Building in evidence: reviewing housing and occupational therapy

Darren Awang
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Executive Summary

This review is intended to provide a usable resource for occupational therapy (OT) practitioners within housing although much of the material will also be valuable to housing professionals, OT educators, students, policy makers, service users and those with a special interest in housing adaptation work. The reviewed material covers a wide range of relevant published and unpublished literature related to OT in housing. Critical perspectives are offered and practice implications are highlighted so that readers can judge for themselves the value of the work and its importance to their particular needs or circumstances.

Who will use the Review?

Those with an interest in housing provision will find the evidence presented useful in raising awareness of, and supporting the need for, effective housing solutions for older people, disabled children, disabled adults and their carers.

It is anticipated that the review will be valuable to a wide range of individuals and agencies including housing providers, environmental health officers, access and grant officers and others who have an interest in or responsibility for providing accessible environments.

OT students and those contemplating literature reviews may be able to utilise the methodology adopted as a basis within their studies. They may find the section on search strategies for traditional and grey material helpful especially in the application of critical appraisal frameworks to ensure that a systematic approach to inquiry is maintained.

The section on critiquing adaptation leaflets/booklets (see also Appendix 3 page 111) provides a valuable tool for social services and housing OTs who are regularly involved in information production for service users. The checklist will enable them to pinpoint the strengths and limitations of service leaflets related to the adaptation process.

The review offers a comprehensive range of recommendations that are intended to influence the development of a research strategy and action plan for the College of Occupational Therapists Specialist Section in Housing (COTSSIH), in accordance with COT’s Research and Development Strategic Vision and Action Plan (Ilott and White 2001, www.cot.org.uk).

About the Review

The 12 month review took place between July 2002 and June 2003. The aims were to:

- Identify and appraise the quality of selected published and grey literature relating to housing and occupational therapy
- Use social model of disability values to determine the extent of user-centred work
- Provide an overview of the current evidence base that could assist OTs working in the field of housing and adaptation work
- Identify where work has occurred and where gaps in knowledge exist
- Identify research priorities in housing and OT and provide recommendations to assist in the production of a research strategy for COTSSIH
Methods Adopted

- Keywords and terms were initially produced. Strategies for published material included hand, electronic database and bibliographic searches, contact with lead authors and the identification of relevant websites using web search engines
- Grey literature was identified using creative strategies. These included:
  - Writing to OT and housing focused publications to appeal for review information
  - Conference presentations and networking
  - Appeals were made using flyers to target COTSSIH members
  - OT housing educators' E-mail distribution lists
  - Contacting adaptation/equipment suppliers and manufacturers
  - Utilising COT librarians to assist with dissertation searches
  - Using the project steering group as a resource
- Material was screened using inclusion and exclusion criteria. The quality of the literature identified was determined by using critical appraisal checklists developed by Taylor (2002) and the Centre for Health Information Quality (2002)

Results

- In total over 130 publications, grey literature items and enquiries related to the research were identified or obtained. Of these 35 individual items have been presented within the review. These include 20 published works and 15 items of grey literature
- Of the published work only eight OTs were principal authors/researchers. Overall, when considering the wider body of work that was examined, it is clear that only a minority of researchers were from an OT background
- Grey literature included two Masters dissertations, an unpublished local authority report, practice/design guides and eight adaptation leaflets/booklets. Most leaflets were of good quality with regard to accuracy, clarity and relevance. However recurrent problems included lack of review dates to ensure that information did not become out-dated. Presentation problems were evident such as producing too much text within leaflets or designing similar looking leaflets aimed at different tenures that were easily confused. Most material had not been produced in consultation with service users and there was a lack of explicit opportunity to feedback on the resources to prevent repetition of problems

Key Review Themes

The evidence base

- There was a growing body of evidence to show that adaptations both major and minor were effective interventions and provided a substantial means of enabling older people, disabled adults and disabled children to remain independent at home (Heywood 2001, Oldman and Beresford 1998, Grisbrooke 2003 and Payne 1998). Good quality adaptations had a strong positive impact on the quality of life experienced by service users and this improvement went beyond the physical aspects of self-care or access needs. Adaptations appeared to have positive effects on health (physical and mental), productivity, leisure/play and social aspects of individuals
- Although the number of studies focusing on the financial effectiveness of adaptations was
limited, the evidence produced appeared strong in demonstrating that adaptations provided a financially sound investment compared with formal care provision (Heywood 2001). However it needed to be recognised that adaptation provision did not necessarily diminish the need for care to complement adaptation usage (Nocon and Pleace 1998)

- There were ongoing difficulties within the adaptation process caused by inadequate funding, lack of appropriately qualified professionals and other housing support staff, variation in choices available to service users, tenure inequalities, interagency communication, communicating ideas to users, variable information and feedback strategies, support mechanisms, poor assessment and ill-considered recommendations leading to poor adaptation outcomes. These well-documented difficulties were recurrent within the literature

**Standardised outcome measures and evaluation**

- Studies that measured outcomes relating to performance and independence using standardised methods were limited. The uses of the *Canadian Occupational Performance Measure (COPM)* and the *Community Dependency Index (CDI)* were apparent and their use in providing evidence of successful outcomes appeared encouraging (Johnson 1998, Stewart and Neyerlin-Beale 2000)

- A theme that emerged strongly was the question of when post installation evaluation should take place and what methods might be most appropriate for longer-term evaluation (Office of the Deputy Prime Minister [ODPM] 2003a, Grisbrooke 2003 and Chamberlain et al 2001)

**User groups and under-researched groups**

- User groups were also identified as a positive means of enabling users to participate in the delivery of services (Awang 2002a, Baldwin 2003 and ODPM 2003a)

- Research relating to the needs of minority ethnic groups as service users appeared limited

- There appeared to be a low profile for service users with learning disabilities and sensory impairments

- There were opportunities to continue to research the views of children in a creative way (Oldman and Beresford 1998)

- Unmet needs appeared to recur as a theme within studies, due to rationing of services (O’Brien 2003)

**Theoretical underpinnings**

- Professional attitudes were also highlighted as needing to be sensitive to service users needs, with a growing emphasis on adopting social model of disability approaches and philosophies to guide policy and practice (Nocon and Pleace 1998)

- There was criticism regarding basic assessment skills that led to poor adaptation outcomes for users (Heywood 2001)

- Few studies articulated the use of underpinning OT theory and models although some were beginning to identify the requirement to widen the focus of accessibility and adaptation provision to 'occupation', health and well-being

- There was a growing evidence base related to specific design philosophies and principles such as universal design and lifetime homes that could potentially reduce the need for retrospective adaptations. These appeared to tie in with social model of disability values and social role valorisation principles
User-Centred Research

- Where research had been undertaken, part of the remit for the review was to establish the degree of user-centred approaches. The review revealed that most studies aimed to provide a service user perspective. However service users tended to be the focus of the research rather than being integral to the full research process. As a result, participation levels of service users in setting the research agenda were low.
- Only a few studies utilised disability/user groups in the commissioning and execution of research projects (Nocon and Pleace 1998 and Northern Ireland Housing Executive 2003). It was recognised that a service user representative, for example, would have provided a valuable perspective on the review's Steering Group. This was identified as a limitation of this review.

Comparison of Research Methodologies

- In general, methodological approaches were not clearly articulated within studies although those identified included phenomenology, participatory action research, collaborative research and experimental approaches.
- Methods included surveys (postal, telephone and desk-top), face-to-face interviews, focus groups, repeated measure designs, case studies, user trials and audits.
- Several studies utilised more than one method although mixed use of quantitative and qualitative methods was not always fully justified.
- Problems in identifying and obtaining access to participants appeared to be a recurrent theme making the task of gaining appropriate samples difficult for researchers. Lack of integration between information management systems appeared to create barriers to obtaining research participants.

Recommendations

It should be recognised that in outlining the following recommendations all occupational therapists have a duty under the Code of Ethics and Professional Conduct for Occupational Therapists (COT 2000) to be consumers of research at an individual level. As a result, the recommendations have been presented within five themes which will have relevance to all social services and housing practitioners. It is their responsibility to be aware of, implement and contribute to the development of the evidence base. This section has integrated aspects of building research capacity as part of COTSSIH's Research and Development (R&D) strategy and also promotes the pursuit of evidence-based practice as a central component of continuing professional development (CPD).

1 Research priorities

- Research needs to continue to identify the benefits of housing and adaptation work for users in terms of quality of life, well-being and financial advantages. A key focus for future research should relate to the positive impact that housing adaptations have on the broader aspects of health and well-being of individuals. Given that adaptation resources are linked with housing requirements via housing grants such as Disabled Facilities Grants (DFGs) as opposed to health needs, work in this area should be considered a top priority. In December 2003 John Spellar, Minister with responsibility for the Department for Social
Development, announced the abolition of means-testing for parents of disabled children in Northern Ireland (Department for Social Development 2003, O’Brien 2004). Part of the rationale for this was to link the abolition to exemption from charges for other children’s health services. This change could initiate a fundamental review of the role of the DFG. Measures of intervention outcomes need to take into account not only areas of self-care but also those related to play, social development, leisure and productivity/retirement activities. The development of creative methods should be encouraged

- Occupational therapists need to view the wider social implications within their assessments and practice that impact on service users. These relate to social model of disability values, citizenship, choice and control concerns and accessible housing as an individual right
- The development of transparent practice standards covering the full adaptation process, requires significant attention to ensure parity of services for service users and enable minimum standards to be achieved. This would also enable users to challenge decisions that are made. In order to do this, the development of guidance on the provision of service user information is a key area for OT services to share information on creative strategies and practices currently in use
- Areas requiring a higher research profile include minority ethnic groups, people with sensory disabilities, learning disabilities and mental health problems. Clear housing adaptation and wider benefits need to be established. In addition, the potential role of user groups as a force for reform within service provision, requires further exploration. This may initially be investigated within a CPD framework offering opportunities for personal and service development. The difficulties associated with unmet needs require significant exploration as resources for housing adaptations continue to be problematic
- It is recommended that COTSSIH in conjunction with COT, targets research projects that produce information for the general public as well as providing good quality evidence on which to base practice

2 Developing the theory base
- The theoretical basis for OT in this area requires a degree of fundamental reappraisal to provide clarity for intervention techniques and to support therapists in their ability to provide coherent rationales in decision-making and hence justify their practice. The application of person-centred outcome measures for evaluative purposes, is an area requiring significant practice and research development within housing
- The areas related to design standards and principles that are aligned to social model of disability and social role valorisation values, are now moving rapidly as technology and manufacturing practices continue to improve. This area requires clarification from an occupational therapy perspective. Research into how such principles can be integrated within OT theory and practice is warranted

3 How research is conducted
- In considering the development of research projects COTSSIH should advocate the adoption of user-centred research approaches that mirror the values of occupational therapy with a clear goal of increasing collaborative/participatory research. This would put service users, families and carers, their knowledge and their experiences as the central pillar in advancing the profession’s evidence base in this area
- Prior to commissioning research (either singly or collaboratively) COTSSIH should consider
the development of a set of participatory principles to use as criteria in establishing the strongest research proposals. COT has produced Research Ethics Guidelines (COT 2003a) that would provide a suitable foundation to develop such participatory criteria. Researchers would, therefore, need to be able to articulate their research positions, methodological approaches and choices of research methods and ethical considerations. This set of principles and criteria could be an area of development by COT given its wider application to COT commissioned work and work undertaken by other specialist sections

- Similarly, practitioners and managers also need to consider carefully why they need to evaluate services, how this can be done and when evaluation should occur. Although audits may have their strengths as a retrospective quantitative means of providing service statistics and may represent an initial step in building research capacity, it is advised that a mixture of data collection methods for short and long-term evaluative purposes would be most beneficial. How managers can be assisted in developing such measures is an area that requires further serious thought. If carefully considered these could take into account individual circumstances possibly offering service users evaluation choices that could still produce appropriate agency or interagency evidence

4 Developing and nurturing OT researchers and CPD in housing

- If funding was available, it is recommended that COTSSIH extends its role in supporting research and encouraging OT researcher development. This would ensure that COTSSIH specific research philosophies and research priorities are maintained and achieved. As part of this remit there needs to be a commitment to increase numbers of OT housing researchers through planned development programmes. COTSSIH could provide a support network to facilitate housing researcher development within OT

- Opportunities for OTs who practise in housing to enhance CPD and lifelong learning, need to be brought together and promoted. CPD could be viewed as a logical step towards encouraging practitioners to become research active through the use of evidence-based practice. This will initially necessitate a review of CPD and OT educational opportunities related to housing at under/postgraduate levels and less formalised routes. OT educators in housing could play a crucial role in this area. The development of current and future OT researchers in housing could be achieved through a variety of means such as:
  - Promoting the dissemination of Masters theses to the COT library and encouraging researchers to update the Register of Therapy Researchers
  - Promoting the profile and work of OT researchers in housing through conferences and at regional levels through organised study days or workshops
  - Supporting Masters students through the provision of supervisors or research mentors. A pre-requisite to this would be to establish the current expertise and availability of individuals that could fulfil such roles
  - Supporting the production of research publications to ensure that, for instance, good quality Masters theses are published as research articles or practice evaluations are written up and published within the British Journal of Occupational Therapists (BJOT) or alternative publications
  - Encouraging and supporting student bids in gaining Masters level housing related study opportunities through awards schemes such as the existing COT award scheme
  - Developing and promoting a range of housing CPD opportunities in conjunction with practice and education partners at regional and national levels
  - It is recommended that housing practitioners build in to their CPD programmes opportunities
to extend their knowledge, experiences and evidence base relating to the above points

- OTs and OT educators are also encouraged to join and support COTSSIH at both regional and national events and meetings
- Practitioners should be encouraged to disseminate important work through a variety of peer published routes and more popular publications such as OT News
- The development of the COTSSIH website needs to be fully explored as a means of communicating with members and providing links with and to other recognised web sites
- A strategy is required to develop future PhD students within OT and housing who will become future leaders in this field. Of equal importance is the need to press for the development of consultant therapists within this significant area of social care/housing provision. As yet the consideration of this kind of post remains health related
- Work is needed to share information with other specialist section partners and develop potential collaborative research projects
- It is imperative that OT educators are fully involved in CPD opportunities and building research capacity within housing. This needs to be done by using existing communication methods as fully as possible and making full use of expertise and research networks available e.g. connections with existing research centres
- Ways to bring together educators, practitioners and researchers need to be developed through creative and collaborative partnerships by for example joint funding specialist OT housing researcher posts

5 Wider strategies to encourage research development

- It is recommended that COTSSIH begins to make formal links with, and align itself to, research organisations that have developed and implement user-centred research approaches. This could initially involve offering a consultative role to research steering groups, eventually leading to commissioning relevant research projects with groups such as the Joseph Rowntree Foundation, user group organisations and specific representative groups. Such partnerships will need to be actively sought and maintained
- COTSSIH should examine how far current partnerships with recognised housing agencies such as Habinteg can be further developed
- It is recommended that COTSSIH take a lead role in developing links with popular housing publications through feature articles, or seeking sponsorship for events such as the COTSSIH annual conference (a list of housing related websites has been provided on page 106). Similarly, relationships with companies and manufacturers are an area for development
- In terms of Research Governance it is essential that COTSSIH begins to influence the national housing and social care research agenda. This could be achieved by strengthening links with, for instance, the Association of Directors of Social Services and housing counterparts within both the public and private sector. The development of partnerships with research gatekeepers could prove to be a valuable future resource
- There is a need to press for a national housing database that includes adaptation needs, adapted housing registers and adaptation resources. If such a system was linked to social care and health care information, more effective matching of properties to individuals and families could be achieved. At the very least compatible IT systems and standardised local procedures for storing housing information with particular reference to DFG systems are required. It is unlikely that COTSSIH and COT could achieve such an objective without assistance from other organisations or partners
- Additional resources are required to enable COTSSIH to fulfil its potential both as a resource
for OT and housing professionals and potentially for the general public. Full and ongoing investment in COTSSIH and dedicated personnel would enable significant progress to be made within the recommended areas

- COTSSIH should play a key role in bringing together and maintaining dialogues and working relationships between OT education providers, local authority and health providers, policy makers at a national level, user groups, housing agencies and researchers. This is a crucial component in advancing the profession and creating opportunities to further develop the evidence base. It is important that members are made aware of progress in these areas through regular communications

- It is recommended that COTSSIH use the findings of this review to assist with the formulation of its own Research and Development Strategic Vision and Action Plan. Many of the points raised within the review will have direct relevance to the six key objectives framework developed by Ilott and White (COT 2001). Consultation and agreement will be required from COTSSIH members prior to ratification of the completed document by COT's Research and Development Board

**Future Review**

- It is recommended that COTSSIH identifies a date for a review of the literature related to OT and housing within the next three to five years, to monitor the development of publications in this area and to re-evaluate its research strategy

- A formal mechanism for the evaluation of this review will also be required to determine its strengths and limitations, enabling future literature reviews to benefit from such an appraisal
Introduction

This review has been specially commissioned by the College of Occupational Therapists Specialist Section in Housing (COTSSIH and COT 2002) and represents the first of what hopefully will be many research-focused initiatives. The review was intended to be a useful tool for occupational therapists (OTs) working within the related fields of social services and housing, in identifying the current evidence base and future research priorities in this area.

The remit for the research tender was to produce:

“...a review of the current literature, published and ‘grey’, contributing to the evaluation of OT intervention in housing adaptations for people with disabilities. Both process and outcome will be covered. The output is for use primarily by OTs working in the Housing sector and specialising in housing adaptations for people with disabilities.”

(COTSSIH and COT 2002, p2).

This review took place between July 2002 and June 2003.

What is a Literature Review?

Fink (1998) defined a literature review as ‘a systematic, explicit, and reproducible method for identifying, evaluating, and interpreting the existing body of recorded work produced by researchers, scholars, and practitioners’ (p3). The success of literature reviews has usually depended on a reviewer being able to locate the relevant body of recorded and published work. Given that compared with other academic subjects housing and occupational therapy (OT) has been perceived to be a generally under-researched area with comparatively little published work, this review has also included a quantity of 'grey literature' that OTs might use on a day-to-day basis.

Hart (2001) described grey literature as ‘a range of published and unpublished material which is not normally identifiable through conventional methods of bibliographic control (e.g. ISBNs and ISSNs)’ (p94). The range of material related to housing and OT identified in the review was very broad including conference material such as papers and keynote speeches, dissertations/theses taken at various higher levels (Masters and above), newspaper articles and features, professional and trade magazines, annual reports, leaflets, information 'packs', posters and websites.

Part of the search and review processes included establishing the quantity of published and unpublished material and then determining the quality of the produced work. Specific strategies that assisted in these processes have been outlined in the methodology section.
Aims of this Review

Specifically the review aimed to:

- Identify and describe selected published and grey literature relating to housing and occupational therapy
- Appraise the quality of this literature incorporating and developing relevant critical frameworks to determine its strengths, limitations and application to practice
- Ground the review within social model of disability values (where disability is viewed as society's problem rather than the individual's) as an underpinning philosophy in establishing the extent of user-centred work. Such an approach supports the Research and development strategic vision and action plan (Ilott and White 2001, www.cot.org.uk)
- Provide an overview of the current evidence base that could assist OTs working in the field of housing and adaptation work
- Identify where work has occurred and where gaps in knowledge exist
- Identify research priorities in housing and OT

A key goal of the end product was to create a useful and readable document to provide information, source material and contacts primarily for practising OTs, but that could also be a useful resource to OT students, educators and others interested in this topic. It was hoped that the review could be used to stimulate debate and increase research interest and enthusiasm within this important area of service provision. The review has provided information and recommendations to assist COTSSIH in forming a future research strategy and action plan.

There was an intention not to reproduce material identified in other reviews such as Mountain (2000). Although some overlaps have occurred, this review has provided a complementary perspective. The review examined a limited number of items allowing greater attention to describing material and in particular to examining the methodological processes of research based literature. This has enabled a focus on the critical appraisal of work to identify strengths and limitations and highlighting similarities and differences between the studies produced.

Structure of the Review

The review has been structured in the following way. The methodology section describes how the review was conducted, the processes involved included the literature search strategies, the outcome of searches, the appraisal of information and the limitations of the review approach.

Two key sections make up the main part of the review. The first relates to published material such as journal articles, books and unpublished Masters dissertations. Dissertations have been included in this section as they were scrutinised using the same appraisal framework as was used for published material. The context and aims of the literature have been outlined and methodological perspectives including user-centredness have been examined. Key results have been described and implications for practice have been highlighted. This section is presented alphabetically to enable the reader to identify particular works more easily. The second part includes the remainder of the grey literature and specifically examines practice guides and adaptation leaflets. Recommendations regarding the production and review of adaptation leaflets have been provided.
A comprehensive range of recommendations are then presented covering aspects of reviewed material and links to wider aspects of the profession such as key research priorities, the role of COTSSIH, CPD, OT education and housing, user-centred research and the development of a research strategy with suggestions regarding how to move the specialist section forward.

**Using the Review**

Keywords and terms (identified as green text within the review) have been described within a glossary (see page 90). A range of appendices with additional information has also been provided.

In order to help the reader navigate through the review cross-referencing to related authors studies is included (usually identified by the use of square brackets and the review page number). For example where a study might have relevance to another author this will be shown as follows:

[See also Awang (2002a) page 29]. Note that the page number indicated relates to this review rather than that of the original article or publication.

Reference material has been divided into two types. All source material relevant to the actual review and its processes have firstly been presented with contact information where possible. A separate complementary publication list has been included to indicate useful sources for further reading. Many of these had been originally considered for the final review and form part of the results of the various search strategies. This was intended to give the reader easy access to identifying the wide range of supplementary material available.

Working databoxes (see Appendix 5 page 116) have been used to highlight at a glance key aspects of reviewed material and cross-referencing has been included to signpost the reader to related work.
Methodology

The review focused on two types of literature and therefore different methods were required in searching for the material and appraising its quality.

Search Strategies for Published Material

In order to identify published material several strategies were used. Initially keywords and terms were brainstormed to widen the search focus. This ensured that as many housing and OT related publications as possible were initially identified. Keywords and electronic databases used have been presented below.

