – Society for Research in Rehabilitation.	Personal non-financial (non-specific)	No action needed
Phillip Whitehead	Member of Research and Development Board – Royal College of Occupational Therapists.	Personal non-financial (non-specific)	No action needed

8 Glossary and abbreviations

Glossary

Audiology

Audiology is a healthcare science encompassing hearing, tinnitus and balance. In general, use of the term audiology refers to audiology departments and hearing care providers and “audiologist” refers to audiologists, clinical scientists and Hearing Aid Dispensers (HADs).

Barthel Index

‘The Barthel Index (BI) consists of 10 items that measure a person’s daily functioning, particularly the activities of daily living (ADL) and mobility. The items include feeding, transfers from bed to wheelchair and to and from a toilet, grooming, walking on a level surface, going up and down stairs, dressing, continence of bowels and bladder. The BI can be used to determine a baseline level of functioning and can be used to monitor improvements in activities of daily living over time.’ (Kings College London)

Dementia

Dementia is not a disease, but a collection of symptoms that result from damage to the brain. These symptoms can be caused by a number of conditions. The most common cause of dementia is Alzheimer's disease. Common symptoms of Alzheimer's disease and other forms of dementia include:

- memory loss – especially problems with memory for recent events, such as forgetting messages, remembering routes or names, and asking questions repetitively
- increasing difficulties with tasks and activities that require organisation and planning
- becoming confused in unfamiliar environments
- difficulty finding the right words
- difficulty with numbers and/or handling money in shops
- changes in personality and mood
- depression (from NHS website)

EUROQOL 5D (EQ-5D)

The EQ-5D™ Index is a standardised measure of health status developed by the EuroQol Group in order to provide a simple, generic measure of health for clinical and economic appraisal. (From

NHS website: Patient Reported Outcome Measures (PROMs) in England - 2011-2012, Special topic, EQ-5D™ Index analysis)

Katz Index

The Katz Index of Independence in Activities of Daily Living is 'a tool for assessing a patient's ability to perform activities of daily living in the areas of bathing, dressing, toileting, transferring, continence, and feeding.' (online Medical Dictionary)

Nottingham Extended Activities of Daily Living Scale

The Nottingham Extended ADL scale is a 22 item questionnaire developed to assess stroke patients living in the community. (Nouri FM and Lincoln NB (1987) An extended activity of daily living scale for stroke patients. Clin Rehab 1: 301–5)

Podiatry

Podiatrists, also known as chiropodists, 'treat a wide variety of foot and lower limb abnormalities, from corns, calluses and ingrown toenails through to arthritis, diabetic ulcers and sports injuries.' (NHS website)

Restorative care / restorative model of home care

Restorative care is a term sometimes used to describe reablement (NICE guideline: Intermediate care final scope)

Temporary accommodation

Under the terms of Part 7 of the 1996 Housing Act, temporary accommodation is accommodation provided by a local authority under its 'Interim duty to accommodate in case of apparent priority need' while enquiries are made into their application.

Please see the NICE glossary for an explanation of terms not described above.

Please see the NICE glossary for an explanation of terms not described above.

Abbreviations

Abbreviation	Term
AHSN	Academic Health Science Network
AMPS	Assessment of Motor and Process Skills
ANOVA	Analysis of variance, which is a statistical tool for comparing the responses in two or more data-sets
COPD	Chronic Obstructive Pulmonary Disease

DWP	Department of Work and Pensions
FIM	Functional Independence Measure
GMW	General Medical Ward
IAM	Instrumental Activity Measure
ICU	Intensive Care Unit
NEADL	Nottingham Extended Activities of Daily Living
NIHR	National Institute for Health Research
OECD	Organisation for Economic Co-operation and Development
PRISMA	Preferred Reporting Items for Systematic Reviews and Meta-Analyses
STARRS	Short-Term Assessment, Rehabilitation and Reablement Service
TUG test	Timed Up and Go test
UCL	University College London

About this guideline

What does this guideline cover?

The Department of Health (DH) asked the National Institute for Health and Care Excellence (NICE) to produce this guideline on Intermediate care including reablement (see the scope).

The recommendations are based on the best available evidence. They were developed by the Guideline Committee – for membership see section 7.

For information on how NICE social care guidelines are developed, see Developing NICE guidelines: the manual

Other information

We have developed a pathway and information for the public and tools to help organisations put this guideline into practice. They are available on our website.

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