### Occupational therapy
- Rehabilitation, adaptation, evaluation, assessment, effectiveness, audit, research, review, literature review, good practice, primary care, intermediate care, bed-blocking, community care, social care, social services, housing services, local authority, disability service, community services, equipment, best value, performance indicators, standards

### Housing
- Housing/home adaptation, modification, wheelchair, design, universal design, lifetime home, building regulation, housing policy, grant, Disabled Facilities Grant, renovation grant, housing grant, tenure, owner occupation, housing association, housing corporation, care and repair, home improvement agency, residential care, nursing care, informal care

### Disability
- Impairment, handicap, physical disability, sensory impairment, intellectual impairment, elderly, elderly people, older people, user, service-user, consultation, participation, user involvement, independent living, mobility, assisted living, empowerment, independence

#### Table 1: Keywords and terms

| AMED (Allied and Alternative Medicine Database) |
| ASSIA (Applied Social Sciences Index and Abstracts) |
| BIDS (Bath Information Data Service) |
| Ovid (includes MEDLINE, AMED, CINAHL) |
| Biomed |
| The Cochrane Library |
| OTBibSys (includes occupational therapy, rehabilitation, education, healthcare delivery) |
| OTDBASE (occupational therapy literature) |
| Web of Science |
| Zetoc |
| Internet Search Engines e.g. Google.com |

#### Table 2: Electronic databases used

Hand searches through relevant publications and journals were undertaken. Bibliographies and reference lists were also scanned to identify original sources and review articles. Government documents including consultation papers, ombudsman reports and joint review reports were also
utilised to identify the evidence upon which policies had been based. Lead authors were contacted when clarification of particular points was required. Searches of relevant websites included the Joseph Rowntree Foundation, housing organisations, disability and voluntary organisations. Search engines such as Google (www.google.com) assisted in this process and advanced searches were completed using Boolean operators (refining searches by including ‘AND’, ‘OR’ etc). Similar advanced searches were completed with electronic databases using keyword combinations.

Search Strategies for Accessing Grey Literature

Having previously identified the potential wide range of material that grey literature might cover, it was necessary to devise appropriate strategies to locate its existence. It was recognised that source material would be difficult to find as the work could be in the form of local reports, evaluations or dissertations some of which might not have come under the heading of occupational therapy. Publicising what the project was about and what information was required from both OTs and the wider population became a key focus. It was decided that the following strategies would be employed:

- To write to OT focused publications. These included Occupational Therapy News (OT News) and Therapy Weekly
- To write to housing educators within OT using the COTSSIH housing educators group E-mail/distribution list. This could potentially identify current and previous relevant Masters studies or education linked research projects relevant to occupational therapy and housing
- To contact relevant stairlift/vertical lift companies to establish if any research had been undertaken with service users regarding the effectiveness of adaptations etc…
- To write to relevant housing publications including Housing Today and Environmental Health Journal
- To highlight the review to COTSSIH members via a flyer
- To publicise the project directly to COTSSIH delegates via a presentation at the 2002 COTSSIH annual conference in Manchester
- To utilise keyword searching with Internet search engines
- To use the project steering group as a resource to identify potential contributors
- To use the services of COT librarians to assist with hand and COT database searches

Table 3: Search strategies for grey literature

It quickly became evident that publicising the review would require a concise ‘standard’ letter/template that contained all of the relevant information. This included:

- Who had commissioned the research
- The topic area
- The aims of the research
- What the outcomes would be
- Why the review was important
- The type of material that was required for review
- How people could help
- How to contact the researcher to discuss potential contributions

(See Appendix 1 page 109 for the standard letter template)
The basic structure of this letter could then be modified to suit specific target audiences reducing the need to constantly repeat the same information within written and E-mail correspondence. Details regarding this process of grey literature searching can be found in COT's Abstracts conference publication (COT 2003b).

**Inclusion and Exclusion Criteria**

In order to create a focus for the review, specific criteria were introduced to assist in determining what did and did not need to be included (Fink 1998, Gomm et al 2000). Initial criteria included the following:

- Material needed to relate to:
  1. The evaluation of occupational therapy intervention in housing adaptations
  2. The process of occupational therapy in housing adaptations
  3. The outcome of occupational therapy in housing adaptations
  4. Any significant aspects of housing adaptations
  5. The centrality of service users and disabled people

**Table 4: Inclusion criteria**

It was anticipated that work should date from 1990 to the present, acknowledging the introduction of the **NHS and Community Care Act 1990** (Great Britain, Parliament 1990). Material produced in the UK was included as a general principle. Sources outside the UK were excluded unless they were identified as highly relevant to the review. Work that did not relate to any of the above criteria was also excluded. Material deemed to be weak due to lack of consideration in, or omission of, methodological approach was also excluded.

The process of applying criteria was not as straightforward as anticipated. There were a number of publications that informed occupational therapy and housing. However many of these were on the periphery of what could be considered valuable or significant to OT housing practice, service delivery and user-centred work. It was also evident that it was highly unlikely that many publications would actually fulfil all of the criteria. As a result, items selected for inclusion in the review needed to demonstrate as close a match as possible to the criteria. This flexible approach facilitated the selection process. Key questions in final decisions taken included determining the credibility, meaning and usefulness of the work to practitioners as outlined in the original COTSSIH tender (COTSSIH and COT 2002).

As work continued further phases developed within the process of criteria application. Steering group discussions relating to what should be included and excluded assisted in clarifying expectations of the finished review. The currency of the material became increasingly important. It has been more than a decade since the implementation of community care policies and the inclusion of very early work was, therefore, reconsidered. There were limits as to how extensive the review could be, given the scope of funding, the timescale for completion and the resource practicalities in the number of pages produced.
Results of Search Strategies

The results of search strategies for published literature have been outlined below.

<table>
<thead>
<tr>
<th>Search strategy</th>
<th>Number identified as suitable for final review</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Database</td>
<td>6</td>
<td>• Adams (1996a,b)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Johnson et al (1996)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Chamberlain et al (2001)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Nocon and Pleace (1998)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Stewart et al (2000)</td>
</tr>
<tr>
<td>Hand searching</td>
<td>3</td>
<td>• Grisbrooke (2003)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Picking and Pain (2003)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• O'Brien (2003)</td>
</tr>
<tr>
<td>Internet search engines</td>
<td>7</td>
<td>• Centre for Accessible Environments and Lacey (2002)</td>
</tr>
<tr>
<td>(e.g. to identify book publishers etc)</td>
<td></td>
<td>• Higham (1999)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• ODPM (2003a,b,c)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Thorpe (1999)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Winfield and Goodman (2001)</td>
</tr>
<tr>
<td>Publications already owned or borrowed from libraries</td>
<td>4</td>
<td>• Awang (2002a)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Department of the Environment (1996)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Heywood (2001)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Oldman and Beresford (1998)</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td></td>
</tr>
</tbody>
</table>

Table 5: Results of search strategies from published work

By thoroughly recombining keywords and terms it became apparent that most publications had been identified when the same titles recurred following repetitive searches. An example of the results of a search strategy using Ovid and combinations of keywords has been provided in Appendix 2 page 110.

Most of the strategies outlined in Table 3 for grey literature searches, produced material for consideration for the review. Some were not fruitful and this created questions for further exploration. For instance, despite repeated efforts to access housing publications, no response was obtained. This seemed curious given the relevance to the remits for both Housing Today and the Environmental Health journal as the focus of this review was clearly concerned with broader aspects of accessible housing.

16 OT educators with an interest in housing issues were identified and contacted using an E-mail distribution list created by Jani Grisbrooke from the University of Southampton. Although
seven replies were received it was clear that there appeared to be a lack of Masters level projects current and past relating to housing, that could be directly accessed from these sources.

In addition, making links with relevant ‘adaptation’ companies seemed a straightforward and obvious course of action. However following initial conversations with one supplier, it appeared that companies would not be forthcoming about user views on the strengths and weaknesses of, for instance, particular models of stairlifts. This could possibly be related to potential economic concerns and providing competitors with advantages within the marketplace. It did not appear that any independent consumer tests had been carried out that were suitable for the review.

Publicity through OT News and Therapy Weekly proved very successful in identifying potential contributors. Both publications were able to print articles related to the project (Awang 2002b and Therapy Weekly 2002) and OT News was able to print a picture so that potential contributors could put a face to the reviewer’s name. It was also valuable to obtain previous years indexes of OT News. The indexes were very useful tools in identifying relevant source material. It was not always possible to identify the source from which contributor replies originated, from but jointly the publicity produced 12 recorded enquiries of which two (Baldwin 2003 and Warrington Borough Council 2002) were included in the final review. It was important to plan the publicity stage as soon as possible to enable the formation of a network of contacts that snowballed further resources and contacts.

The most productive method of generating interest in the review was the links within COTSSIH itself. This was done in several ways. Firstly, a flyer publicising the review was sent out by the public relations officer. Previous newsletters were also obtained to identify material. Secondly, the project steering group members provided material for consideration (seven adaptation leaflets/guides included in the review) and contacts that could be followed up. Thirdly, an opportunity to request contributions arose via the COTSSIH Annual Conference in 2002. This also enabled face-to-face contact with OTs who could assist directly with locating grey material for review consideration. Other opportunities arose from contacts made during the COT Conference in Brighton in 2002. Previous and current conference programmes and abstract lists were also used to identify contributions. Conference presentations were important in identifying current and new research not yet published. It was estimated that these combined strategies produced over 20 recorded enquiries or potential review material, of which 10 items have been included in the review.

The COT library was an invaluable source of published and grey work. Forming a productive relationship with the COT library service proved highly successful in terms of identifying and borrowing relevant material. This was particularly evident with Masters dissertations. From the keywords provided, the librarians were able to identify lists of projects that were pertinent to the topic area. In all 13 were identified as relevant to the review with two (Johnson 1998 and Payne 1998) being included in the final selection.
The results of grey literature search strategies have been outlined below:

<table>
<thead>
<tr>
<th>Search strategy</th>
<th>Number of contacts made</th>
<th>Number identified as suitable for final review</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contacting housing and environmental health journals</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Housing educator E-mail distribution list</td>
<td>7</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Contacts with adaptation manufacturers</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Warrington Borough Council (2002)</td>
</tr>
<tr>
<td>COTSSIH</td>
<td>20+</td>
<td>11</td>
<td>• Brighton and Hove Council (no dates a,b)</td>
</tr>
<tr>
<td>• Flyers</td>
<td></td>
<td></td>
<td>• Essex Social Services (1999, 2000)</td>
</tr>
<tr>
<td>• Conference networking and presentations</td>
<td></td>
<td></td>
<td>• Greenwich Council (2002a,b)</td>
</tr>
<tr>
<td>• Steering group</td>
<td></td>
<td></td>
<td>• Northern Ireland Housing Executive (2002a,b and 2003)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Stockport Metropolitan Borough Council (2001a,b)</td>
</tr>
<tr>
<td>COT library</td>
<td>13</td>
<td>2</td>
<td>• Johnson (1998)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Payne (1998)</td>
</tr>
<tr>
<td>Total</td>
<td>53+</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

Table 6: Results of grey search strategies

Appraising published literature
A variety of source material has been examined within this review and this poses some difficulties when assessing the quality of the literature. In appraising the quality of more traditional published pieces of work such as journal articles, reports and unpublished dissertations, there were several choices as to how quality appraisal could be achieved. For example Gomm et al (2000) and Girden (2001) identified a series of research appraisal questions for different types of research approach. For the purposes of this review critical checklists developed by Taylor (2002) were
applied. This choice was guided by the ease of use and the flexibility of the checklists that could be applied to qualitative research and surveys. A checklist used relating to qualitative studies has been reproduced in Appendix 3 page 111.

Appraising grey literature

Where information was being provided by agencies for internal use or externally for the public, the question of quality appraisal required a more creative and flexible approach. This information came in the form of adaptation leaflets, eligibility criteria or service/practice guides.

Following website searches, the Help for Health Trust organisation (www.hfht.org.uk) was identified. The Trust set up the Centre for Health Information Quality (CHIQ 2002) to maximise public confidence in health information. CHIQ produced two information quality checklists for both producers and reviewers of health information. Although not specifically intended for service users within the social care context, the checklists have been adapted to evaluate the broader grey material in this review (see Appendix 4 page 113). Changes to the language and terminology used in this sector have been made and both the reviewer and producer perspectives have been combined to demonstrate to the reader the wide range of questions that could be posed in appraising the quality of housing and adaptation information. Check boxes have been added enabling comparisons to be made between adaptation leaflets using a simple percentage scoring system.

Ethical Considerations

Material obtained from library databases, hand searches of journals or directly from the Internet, was all publicly/professionally accessible information. Similarly, adaptation leaflets and other booklets including guides etc... were also considered public domain information and were provided willingly for the specific purposes of the review. As a result it was not considered that a formal consent process was a necessary prerequisite to undertake a review of the material. Nevertheless, the review aims, purpose and a statement of how relevant material would be used, were clearly outlined in correspondence when required (see standard letter template Appendix 1 page 109).

The use of appraisal checklists could be considered as a means of endeavouring to ensure that a balanced approach was utilised in the critique process, that took into account both strengths and limitations. It was anticipated that this would result in a fair representation of the work outlined in the review although areas of subjective interpretation were inevitably evident. An additional ethical safeguard was the use of the project steering group drawing on the wide range and experiences of its members.

Limitations

An area of the review that could have been improved was in the lack of representation of service user views in the structure of the steering group. As a key focus of the review was on user-centred work, the inclusion of a service user would have been an invaluable perspective. This would demonstrate a commitment to identifying service users as one of the profession's strengths, with
the potential for a central role within the whole research process (see recommendations for a further discussion related to this point).

The research strategies used did not produce any appropriate material from a Scottish perspective within the timeframe and this was identified as an area for future work and consideration. It was recognised however, that a consultation document *Equipped for Inclusion -Report of the Strategy Forum: Equipment and Adaptations* ([www.scotland.gov.uk](http://www.scotland.gov.uk)) was in progress regarding the future direction of equipment and adaptations for disabled and older people. In addition an accompanying document by Michael Mandelstam entitled *Using the Law to Develop Equipment and Adaptation Provision* which readers are directed to ([www.scotland.gov.uk](http://www.scotland.gov.uk)).

Restrictions of time, resources and the practicalities of production have meant that not every item deemed relevant or valuable to OTs has been presented in this review. Where the same authors have undertaken several key pieces of work, the most relevant material has been reviewed and included.

It was arguable that this was the first publication in the UK to focus on housing and occupational therapy from both published and grey literature perspectives. As such, the review should be considered as the initial step in identifying a baseline of the evidence available. As research knowledge advances, future reviews and possibly systematic reviews will need to be undertaken regularly to demonstrate what the best evidence for practice is in this area.
Part 1: The Review
Part 1: The Review

The following review firstly concentrates on a selection of published articles, books and also grey literature in the form of Masters dissertations. The work is arranged alphabetically by primary author. Each study is outlined in detail with aims and contextual issues initially identified followed by methodological considerations. The key findings are explored with the emphasis on practice implications for OTs. An overall perspective on the quality of the work is then offered with areas for further study highlighted at the end of each section where applicable.

The second part of the review examines grey literature including material from several occupational therapists and organisations that provided locally produced service information, leaflets and practice guides. The adaptation information is critiqued based on the checklist identified in the methodology chapter.

Words in green text are explained in the glossary of terms at the end of the review (see page 90). Cross-referencing to related work with this review is indicated by use of square brackets.

Adams (1996a, b)

Adams (1996a), prompted by the varied responses relating to the funding and provision of housing adaptations for disabled people, undertook a research project as part of a Masters degree (Adams 1994). Part 1 aimed to establish:

- Whether disabled people were able to get access to fair and consistent adaptation services
- Who funded housing adaptations
- How joint working operated between housing bodies and local authority OTs

A postal questionnaire was sent out over a six month period to six housing associations and six local authority housing departments within one county's borders. The design for the study included both quantitative and qualitative elements. Inclusion criteria aimed to identify a mix of local authority inner city and town housing departments that had carried out publicly funded adaptation work within the previous 12 months. Similarly housing associations and relevant charities were included. All were randomly sampled. The questionnaire was piloted in consultation with various housing agencies and occurred one month prior to the main study.

The findings indicated that although authorities and associations stated that they had commitments to housing disabled people, not all had developed formal policies for accessible housing schemes. A broad variation within procedures and provision was evident for disabled people. The relationship between housing authorities and associations appeared competitive and needed to improve. All agencies adopted a ‘transfer rather than adapt’ policy - major adaptations would only be considered if no other suitable stock was available. Adams called for the setting up of centrally co-ordinated databases with registers of accessible housing (regardless of tenure) and tenant profiles.

Part 2 (Adams 1996b) investigated the role of community OTs in assessing home adaptations and limitations of the Disabled Facilities Grants (DFGs) system as documented by service users. It aimed to establish the:

- Distribution of major (DFGs) within the county
- Possible failure of the DFG system to serve users effectively
Performance of social services and community OTs within the DFG process

Questionnaires were sent to six senior OTs employed by the county council who had been involved in assessing adaptations over the previous 12 months. They were randomly selected and stratified by location (inner city and town).

Six service users identified by OTs who had applied for, or were undergoing adaptation work, were selected for informal interviews of up to two hours. All users had raised either informal or formal complaints relating to the adaptation process. It was recognised that the sample was therefore non-representative due to the reduced opportunity to portray positive experiences. Participants were encouraged to relate the sequence of events regarding the process, funding arrangements for DFGs, relationships with housing agencies, time scales and anomalies encountered within the process.

From the OTs it was evident that there were delays in the process attributable to staff shortages and procedural delays for financial assessment (in one case up to a year). In three other areas agreement had been reached with housing authorities to enable a quick informal test of resources to reduce the delay. Five OTs acknowledged that the wait for DFG assessments was a method for controlling demand. There was some evidence that home improvement agencies were not being employed as agency costs were included within the grant awarded, thus reducing the amount that could be spent on the actual adaptation work. Grants were awarded in the main to older people and variation was reported in top-up funding. Tenure and funding routes proved a major obstacle for OTs in getting work completed. Adams argued that as the OTs had little control over such financial processes the ability to criticise the degree of their legitimate accountability remained questionable.

Most users agreed that the reasons behind means testing were valid but those who had contributions were shocked by the amounts required. One carer had to move out from the family home so that she could be excluded from her mother's financial assessment. Problems were identified with acquiring insurance to secure loans to meet contribution shortfalls. Marketing of DFGs was poor with difficulties relating to paucity of information and complexity of the forms. VAT inconsistencies regarding what was and was not considered to be DFG work proved confusing, leading to participants’ agreement that all DFG work should be VAT exempt.

Adams concluded that the system had developed into a complicated, multifaceted and bureaucratic one which staff and users found difficult to navigate. Improvements to the system were required. Adams identified that the shift to move council property into the housing association sector would cause an increase in DFG demand. She identified several key recommendations including:

- Setting up county wide housing registers for accessible accommodation
- Local joint special needs housing lists between all housing agencies
- Adaptation money that followed service users across tenure
- Housing agencies to carry out tenant profiles with community OTs for proactive planning
- Fundamental improvement in marketing and application procedures of DFG

Overall the study provided useful and practical recommendations for OTs working in this area. There were some methodological details that needed further exploration. For instance in part 2 methodological justifications were not fully addressed and it was not evident whether interviews with OTs and service users had been piloted. Also issues relating to ethical considerations (such
as informed consent) and trustworthiness (member-checking of transcripts) were not presented. User perspectives were identified through a traditional interview approach and opportunities for greater involvement appeared limited. It is interesting to note how many of the same themes identified by Adams in 1996 recur throughout more recent research. In particular, themes such as poor DFG publicity and complexity of grant information have been identified by Heywood (1994) and Awang (2002a) [page 29]. Home improvement agencies did not appear to be used to their full extent. A key area highlighted by Adams was the potential difficulties that council housing transfer to housing association status would have on the demand for DFGs. As Large Scale Voluntary Transfers of council housing stock to the private sector continues, the impact on DFG uptake requires close ongoing monitoring.

Awang (2002a)

Awang (2002a) identified that current political and legislative opportunities enabled older service users to engage in the delivery of public services. However, literature demonstrated that although political ideals promoted involvement, levels of citizenship and citizen participation could be influenced by organisational and structural barriers. Specifically older peoples' experiences of involvement were examined within the home adaptation process. Based on a Masters dissertation (Awang 1999) the research article aimed to:

- Investigate the participatory experiences of older homeowners who had used DFGs to adapt their homes
- Clarify the strengths and weaknesses of adaptation processes from older peoples' and agency workers' perspectives
- Stimulate debate and increase the evidence base related to older peoples' housing needs

Using participatory action research as the guiding methodology the study employed ‘within-method triangulation’ to include interview methods with both older people and adaptation agency workers and examination of adaptation documentation. Through purposeful sampling three research sites were identified within the West Midlands. These included two local authorities and a Care and Repair (C&R) agency. Advice was gained from the Association of Directors of Social Services (ADSS) and permission to conduct the research was granted by directors of social services and C&R England.

Agencies nominated service users. Inclusion criteria incorporated homeowners who were over 60 years with adaptations completed preferably within the previous six months using DFG funding. Participants had to be willing to be audio taped. Initially 25 older participants were identified although only nine individuals representing six households (two from each research site) were eligible and formed the main sample. Ages ranged from 62 to 88 years with a mean of 77 years. A total of seven key professionals were interviewed from the three research sites including OT and C&R managers, environmental health officers and a technical officer. Issues surrounding informed consent, confidentiality and anonymity were addressed. A pilot interview was carried out with a known service user and key themes from OTs were generated using a COTSSIH workshop. Member-checking, triangulation, research supervision, use of fieldwork notes and a research diary improved aspects of the study's trustworthiness. The study's limitations, including the difficulties of achieving a full participatory approach, were discussed.
Semi structured interviews were carried out based on a guidance framework of identified key process areas. Scenarios were developed and analysed for each site or case followed by cross-case analysis to give an overview of the various experiences. The range of documentation collected was described although analysis was not fully discussed.

The findings were collated into three main themes: accessing the adaptation process, information and support within the process and gaining users’ views. Older participants were unaware that adaptation grants could be obtained until they were experiencing difficulties. Informal routes through word of mouth on hospital wards played a part in gaining adaptation information. More formal routes to acquire information through practice nurses at GP surgeries were identified by two participants. Local authorities were cautious regarding grants publicity due to perceived resource implications on already stretched services and budgets. OTs in one authority were seen as the key means of publicising grant availability. As a result, levels of DFG awareness were initially low for all older participants. It was suggested that lack of information surrounding DFGs had the potential to become a barrier to maintaining independent living.

Older participants dealt with significant amounts of paperwork but experiences of this differed. One authority posted out large volumes of adaptation documentation which older participants viewed as problematic. Additionally, uptake of C&R services was anticipated but this was not monitored, creating potential for individuals to drop out of the process unbeknown to agencies. In another authority, grant officers completed grant application forms at the person’s home. Here paperwork issues were not raised as concerns. Providing information per se did not improve impressions of effectiveness. Rather, information provision required additional support mechanisms such as face-to-face contact and the establishment of a partnership between user and worker to assist accurate information dissemination.

Feedback mechanisms were variable. Structural mechanisms included the use of a disability forum and a service user group. All older participants viewed the idea of service user groups positively, allowing them to have a voice in service provision or provide informal support and information for other users. One agency did not tell users about its complaints procedure book and thus removed the potential for feedback. Surveys were commonly used although such methods offered little control in how the material was used and how changes had been implemented.

The research found that overall, DFG publicity was low or absent making it difficult for potential users to gain appropriate information regarding future independent living. Participative experiences varied but were also generally low for older homeowners. When more involvement occurred this was through necessity rather than choice. Favourable perceptions were evident when more personal attention was given throughout processes. It appeared that organisations were geared towards service sensitisation rather than offering democratic control. It was suggested that it could be straightforward for adaptation agencies to introduce service user groups. The research indicated that much more needed to be done to establish future adaptation needs for forthcoming generations of older and disabled people and that adaptation agencies were well placed to lead such work.

There was evidence of poor grant publicity which created barriers for older people and their participation as citizens when they required help in maintaining independence. Whilst some found participants obtained information about adaptations through word of mouth, others highlighted the importance of nurses at GP practices in identifying such needs. The provision of information needed further support mechanisms. This theme linked with those of Picking and
The research highlighted the importance of adopting a methodology that reflected the experiences of participants even though it was not possible to undertake a complete participatory action research approach. Service user groups and their value was identified as an area for further research (see also Baldwin 2003 [page 31], ODPM 2003a [page 49]) and it was highlighted that the views of minority ethnic groups continued to be an under-researched area. The findings were not generalisable given the small numbers involved in the sample and the limited number of participating research sites.

Baldwin (2003)

In an unpublished London borough based report Baldwin (2003) examined service users’ views on the effectiveness of major adaptations. The research was prompted by local authority involvement in the completion of the ODPM study (2003a [page 49]). The study had identified that there had been no local review of the service or user evaluation following the completion of adaptations. The aims were to:

- Gain information relating to users’ views of satisfaction and perceived level of independence
- Promote client-centred practice and user involvement
- Use an evidence base to improve service practice and provision
- Enable comparison of user satisfaction between DFG and housing funded adaptations

Current practice meant that customer satisfaction surveys dealing primarily with the building process were sent out from the Environmental Health Office’s (EHO) Adaptation Service to all service users, bypassing the OT service. Problems were dealt with via assistant EHOs or the building services manager. As a result the effectiveness of the work or the achieved level of independence following work was not being identified.

A postal survey with open and closed questions based on one designed by Heywood (2001) [See page 38] was carried out across all housing sectors in August 2002. During the period 2000 and 2001 a total of 112 individuals were identified. Following screening those identified as too ill, confused, had moved or had died in the meantime were excluded from the sample. From the original report it was not clear whether piloting had occurred. In all, 86 questionnaires were distributed. A covering letter was included with the seven page survey explaining its purpose with confidentiality and anonymity assurances. As the work formed part of standard in-house service review, external ethical approval was not appropriate. The survey contained 27 questions and was reproduced in the report.

Descriptive statistics were used in exploring the results. 54 questionnaires were returned (63% response rate). The profile of respondents was as follows: 61% were over 65 years, 59% were women, 78% were white (with 8% being black or from minority ethnic groups), 46% lived alone, 17 respondents were council tenants and 30 were homeowners. Of the 54 respondents a total of 87 adaptations had been completed (no costings for these were identified) with 20 having had two or more adaptations. The adaptations comprised toilet/shower cubicle (31%), stairlift (21%), level access shower (22%), concrete ramp (17%) and extension work (12%).

The key findings indicated that overall there was high satisfaction with adaptations – 74% of
respondents scored 6/10 or more with 57% awarding 10/10. 65% found out about the service from OTs. 30 respondents found leaflets clear and easy to understand, however three did not and a substantial number (20) were not aware of any literature relating to having their home adapted. 83% were aware of the stages of the process with 13% unaware. 87% understood how the adaptation would look but 11% did not. Written suggestions included more publicity about adaptations, information strategies for individuals with sensory impairments and informing people about realistic timescales. Positive comments were made including good general council information/newsletters with relevant contact numbers.

70% of users felt they had been involved in the process as much as they wanted to be with 11% preferring more involvement. However in examining aspects of involvement in more detail, it was evident that several respondents (26) had not been given an opportunity to view similar work prior to the adaptation and 13 respondents wanted, but did not have opportunities, to discuss the work with the contractor. 22 respondents were not given the opportunity to become involved in the final selection of the contractor.

38 respondents found that the work made them feel safer from risk of accidents whilst 19 felt less reliant on help from others. Nine were subsequently able to pursue their own interests with eight reporting that the adaptation had helped them to have a social life. Three individuals found adaptations helpful in returning to work.

Baldwin concluded that there was a need for external publicity of adaptation entitlement as most users found out about adaptation work directly from OTs. Differences in adaptation leaflet provision were highlighted as council tenants received information whereas DFG applicants did not. It was clear that improvements were required in order for users to be able to clearly visualise work and choose contractors.

Baldwin identified recommendations likely to be useful for other authorities. These included better consultation with housing and environmental health departments and improvements to information systems, a revised range of adaptation service leaflets with supplies to CAB outlets, libraries, hospitals, GP surgeries, pharmacies and community service reception areas. OT practice could be improved using computer generated design to demonstrate how adaptations would look, photographic collections of previous work, lists of service users willing to show their adaptations to others, lists of exhibitions and manufacturers' show rooms and better information for those undertaking work privately. It was recommended that housing surveys were routinely copied to OTs with a feedback system including regular interdepartmental meetings. In addition, an OT specific questionnaire for users and the involvement of user groups to review the adaptation process, were recommended.

Although a pilot survey might have reduced non-responses to certain questions this was a relatively straightforward and useful small-scale local study demonstrating that users’ perspectives to review outcomes were an achievable and necessary part of service delivery. Some of the results deserved further analysis to provide tenure, sensory disability or ethnicity specific information enabling, for example, the identification of patterns within the process where disadvantage may have been apparent. Areas where difficulties arose could have been researched further using a qualitative approach. The findings demonstrated that adaptations could have a wide ranging impact on the overall welfare of individuals rather than just functional aspects of self-care, highlighting that future research should include areas of perceived safety/risk within the home, reliance on others, leisure and productivity.
Centre for Accessible Environments and Lacey (2002)

Planning your home for safety and convenience (CAE and Lacey 2002) was directed primarily at older and disabled owner-occupiers. It provided a valuable source of information for individuals who wished to plan ahead with regard to incorporating future housing needs. The book took an inclusive approach in identifying potential solutions to difficulties that might affect the general needs of the broad population.

The book was divided into 3 main areas: new homes, in and around the home and major adaptations. The first chapter related to buying a home and the different design features available such as Lifetime Home Standards, Part M and Smart Homes.

The second chapter provided useful suggestions for future proofing homes and making them safer and more convenient for residents and visitors. Sets of questions provided a checklist for individuals to assess the potential of a new property under key rooms/areas and practical suggestions were offered with regard to layout, basic equipment and fittings. Real life case studies illustrated how solutions could be implemented within kitchens and bathrooms. Issues surrounding safety and security were also covered.

The final chapter was likely to be of most interest to OTs, covering major adaptations including DFGs and the process of acquiring an adaptation. A further useful case study showed how a bungalow could be adapted for wheelchair use and provided perspectives from both the person using the adaptation and also an architect’s account by Stephen Thorpe. Step by step processes were explained and the reasoning behind the decisions surrounding each part of the adaptation were offered.

The final part of the book identified relevant organisations that could offer assistance to older and disabled people who were considering changes to their home environment.

This was a very useful and clear guide to read and use. It was pitched well for the target group and would be a very good basic text for OTs to recommended to individuals who were considering adaptation work. A particular strength was the fact that perspectives of disabled individuals who used the adaptations were provided. As it was a general text, it would not be an effective alternative to specific information regarding local authority practices although its user-friendly layout was something that authorities might wish to adopt. It was significant that although OTs were briefly mentioned within the text, no direct involvement of an OT organisation appeared to be evident in the book’s production.

Chamberlain, Evans, Neighbour and Hughes (2001)

Chamberlain et al (2001) completed a retrospective audit on equipment and adaptation work within a local authority setting. The audit question within the article aimed to investigate how many service users' ADL problems had been resolved by equipment and/or adaptation provision focusing on:

- Usefulness
- Proportions still being used (alone or with help) after 18 months
- Reasons for non-usage
- Satisfaction levels with the OT service
Following consideration of alternative methods a telephone survey lasting 5-10 minutes was identified as the best way of collecting data using closed, scaled and open-ended questions. As the audit was workplace based, no formal external approval was required. A total population of 381 living adult service users who had received OT/OTA home visits and had equipment/adaptations provided during 1998, were identified. A random computer sample produced 100 users. Data from 10 pilot surveys were included in the full analysis, as the schedule did not require changes. Analysis occurred using SPSS. Five OT team members completed the telephone survey in two sessions in November 1999 and January 2000. Demographic details, ADL problem areas, tenure and specific provisions were extracted from case files and transcribed on to standardised individual summary data sheets, to guide each survey. Informed consent was obtained following contact by letter prior to the audit and to reduce bias, original assessors did not survey known respondents.

57 surveys were fully completed (by 17 men and 40 women) including the views of six carers. 43 users did not participate due to hospitalisation, communication difficulties, refusal to participate, missing information or death of the service user. The profile of the sample showed that 70% were over 65 years with 60% being homeowners and the remaining 40% being mainly council tenants. 40% lived alone. Half of the respondents recalled ADL problems without prompting (indicating recall issues in evaluation studies) and half with a prompt (e.g. “Were you having difficulty in climbing the stairs?”). One respondent could not remember the problem or the service provided but was still using the equipment.

Respondents had in total 152 ADL problems with women experiencing 63% of the problems. The authors indicated that this did not demonstrate a noticeable gender difference in problems experienced, however on closer examination, it was evident that men had an average of 3.3 problems compared with 2.4 for each woman. A quarter of the respondents had one problem with half having two or three. Seven respondents experienced five problems. The most common problems related to bathing and/or showering (39). It was not possible to identify a relationship between problems experienced and whether the person lived alone or with others.

188 pieces of equipment and/or adaptations were provided with the most common being a grab rail. Unfortunately the results did not differentiate between adaptations and equipment to enable a fuller appraisal of adaptation usage. A clear finding was that 85% of equipment and/or adaptations were still being used 18-24 months after provision, with 69% being used on a daily basis and 27% being used between once and several times per week. 11 items (6%) were no longer needed suggesting potential functional improvement and 12 items had been used but no longer met needs. Nine items had never been used and included a buttonhook, emergency use commode and bath seats supplied with other equipment such as grab rails.

79% of respondents scored 5 (very useful) with 20% rating the equipment as useful (score 2-4). This suggested difficulties in either the validity of the scaling system adopted (as only a score of 1 represented not useful i.e. a negative response) or possibly difficulties in interpretation of the measure. 80% of equipment and/or adaptations still in use were being used independently. Following statistical analysis it was suggested that users were more likely to be satisfied with using equipment and/or adaptations independently than those who required assistance. However given the concerns of the scaling system, this finding should be viewed with caution.

Although 98% would recommend the service given, the majority of users did not recall who had provided the service without prompting suggesting difficulties with service profile. This again
raised questions as to when audit or evaluations should occur post installation of adaptations. In monitoring terms, the most recent guidance (ODPM 2003a [page 49]) advised routine surveying of all participants to gauge satisfaction with the process and the outcome. It suggested sample surveys after six months, one year and three years to review the adequacy of the adaptations provided. In this study, following an 18 month to two year period, half of the respondents were unable to recall what problems had occurred without prompting.

The audit, which was primarily service-orientated rather than user-centred, provided a useful example of how service performance could be enhanced through service user feedback. Although a small local sample was used the findings were encouraging from an OT perspective in identifying the need for further assessment and the recycling or removal of equipment. Caution was required regarding the results from the satisfaction scale. It was not clear what the outcomes were in relation to unmet needs and whether such issues were resolved or still persisted. Future methods could be expanded to include qualitative data collection to gain a deeper understanding of how adaptations were being used. With some adjustments the research approach could be readily replicated. In relation to this review the extent of the effectiveness of adaptation work could not be fully identified from the audit. A reworking of the results categorising the work as equipment, minor work and major adaptations (with costings) would have been beneficial in comparing this study with that of Heywood’s (2001) [page 38] for example.

**Department of the Environment (1996)**

The first major government review of the DFG system in England was completed by Pieda on behalf of the Department of the Environment (1996). The study aimed to identify how the DFG system was operating and how effective it was at meeting disabled peoples’ needs. Seven objectives were identified. These were to:

- Quantify a profile of DFG applicants and ranges of work funded, identifying those who did not receive funding
- Identify local authority perceptions of DFGs in relation to their objectives and funding priorities
- Assess the roles and relationships between welfare and housing personnel
- Examine how different funding sources were being used and the management of DFG demand
- Establish DFG implementation and the referral approaches adopted
- Identify the best service for users

The research design involved mixed quantitative and qualitative methods incorporating three elements: the collection and analysis of data on DFG enquiries, a postal survey of housing and welfare authorities and local authority case studies. A comprehensive sampling procedure resulted in an even distribution of 74 housing authorities providing data on 1,520 individual DFG enquiries between 1993-1994. From this sample 69 housing authorities and 41 welfare authorities (social services) returned surveys. 14 local authority case studies were undertaken into how the DFG system operated. Case study data collection methods included face-to-face interviews with housing and social services counterparts. Five of the case study participants were interviewed prior to the survey design to assist in the survey development and re-interviewed towards the end of the research programme. Other methods included telephone interviews with five home improvement agencies and groups representing disabled people from these five areas.
The DFG system was reported to have made a valuable contribution to people who wanted to adapt their properties. 24,000 people received a DFG between 1994 and 1995 with the average grant estimated at £3,700 between 1993-1994. Drop out rates were high at 35%. The three main reasons for this were that applicants were ineligible due to works not being covered by grant aid, council adaptations were funded by an alternative local authority route and applicants had received a nil grant award following the test of resources (34%). Other reasons were that applicants had died during the application process (13%), could not afford the contribution (8%) and in some cases had refused to complete the means test (4%). 41% dropped out due to reasons unrelated to the operation of the grants system.

The grant appeared to be well targeted with 60% going to homeowners and 70% of awards going to people aged 70+. In addition the weekly income of 64% of those awarded grants was below £150.

The report highlighted the problems caused by delays within the process due to staff shortages and pressure on budgets with delays occurring at the welfare assessment and housing enquiry stages. Complexity of the administration of the system was problematic especially where two tier systems of local government operated. The report called for a fundamental review of the DFG system raising the issue of whether the DFG should be decoupled from the grants system and transferred into the community care programme, to improve integrated services and reduce the pressure on the mainstream renovation grant system.

Areas that required improvement in terms of meeting the needs of disabled people were as follows: the provision of user friendly forms was advocated with early guidance on eligibility criteria or on potential grant award and the identification of key workers e.g. from a home improvement agency. This role was not considered to be an effective use of the OTs time. (In comparison with Heywood 2001 [page 38] - see also Picking and Pain 2003 [page 57]. In addition users needed to be informed regularly of progress e.g. using standard letters. Users also required choices in who provided agency services. The report made a specific mention of the potential of service user groups to put pressure on authorities to deliver more responsive services. It suggested that such groups could provide feedback relating the DFG process as a whole through user forums. User groups could also be of benefit as a mechanism in securing feedback for users assisted through the DFG process (see Awang 2002a [page 29]) and to assist in the follow up of applicants who drop out of the system.

This was a comprehensive study providing a considerable insight into how the DFG system worked. The choices for the methods adopted were fully described. However the report was disappointing with respect to areas such as how grants could be publicised, although it does indicate how users entered the system. These routes were mainly through OT assessment although enquiries came from disabled applicants themselves, GPs, friends and relatives and hospital OTs. A further issue was that considering data was based on over 1,500 applicants only a handful of disability groups were involved in providing feedback. It appeared that no direct views from service users were sought.
**Grisbrooke (2003)**

To date one of the few studies published relating to the user perspective on living with through-floor/vertical lifts, was completed by Grisbrooke (2003). Using a phenomenological approach that reflected the person-centred philosophy central to occupational therapy, Grisbrooke aimed to identify the users’ experiences of living with a lift after it had been installed. Although the original qualitative study provided additional information on acquiring the lift, this article focused on themes relating to living with the lift. Grisbrooke identified that literature related to vertical lift usage was primarily in the form of company leaflets, with more recent emphasis on the general application of through-floor lifts within design guides specifically for therapist use or local authority practice guides [see Essex Social Services 1999 page 66].

From a sample of nine eligible local authority users identified through social services and housing databases, eight individuals, unknown to the researcher, agreed to participate. **Inclusion criteria** required that all people had received a lift from the authority between one to five years post installation. All house design styles, lift products and disability categories were also included. **Ethical approval** was gained to conduct the research. Data collection methods included audio taped, semi-structured interviews within participants’ homes. The use of a pilot interview was not indicated. The interview format had been agreed in consultation with a service user, an OT and housing officers. Transcribed data was scrutinised using **thematic analysis**. Although not specifically mentioned, **trustworthiness** was addressed through the use of field notes and **member-checking** (credibility). In addition, a clear description of the research process and peer examination of the findings ensured **dependability**.

The findings identified that all participants encountered post installation difficulties. In three cases lifts needed to be replaced or resited. Resiting occurred specifically when the lift was positioned on a party wall, causing noise disturbance for neighbours. Once the participants had learned to use lifts and difficulties were resolved, confidence began to grow. Successful adaptations became ‘functionally invisible’ and tended to ‘fade from sight’ enabling choices to be made within lifestyle routines.

Lifts were found to impact both positively and negatively on other individuals such as carers. For instance the spatial impact for some was detrimental. One home was reduced from a three to a one bedroomed property and in another, the lift was still second choice to rehousing. There were some ‘fringe benefits’ for carers in terms of assisting with repeated use of the stairs whilst carrying laundry.

Importantly, the study revealed that users found maintenance engineers to be key professionals. They helped participants by revealing ‘tricks of the trade’ in operating lifts, offering control over recurrent problems. Grisbrooke advised agencies to cultivate the knowledge of engineers from the companies carrying out lift work, taking this into account when tenders for contracts were considered. The ability to recognise product quirks could be useful for OTs when dealing with requests to diagnose potential lift repair problems.

Particular difficulties were encountered when unforeseen or anticipated breakdowns of problematic lifts caused funding problems. This led to time delays in replacements and problems managing the care situation when unplanned respite care was required. This caused anxiety for users and was a potential extra resource cost to agencies when not appropriately managed.
Grisbrooke argued that OTs needed to judge carefully at what point evaluation of completed adaptations should occur. If too soon, post installation issues might not yet have arisen, whilst if too late, issues might have been difficult to identify as the adaptation became taken for granted. This finding also links with those of Chamberlain *et al.* (2001) [page 33] where half of users from an audit were not able to recall their initial problems without prompting.

Although the small sample related to one local authority and piloting was not discussed, this was a well-constructed qualitative study with due consideration given to the methodological approach adopted. Further research could widen the sample and scope of lift evaluation in order to assess the **transferability** of these findings, particularly with respect to party wall problems. If three lifts from a sample of eight had to be replaced or resited in one authority, the potential waste and cost to users and service providers if applicable nationally could be enormous. Authorities that have differing mechanisms for repair, replacement or maintenance could be compared focusing on users’ views to highlight better practice and more efficient management of resources. The extent of engineer involvement was another area worthy of additional study. Establishing post installation/adaptation evaluation times also required further consideration in view of the ODPM (2003a [page 49]) suggestions. This could influence the timing of standardised user-centred evaluations in meeting identified goals. In terms of sample identification the research demonstrated that where more than one agency was involved, shared and compatible databases were required not only to facilitate interagency communication, but also to enable full audits of adaptation work.

**Heywood (2001)**

A key text (*Money well spent*) concerning the effectiveness of major and minor adaptations was completed by Heywood (2001) and could be viewed as essential evidence for social services and housing OTs. This publication comprising of six chapters, was based on a study of seven participating English and Welsh local authorities. Heywood’s four aims were to:

- **Identify the evidence that adaptations improved independence and quality of life of disabled people**
- **Find out why poor adaptations occurred and how they could be prevented**
- **Identify how far legislative requirements were being implemented**
- **Trial a methodology that could be used by other researchers as a template for future research in this area**

The research approach was described as primarily user-centred and key housing adaptation professionals collected fieldwork data. The research population included all service users regardless of age, race/ethnic groups, tenure or geographical area within the seven authorities. The **stratified sample** was drawn from those who had acquired major and minor adaptations with completion dates covering the seven years from January 1992 to December 1998. Data collection methods were mixed.

Those individuals who had acquired minor adaptations were surveyed from six authorities and 162 responses were obtained from 300 sent out (54%).

The final **sample** for major adaptations included 84 face-to-face interviews with an additional 20 telephone interviews from five authorities. Participants represented three age brackets: children, those under 60 and those over 60. The main research took place between October 1999 and
September 2000 following a pilot study. It was not evident how permission was gained to conduct the research within the various authorities although individual consent was obtained for the interviews. Telephone interviews were completed anonymously whilst teams of officers carried out the semi-structured interviews and completed the research administration. Both participants and interviewers recorded scores out of 10 for adaptation work. In many cases written interviews were sent to interviewees for member-checking. It was not clear whether interviewers and interviewees were previously known as this may have affected the data obtained. Interviewer training in using multiple researchers for data collection and consistency of approaches required further clarification.

For minor adaptations there was overwhelming endorsement of effectiveness. Works completed included grab rails, stair rails, external handrails and ramps (60%, 43%, 38% and 12% respectively). However, some individuals were still unable to bathe safely even with minor adaptations, indicating the necessity for follow-up visits to check if needs were being met and establish whether major adaptations should be considered. 77% (112/145 responses) indicated positive effects relating to health consequences, although 22% (32/145) stated no health effects. Seven respondents had fallen prior to adaptation being fitted, indicating a role for minor adaptations in falls prevention. 86% (from 138 responses) stated they would have spent the money in the same way.

With major adaptations, very high levels of satisfaction were expressed. 91 of the 104 participants felt money had been well spent. Key areas related to bathing, toileting, stair use, space requirements, heating, accident prevention, improving health, improving well-being and combating depression, help for care-givers and preventing admission into care. When good adaptations were provided the outcomes were even more dramatic than the gains for minor adaptations.

However when problems did arise, the effects could be disastrous. Of 69 interviewees, 25 had no problems and the remaining 44 reported a total of 79 causes of difficulty. Problems related to poor processes of communication prior to specification of work (16), poor quality implementation (20) and the finished scheme not adequately meeting the intended need (43). Significantly, assessment-related problems outnumbered implementation problems by three to one.

In terms of value for money, the average cost of 67 adaptations was £9,657 (range £800-£45,968 with a median of £5,890). The total spent was £662,324 with 71.9% from DFGs and 24% from Housing Revenue Account. Expenditure from the public purse totalled 96.7%. In estimating the cost benefits of aspects of adaptation provision, Heywood found that for 39 respondents whose adaptation had reduced the burden of care, the equated adaptation cost over a similar time span was £4.74 per week. This was equivalent to the cost of less than one hour of paid care per week. Heywood also argued that money spent on properties that were too small to adapt might have been better spent on assisting families financially to move to larger properties.

Heywood highlighted that there were two main causes of waste with major adaptations. Firstly, professional issues related to practice interpretation skills or criteria-led assessment caused compromises in professional judgment with the persistence of medical model thinking. Common themes were identified as insufficient attention to detail and failure to consult adequately - professionals not listening to users appeared as a common issue. In addition, user expertise was undervalued and professionals failed to understand and assess psychological needs. Heywood identified the OT as the best person to coordinate the progress of adaptation, a point contested by...
Picking and Pain (2003 [page 57]) who advocated the role of home improvement agencies or trained local authority staff.

It was found that failure to recognise the need for warmth prohibited the use of some adaptations, as adequate heating had not been provided. Space restrictions meant that the physical growth of children was not taken into account. This was due in part to Poor Law mentality in completing the minimum work required. There was also failure to recognise cultural diversity and forgetting needs of the whole family including carers. Poor assessment processes inevitably led to poor solutions.

Secondly, institutional and structural difficulties included inadequate ongoing consultation/supervision during work, delay, inadequate resources to do the job including low staffing levels and capital budgets, low grant limits (the £20,000 DFG limit has now increased to £25,000), lack of adaptation subsidy for council tenants (limiting further what was spent and supporting Poor Law mentality), pressure of lowest quote culture, Test of Resources and problems with moving home as an option.

Many of the points raised might challenge views held by OTs, however Heywood advised that a balance needed to be struck. The majority of good adaptations proved highly beneficial but poor adaptations were significant areas of waste and as such needed to be addressed. She advocated the need to work out more clearly the cost and benefits of adaptation services. By doing this it could be demonstrated to government that housing source expenditure had major benefits for social services, health providers and the Department for Social Security. It was clear that accessing funding from preventative health care budgets based on the wide ranging beneficial effects of housing adaptations, ought to be a key area of ongoing research.

Mental health aspects were shown to be an area for OTs to consider seriously when recommending adaptations. Evidence suggested that adaptation work could and did play a vital role in promoting mental health well-being. Again this aspect of housing requires greater consideration as a significant area of research.

Heywood’s final aim of trialling a research methodology for future replication appears to have been successful with Baldwin (2003 [page 31]) adopting/adapting the questionnaire used. The methodology using the expertise of local authority staff to carry out research enabled professionals to reflect and review their own practice out of ‘role’. Further reflections of this role change would have provided useful evidence as to how being involved in the research process as a professional actually affected changes in future practice. The user centred approach was commendable in a study of this scale, however participatory levels were relatively low for the users involved. Heywood identified that getting to interview the parents of disabled children was difficult and there were also database problems in identifying whether adaptations were intended for children. Overall this was a strong study providing valuable evidence regarding the effectiveness of minor and major adaptations. The research has provided OTs with an opportunity to reflect on their assessment approaches, challenging poor processes and indicating the potential need for the creation of local standards within this area.
Higham (1999)

Higham (1999) completed an ambitious research project for the Wales Office of Research and Development in Health and Social Care. Based upon six participating Welsh local authorities, the general aim of the research was to determine adaptation outcomes for users in the areas of access, equity, effectiveness, efficiency and acceptability. Specifically models for effective social care intervention and inter-agency working were sought. The report provided a clear summary and recommendations. A thorough review of literature was presented assisting in subsequent schedule development for data collection purposes.

Although no overall methodological approach was discussed, the main data collection methods were mixed and choices for each were generally justified. The research took place between October 1998 and March 1999.

Semi-structured interviews were completed with OTs, care managers and housing managers from the authorities. Interviews lasted between one and two hours, were taped and later transcribed. It was not clear how many staff members were interviewed and how informed consent was obtained.

Data collection methods for users included a postal questionnaire, face-to-face interviews and telephone interviews. Ethical issues and language preferences were addressed. Samples for the survey were determined using criteria that included:

- DFG recipients
- Council tenants who had received adaptations over the value of £250
- Recipients of minor works/home repair assistance or an equivalent budget

The surveys incorporated 28 closed and open-ended questions with additional process questions for DFG recipients. The intended sample aimed to identify up to 50% of individuals who had had adaptations completed within the previous 12 months with equal numbers of private and public sector households. In total, although not clear from the report, 872 questionnaires were distributed. 267 were returned reflecting a response rate of 30%.

10 interviews were completed at users’ homes within one of the authorities, lasting between one and two hours. The sample generally reflected the overall population in terms of geographical location, tenure, age range and adaptation complexity. 26 short telephone interviews were also conducted using survey respondents from all six authorities who had provided comments worthy of further discussion. Liaison with voluntary organisations proved valuable in revealing issues for exploration in interviews. The extent and incorporation of this method was not fully examined.

All interviews used schedules. These and the survey used were reproduced in the appendices. In terms of analysis ‘Pinpoint’ data analysis software was used for the survey but interview analysis methods were not described. Although it was stated that research instruments were designed to produce reliable data and that they accurately reflected reality there was no mention of how trustworthiness aspects were addressed from a qualitative perspective. Additionally it appeared that surveys were not piloted.

Several key findings were presented. 31% of users had considered rehousing prior to requesting adaptations. The remainder wished to stay in their current home. 72% found it ‘easy’ or ‘very easy’ to contact the relevant staff member with 26% finding it ‘difficult’ or ‘very difficult’. 22% of users
would have liked more information at the point of initial inquiry and 4% commented on the general lack of verbal and written information.

Of 129 respondents, 70% found the process of completing the grant forms ‘easy’ or ‘very easy’ with 30% having difficulties, although the survey did not indicate how this process might have been facilitated. 40 respondents (17%) received help from a Care and Repair agency and it was noted that these individuals also found the grant application process easy. 99% of users were satisfied with these services demonstrating a strong endorsement for the use of such agencies. Similarly in one authority where Care and Repair was not used, 91% of respondents found the application process through housing grant officers ‘easy’ or ‘very easy’. It was found in one authority that council tenants tended to receive piecemeal adaptations compared with private sector DFG recipients who had all adaptation work completed at the same time. The reason for this was identified as prioritisation eligibility that rated bathing facilities as less urgent and therefore such provisions were presumably delayed. Council tenants also tended to wait longer for work to be completed.

76% were ‘satisfied’ or ‘very satisfied’ that the adaptation met their needs. 7% were ‘unhappy’. However, 95% found that adaptations had made living easier within their homes. Of the remainder, 4% said that adaptations did not help due to adaptations having not yet been received as promised, serious building work problems existed or equipment did not work satisfactorily. 56% of respondents did not answer the question relating to what was the most difficult part of the process. The most frequent answer was ‘waiting’ (16%).

In terms of the interviews, three case studies were presented which included action points for future practice. These linked to the recommendations. In addition, adaptation processes were mapped out to explain how systems worked and to identify where difficulties or delays occurred. Alternative systems including a fast track were suggested to streamline service provision.

A series of recommendations were identified including:

- ‘One stop shop’ referral systems for accessing services
- User-friendly information in a variety of formats that outlined statutory rights (including community care assessments), alternative information and funding
- Better promotion of complaints procedures [compare with Awang 2002a page 29]
- Early information and support to assist younger disabled people to avoid crisis situations
- Improved joint working practices including written arrangements for dealing with referral procedures, joint visits, response times criteria and contentious issues
- Regular agency meetings to review such arrangements
- Designated DFG co-ordinators or alternatively regular reports to members and user forums via an adaptations committee to ensure consistency [see Picking and Pain 2003 page 57]
- Key worker systems especially where home improvement agencies provided adaptation assistance (see Department of the Environment 1996 page 35)
- Post completion and follow up procedures to gauge user satisfaction, including an OT visit to check that facilities fulfilled users needs and to identify any additional support requirements [see ODPM 2003a page 49]
- Public sector adaptation registers working towards the development of a national register of private sector adapted housing in partnership with voluntary and private sector agencies. This also needed to consider joint rehousing policies [see Adams 1996b page 27]
- Development of performance indicators and the adoption of statutory complaints procedures similar to those of social services were required [see Winfield and Goodman 2001 page 61]
A key role for OTs was identified in the review and evaluation of services and the overall planning process. It was suggested that shortfalls in OT numbers could be overcome by recruiting private sector OTs and exploring how hospital OTs could be utilised in the process. Finally it was recommended that social care plans should publicise the valuable work that social services and housing authorities carried out in the home adaptation process.

This study was an ambitious project considering the short space of time required for its completion and the fact that one researcher was involved. Both service and user perspectives were offered. The project supported findings of other studies in this area particularly Heywood (2001) but provided an important Welsh perspective given the particular problems associated with housing stock. Again overall satisfaction with adaptation work and indications that adaptations helped individuals manage at home, were evident. The strong endorsement of Care and Repair was encouraging. There appeared to be some methodological omissions particularly in relation to piloting and qualitative data analysis with some trustworthiness issues not having been fully considered. Tabulated information on samples would have been beneficial and discrepancies in tables and figures numbering made some of the results difficult to follow. However the study provided more evidence relating to the overall picture of adaptation and housing.

Johnson, Wright, Jeffcoat and Petherick (1996)

In response to concerns relating to the lack of evidence about services to minority ethnic communities, Johnson et al (1996) conducted an audit within a single metropolitan district OT office. Within the article the aims of the audit were not clearly identifiable although the review highlighted the need to promote the profile of OT services and that surveying users’ needs and monitoring service delivery were essential, particularly in relation to Asian service users.

A collaborative project was undertaken (‘collaborative’ not expanded upon) to thoroughly audit all current cases on one day (year not specified). A questionnaire-like form was used to record data within a coding framework highlighting information such as ethnicity. Data was then transferred onto anonymised coding sheets and input into a database that was subsequently analysed using SPSS. Missing key information was identified by contacting service users by telephone. Imperfect records were excluded and a total of 1,004 cases were analysed so that comparisons could be made between ethnic groups.

Descriptive statistics identified that 42% of service users were male and 58% female. 50% were recorded as being white UK, over 30% belonged to South Asian groups, with just under 10% being Black Caribbean. A key concern underlying the research was that minority ethnic groups were under-represented in terms of service provision. However the results showed that provision closely reflected Census information for the area although the was a slight under-representation of Black African/Caribbean men and higher proportions of Asian men. There was no overall evidence that the service was addressing predominantly white user needs to the exclusion of Black and Asian users.

Few Asian elders lived alone compared with black elders and whites. Few Asians preferred English to communicate (7%). Most popular languages were Punjabi (33%), Mirpuri (28%) and Urdu (13%). With regard to religions for Asians, 50% were Muslim, 31% Sikh and 11% Hindu. For Black Africans and Caribbeans, 22% attended black-led churches, 19% other and 16% were
Church of England. There were significant numbers of unknown returns regarding religious persuasion for most groups. In terms of service requests nearly half related to hygiene needs. Higher proportions of Asian service users sought major works (50%) compared with black (20%) and white (8%).

It was found that greater delays were evident for Asian service users. Average waiting times were 260 days (white), 310 days (African/Caribbean) and 391 days (Asian). This discrepancy was most likely explained by the fact that Asian individuals were more likely to be seen by qualified OTs to address more complex needs rather than OTAs who were able to see users more quickly. 78% of Asian service users saw qualified OTs, compared with around 57% for both white and black service users. By comparison, greater numbers of white and black users were seen by OTAs and senior OTAs.

Several useful recommendations were made relating to:

- Better information services and ethnic monitoring to enable appropriate allocation of staff, demonstrating how users identified the need for the OT service
- Regular monitoring and evaluation of the results following data collection
- OT service specific training for language support staff
- Cultural awareness training for all staff
- Improved interagency working

There were few studies by OTs relating to minority ethnic groups and housing identified by this review. As such, research in this area could be considered a high priority to provide a future evidence base to assist practising OTs. The authors called for further studies specifically regarding users’ attitudes to illness and expectations so that appropriate and sensitive services could be developed. Although greater clarification and justification was required particularly in the methodology this audit provided a useful baseline study. The findings were location specific and as such were unlikely to be generalisable to other authorities. The study highlighted how auditing information systems could identify improvements to relevant aspects of practice and service delivery.

**Johnson (1998)**

In an unpublished Masters thesis, Johnson (1998) carried out a study using a repeated measures design [see also Stewart and Neyerlin-Beale 2000 page 58]. The study aimed to identify client-centred perceptions of change following the provision of adaptations. Following examination of the philosophical bases of disability models relating to both the Community Dependency Index (CDI) and the Canadian Occupational Performance Measure (COPM), Johnson provided a strong rationale to use the COPM in order to measure user-centred outcomes following adaptation provision.

The research took place in a single local authority with participants unknown to the researcher. A non-probability purposive sample was drawn from data from an adaptation panel of users likely to have adaptation completed within the 6 month period from October 1997 to March 1998. Following application of explicit exclusion criteria, 24 participants were identified as eligible for the first measure. Only 18 progressed to the second measure due to a variety of reasons including non-completion of the adaptation within the research time-scale (3), admission to hospital (1) and the death of two participants. Ages ranged from 33-84 years (mean 66) with 20% aged 80
years and over. Participants had a wide range of impairments with eight receiving home care and 19 having previously received equipment and minor adaptations.

The author was trained using the Self Instruction Programme for the COPM. The research had approval from the Head of Service and letters were sent to participants explaining the purpose of the study. Opportunities to withdraw were offered throughout the process. Each participant was visited once prior to the adaptation being completed and then again post-completion leaving time to make use of the adaptation. It was indicated that compromises were made in that some participants were assessed immediately after adaptation completion when a six month period would have been preferable. Participants were not informed of previous scores during second phase measures. 21 adaptations were completed with stairlifts the most popular (11), although there were two downstairs shower/toilet extensions and one bedroom with shower/toilet. 73 problems were initially identified with the vast majority (79%) being in self-care (with higher incidences of bathing and stair mobility difficulties) and problems in productivity and leisure being equally prevalent.

Parametric statistical analysis was applied using Pearson's product-moment co-efficient which identified a high correlation between performance and satisfaction with performance. The use of a related t-test demonstrated highly significant changes in performance and satisfaction with performance, following the adaptation provision.

This meant that it was highly likely that adaptations had a very real and positive impact on improving quality of life (in performance and satisfaction terms) with 17 of the 18 participants. However, there were some difficulties as problem areas unrelated to adaptation provision also showed improvement following retest when these aspects should have remained unaffected or constant. This could have been explained by participants feeling more positive about unrelated problems following the adaptation provision. Comparisons with a control group might have improved this situation and provided an indicator as to whether adaptations actually had unanticipated benefits in other identified problem areas.

There was a clear demonstration that COPM could be an effective measure within the social services setting linking into user centred adaptation goals. Johnson argued that the use of COPM could challenge critics who have argued that professionals tended to conceptualise need rather than service users themselves. However the limitations for use of COPM were apparent with four participants who had cognitive difficulties. In these instances proxy scores were given by carers that might have affected the results. These participants' scores might not have then been appropriate for COPM use and it would have been interesting to revisit the results excluding these participants. Johnson suggested that COPM could assist as a valuable communication tool in interviewing cognitively impaired users and carers together.

Johnson indicated that COPM interview techniques facilitated opportunities for individuals to consider areas in which they would really like to see changes occur. However assessment methods using narrowly defined parameters (such as eligibility criteria) might not provide such opportunities. Thus COPM use could support therapists with social model of disability values who aimed to integrate community care philosophies within their practice. Johnson suggested that the COPM was inappropriate for comparing priority of one user's needs with another. This predictive requirement would be better suited to the CDI concurring with the findings of Stewart and Neyerlin-Beale (2000) [see page 58].
This was a well thought out and well executed project. The study would be worth replicating on a greater scale and could potentially provide OTs with a valuable measure for identifying whether user goals have been achieved and could assist with providing valuable evidence of successful OT intervention.

Nocon and Pleace (1998)

Following concerns that the housing needs of disabled people in Shropshire were not being met this study by Nocon and Pleace (1998) was jointly commissioned by an interagency group including the Shropshire Disability Consortium (SDC), a housing officer group, social services and the housing authority. The research used mixed methods and aimed to:
- Obtain views from disabled people, purchasers, and providers about what issues needed to be addressed to meet the housing needs of disabled adults (aged 18-64) in the area
- Collect quantitative information
- Provide local policy recommendations regarding planning and service delivery

Qualitative methods included three focus groups with 22 disabled people. 26 people were involved in individual or group discussions including consortium staff, social services, housing and health staff. Separate discussions with OTs and housing officers responsible for housing adaptations were also incorporated. Quantitative methods included the collation of statistical information and development of a postal questionnaire. The interagency group was involved in advising on the research design and arranging its implementation with significant involvement from the SDC.

The audio taped focus groups and discussions were semi-structured, enabling individuals to discuss experiences of the services provided, how housing needs were being met and suggestions for improvement. The postal survey, drawn up in consultation with the steering group, included multi-choice questions regarding demographic information, tenure, location, impairment, personal assistance, housing problems and adaptations completed or required. It was not clear if issues surrounding ethnicity were addressed. Open-ended questions were included. Other formats such as Braille were available.

Justification of the respective merits and limitations of triangulation in the decision to use both mixed quantitative and qualitative methodologies and in the analyses of data, was not evident. Piloting was not reported in relation to all data collection methods. Issues surrounding trustworthiness in relation to handling the data from focus and discussion group transcripts and subsequent member-checking for accuracy and interpretation were not discussed within the paper. Ethical considerations were not fully reported.

The key findings from the focus/discussion groups were the lack of choice and control over housing arrangements experienced by disabled people including delays in finding suitably located and secure housing. Experiences were mixed in relation to the adaptation process although the authors placed emphasis on the difficulties encountered. These included the imposition of professional ideas about what might be required, failure to design inclusive facilities, not being involved in the decision-making process with professionals ‘knowing best’, rectifying mistakes, frustrations in overcoming bureaucratic red-tape, inequity experienced in getting adaptation work done in the privately rented sector and tenure inequities within under-resourced adaptation funding arrangements.
Disabled people felt that providing improved housing did not necessarily equate to the reduced need for personal care. Some expressed that it was a case of control over personal assistance in making the best use of adaptations. Others felt that poor design could mean the need for more support. Comments from consortium staff indicated that there was a specific problem with the housing needs of people with sensory impairments being overlooked.

A postal survey was issued to a random sample of 500 recipients, from the social services database and passed to the researchers. 210 replies were received (42% response rate). The respondents’ profile was considered broadly representative of disabled people within the county.

Analysis of the survey found that 75% reported having housing problems with 44% having between one and three problems and 31% having four or more. Problems related to stairs (40%), bathroom (28%) and kitchen (20%). It was not clear how many reported problems were identified in total. 81 respondents (39%) wanted one or more adaptations which included improved access to the property, bathroom and kitchen adaptations or the provision of a downstairs toilet. 55% of local authority tenants reported the greatest adaptation need compared with 33% of owner-occupiers although this was reported as being not statistically significant. Adaptation need was not associated with the amount of personal assistance received.

In terms of implications for practice, the study revealed that there appeared to be a high level of reported unmet housing needs across tenures. Housing need appeared to be individual and related to the specific barriers encountered. Disabled adults sought involvement at all stages of service planning and delivery but mechanisms for this were variable. Criticisms related to the failure of professionals to consult or communicate appropriately with disabled people who wanted to be treated as partners in the way that needs were met. In addition, there were calls for disability equality training and moves away from the ‘professionally driven and impairment-based model’ towards a social model [see Heywood 2001 page 38, Picking and Pain 2003 page 57 and Awang 2002a page 29]. The authors were critical of local discretion policies in relation to grants and OTs and housing officers making decisions based on personal discretion, although it was unclear from the findings how this conclusion was reached. The lack of appeals regarding decisions made was highlighted. Council tenants appeared to be disadvantaged feeling pressure to move home rather than adapting the current home due to resource constraints [see Adams 1996b page 27].

Although some methodological and ethical omissions were evident it was clear that housing needs and in particular the need for housing adaptations was high for disabled individuals. In addition, personal care was still a necessity for some following adaptation provision. Linked to this strong themes of control and involvement were expressed by focus groups and difficulties were fully explored. It would have been beneficial to identify positive experiences encountered and how these could have been used to inform better practice giving balance to the findings. A strong positive aspect of this study was the fact that the work came about through collaborative efforts of a disability organisation and statutory service providers, ensuring that experiences of disabled people were considered as fully as possible. As such the research philosophy and design demonstrated a highly commendable participatory approach. A section on the study’s limitations would have been valuable.

This short report by O’Brien (2003) identified families with disabled children who had withdrawn from the DFG system for financial or non-financial reasons and what constraints existed in monitoring DFG withdrawal. Inclusion criteria in determining the sample comprised disabled children under 18 years who had withdrawn from the DFG system within the year 2002 to 2003. The sample was drawn from 5 of 11 Northern Ireland trusts providing community occupational therapy services covering both urban and rural areas with varying socio-economic conditions.

The method chosen for the study was a desk-top survey as there was an ethical concern about raising expectations of families about retrospective grant aid. This method negated the requirement for ethical approval and written consent. The data was collected by paediatric OTs who reviewed retrospective, anonymised case files and recorded age, diagnosis, adaptations requested, problems encountered and outcome on standardised forms. The results were analysed and presented using descriptive statistics.

There were 44 returns from the OT managers of the five trusts. Ages of children ranged from 2 to 18 averaging 8.8 years. All but one child had substantial disabilities with some having life-limiting conditions.

Six main types of adaptation had been requested with the most popular being ground-floor bedroom/shower room (25), shower facility (10), and safe play areas and improved access (7 each). Reasons for withdrawing from the DFG process included inability to afford the contribution (30%), ineligibility for grant aid (25%), lack of agreement about the exact nature of the adaptation (11%) and reasons unclear represented 20% of the sample. Overall reasons for withdrawal fell into two key categories- financially related (55%) and non-financially related (45%). It was also noted that numbers of those withdrawing who were receiving partial grant aid, were similar to those withdrawing due to grant ineligibility (13 compared with 11).

A weakness of the study design was acknowledged in that it was not possible to elicit specific reasons for DFG withdrawal directly from families in terms of cross checking data. Additionally the study only used one source of data from OT records to identify withdrawals and did not include Housing Executive sources. As it was possible for families to enter either system to initiate the adaptation process, it was identified that the sample was likely to be an underestimation of the true number of withdrawals.

O’Brien identified a number of issues to be addressed including the nature of the records held. These were usually manual records and it was not possible to directly extract information related to age (in this case for children) as information was archived by address or name depending on agency. As a result cross-checking of agency information became more difficult. Although statistics on withdrawals were kept, the system was not sensitive enough to explicitly identify financial reasons that could be classed as ‘other’. It was also identified that withdrawals could occur at various points within either agency’s process which required differentiation within future studies and this would still not account for families who did not enter either statutory pathway.

Key recommendations following this preliminary investigation included the need to develop integrated systems between the agencies involved, enabling monitoring systems to clearly identify DFG withdrawals. O’Brien also called for a full retrospective study into the levels of DFG
withdrawal following OT assessment over a three year period that could identify the outcomes following withdrawal. In-depth data could be gained from interviews with families that could also elaborate on the additional costs of caring for disabled children.

It was argued that there was a strong case for a single and equitable system for dealing with DFG delivery in this area.

This was a well thought out study that focused on the key under-researched area of the withdrawal of families from DFG processes. The methodological limitations were discussed and areas for further research were highlighted. Integrated monitoring and information systems were recommended. It was of note that some families receiving partial funding had withdrawn as well as those who did not receive grants, identifying the need for further qualitative research to elicit reasons for withdrawal. The wider implications of unmet need for all service users, regardless of tenure, would also be an area for future research.

Office of the Deputy Prime Minister (2003a,b,c)

In 2003 the Office of the Deputy Prime Minister and the Department of Health produced housing adaptation guidance in the form of a consultation desk guide (2003a), a system review checklist (2003b) and an overview document (2003c).

The overview document (12 pages) provided a 67 key point summary related to the desk guide. The review checklist (8 pages) identified seven key process areas related to the adaptation process. The checklist provided a series of critical questions that adaptation agencies might find particularly useful in relation to the organisation, planning, delivery and evaluation of adaptation work.

The 'Delivering Adaptations' desk guide (2003a) provided guidance for those who:
- Identified, assessed needs and made recommendations for disabled people and carers
- Prepared specifications and made other practical arrangements
- Administered funding systems including DFGs

The document described relevant statutory duties supporting the adaptation process and used identified good practice from local authorities across the country to advise on how service delivery should be organised from the service user's first contact through to adaptation completion. Unlike the previous evaluation of the DFG system in 1996 [see page 35], the guide did not offer a methodological perspective on data collection although it appeared to derive its material from existing literature (identified in the final chapter). It also incorporated site visits to participating local authorities to illustrate specific issues.

The guide continually highlighted as a central foundation the need for services to adopt social model of disability values based on partnership with disabled individuals, as key partners within service planning and delivery. Key goals were quality and choice that linked to best value and modernisation approaches.
The guide described relevant legislative components including more recent developments such as the power of the authority to provide services for carers in their caring duties (GB, Parliament 2000). Significantly the *Regulatory Reform (Housing Assistance) (England and Wales) Order 2002* (GB, Parliament 2002) was included which enabled housing authorities to give unrestricted discretionary assistance (e.g. grant, loan or equity release) for adaptation work, superseding Home Repair Assistance. This order extended powers to acquire suitable alternative accommodation for the occupant with no funding restriction, provided that authorities published policies on how the power would be used. How successful this initiative would be remains to be seen given its discretionary nature and considering the reluctance of housing authorities to utilise discretionary Home Repair Assistance in the past [Heywood 2001 page 38].

A key theme throughout was the need for partners to work jointly in establishing needs (including unmet needs), factoring in an ageing population and subsequent policies, protocols and agreements openly, with adequate accessible information systems. All agencies involved needed to utilise a common referral form directed to a focal service point for dealing with requests. The guidance placed a heavy emphasis on keeping disabled individuals informed, advocating realistic time scales, regular contact and early warning of approaching problems. In particular a minimum ‘suite of information’ needed to include:

- Examples of personal needs indicating a need for services
- Clearly stated rights of those seeking a service along with eligibility criteria
- An indication of the services that made up the system, identifying the single point of contact and any relevant contact details
- An explanation of priority systems, charges, test of resources and clear target times for initial response and assessment
- Details of the processes involved and associated time scales
- Communication systems including complaints and appeals
- Leaflets with comprehensive summaries of the relevant services
- Fuller documentation e.g. protocols and inter-agency agreements available upon request

Such information also needed to be available in a variety of formats and languages to ensure that ability and cultural diversity were addressed. In addition, common training needed to be provided for all those dealing with enquiries and referrals. The guidance suggested that current priority systems should be broadened to reflect social model of disability perspectives. The best systems identified risk assessment and included quality of life issues. An example of medical and social model priorities was provided.

**Priority system for local authority O:**
1. Terminally ill, hospital discharge, living alone
2. Access to facilities
3. Bathing and lifestyle issues

**Compared with social model emphasis:**
1. The ability of the disabled person to maintain their independence is compromised, the capacity of the carer to maintain support of the disabled person is under threat, the quality of family life is deteriorating
2. Full potential for independence and inclusion is not being realised, the needs of other family members of the household are not being met
3. Potential future needs are not provided for

ODPM (2003a) p22
In dealing with large volumes of referrals, the guidance suggested consistent approaches across all access points, a means of identifying urgent cases, criteria that reflected needs rather than arbitrary decisions e.g. bathing assistance should be low priority and a system for checking with the referrer that correct decisions had been made.

With regard to prioritisation and eligibility policy, however, there was no mention of recent eligibility criteria guidance *Fair access to care services* (Department of Health [DH] 2002) which has updated part 7(1) of the *Local Authority Social Services Act* (GB, Parliament 1970). This local authority circular enabled local authorities to set eligibility at any of four levels of need - critical, substantial, moderate and low. The impact of this on service user eligibility for service provision including access to equipment and adaptations has yet to be determined but could be significantly detrimental where authorities have limited resources. Whether authorities adopt social model values within eligibility criteria as recommended remains to be seen.

It was recognised that a single and consistent point of contact throughout the process should be maintained, with a nominated progress chaser (see Heywood 2001, Picking and Pain 2003) regardless of which particular agency was most heavily involved at the time. This might include an individual from a home improvement agency or a local voluntary service involved in the process.

In terms of assessment the guidance reminded agencies that disabled service users should be viewed as experts on their own needs and that professionals should listen carefully to them [see also Nocon and Pleace 1998 page 46] and others affected by the potential adaptation work. OTAs were highlighted to carry out assessments for minor adaptations and paediatric OTs were encouraged to be trained up to assess and recommend children’s adaptations, ensuring that OT involvement remained consistent for the user. In addition it was suggested that provided that proper training, supervision and review processes were in place, assessments for minor adaptations could be extended to care managers and home care assistants. In dealing with complex cases appropriate joint working arrangements should be drawn up including all key partners and directly involving the service user where possible.

The guidance recognised that not all disabled people would follow the traditional route for getting work done and the process should be designed to enable choices to be made in who to approach for practical help with lists of appropriate builders, disabled living centres or home improvement agencies. The use of disability housing registers needed to be further developed with the creation of databases of adapted properties and lists of potential occupants, with an appropriate service to match properties to people. Consideration also needed to be given regarding arrangements for people who were unable to live in the property whilst work was being carried out.

‘Standard specifications’ were identified as useful in saving time and effort when pricing up work but these had to be versatile enough to encompass individual needs and also required regular review as information, practices and experiences changed.

Modular buildings might provide less disruption and a speedy and economical solution to adaptation needs if re-used, although modular building usage was currently limited. It was recommended that close supervision by the housing authority (once per week) during the build stage was required and that OTs should undertake a site visit to advise on the arrangements for key elements of the adaptation work to prevent wasting time and funds on adaptations that did not meet the person’s needs.
Once completed it was advised that the assessment, grants and supervising officers carried out a joint visit and consulted with the disabled person, carer and family on the appropriateness of the adaptation, the way in which the work had been done and satisfaction with the completed work. Minimum expectations for monitoring the system should involve the inspection of the completed adaptation, instructing the user on safe and effective use, routine surveys of user satisfaction with the process and outcome after six months, one year and three years.

From the findings of this review, careful consideration in timing evaluation was required [see Grisbrooke 2003 page 37, Chamberlain et al 2001 page 33]. Surveys might not always be the most effective method in obtaining long-term data. In addition, agencies needed to consult with a standing group of service users (see Awang 2002a page 29) and carers to monitor the system, review survey responses and to contribute to the design and evaluation of the adaptation service.

It was clear that the consultation desk guide would provide many challenges to service planning and delivery. There was an expectation that OTAs could play a key role within minor adaptation provision. There was also recognition that paediatric OTs trained in housing adaptations could add a new dimension to services, possibly opening up opportunities to access health budgets. Such a move is an area of further debate in terms of how well this could work in practice and whether or not better joint working should be a key focus. Clear inter and intra agency working arrangements using service level agreements was highlighted. The documents drew heavily on many of the themes identified by authors within this review. Perhaps the most challenging aspect of the desk guide was left until last. Proposed time targets were identified for the whole process with a high priority case (with £5,000 of adaptation work) completed within 16 weeks and a maximum time target of 52 weeks for the least urgent cases. Though commendable, how realistic such targets will prove to be remains to be seen.

**Oldman and Beresford (1998)**

Oldman and Beresford (1998) carried out research that aimed to explore parents’ and disabled children's perceptions and experiences of housing and also offered professional perspectives on meeting housing needs. This review focuses on parents and children's views. Specifically the study examined what made homes unsuitable for disabled children, what families did in response to dealing with unsuitable accommodation and families' experiences of the process of change within the home environment.

The research involved quantitative and qualitative approaches including a postal survey of families living in Northern and Yorkshire regions and interviews with parents, disabled children and professionals in housing and social services from the same areas.

Two stratified samples were drawn from a Family Fund database. One low income group (under £18,000 p.a.) received Fund assistance whilst the second group of middle income families did not. The number of surveys posted out was not stated although over a 70% return rate was achieved representing 234 families, with 138 from the low income group and 96 from the middle income group. Piloting the survey was not reported. 98% of families were white with five Asian families participating in the survey. Asian families did not wish to participate in subsequent interviews. Children's ages ranged from one year to 19 years.
The survey identified 97% of middle income families and 42% of Fund families as homeowners. 48% of Fund families rented from local authorities. 75% of families reported aspects of unsuitable housing with 4/10 identifying four or more aspects as being unsuitable including lack of space for play (and equipment) and lack of a downstairs toilet indicating that stair use was problematic. Parents with children who required more self-care help tended to regard their home as unsuitable.

One to two hour interviews were carried out with parents representing 40 families (30 Family Fund and 10 middle income) and included parents who had not experienced unsuitable housing. A significant proportion had either moved home or had adaptations completed. Topics included how housing factors affected care, parents’ perspectives on how unsuitable housing affected their children and what parents had done to try to improve their housing circumstances. Confidentiality and anonymity were addressed although survey and interview analyses and member-checking were not clearly described. Descriptive survey statistics were linked to interview themes.

Seven children aged eight were interviewed using creative methods. Children drew plans of their homes and described areas they liked or disliked. Everyday activities were explored further. Moving home and adaptations were also included. Children concluded interviews by describing their ‘ideal home’.

Children's descriptions ranged from words such as ‘bad’ or ‘hard’ relating to how well they could manage to use a room, to ‘easy’ referring to spacious rooms. Children tried to reduce the need to use stairs throughout the day e.g. for using the toilet, due to the considerable time and effort involved. Cluttered or cramped rooms were seldom used. Ideal homes were described as 'big' and 'massive’. Some children who used wheelchairs at school were unable to use them at home and were highly conscious of potential hazards when attempting to mobilise.

Play was a key area where experiences differed. Those with greater independent mobility had more opportunities to play around their home or garden. Other children were restricted to their bedrooms or living rooms with fewer opportunities to spend time alone. Gardens were important - families had ‘adapted’ gardens to improve safety and access, creating fishponds and playground areas. Although most children had friends round to play or sometimes stay over, three children had never visited a friend's house because of difficulties with steps and not being able to use toilets unaided.

Other social development barriers were children's frustrations at not having the opportunity to help with tasks including washing up when other siblings could do this. Privacy, dignity and practicality were issues raised in self-care. Five children needed assistance and two needed to be lifted on to the toilet. One child interviewed found her parents' assistance ‘nerve wracking’ as she was getting older and she feared her friends' reactions to this situation. Another child described her inability to fully utilise the washer/drier toilet as her mum preferred to get her off the toilet quickly. Children liked the opportunity to spend time alone when bathing/showering but this was countered by the assistance required for transfers.

Five children had moved short distances to houses initially unadapted and no more accessible than their previous homes. Adaptations did not necessarily enable greater independence as parents could ‘control’ their use. There were also instances of children wanting a particular aid installed but parents refusing this. Sometimes changes made to help parents in their caring tasks, highlighted the child’s perception of being treated differently, inhibiting privacy and independence.
The authors identified that attitudes to disability often had the strongest influence in explaining why families did or did not choose to respond to unsuitable housing. Parents needed to become their own care managers and appeared to lack knowledge of the adaptation and funding process. Some homeowners believed they would not get financial help due to their status. Some would not adapt because of the visual impact of the potential work, or because adaptations might reduce the child's future independence. Others felt their children should learn to live in the 'normal' world and cope with awkward housing.

The survey indicated that owners were much more likely to self-fund adaptations than council tenants, however council tenant interviews showed that self or part-funding was more common than the survey suggested. When parents sought financial help in the process they reported OT involvement, although some reported that OTs had only dealt with equipment needs, overlooking housing issues. Parents seemed to make no sharp distinction between health, social and housing needs. The researchers questioned the lack of more general assessment of the families' total needs. Assessment was stressful and took too long. Advance warning of timescales was required. The majority of attitudes to OTs were critical. Families had to research independent living centres or catalogues and found OTs reactive. Several mothers felt upset that OTs had checked on them by going to schools to observe children's behaviour. Others felt pressure to move rather than adapt though some welcomed this opportunity. Some families did not like OT suggestions especially through floor lifts, stair lifts and ceiling track hoists as adaptations exacerbated space problems. The financial assessment was viewed negatively especially when no funding was forthcoming. Tenure differences occurred regarding moving, with renters less satisfied than owners due to the lack of available, decent quality accommodation. The medical priority system lacked adequate information. Occasionally families were left to their own devices to find new accommodation. OTs were identified as the closest to understanding the housing and disability relationship but were not always family or child-centred. Constraints were identified regarding insufficient funding. Adaptations were not comprehensive and appeared to have been completed in a piecemeal fashion and 'done on the cheap'.

Two main recommendations were made. Firstly, urgent policy review was required to ensure that children's housing needs could be properly met. Problems associated with tenure differences and the resultant test of resources were highlighted. There were strong motives for health authorities to be included in funding adaptations or moving house as sums involved would not be excessive compared with potential health problems in parents, better life chances for children and the reduced demand on care services. Secondly, it was clear that families wanted professional attitudes to change, supported by specific child related policies and procedures. Professionals such as social workers and paediatricians required greater awareness of disabled children's housing issues. Housing staff needed to improve sensitivity to the specific needs of disabled children.

The research provided a broad picture of the views of parents and importantly those of disabled children regarding their housing needs. Although some methodological areas were not fully addressed the interview method involving children was very creative and it would be beneficial to see future research replicating this method. The children's interview findings provided a fresh insight regarding their adaptation needs and experiences. Some challenging points regarding parents' perceptions of OTs showed the need for therapists to communicate clearly timescales, assessment processes, reasoning and rationales. Reasons why adaptations were not being used and issues surrounding the value of adaptation work in promoting privacy and dignity required further exploration. The study raised 'Poor Law' thinking processes identified by Heywood (2001)
[see page 38] with similar issues regarding the need for health authority funding, highlighting the broader benefits of adaptation works.

**Payne (1998)**

In a Masters report Payne (1998) focused on evaluating carers’ perceptions of the effectiveness of bathing and showering adaptations acquired through DFGs within one Greater London Borough. Although not focusing on the direct views of children, the research aimed to explore:

- Whether adaptations met carers’ and children’s needs
- Safety aspects
- Features which helped or hindered care-giving and planned or unplanned outcomes of intervention
- Whether developmental needs were being met.

The justified methodology indicated the use of mixed approaches using survey and interview methods. In addition departmental records and photographs were used to improve reliability of the data and transcripts were member-checked by interviewees. Social service heads and the university ethics committee approved the research. Participants were unknown to the researcher and children were not contacted directly. Anonymity, consent and confidentiality issues were fully addressed and interpretation services were offered where appropriate but declined. The six year time frame for the study (although the report states five years) extended from January 1992 to December 1997.

A total population of 27 families met the survey inclusion criteria from 1,215 DFG applicants. Participants had to be the main carers of disabled children with severe bathing problems who had received bathing/showering facilities via DFGs. Three families were subsequently excluded where the children had died and/or where the home was repossessed.

Initially, 12 carers completed the previously piloted 30 minute survey (50% response rate with 11 mothers and one father). All lived in owner-occupied or council-owned houses or flats. Nine families were white British, two were Indian and one family was mixed-race. 13 children were represented with a variety of physical and/or learning disabilities, some attended boarding school and several were wheelchair users. Ages ranged from 3 to 18 (mean 9.6 years) and the average weight was 35.8 kgs. A variety of bathing/showering facilities had been provided.

Interviewees identified from the survey included three mothers (white British) who provided qualitative data regarding their experiences of the outcomes. Two were owner-occupiers and had 12 and 14 year old boys with Duchenne muscular dystrophy (both wheelchair users) whilst one council tenant had a nine year-old boy with hemiplegia, epilepsy and a hearing impairment. All adaptations were level access shower-rooms although one was large and included a ceiling track hoist and bath.

Descriptive statistics were presented for the quantitative elements of the survey although it was not clear how the qualitative data was analysed and how the combined data was integrated. Coding, content analysis and categorisation were described in handling the interview data and this was then linked to survey findings or departmental records.
Results from the survey indicated that overall, following adaptation provision, needs of both carers and children were met. The need to lift children was reduced or removed improving positioning, time required and health of the carer. Floor drainage showers proved to be most satisfactory but shower screens, although improving privacy, provided only partial protection of carers from water, obstructing access to the child's lower half, with one screen being difficult to open against the floor gradient.

For children independence was also increased using seating, positioning of equipment, shallow baths and floor drainage showers. Over bath showers were useful for washing hair but did not facilitate play in the same way that baths or level access showers did. Baths satisfied needs of ambulant children or ceiling track hoist users. Children enjoyed being hoisted but did not like sitting on wet slings and edges of slings could be abrasive during athetoid movements. New skills through play were also identified following adaptation work.

All equipment including ceiling track hoists, shower chairs and floor drainage showers eased caring. Reduction in kneeling, bending and reaching, time spent in close supervision and incidences of soft tissue injury were noted. Care giving was hindered by portable hoists, screens (especially fixed), over bath showers, slings and restricted space. It appeared that mothers used lifts reluctantly sometimes preferring to lift children and opting to use hoists when tired. Room size ranged from 2.78 m\(^2\) to 6.46m\(^2\) but did not appear to affect satisfaction levels.

The author concluded that on the whole bathing/showering facilities provided benefits to carers and children though some difficulties were encountered. Areas for consideration were responsibilities for wear and tear in domestic shower-rooms particularly in relation to shower controls, recording and ease of access to safety specifications for families and maintenance departments and development of long-term monitoring systems to ensure effectiveness was maintained.

This was an original study that provided an insight into an area that had previously been poorly addressed. There were some methodological concerns in relation to the development of the survey, in particular in relation to the lack of non-standardised measures and the depth of consideration of the types of analysis used. The study might have been better focused if fewer aims were identified given the location and small size of the sample. Nevertheless the study provided a useful basis for future research given the amount of data produced. This could include reasons for reluctance to use lifting equipment, how play and developmental skills were identified and incorporated within assessment for adaptations and gauging the effectiveness of children’s adaptations over time to identify triggers for further intervention. The points raised could be developed into a checklist of considerations for other OTs working with families of disabled children.

**Picking and Pain (2003)**

Picking and Pain (2003) examined whether disabled people felt they had received appropriate professional support, information and practical help from OTs when adapting their homes and aimed to learn more about disabled peoples’ feelings regarding the adaptation process. The authors suggested that more guidance was required for OTs that both explained the role of professional support in this area (as often therapists had to coordinate works) and identified
what aspects of the process users themselves could control.

The use of focus groups to explore attitudes and opinions within a single-category design was adopted. Using purposive sampling participants were recruited to three focus groups using closed OT cases from three geographical locations including two towns from one county council and an urban population from a unitary authority. The sample contained 17 participants (with one non-disabled individual) who had received financial and professional intervention from the authority. One participant was from a rural location whilst the remaining 16 were from non-rural locations. Participants represented a mixture of house design, tenure and a variety of adaptations. It was noted by the authors that due to workload pressures some OTs were reluctant to assist in recruiting participants, with those committed to research in principle giving the most help.

Individuals had to be over 18 years, to live in the designated areas and to have had smaller major adaptations costing £1,000-£10,000. Recipients of minor and complex adaptations (including extensions) were excluded. Good communication skills were required to take part in discussions. Permission was granted via a local research ethics committee and the Association of Directors of Social Services (ADSS) research group was initially consulted. Confidentiality was discussed and anonymity of the participants was assured. Although participants agreed to be tape-recorded, issues surrounding informed consent and withdrawal from the study were not fully addressed.

Open-ended questions were used within groups from a question guide (reproduced in the article) and information was collected using a tape recorder and by an observer who noted non-verbal communication. Transcribed tapes were subsequently coded and categorised. Themes were identified initially from the separate groups and then inter-group comparisons were made. Verification of the findings through a member-checking process was not discussed and this may have affected the credibility and confirmability of the findings in terms of trustworthiness.

Four key themes were identified including factual accounts, understanding of the process, experience of ‘others’ and opinions and feelings. It was noted that of the 17 schemes, 11 were problematic during installation. Most participants were aware of the process and roles of professionals. It appeared that if individuals had prior knowledge of the system or were well informed they were more likely to want to take control, although some wanted decisions made for them [compare with Awang 2002a, page 29]. Stress was experienced when people were unprepared especially when not able to visualise the final scheme, compared with those who had seen examples of work or who knew what was expected of works and lengths of time involved.

Professional support most valued was ‘moral support’ which included regular telephone calls and visits, being listened to with someone who could empathise with stress of the process. The authors suggest that it should be the person with the ‘right attitude’ rather than the person with the right ‘job description’ who mattered to individuals. It was clear from the findings that there was no one right way of providing support. Some individuals wanted decisions to be made for them but wanted to be party to that process, whilst others wanted to take up matters directly with builders or choose their own for the work.

It was suggested that information provision and opportunities to take control should be made available to the service user by the OT at the outset of the adaptation process in addition to assessment and interpreting needs into specifications. Professionals needed to recognise prior
experiences and knowledge of the process to enable the right choices to be made in how the user wished to control the situation.

Although some of these points have been identified previously by Heywood (2001) [page 38] the authors challenge the assumption that OTs need to be the progress chasers as this role fell outside the range of OT core skills. It was argued that this role should be adopted by home improvement agencies or local authority staff with appropriate experience and disability awareness training [see also ODPM 2003a page 49].

Approaches and qualities appreciated by participants included an ‘understanding attitude’, ‘standing back’, using a gentle approach to facilitate decision-making processes and providing appropriate information to allow the individual to progress at their own pace. Participants valued OTs who did not pressurise rather than those who ‘knew best’. This point was similar to that identified by Nocon and Pleace (1998) [see page 46]. Participants wished to avoid ‘invasion’ of their home through duplicative visits and identified problems with lack of staff availability at important stages.

Despite some methodological limitations in piloting and addressing issues of trustworthiness, this was a good piece of work. The authors identified that data saturation did not occur, implying that further work in this area was warranted. It was notable that participant recruitment was difficult due to reluctance on the part of some OTs to assist due to work pressures. The fact that there was only one participant from a rural location suggested this was an area for future research in comparing urban and rural experiences of adaptation processes. Some participants were unable to attend due to ill health, travel concerns and inclement weather. These potentially dissatisfied individuals might not have wanted to discuss the topic in a group setting and might have proven to be a rich source of data. The authors, in acknowledging these difficulties, found the focus groups successful for those able to attend, although alternative methods for those unable to participate in groups were not addressed. As such consideration of the limits of focus group usage would have been beneficial.

Stewart and Neyerlin-Beale (2000)

In this comparative study Stewart and Neyerlin-Beale (2000) investigated the effectiveness of paediatric OT provision within a local authority. Using outcome measures, the research aimed to establish whether intervention enabled disabled children to become more independent and also if such interventions, including major and minor adaptations, reduced the perceived strain on carers. The goal was to demonstrate that within a predominantly social work environment, occupational therapy was an important and effective resource. Literature had shown that additional demands were placed on carers of disabled children but it was unclear how well home-based interventions added to, or relieved the pressure of caring tasks.

The study used a same-subject before-and-after design (repeated measures design) as it had the advantage of minimising distorting effects as the characteristics of the children remained constant over the both ratings. This could be assessed for significance using a paired t-test.

Following ethical approval a population of 46 disabled children from one local authority occupational therapy service was built up over an 18 month period. 33 children (16 girls and 17
boys) formed the main sample that was divided into four age bands ranging from 2 to 18 years. The largest age band was 11 to 15 years (49%). Children had a range of disabilities. 30 carers (24 women and 6 men) from 27 of the households participated in the completion of carer outcome measures. Inclusion criteria covered current and newly referred disabled children and parents who were willing to participate. Families excluded from the population were not eligible (11), as OT intervention was incomplete. Two withdrew, although it was not clear what mechanisms existed to facilitate withdrawal. Gaining informed consent was not fully discussed particularly in respect of disabled children. The researcher was unknown to all participants. It is important to note that interventions were not given in isolation and children had regular contact with schools and other therapy professionals whilst carers received education and support.

The standardised measurement tools used with the children were the Community Dependency Index (CDI) and the Canadian Occupational Performance Measure (COPM). The CDI had been found to be useful in objectively measuring function across a wide range of disabilities. COPM provided a useful measure for evaluating a service as it recorded subjective performance improvement even if there was no measurable change in independence. Carers completed three scales - the Caregiver Strain Index (CSI), Subjective Burden Scale (SBS) and Perceived Stress Scale (PSS). All choices were justified with supportive evidence.

The case OT completed the CDI and COPM during the initial assessment whilst the researcher independently contacted main or both carers to complete the three scales. Interventions lasting between six and nine months occurred in nine areas including advice and equipment (100%), moving and handling issues (97% n=32), minor adaptations (64% n=21) and major adaptations (61% n=20). All participants were then reassessed. In addition carers were asked to rate the satisfaction with the OT service on a scale from 1 (not satisfied) to 5 (very satisfied). It was not clear what scale the satisfaction measure was based upon [see Chamberlain et al 2001 page 33]

The authors report that for children the CDI demonstrated statistically significant improvements for independence. Eight children with severe cognitive difficulties did not complete the COPM but the remaining 25 showed overall statistically significant improvements in both areas of ‘performance’ and ‘satisfaction with performance’. With the carers slight changes were shown on all three scales although the SBS showed a significant trend in the lowering of burden scores i.e. decreased burden. Overall satisfaction was very high with an average score of 4.3.

The CDI scores suggested considerable improvement in levels of independence with 13 participants reaching a pivotal independence score of 60+. This was the equivalent of becoming independent in two tasks or completing three or four tasks with difficulty, compared with being completely dependent on carers previously. Where scores had not changed one was already fully independent and three teenagers remained heavily dependent despite equipment provision. The remaining two were pre-schoolers and were not expected to demonstrate full independence at this stage, revealing that the CDI might not be appropriate for this age group. The authors indicated that the CDI was valuable in identifying the need for additional care services in such instances.

Improvement within the SBS showed that carers may have benefited from moving and handling and other equipment, but other scales were not noticeably affected and the authors concluded that perhaps intervention beneficial to the child could actually relieve the stress associated with the complexity of the caring task.
The authors identified several limitations of the study including the small sample size, affecting generalisability, the lack of a control group and subsequent efficacy. In addition, therapists were not ‘blinded’ to the interventions potentially affecting reliability of the results. Larger studies with longer time frames were suggested, possibly using waiting lists as control groups. Comparative economic studies could establish the benefits or difficulties of home versus residential caring. Qualitative elements were advocated to provide a richer understanding of experiences of children and carers. Stress scales for children could be incorporated to identify quantitative changes.

In conclusion, this study was well designed and executed although some ethical issues were not fully addressed. From a social model of disability perspective there were empowerment concerns within the research process in terms of how much control the participants experienced. It was clear from the research that OT intervention was playing an important part in the lives of both disabled children and their parents. However, the extent to which both major and minor adaptations played a role in enabling independence or producing satisfaction in performing activities, could not be fully determined. This raises the question as to whether adaptations should be looked at in isolation from other areas e.g. equipment provision, moving handling issues or care provision and whether such distinctions are necessary when looking at ‘independence’ in a holistic manner. The authors suggested that by combining data from both measures it was possible to provide employers with clear evidence of the effectiveness of OT service provision and as such the use of the CDI and COPM both have clear implications for OT practice in this area. The integration of paediatric OTs within a local authority appeared to have been successful for this service, providing useful evidence for an increased role for paediatric OTs in adaptation provision as envisaged by ODPM (2003a) [page 49].

Thorpe (1999)

This working file was developed as a result of training courses run by the Centre for Accessible Environments (CAE) and the College of Occupational Therapists (COT). Its primary focus was as an information source for OTs but could also be used by other professionals. The ring file format could enable new information to be included and older information to be removed if required. A feedback sheet was included with requests for comments about usage of the file to enable regular updating.

The file comprised four main sections with useful reference sections relating to relevant organisation and product details/contacts, as well as associated publication lists and an index at the end making it easy to find information related to key words.

The first section described the key people involved in home adaptations starting with the service user and OT through to process regulators such as grants and building control officers and specialist firms and subcontractors. There was an emphasis on client-centred practices including an acknowledgement that the service user should clearly understand the stages involved and be supported through these. Reference was also made to the importance of contract agreements and responsibilities for all parties from the outset.

The second section dealt with the processes involved and clearly outlined the stages in a house
adaptation and when key professionals might be involved. These included determining a carefully prepared brief (involving an architect or surveyor early on), developing a detailed design, planning, tendering and approving funding. Timescales for each stage were identified although potential delays were acknowledged. Some tips on what works might require planning permission were included using illustrations along with relevant information regarding building regulations, party wall information and VAT. Advice was also given as to how information should be conveyed at design stages.

OTs would find much useful information within section 3 ‘building principles’ related to making early decisions regarding adaptability that would enable them to participate effectively within the detailed design processes. Basic illustrated information was provided relating to roofs, foundations, external walls and internal structures, drainage, services and fire considerations. These areas were built upon within the final section in selecting building elements. Here more general products were considered which referred to the internal arrangement of accessible features such as doors, thresholds, windows, bathrooms and fittings, toilets and showers, kitchens, controls, rails and hoists and lifts.

This file would be an essential tool for OTs working in this field providing a broad range of information presented in a logical and easily readable format. The detail was appropriate for its purposes and further sources were indicated if more information was required. The file was very easy to navigate having only four main sections and a useful index. OTs could also add their own information to develop it into a personal resource file. It was clearly presented with good illustrations, however it was not clear whether the information was available in other formats. Student OTs would find this a very useful tool in gaining an understanding of the role of the OT in a housing/social services setting. It would also be useful for OTs who were new to this area and more experienced OTs might find some of the details for instance on planning, building regulations and building principles of particular value.

The working file has proven to be popular being used as a basis for CAE/COT training courses. Unfortunately no further updates have been made since 2000/1 and as a result the information contained will become dated unless OTs themselves produce regular updates.

Winfield and Goodman (2001)

In response to Best Value requirements a study conducted by the Syniad Benchmarking Centre by Winfield and Goodman (2001) aimed to identify standards for consistent service provision related to housing adaptations within Wales. Significant variations within local practices had been apparent. Using a systematic 10-step benchmarking approach through performance comparison, housing adaptation data was collected from 19 Welsh unitary authorities. Performance indicators for local government in report format and five related good practice guides were produced. [see Appendix 5 page 132]. The study focused on:

- Communications
- Needs assessment/prioritisation/eligibility
- Time taken
- Outcomes
Authorities completed a series of substantial questionnaires for the financial year 1998/1999. Partners in the benchmarking exercise included a disability organisation, a home improvement agency and National Assembly of Wales representatives. Data generated was provided solely by the participating authorities.

Mixed quantitative and qualitative data was gathered and analysed producing descriptive statistics. The results were presented using a table format with supporting narrative within the report. No method was specifically mentioned. A brief summary of relevant findings is outlined below.

Actual expenditure (including staffing, administration etc) for mandatory DFGs for 16 authorities ranged from £136,729 to £4,368,000 with a median value of £690,427, representing an average of £7.47 per head of population. Social services equipment expenditure ranged from £37,529 to £245,240 (nine responses), averaging £121,618 (£0.74 per head). Social services adaptation expenditure ranged from £5,900 to £142,698, averaging £55,404 (£0.36 per head). The average Housing Revenue Account expenditure for nine respondents was £290,470 (£2.12 per head). The numbers of properties adapted by nine authorities ranged from 105 to 4,397 averaging 933.

The number of DFGs given (12 authorities) ranged from 64 to 746 (median of 141). The costs of DFGs ranged from £3,758 to £9,000 with a mean of £5,816. This compared with the median value of £5,890 capital costs identified by Heywood (2001) [page 38]. By comparison social services adaptation costs (10 authorities) ranged from £39 to £316 with a median of £118. Almost all authorities had used disabled adaptations agencies such as Care and Repair.

All 18 authorities gave information at the point of initial enquiry and assessed applicants against eligibility criteria. Numbers of OT referrals averaged 1,889 with 39% requiring adaptations (1 in 3 referrals). Results of assessment outcomes were given to users by all 18 responding authorities with 16 providing a hard copy to their service users. The different solutions to user needs were discussed (15/17) with 10/13 authorities obtaining user agreement before proceeding. Verbal communication was the most common method of consultation with users on adaptation recommendations. 12/18 measured user satisfaction with 11 using a questionnaire either at the end of service provision or annually. Communication was via standard letters (16/19), face to face interviews (15/18), leaflets (14/18) or individual consultations (13/18). The type of information available was financial, eligibility criteria and details of who was to carry out the assessment.

Time recording usage was low with only 5/17 authorities using such strategies. This was considered an extremely important area for services, as time in managing the process was a key performance area.

Quality issues related to all parts of the process from initial enquiry to completion of works with consultation throughout. Many of the authorities did not collect such information routinely. 12/18 authorities measured user satisfaction of services provided. 11 used questionnaires, eight made home visits, seven used telephone calls and four surveyed the final outcome. Additional methods included final payment stage grant officer visits where users 'scored' builders' performances, self-review forms, focus groups, comment cards and compliments/complaints forms. One authority had set up a service user group in 1999 for this purpose. A variety of professionals collated information that was disseminated to organisations and service users through letters and Best
Value groups. The data was used to monitor expenditure and performance, benchmark comparisons with other authorities, measure public satisfaction and assist in developing future action plans. Six authorities collected data annually, two quarterly and one monthly, however eight collected data only at the end of service completion.

Authorities regularly carried out visits to check progress with DFG cases (16) although only half did this for Housing Revenue Account adaptations showing potential tenure disparity. 8/17 reviewed the adaptations care plan on completion. Only 4/16 authorities conducted a review some time after completion. 13 carried out evaluation procedures to see if adaptations met users’ identified needs through visits (5) or questionnaires (3). Nine had evaluation procedures to check that the user was able to remain at home (four using surveys). Only one authority evaluated the length of time the user remained at home following adaptation completion, but this was not a formal procedure.

Key recommendations from the Benchmarking Club indicated the need for future research of the Welsh ageing population to take into account adaptation and equipment needs and resources for health and social care providers. ‘Whole’ system approaches were recognised as being speedier and more effective with better access for users. More work was needed to develop a time-specified process model of the key stages involved in adaptation provision against which performance could be measured annually. The use of feedback forms following completion was recommended to identify any work problems.

Significantly given the different funding arrangements and tenure disadvantage the researchers recommended that consideration be given to consolidating all forms of funding for adaptation work. The need for common accountancy frameworks for service costs across local government was identified. It recommended the adoption of not only a standard level priority system throughout Welsh local government but also ‘cross service tracking’ to give accurate information on application progress, which could also collect performance data on time taken for the entire process.

A key outcome was the development of five adaptation good practice guides entitled:
- Screening for eligibility criteria and prioritisation for assessment
- Adaptation needs assessment
- Time taken
- Ensuring a quality outcome
- Ensure an effective communications process

These were designed to assist organisations in performance assessment, comparison and goal setting activities. It was recommended that authorities should seek to achieve a balance in all performance areas. Included was information on the target audience, a series of key activities graded from ‘minimum standards’, ‘good practice’ through to ‘better practice’, advice on current targets, possible performance measures and useful references. Descriptions of what constituted ‘critical success factors’ for improving performance were outlined.

This was a well-executed and thorough project with significant policy implications identified for adaptation delivery in Wales. OT teams would find the practice guides valuable tools in ascertaining service strengths and limitations enabling comparability over time or between
authorities. Although a disability organisation was involved, it was not clear from the report how far the views of users themselves were incorporated within the methods. Within the standards a higher profile could have been given to user involvement. For example within guide 5 (effective communications) under ‘better practice’ check points include adopting a service users charter, face-to-face consultation, regularly advising service users following screening, user feedback to improve performance and publishing findings to service users. If users should be viewed as central to the adaptation process, it could be strongly argued that methods for involvement should be minimum requirements rather than elements of better practice. In this respect minimum standards required re-evaluation to promote more creative strategies to enable users to shape or control service delivery. The report would benefit from a clear section on the methodology used.
Part 2: Grey Literature
Part 2: Grey Literature

Essex Social Services (1999)

Essex social services have produced a service-focused Occupational Therapy: Good Practice Guide (1999). This was a comprehensive document intended for OT staff to use for reference, training, assisting in problem solving and making recommendations for equipment and adaptations. It was also used as a benchmark as part of investigations into complaints. Key aspects have been described below.

Section 1 provided overviews of the OT process from enquiry to case closure and included useful summaries of key legislation, eligibility and prioritisation for OT assessment and the OT assessment process (including recommended reading on cultural diversity). Examples of assessment, action plans and housing assessment report forms were included. Assessment practice standards clearly denoted the standards of recording information expected within the authority. A supported housing index with accompanying user guidance notes was described. The index provided a framework of user specific details related to individual housing need which, when input onto a database, provided evidence for supported housing.

Section 2 described the DFG process with timescales. Terminology relating to the DFG process was defined and each aspect within the process was outlined in detail. The roles of both the OT progress chaser and the housing adaptation grant panel process were explained.

Section 3 provided integrated protocols including information on scheme descriptions, provision guidance, safety issues and protocols/technical guidance. Scheme protocols related to straight track and curved stairlifts, through floor lifts, level access shower trays etc providing specific, comprehensive and consistent checklists so that OTs met necessary requirements. These enabled audit trails to be tracked.

Section 4 dealt with equipment schemes. The processes of scheme use and evaluation were not fully clear from the documentation. Examples of protocols and forms used by the service were provided on disk.

Section 5 covered guidance on accessing voluntary sector funding and specific equipment such as environmental control units. Guidance on requests from residential establishments was included with a useful reference list of who was responsible for basic equipment provision.

This guide if replicated would provide a useful template for other OT services in setting up comprehensive service guides, induction information and material to support OT students on placement. Although the guide was designed specifically for staff use it could readily be adapted to provide a more detailed document for service users to show what services were available, how services should be provided and the processes involved in decision-making. This higher level of information provision would allow greater accountability and service transparency, promoting service users’ rights to challenge decisions or processes within the system.
Greenwich Council (2002a,b)

Atkinson and Dodd have produced two booklets to assist in decision-making with regard to adaptation design. The first, Accessible Homes (32-pages, Greenwich Council 2002a), aimed to provide specification guidelines for new-build and existing properties that would accommodate the needs of a variety of wheelchair users, reducing the need for customisation between tenancies. The second 24-page booklet, Site Brief (Greenwich Council 2002b), was devised to achieve wheelchair user standards with ‘footprints’ that exceed those of lifetime homes. Standards provided have complied with Part M of the Building Regulations (Department of the Environment, Transport and the Regions DETR and Welsh Office 1998), British Standard 8300 (BSI 2001), “Lifetime Homes” and Stephen Thorpe’s Wheelchair Housing Design Guide (1999).

Accessible Homes provided several general design briefs that aimed to anticipate common difficulties experienced by wheelchair users. The booklet was broken down into 15 sections with handy contents and glossary pages. It covered wheelchair dimensions, external features including gardens and hardstandings, approaches, internal specifications including kitchens, bathrooms and bedrooms, doorways and door and window controls. There were only two diagrams showing a turning circle and common wheelchair dimensions. Similarly, Site Brief contained 15 sections outlining essential requirements for a variety of standards. These were clearly referred to throughout and where Site Brief standards exceeded other standards, these were clearly identifiable. Additional areas covered included dealing with callers, negotiating the secondary door, moving around inside and outside, using internal rooms and controlling services.

Both guides would provide useful reference tools for OTs and their students in terms of design specifications and dimensions. Further diagrammatic representations would have been beneficial to elaborate on the text. It was not clear from either publication who the intended target audience was or how they would be utilised. Service users, for instance, might have found the information too technical and difficult to visualise. However the booklets would provide useful design guidance for architects, technical officers and builders unfamiliar with domestic accessibility specifications.

Northern Ireland Housing Executive (2003)

This good practice guide, Inclusive Design through Home Adaptations (2003), aimed to supplement the 1995 Northern Ireland Housing Executive’s initial guide Designing for People with Disabilities (NIHE 1995). The practice guide extended information relating to assisted wheelchair users and their carers in light of smart technologies, universal design and changes in regulatory requirements and standards. It was recognised that much design guidance was in existence and the guide sought to offer support in identifying best practice.

The guide used a report style and comprised of 12 chapters, a bibliography, glossary of terms and appendices. Key chapters have been outlined in more depth.

Chapter 1 summarised the key principles of successful adaptations and offered perspectives on standardised compared with customised design solutions. The guide identified the efficiency that standardised designs offered but highlighted that standardisation often required tailoring to specific needs. As a result, principles within successful design needed to incorporate both user
and carer views and their inclusion within the communication process alongside professional reasoning. Clear specifications, promoting independence and offering choices to users was required. The need for adaptations to be efficient and effective with swift positive outcomes for users were identified as key requests. This chapter stressed the important role of OTs in ensuring that users and carers were involved in creating the design brief and that communication procedures were adhered to and outcomes were evaluated both from a technical and user perspective.

Chapter 2 highlighted the variety of pathways and key stages in home adaptations and publicised the two *Adapting Your Own Home* (NIHE 20002a,b) step-by-step guides that complemented these stages [see page 67].

Chapter 3 directly addressed the importance of the family’s view of disability and subsequent adaptation provision. Areas discussed included the vulnerability of families who may have to suddenly deal with the onset of disability, the long-term implications of diagnosis, the involvement of a number of professionals, the emotional and social impact on the family of adapting a home and the level of family disruption. Advice was offered to professionals in considering how the changes in family ‘ownership’ of the home and its spaces might potentially affect dynamics requiring sensitivity to siblings, for instance, and the importance that adaptations were fully integrated both visually and functionally. The guide made reference to other work by Beresford and Oldman suggesting visits to adapted homes, or 3D modelling to enable families to visualise the end product.

Chapter 4 focused on the role of the OT, defining the nature of occupational therapy and summarising the OTs involvement in the home adaptation process. This included initial contact, assessment, post assessment, recommendations and potential input after recommendations had been made. The key stages of OT involvement included checking and agreeing plans, arranging alternative accommodation, location of fittings during the building phase and post completion visits that incorporated evaluation of the outcome for both users and carers.

Chapters 5 examined researching and selecting equipment.

Chapters 6, 7 and 8 considered the roles of a range of key housing professionals, designers and contractors within the process.

OTs would find chapter 9 particularly valuable. This chapter analysed four design options based upon case studies of existing properties using photographic illustrations. The first case study examined how ‘assistive’ or ‘smart’ technologies could be incorporated within areas of safety, security and lifestyle monitoring. A definition of an assistive technology device was offered and selected items were illustrated. Sources of additional information relating to Smart Homes were given and further work on researching and evaluating the benefits of such technology for users was identified.

The second case study provided two examples. Firstly, how a typical house could be adapted through equipment/alterations to meet users’ requirements. The second example dealt with adaptations to enable an individual to work from home. Both examples provided photographic and design plans. The first offered existing plans and adapted designs for ground and first floor arrangements that incorporated a downstairs w/c, vertical lift and ensuite bathroom. The second focused on the provision of a ‘home working zone’.
The third case study provided guidance on solutions that required an extension to a property for an assisted wheelchair user. Design options that considered the use of mobile hoists and ceiling track hoists were compared.

The final case study examined the use of ‘off site manufacture’ (prefabrication), a relatively new approach to home adaptation solutions. The guide described the purpose of this type of construction technique and pointed out the work undertaken by South Bank University in modular construction technology. Examples of different types of construction were shown.

A key part of the guidance related to the production of data sheets that set out the logical steps to design elements under 11 different headings. These are listed below.

1.0 Site consideration
2.0 External works
3.0 Entering the building
4.0 Circulation spaces
5.0 Living rooms
6.0 Kitchens
7.0 Dining areas
8.0 Bedrooms
9.0 Sanitary accommodation
10.0 Environmental controls
11.0 Vertical circulation

These data sheets, with their comprehensive accompanying illustrations and notes, would prove very beneficial to OTs in practice in offering a benchmark against which individual requirements could be based.

The final chapters provided information on relevant legislation and on further sources with contact details. The appendices offered shower specification checklists and housing specifications that could guide assessments, recommendations and decision-making processes of OTs.

This comprehensive guide would provide a very useful source of information to practising OTs. Although the legislative requirements were directed towards Northern Ireland, there was much to offer practitioners on the mainland. The importance of recognising the effects of adaptations on family dynamics was a key feature. Further consideration into the depth of the case study material might have been beneficial, particularly with reference to assistive technologies, although the design sheets provided a detailed resource of potential housing solutions presented in a logical manner. Similarly, the plans did not identify a scale, making direct comparisons between diagrams more difficult.

The guide was produced in collaboration with professionals from housing agencies and health and social services trusts. Service user involvement was identified as an integral component of production and appeared evident within case study contributions. But details of the extent and process of participation were not expanded upon. It would have been beneficial, for instance, to offer personal perspectives from contributors that explained the strengths and limitations of the adaptations in a similar manner to those presented by the CAE/Lacey (2002) [page 33]. The guide recognised the need for regular reappraisal of what was considered best practice, given the constant evolution of housing design development. The need for more research to underpin sensory impairment and challenging behaviour designs was identified as a further area of development.
Adaptation Leaflets

As previously mentioned in the methodology section, an adapted CHIQ checklist (Appendix 4 page 113) was used to appraise eight adaptation leaflets from five different adaptation agencies, obtained through publicising the review. These agencies have been outlined in Table 7 at the end of this section. The key appraisal themes considered for each adaptation leaflet were accuracy, clarity and relevance.

Comparison between leaflets was achieved by devising a simplistic and untested scoring system based on the introduction of check boxes. For the purposes of this review the use of the checklist should, therefore, be viewed as a pilot study of a small sample of, no doubt, many adaptation leaflets in existence in the UK. It was unlikely that these findings would be representative. Scores should be read in conjunction with the comments regarding strengths and limitations. In addition, although the checklist provided a more objective approach to the appraisal process, certain aspects required a subjective view and others reviewing the same material might reach different conclusions.

As can be seen, although leaflets scored relatively highly (scoring between 72% and 87% against relevant checkpoints), there were several points worthy of further discussion.

It was apparent that although most leaflets had production dates, none indicated review dates for updating the material. Currency of the information should be considered highly important. Details such as changes in contact numbers or the DFG limit from £20,000 to £25,000 could be overlooked. CHIQ suggested that material needed to be reviewed every two years. Agencies needed to incorporate explicit information provision strategies within general policies to facilitate reviews and ensure that adequate resources would be available for the task. It could be argued that currency of material should be included as an additional checkpoint within the adapted checklist.

One issue arose particularly in relation to the booklets produced by NIHE. Overall these were arguably the most effective publications and were well considered and informative. However care needed to be taken in the choice of front covers of both public and private sector booklets. Both were almost identical apart from comparatively small titles at the bottom on the front covers. This made the publications virtually indistinguishable from each other and could cause confusion for service users who might inadvertently use the wrong one. On a related point, the front covers of these publications showed photomontages of adaptation professionals involved. This was a creative approach but required further thought as the montages detracted attention away from the main title. Therefore agencies needed to ensure that booklets/leaflets provided for similar topics but with different target groups, were easily distinguishable from each other and had clearly identifiable titles. Booklets/leaflets with similar colour schemes also required reconsideration.

Leaflets with more pages provided useful tables of contents that made identifying relevant sections easier. When agencies provided larger volumes of information, some opted to cramp text or sections together to keep leaflets shorter when consideration of more pages might have been a better strategy. Most leaflets used simplified steps or checkpoints that summarised key events within the process. It was felt that this was particularly valuable given the complexity of the adaptation process. Another useful idea was incorporating blank text boxes to enable users to complete their own relevant details such as the OT’s name and contact number. However it needed to be established that these details were being completed accurately. A method of
identifying effectiveness could be to pilot this format with a user group. One booklet provided additional notes pages. All agencies provided alternative formats.

Occasionally jargon was apparent, for instance, ‘daily living activities’ - a widespread term within OT, might not necessarily be common in general communication. Better strategies included the provision of examples and definitions of key terms (e.g. for OT or DFG). Glossaries were very useful in these circumstances.

All leaflets used a personal tone (‘you’ or ‘your’) to engage users and most generally adhered to the CHIQ and Plain English Campaign suggestions of 20 words per sentence using active rather than passive verbs. There was variation in the use of contact details with some leaflets providing these throughout the text and others providing these at the beginning or end of the leaflet. It would be worthwhile using a page dedicated to contact details regardless of whether such details already appeared in the text or not, as this would facilitate users accessing relevant numbers more easily. Two agencies advised users that professionals might be difficult to contact but this should not be presented in a manner that might dissuade individuals from making contact when necessary. Some agencies provided E-mail addresses but only one provided a website address. This could indicate the need for better IT resources in increasing accessibility options for service users.

Where information was serialised or alternative leaflets for different targets groups were required (such as for public and private sectors) signposting to these additional sources was generally required. The review provided evidence that adaptation work was publicised through service user word of mouth and, therefore, current users could act as resources for future service users. This meant that the range of service literature available needed to be explicit in each related leaflet.

Aftercare following adaptation completion was an area neglected in most leaflets. The availability of aftercare and warranties etc should be made clear at the beginning of the process, otherwise confusion over responsibilities could occur and users might not be prepared for additional costs of maintaining adaptation work.

User involvement within the production of material was not evident in most of the leaflets. Some agencies did not provide explicit opportunities for users to feedback on the leaflets themselves and were subsequently at risk of continuing to replicate unidentified problems. Warrington Borough Council provided explicit information relating to how users could provide comments or complaints about services. None of the leaflets however, mentioned what users rights were in this area or referred to the legislative base for service provision.

Essex Social Services appeared to adopt a strong participatory approach within service delivery, outlining its commitment to service users and showing that users’ views were valued in shaping service delivery. The leaflet actively promoted recruitment of users to the Participation and Advisory Group (PAG). NIHE used a variety of external organisations in the production of its booklet including a disability organisation - Disability Action NI, a Family Information Group, a Housing Trust and the RNIB. This commitment to active participation within information production and service planning was commendable, increasing information credibility and effectiveness. Agencies would benefit from adopting similar approaches.

Services should compare their own leaflets using the checklist provided within this review (see Appendix 4 page 113). It was evident just from examining public and private sector leaflets in an objective manner, that information, support, guidance and choices varied between tenures. This simple approach could easily be used to highlight parity issues in the way services were offered and delivered.
The above recommendations did not intend to present a rulebook regarding information provision regarding adaptations and housing, but rather to establish some principles to encourage creative local approaches to information provision. Given the ODPM (2003a) [page 49] suggestion of a ‘suite of information’ for service users, it is recommended that further work in this area be completed to include adaptation/DFG leaflets.

The leaflets in this review could be considered introductory in terms of presentation and content. As such, certain pieces of information might need to be omitted to keep the information simple and easily accessible. But this does not negate the need for its production and agencies should develop a second tier of in-depth information related to the intricacies of adaptation processes, to be made available upon request. If agencies want to get this information right first time the active involvement of service users in information production is highly recommended. The checklist provided on page 113 could provide a framework to review service information.

This review indicated that ongoing information provision required commitment, a strategy and adequate resources. OTs were likely to be involved in the development of OT-related housing information, although as can be seen, this might prove to be a time consuming but necessary task especially where information might cross social, housing services and external agencies (e.g. hospital and primary care trusts, home improvement agencies or housing associations). It is recommended that OT, housing and adaptation information production strategies are integrated into general information provision strategies for the organisation. This might come under the remit of a specified information officer who could co-ordinate the task.
Table 7: Adaptation Leaflets

<table>
<thead>
<tr>
<th>Agency</th>
<th>Date</th>
<th>Score</th>
<th>Strengths</th>
<th>Limitations</th>
</tr>
</thead>
</table>
| Brighton and Hove City Council  
*An information guide for people with disabilities: adapting your home, Brighton and Hove’s guide for the private sector*.  
8 page A5 leaflet                                                   | No date    | 21/29 | Sector clearly distinguishable  
Colour codes easily distinguishable  
Simplified steps  
Checklists provided  
Clear contacts including E-mail  
Alternative formats available  
Users encouraged to seek advice where necessary                        | Presentation - cramped spacing between text and different sections  
Follow-up aftercare discussed but repairs/warranties not mentioned  
DFG not defined  
Not dated  
User involvement in production not mentioned  
Feedback not explicitly encouraged  
No space for additional information                                      |
| Brighton and Hove City Council  
*An information guide for people with disabilities: adapting your home, Brighton and Hove’s guide for council tenants*.  
8 page A5 leaflet                                                   | No date    | 21/29 | Sector clearly distinguishable  
Colour codes easily distinguishable  
Simplified steps  
Checklists provided  
Clear contacts including E-mail  
Alternative formats available  
Repairs/warranties mentioned with contact number  
Users encouraged to seek advice where necessary                        | Presentation - cramped spacing between text and sections  
DFG not defined  
Not dated  
User involvement in production not mentioned  
Feedback not explicitly encouraged  
No space for additional information                                      |
| Essex Social Services  
*Adapting your home: a guide to the Disabled Facilities Grant*.  
16 page A5 leaflet                                                   | October 2000 | 24/30 | Contents page provided  
Alternative formats available  
Users encouraged to seek advice where necessary  
User involvement evident in production  
Feedback and participation encouraged  
Clear contacts including E-mail                                                                                           | Review date required  
Serif font used  
Length of sentences  
Presentation - cramped spacing between text  
No space for additional information  
Could be serialised                                                          |
| Northern Ireland Housing Executive  
24 page A5 booklet                                                 | December 2002 | 27/31 | Contents page provided  
Glossary of terms  
Professional roles clearly defined – photographs included  
Heating addressed  
Space for additional information and notes provided  
Simplified steps  
Checklists provided  
Clear contacts and relevant web addresses included  
Alternative formats available  
Users encouraged to seek advice where necessary  
User involvement/external organisations evident in production                              | Leaflets for different sectors are highly similar with overuse of photographs at expense of title  
After-care - repairs/warranties not mentioned  
Feedback not explicitly encouraged                                                                                      |
Table 7: Adaptation leaflets

<table>
<thead>
<tr>
<th>Source</th>
<th>Date</th>
<th>Percent</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern Ireland Housing</td>
<td>December 2002</td>
<td>77%</td>
<td>Contents page provided, Glossary of terms, Professional roles clearly defined – photographs included, Heating addressed, Space for additional information and notes provided, Simplified steps, Checklists provided, Clear contacts and relevant web addresses included, Alternative formats available, Users encouraged to seek advice where necessary, User involvement/external organisations evident in production</td>
</tr>
<tr>
<td>Stockport Metropolitan Borough Council</td>
<td>September 2001</td>
<td>87%</td>
<td>Stockport Metropolitan Borough Council Disabled Facilities Grant: how do I apply? 8 page A5 leaflet, Space for additional information provided, Alternative formats available, Simplified steps</td>
</tr>
<tr>
<td>Stockport Metropolitan Borough Council</td>
<td>September 2001</td>
<td>77%</td>
<td>Stockport Metropolitan Borough Council Disabled Facilities Grant: what happens next? 8 page A5 leaflet, Space for additional information provided, Alternative formats available, Simplified steps</td>
</tr>
<tr>
<td>Warrington Borough Council</td>
<td>April 2002</td>
<td>86%</td>
<td>Warrington Borough Council Easy guide to adapting your home if you have a physical disability. 11 page A4 booklet, Simplified summary of DFG process 2 page A4 sheet - 19 steps, Contents page provided, Clear contacts, Alternative formats available, Users encouraged to seek advice where necessary, After-care is mentioned, Terms clearly defined, Larger type size used, well spaced text, Section outlining information on comments and complaints identified</td>
</tr>
</tbody>
</table>

Leaflets for different sectors are highly similar with overuse of photographs at expense of title. After-care - repairs/warranties not mentioned. Feedback not explicitly encouraged.


Serif font used. No space for additional information. User involvement in production not mentioned. Feedback not explicitly encouraged.
Conclusions and Recommendations

Overall, literature both published and grey came from a diverse range of sources with an equally diverse range of intended uses. The quality of the work was variable although in the main the material presented in the review was of good quality and appeared to be generally representative of the broad range of material available with regard to housing, adaptations and OT.

The following section draws together key findings from the review material and identifies recommendations to assist COTSSIH in developing its research and development strategic vision and action plan. It also highlights to readers areas where progress could be made and priorities lie. It will also provide useful themes for those wishing to carry out further exploratory research to advance knowledge within this field of study.

Core Themes Identified

Key areas of research development identified by the review and literature searches, included problems encountered by disabled children and their families, older people, measuring outcomes and adaptation effectiveness and a lack of information and control of the complex adaptation process as experienced by service users. Some areas including children, once poorly researched, have gained a significant profile in recent years. There was an increasing level of service information to explain adaptation processes at local and regional levels. There was also diversity in the range and quality of such information.

A major theme that has continued to emerge from the content of the reviewed literature is that well designed, planned and executed home adaptations really do work and make an important contribution to the independence of individuals within the community. Through both qualitative and quantitative means, several authors highlighted that this was a strong perception of service users. Yet inevitably, much of the literature highlighted the difficulties that occurred throughout the home adaptation process. These past and ongoing problems included the following:

- Ongoing lack of resources to adapt properties to keep pace with demand
- Procedural delays throughout the process
- Staffing shortages
- Tenure inconsistencies
- Variations in local interpretation of national policy
- Lack of opportunity for the development of home improvement agencies usually linked to financial constraints
- Interagency and intra-agency communication problems
- Uncoordinated housing allocations for suitably adapted properties
- Lack of publicity and unwillingness to publicise adaptation services suppressing demand and ignoring individual rights
- Poorly considered assessments, recommendations and subsequent solutions
- Complexity of information within the adaptation process
- Problems with feedback and complaints procedures
- Reliance on surveys to gain feedback
- Existence of medicalised criteria and uncertainty of how unmet needs were managed
Difficulties experienced by users:
- Staff attitudes to disabled people and their housing needs
- Visualising the work
- Lack of appropriate support throughout the process for users
- Some problems in feeding back views to agencies
- Lack of housing options regarding moving or adapting
- Lack of choices/options open to users throughout the process in terms of who controls the process, how it is controlled and personal choices regarding how the adaptation should look
- Adaptations that did not work as intended causing extra delays and associated human and financial costs
- Complexity of the system
- Dealing with a complex and wide range of professional and non professional agency workers and external contractors
- Financial problems related to acquiring adaptations
- Disabled children and their parents and older people faced additional barriers relating to their specific needs and circumstances

Whilst acknowledging that such problems persisted to plague service users, professionals and adaptation agencies alike, the review demonstrated that it was time to move the debate forward. In the main, the problems have been well documented attaining a high profile, much higher than the profile of the benefits of adaptation work. Of more concern is that the immediacy of resolving such problems has, perhaps, been at the expense of the development of research linked to the far broader health and well-being aspects related to housing adaptations. Such areas have been generally untapped from an evidence/research perspective. This could be disheartening from a professional point of view and unacceptable from a user's perspective. It is arguable that many OTs working within the housing field have been acutely aware of the difficulties described by the authors within the review. The process of reframing the problems to not only highlight solutions but also to evaluate the success of solutions, was gradually beginning to happen in research terms.
- It is clear that ongoing research is still required to promote the successful role that housing adaptations play in maintaining older and disabled people's independence and lifestyles within the community

The growing evidence base and widening the occupational focus

The positive aspects from the review were that evidence was growing to support the value of both major and minor adaptations. When good quality adaptations were completed they were of immense value to service users. It was recognised within the literature that adaptations improved service users' views on the quality of their lifestyles. Studies by Baldwin (2003), Chamberlain et al (2001), Heywood (2001), Payne (1998) and Grisbrooke (2003) demonstrated that overall, users were satisfied with the outcomes of adaptations. However it was apparent that areas of focus were beginning to emerge such as how adaptations could have a wider impact on well-being experiences.

Heywood (2001) appeared to produce strong evidence to demonstrate that adaptations provided a financially sound investment compared with formal care provision. This did not mean that adaptations could replace the need for care (Nocon and Pleace 1998). Nevertheless the long-term benefits of adaptations required much more research.
• It is recommended that future research priorities should include exploration and investigation of housing adaptations in relation to health, mental health and general aspects of welfare and well-being. It was notable that the scope of measures of success also needed to take into account not only areas of self-care but also those related to play, social development, leisure and productivity/retirement occupations.

• Further work is required to link financial benefits to the broader housing aspects of health and well-being. As lack of housing resources continues to undermine the future benefits of adaptations, there is a strong incentive to access other areas for funding such as health budgets. This would require substantive and cumulative evidence of both health-related and financial advantages.

Standardised outcome measures and evaluation

Studies that measured outcomes relating to performance and independence using standardised methods were limited, but their contribution was significant (Johnson 1998, Stewart and Neyerlin-Beale 2000). It was clear that managers would need choices in the methods available in determining the wider range of success of outcomes such as increased autonomy, choice and control that incorporated qualitative as well as quantitative elements.

• The uses of COPM, CDI and other standardised measures deserve further investment in larger scale, longitudinal studies and should be considered a priority. Such studies could provide evidence of successful person-centred outcomes and demonstrate that the use of such measures are practicable for therapists to use on a daily basis in their jobs, thereby contributing to service planning.

A strong theme related to the timing of evaluation. Questions remained as to when and how post-installation evaluation should occur. Delivering Adaptations (ODPM 2003a) suggested post-installation evaluation at six months, one year and three year intervals. Such an undertaking would require ongoing investment and it was not clear who would carry out evaluations, how it would be achieved and what use could be made of the disseminated information. Work by Chamberlain et al (2001) showed that half of service users required prompting with regard to the problems they had previously experienced, after 18 months to two years post-provision. In addition, Grisbrooke (2003) identified that vertical lifts became ‘functionally invisible’ as they were absorbed into lifestyle patterns.

• Therefore it would seem sensible to utilise a mixture of data collection methods for short and long-term evaluative purposes. If carefully considered these could take into account individual circumstances possibly offering users evaluation choices that could still produce appropriate agency evidence.

User groups and under-researched groups

The potential role of user groups also began to emerge as a key theme within the review. Awang (2002a) indicated positive perceptions from older service users of user groups as both a means to facilitate service delivery and to provide support for individuals going through the adaptation process. There was potential to develop user groups as a central mechanism to assist in the evaluation of the wider aspects of service provision. User groups were recommended at a local level by Baldwin (2003) and Essex Social Services (2000) advocated user involvement within a Participation and Advisory Group. Significant emphasis was also placed on the integration of user groups by the ODPM (2003a).
Further research in this emerging area regarding the role and contribution of user groups related to housing adaptations and user-focused service evaluation, is therefore warranted. In this way it be may possible to extend user group models to address wider citizenship participation.

Although there was a growing profile highlighting disabled children's needs, there was still the potential to develop this important aspect. In particular finding creative ways of capturing the experiences and voices of disabled children was an area for development. Likewise, older service users continued to be the major recipients of community care services and adaptation provision (DoE 1996, Heywood 2001, Awang 2002) and as such housing strategies needed to be developed and supported to ensure that this group and future cohorts have choices and control over their housing needs.

Literature searches demonstrated that adaptation needs of minority ethnic groups, service users with learning disabilities and individuals with sensory impairments appeared limited. As a result there were many potential research opportunities within these areas.

Future research is required focusing on the adaptation/housing needs of minority ethnic groups, service users with learning disabilities and individuals with sensory impairments.

[Note: it was identified that two publications Housing Sight (2003) and Adapting Homes (2004), have been produced jointly by RNIB Cymru and JMU Access Partnership. Housing Sight builds on Lifetime Home principles, setting standards of good practice for those involved in meeting the new build housing needs for people with serious sight loss. Adapting homes is a guide to adapting existing homes for people with sight loss. Unfortunately both publications fell outside the timeframe to be included in the review but reference details have been included in the bibliography]

Linked to these themes were the relatively unknown experiences of service users whose needs remained unmet due to potential service ineligibility or financial constraints. It was important to establish what impact Fair Access to Care Services (DH 2002) would have on the home adaptation needs of local communities in determining risks and 'eligible risks' faced by individuals (COT 2003c).

Further research is required into how unmet needs impact on service users and whether policy initiatives promote or reduce opportunities and choices of individuals to remain within their communities.

**Theoretical underpinnings**

There was also a need to develop the OT theory base related to housing and adaptation work. Heywood (2001), for instance, was critical of some basic assessment skills of OTs and Nocon and Pleace (1998) identified professional attitudes as creating barriers for disabled people. The articulation of existing OT models with actual practice was limited to those studies that used recognised OT models (Johnson 1998, Stewart and Neyerlin-Beale 2000).

Perhaps refocusing on theory issues would assist OTs in re-expanding the potential of occupational goals as defined by service users. In addition, it was unclear how far design standards had been developed in collaboration with disabled people although work from NIHE (2003) went some way to addressing this particular point. The development of universal design,
lifetime home principles and wheelchair and assisted wheelchair housing (incorporating extra space for an attendant) required greater examination. These areas, currently developing at a rapid pace, deserved further consideration given the growing older population and likelihood of higher incidences of disability or mobility impairments. In addition, social model of disability values and social role valorisation principles within housing design required further exploration. It would be particularly beneficial to examine basic principles and philosophies of each approach and critique relative merits and limitations. It would then be possible to evaluate from an occupational therapy perspective how they might impact on theory, models and practice.

- A degree of fundamental reappraisal is needed to re-establish the theory and practice linkages of OTs working within housing/social services to enable a clear basis for intervention techniques and to support therapist’s reasoning and assessment skills. This could also include the efficacy of integrating social model of disability and social role valorisation values within the application of existing design standards and principles.
- The above recommendation is equally valid to OT educators who specialise in teaching undergraduate OT students aspects relevant to housing/social services.

Methodological Themes

Methodology and methods

Generally methodological approaches were not clearly articulated within studies although the few identified included phenomenology, participatory action research, collaborative research and experimental.

- From this evidence it is clear that more work is required by housing researchers in considering their research positions. Questioning and finding answers to philosophical assumptions should be considered essential in justifying research pathways undertaken and the impact on those being researched.

Methods included surveys (postal, telephone and desk-top), face-to-face interviews, focus groups, repeated measure designs, case studies, user trials and audits. Several studies utilised more than one method although mixed use of methods to obtain quantitative and qualitative data was not always fully justified. Methodologies and methods varied in their user-centredness. For instance, a strong participatory approach was utilised by Nocon and Pleace (1998) and future researchers would be advised to read the original related information/newsletters from the “Living Options Partnership” project available from the Kings Fund.

- It is apparent that researchers in housing need to think carefully about what methods they use and combine when executing their studies. In developing rigorous research, such methods need to complement the philosophical and methodological approaches being adopted.

Access to participants and information management

The difficulty in gaining access to research participants was a strong theme. Without access to service users, little could be achieved within a user-centred approach. Housing and social services information systems appeared to lack integration making the process of offering a sample problematic. When multiple agencies (especially if crossing civic boundaries/functions) were involved, much more effort was required to match up suitable participants for research purposes.
This problem identified at a housing/adaptation level was probably symptomatic of a more deep-rooted problem in housing information management at local and national level. Guidance was required on information system integration between housing agencies (including housing associations), social services and possibly health agencies, enabling a whole system approach.

The introduction of local information management standards would be beneficial but might not necessarily solve these difficulties however a national system could greatly improve efficiency and would, for instance, enable disabled people to move to different regions more easily if required.

- There is a strong requirement to press for a national housing database that includes adaptation needs, adapted housing registers, adaptation resources and residential or nursing alternatives. If such a system linked together housing, social and health care information, the needs of individuals could be more effectively met by, for instance, matching of properties to individuals throughout the country, or identifying respite care places whilst a vertical lift or extension was being completed. At the very least compatible IT systems and standardised local procedures for storing housing information with particular reference to DFG/home adaptation systems are required.

Picking and Pain (2003) identified that another potential barrier to obtaining samples was the difficulty for OT practitioners to be involved in research production. Without the assistance of professionals and their ability to identify or nominate participants, the research process could falter at one of the first hurdles. This point is explored further in relation to CPD and ethical obligations in the next section.

- Therefore it is identified that creating opportunities to engage housing practitioners in related research needed more consideration. Additionally, creative ways are required to give practitioners time and support to participate in relevant activities as part of their CPD, that could lead to an interest in developing the evidence base through their own research.

**Nurturing OT Researchers in Housing**

It was identified from the reviewed material that OTs themselves were not producing the majority of key published studies within relevant housing literature. The evidence base produced by OTs was limited, however there were signs that empirical studies were growing in number.

- A key recommendation from this review is that OT researchers in housing need to be nurtured and developed.

**Promoting and disseminating OT housing research**

Masters level theses were a potential means of identifying OT housing researchers. Those individuals who were carrying out or had completed Masters research related to OT and housing, needed to ensure that the information was disseminated. This practice of dissemination was a crucial component of the research cycle in the advancement of the profession.

- One key mechanism for this would be to publicise the donation of dissertations to the COT library. This does occur via *BJOT* but COTSSIH needs to consider better use of its newsletter and website to target its members. In addition, those active in research should regularly update the OTR database.
- Masters level students should be encouraged to disseminate their findings through COTSSIH sub-groups, meetings or at conferences.
• The potential of using the COTSSIH website requires investigation as an accessible, speedy and efficient method of disseminating material and stimulating debate

In terms of reviewed Masters material, it was evident that there was a varied range in the quality of the work produced. Some material was very relevant in terms of its content to OT and housing, however weaknesses were apparent in methodological approaches, research design and execution. This negated their inclusion within the review. Having said that, some studies were of a very good standard but had not been published and therefore remained grey literature.

• It is recommended that authors of good quality Masters research be supported in their efforts to publish their findings. This could be achieved by creating a ‘pool’ of OT housing researchers with publication experience who are willing to facilitate the production of articles, short reports or practice evaluations. It would be useful to consider such facilitators as second authors in such published work, thereby enhancing researcher profiles and outputs.

Post/undergraduate education, CPD and lifelong learning

COT (2001) identified that in 1999 the voluntary Register of Therapy Researchers contained 89 individuals (51%) with a taught Masters degree, with 32 (18%) holding a research degree at PhD/MPhil level. The majority of the Masters dissertations reviewed as part of this project demonstrated that OTs who research housing aspects of occupational therapy do so from wide-ranging academic disciplines. These included housing studies, design and technology, health practice, policy organisation, rehabilitation management and research, health psychology and social sciences. This was possibly a reflection of the diverse potential for the application of occupational therapy practice within these subject areas but could equally be symptomatic of a lack of educational opportunity within OT specific Masters programmes. If this was the case, potential students might be seeking other higher educational routes outside OT programmes to develop their interests or career paths. This raised the issue of modular flexibility within OT Masters programmes to enable students to experience, engage with and study the broader aspects related to housing practices whilst remaining within a defined occupational therapy framework.

Similarly, the profile of housing related studies within undergraduate OT programmes required clarification. It was identified within The Quality Assurance Agency for Higher Education (2001) benchmarking statement that student occupational therapy graduates were expected to demonstrate professional skills in planning interventions related to environmental modifications based on appropriate assessments. They were also expected to have an understanding of social, housing and environmental policies. In addition, the draft Pre Registration Curriculum (COT 2003d) identified that environmental adaptation was an integral aspect of the profession specific skills framework. The opportunities and emphasis placed on home adaptations within undergraduate curricula needed to be established. A lack of learning opportunity at this level could be detrimental to future recruitment and retention of OTs within social services and housing.

It was evident that COTSSIH needed to begin to network more effectively with OT educators who have an interest in housing and adaptations, to establish what opportunities were available not only for further study, but also to begin to identify how current curricula have included housing related aspects within their Masters programmes (see later).

• It is recommended that further research is required to identify what housing related
opportunities are available for study at both post and undergraduate levels, to enable potential students to have a clear source of information to assist in decision-making. Surveys (possibly using a desk-top method) of both undergraduate and postgraduate opportunities would be valuable. On the completion of such a task it would be possible to identify key occupational therapy expertise capable of fulfilling roles such as facilitating or mentoring dissertation supervision.

Having identified relevant courses and support, COTSSIH should consider supporting its practicing members to seek funding (e.g. through the current COT award scheme) in housing related Masters programmes, ensuring that COTSSIH research principles and priorities were promoted. This would require partnership with student practitioners, their employers (see later) and universities whose programmes fulfil the relevant criteria. Similar considerations would be required for future PhD students and COTSSIH should consider strategies to develop potential PhD students who would become future leaders in this field.

An essential component of the development of OT practitioners is the requirement to enhance their abilities, knowledge and expertise through CPD and Lifelong Learning. McDonald (2002) discussed how many social services practitioners felt intimidated by aspects related to CPD. She described how a CPD peer group was initiated and how collective learning needs were identified and met. This short report highlighted that CPD related activities needed to be meaningful both personally and professionally. A range of accredited/certificated courses related to housing and occupational therapy could prove successful in engaging practitioners who did not wish to pursue a formal Masters route, or who preferred a graded or more personally relevant approach to further study. Such courses would provide substantial CPD and lifelong learning opportunities for practitioners.

- COTSSIH needs to identify the range of CPD opportunities and how such opportunities can be successfully promoted and targeted at its membership
- Experienced COTSSIH researchers should assist those seeking award schemes through, for example, the COT awards schemes for Masters level education

[Readers interested in further reading related to CPD are directed to the May 2002 edition of the British Journal of Occupational Therapy.]

Developing specialist OT housing posts

The College of Occupational Therapists (COT 2002) has acknowledged that the future development of consultant therapists within health care following Meeting the Challenge: a Strategy for Allied Health Professions (DH 2000), would provide enhanced opportunities for career development. However such posts have not been replicated in the social care sector and this will have a significant impact on the profile and opportunities for OTs within social services and housing. Consultant therapists within housing provision could provide key catalysts essential to developing the evidence base, research profile and expertise in this field.

- Although discussions regarding the realisation of social services and housing consultant therapist posts fall outside the remit of this work, it is possible that forward looking local authorities and academic institutions working in partnership could take initial steps by developing joint posts e.g. lecturer/practitioner posts or researcher posts that incorporate a work-based research focus with an academic component. This would ensure that work resources are effectively doubled not only assisting with research bids, ethical issues (such
as *Research Governance framework* DH 2001a) and the technicalities of the research process, but also by fully implementing research outcomes in practice, thereby improving best value and service delivery for users. Expertise could also be fed back into OT curriculum development and programme delivery.

The above recommendation has clear links to the *Research and development strategic vision and action plan* (Ilott and White 2001) which identified that all practitioners were expected to be ‘research aware’ and ‘consumers of research’ under obligations within the *Code of ethics and professional conduct* (COT 2000 Section 5). It was expected that managers would set aside dedicated time (a minimum of half a day per month) for quality-enhancement time i.e. CPD (Ilott and White 2001). It has also highlighted that the College supported expanding a range of collaborative options to enable supervised research including joint research/practitioner posts, honorary NHS/research posts and secondments.

- Thus in accordance with national and professional policies the commitment to researcher and practitioner development requires an explicit research and development strategy with regards to housing aspects of occupational therapy. This should be done as a collaborative exercise through the engagement of all relevant stakeholders.

### Improving housing educator networks

An E-mail distribution list (developed by Jani Grisbrooke from Southampton University) currently exists comprising E-mail addresses of OT educators who have a specific interest in housing issues and OT. This distribution list is a mechanism for educators to share information and maintain links. Housing educators were contacted to contribute to the review and many returned positive messages about the intentions of the review. It was clear from responses that there appeared to be a lack of Masters level projects current and past which could be directly accessed from these sources.

- It is recommended that distribution lists are regularly updated and utilised to inform housing educators of current issues and forthcoming events. Ways of using this list need to be investigated to ensure that it fulfils its potential.
- Additional mechanisms need development, such as on-line discussion groups, to bring together and create dialogue between OT housing educators. This will also foster ongoing dialogues and could potentially lead to improved research networks. A survey of the profile of housing design aspects within OT undergraduate curricula could provide the impetus for this to occur. It also needs to be established to what extent OT housing educators are members of COTSSIH.

White (2003) identified that it was crucial that occupational therapy research within university departments flourished to attract funding for further developments. Thus the inclusion of OT housing educators within the COTSSIH strategy should be viewed as an integral component in delivering successful outcomes for both CPD and research development.

### The Centrality of Service Users

In order to develop the housing evidence base it must be emphasised that service users are the crucial central component. Without their views and experiences there would be little in the way of worthwhile research. The social model of disability (Oliver 1996) would provide an appropriate framework on which to establish a positive research approach in dealing with service users. In
addition, social role valorisation (Fulcher 1996) principles have formed an integral aspect of government policy initiatives such as *Valuing people: a new strategy for learning disability for the 21st century* (DH 2001b), which emphasised the importance of housing options and choice and control as the key to social inclusion.

**Research and ‘the researched’**

Within the reviewed material, opportunities for users to voice their views were evident. However the majority of the studies did not enable meaningful research participation, or go far enough in encouraging the development of service users as partners within the research process. It needed to be clearly acknowledged that just as service users may well experience disempowerment due to the barriers in obtaining the services that they require, it is equally applicable that research can and often does replicate the process of disempowerment.

This could be due to the depth of consideration given to understanding the philosophical implications of the research process and subsequent choices of methodological approach. It is clear from occupational therapy philosophy that the person is central to the therapeutic process. Their occupations form the focus of interventions; the outcome from this should be the development of the individual's potential. Researchers should ask themselves whether or not the research process requires a different philosophy and be clear as to the reasons for the choices made. Research goals could, therefore, reflect individual goals. Strategies to gain the knowledge sought could involve service user input and the outcome could have a direct benefit to service users themselves. This approach reflects principles outlined within the *Research and development strategic vision and action plan* (Ilott and White 2001) with reference to the promotion of collaborative working with consumers at all levels of the research process.

For further reading the booklet *Involving Consumers in Research and Development in the NHS* (Hanley et al 2000) has provided sound principles in respect of consumer involvement and participation in research. In addition, COT has produced *Research Ethics Guidelines* (COT (2003a)) that would provide a suitable foundation to develop such participatory principles into participatory criteria.

It should be noted that adaptations impacted not only on the service users they were intended to assist, but also affected the whole family dynamics as indicated by Oldman and Beresford (1998) and NIHE (2003). As a result it was important that relationships between family members, carers and service users were included holistically within research approaches.

- In considering the development of research projects, COTSSIH should adopt user-centred research approaches that mirror the values of occupational therapy with a clear goal of increasing collaborative/participatory research. This would establish service users, carers, families and their knowledge, experiences and cultural values as the central pillar in advancing the profession's evidence base in this area.
- It is recommended that any future empirical work undertaken by or under the guidance of COTSSIH, should clearly indicate the requirement for collaborative or participatory approaches as recommended by COT (2001) ([www.cot.org.uk](http://www.cot.org.uk)). This will necessitate the development and production of participatory criteria in judging the appropriateness of research proposals. This set of criteria could be an area of development by COT given its wider application to COT commissioned work and work undertaken by other specialist sections. If service, users are central and seen as the strength of the research produced, it will be easier to ensure that outcomes are service user focused.
• It is recommended that COTSSIH in conjunction with COT begins to make formal links with, and align itself to, research organisations that have developed and implement such principles possibly initially by part-funding forthcoming relevant research projects or by offering a consultative role on research steering groups. Such organisations could include the Joseph Rowntree Foundation, user and carer group organisations and specific representative groups. Such partnerships will need to be actively sought and maintained.

**Promoting OT in Housing within OT Forums**

Aspects of grey literature from occupational therapy and housing services could be categorised as practice evaluations or audits. The British Journal of Occupational Therapy has recently introduced ‘practice evaluations’ as a new category aimed at managers and clinicians (Corr 2003). It has provided OTs working in housing with a forum to present and disseminate material including audits, evaluations of assessments, equipment and services. Such evaluations (maximum of 2,000 words) are not subject to the rigour associated with research or short report criteria and will thus provide a valuable opportunity to share best practice and enhance the evidence base (BJOT 2003).

• It is essential that managers, practitioners and educators within housing begin to make use of this forum. Practice evaluations could provide real opportunities to disseminate work-based findings. Much of the grey literature identified from search strategies used within this review, would lend itself to this form of publication. Contributors to the review often expressed having to ‘re-invent the wheel’ in terms of service evaluation. Therefore this potential resource deserves a higher profile so that services can begin to contribute towards the development of the evidence base through sharing practice information.

• In addition, features related to housing work should be promoted through more popular press such as OT News.

• Promotion of COTSSIHs role needs to be targeted at other specialist sections to encourage information sharing and to foster potential partnerships for future research activities. This could be achieved through regional or local group or conference meetings.

**Promoting OT and Housing to a Wider Audience**

Part of the strategy to identify relevant material for this review included making contact with housing publications and equipment manufacturers/companies. Results from this were disappointing. For instance, despite repeated efforts to access housing publications no response was obtained. This led to questions concerning the profile of OT within the popular housing press as an area that deserved further consideration. This could prove to be an area worth exploiting. Success in raising the profile of adaptation work could easily be achieved by OTs, grant officers and service users, producing informative feature articles that highlighted the difficulties faced by disabled service users in obtaining essential adaptation work and the processes and solutions involved. This would provide OTs with an opportunity to explain what they do and how they do it.

• It is recommended that COTSSIH and its members take a lead role to focus sustained efforts in developing links with popular housing publications through feature articles, writing publishable letters to stimulate debate or even looking for sponsorship for events such as the COTSSIH annual conference.

• Similarly, relationships with companies and manufacturers are areas for development.
These may prove to be lucrative funding sources and the potential to develop research partnerships requires further exploration. Caution should be observed in such enterprises given the different philosophies of the agencies involved

**Research Governance and OT in Housing**

In 2001 the Department of Health produced the *Research Governance framework for health and social care* (DH 2001a). This document provided a structure intended to ensure that research was conducted ethically and to high standards to ensure that public confidence was maintained and research participants were properly protected. This remit for governance covered both health and social care research and although local authorities were included it was not clear how far housing research was included.

It was evident within the framework that there was an increasing need for OTs to become involved with agencies which were gatekeepers for the research process. It was clear that links needed to be established and formalised with organisations such as the ADSS and housing authority research groups. In the private sector this would include organisations such as the Housing Corporation. This would enable the profession to begin to influence the research agenda at a national level so that service users housing needs could become an important national focus, bringing the public's attention to the wide-ranging benefits of providing accessible housing.

- It is recommended that COTSSIH pursues developing partnerships with organisations involved directly with Research Governance activities particularly those that sanction ethical processes in undertaking research. This would also involve developing links with R&D/local ethics committees of health trusts. Where COT officers are involved in the development of such collaborations, communications need to be fed back to members using established routes such as the COTSSIH newsletters, website or OT News.
- Clarification is needed regarding the impact that Research Governance may have upon COTSSIH as a housing specialist section and housing related research. In particular, clarification is needed as to the ethical processes required where research crosses healthcare, social care and housing sectors.

Currently, information held by specialist interest groups can enable members as researchers to gain access to practising OT members as research participants. This could prove to be advantageous for COTSSIH by increasing membership, but might also pose management problems in terms of potential repeated requests for members to participate in research.

- COTSSIH will need to identify a way of managing requests to conduct research within the specialist group and find a way of vetting such applications so as to ensure that research conducted complies with pre-determined research values and goals. Guidance on Research Governance and data protection issues should be sought from COT

**Strengthening Educational and Practice Relationships**

As part of the strategy to enhance the production of evidence based practice and in line with Research Governance guidance, it seemed logical that academic institutions and local service providers/users needed to create dialogues with each other, initially to identify potential areas for research and then to establish commitments to addressing identified areas. It was clear from the review that joint working between academic establishments and service providers was limited. However an excellent example of good practice in this area was the collaboration between the
Occupational Therapy department within the University of Ulster and the Northern Ireland Housing Executive. A significant development in this area would be joint funded research projects. One way of nurturing research and development would be through sponsored individual Masters degrees focusing on specific topics, with clear research outcomes e.g. the production of an article from an empirical study. Alternatively, ongoing collaborative research could be achieved through the development of researcher/lecturer/practitioner posts in social services and housing, as previously mentioned.

- COTSSIH should identify and promote such collaborations between academic institutions, service providers and service users, to enhance joint working and improve the profile of OTs in housing and the evidence base that supports practice. Experiences derived from these partnerships could then feed back into undergraduate curriculum development.

Grey Literature - Informing Service Users

It was possible to surmise from the collection of a small sample of adaptation leaflets and booklets that information production was a growing area within housing and adaptation provision. Leaflet production was variable in visual quality but overall the information and style of the material was generally good with regard to accuracy, clarity and relevance. However recurrent problems included lack of review dates to ensure that information remained current. Presentation problems were evident such as producing too much text information within leaflets or designing similar looking leaflets aimed at different tenures that were easily confused. Most material had not been produced in consultation with service users and there was a lack of explicit opportunity to feedback on the resources to prevent repetition of problems.

It was evident that this was an area that would benefit from appropriate guidance and application of general information provision principles related specifically to the area of the home adaptation process.

- It is recommended that COTSSIH take a lead role in developing a national project to identify the range of home adaptation information and to develop guidance on how to produce suitable levels of information as recommended by ODPM (2003a). Such a project could lead to a more principled approach to local information production, ensuring that adaptation agencies do not have to continually 're-invent the wheel'. The project findings could highlight creative practices enabling the sharing of information and providing choices to agencies and users in how and what information is disseminated. Such a project would benefit from being jointly commissioned in association with user groups.

The Role of COTSSIH - a Specialist’s Forum or a Public Resource?

The review identified that some publications being produced within housing were being directed specifically at service users. For instance, the Centre for Accessible Environments book *Planning your home for safety and convenience* (CAE 2002) could easily have been a COT/COTSSIH publication, but it was not. With straightforward, practical and useful publications such as this, it was clear that there was a wealth of information that COT/COTSSIH could be producing for the consumption of the general public. There was potential to create a series of similar style books/booklets on a variety of topics relevant to OT and housing. Commissioning such work (either separately or jointly) would provide opportunities for OT researchers to further develop their skills, profiles and interdisciplinary/agency links with other organisations. It appeared that
with properly funded support and dedicated staff, COTSSIH has a potential role as a public resource in leading the profession in the housing area.

- It is recommended that COTSSIH continues to fund potential research projects with outcomes/products that target the general public, as well as providing good quality evidence on which to base practice
- It needs to be established what resources are available to enable COTSSIH to fulfil its potential both as a resource for OT and housing professionals and potentially for the general public. Full and ongoing investment into COTSSIH and dedicated personnel would enable significant progress to be made within the recommended areas.

**Summary**

The review has shown that there is a fragmented approach to the production of OT research in housing. As a result, clear guiding principles and strategies are required to steer the organisation over the coming years. With a limited number of OT researchers producing information regarding OT and housing, it is evident that the period of diversification needs to continue. The development of guiding principles and strategies should serve to encourage and promote research activities rather than constrain exploration. Eventually, as the evidence base grows, current ‘benchmark’ works will be scrutinised, supported and challenged as new ideas and drivers for change will emerge. Therefore the short-term emphasis should be on the production of good quality research rather than supporting certain areas. That said, over the last decade clear focal areas have emerged related to housing need, including disabled children and their families, older people, measuring outcomes and adaptation effectiveness and a lack of control of the complex adaptation process as experienced by service users. OT researchers should not be discouraged from continuing to enhance these areas.

**Future research**

Simultaneously, work should be encouraged in areas related to unmet need, reasons for drop out from the adaptation process, outcomes and minority ethnic communities and their experiences of adaptation work. Other areas of vital importance were linked to identifying alternative ways of funding adaptation work such as health authority budgets. In this sense, the clear health-related benefits of accessible housing need to be strengthened, fully articulated and supported by empirical and measurable evidence. It was apparent that adaptations could play a vital role in actively preventing acute hospital admission or alleviating bed-blocking, reducing or delaying expensive residential and nursing care, but the evidence needs to be shown categorically in terms of financial as well as quality of life benefits. This would necessitate partnerships between local authorities and their trust counterparts.

Mental health and learning disabilities are key areas of housing need that should not be overlooked. There is scope to explore the impact of sensory impairment and housing particularly given that older people, the most prominent user group of community OT services, might have more than one impairment. There are also opportunities to develop OT housing interests for people with specific conditions. Technology within the home is another area for potential development.
Whereas other specialist sections might be able to demonstrate how their theoretical bases, frames of reference and standardised assessments integrated into practice, this aspect appeared to be poorly articulated within social services/housing practice. One way in which this could be improved would be for OTs to re-familiarise themselves with current OT models to understand how they could guide decision-making and subsequent practice. In addition, design philosophies require further consideration. These aspects would link in well with CPD and lifelong learning needs and goals.

This review has provided a baseline indication of the current knowledge and evidence available to OTs in carrying out practice. It is hoped that the next review of this kind will demonstrate continued progress and development of the range, volume and profile of work related to housing and occupational therapy.
Glossary

Adaptation
A term usually used to describe a structural modification to a domestic property intended to facilitate or improve access to an inappropriately designed property. Adaptations are usually classed as minor or major depending on the extent of the modification, its relative permanence and/or the costs involved.

Association of Directors of Social Services (ADSS)
The research group of the Association is a key stakeholder in dealing with and facilitating relevant research projects carried out within social services. For more information go to www.adss.org.uk.

Audit
A method of research that involves systematically reviewing and following up patient or service user records to identify whether actual practice meets the standards that have been set. The aim of an audit is to establish the quality of the service being provided.

Blinded
A term usually used in experimental studies that indicates that the researchers and/or participants are unaware of whether an intervention or treatment has been received.

Canadian Occupational Performance Measure (COPM)
The COPM is a client-centred subjective measurement tool that enables individuals to identify their own goals and measure their performance and satisfaction with performance, related to these goals over time. See Law et al (1998) for further details.

Community Dependency Index (CDI)
The CDI objectively measures function across a wide range of disabilities with a maximum available score of 100 for full independence across 10 activity areas. It has been shown to be a useful predictive tool in identifying the need for care services. See Eakin and Baird (1995) for further details.

Confirmability
A term that refers to strategies used to reduce bias and maintain neutrality of the data within a qualitative study, thereby improving trustworthiness. Reflexivity within the process is considered as a strategy that contributes to confirmability.

Control group
Within experimental design the control group does not receive the intervention and is used as a means of measuring change within the experimental group.

Convenience sampling
Participants are chosen for reasons of convenience with regard to availability. A drawback of this is the possibility that the relevant target group may not be included.

Correlation
A statistical term indicating a relationship between two variables - these correlations are often described in terms of strength, i.e. high or low correlations.
Credibility
Linked with rigour and trustworthiness, credibility indicates how true the research appears to be when viewed from outside the research project. An example would be the use of member-checking.

Data saturation
When no new information or themes emerge from data sources (such as research participant interviews) data saturation is said to have occurred.

Dependability
This relates to the consistency of data and findings within qualitative research. It can be achieved by demonstrating a transparent audit trail during the execution of the research.

Disabled Facilities Grant (DFG)
A mandatory housing grant that can be used by disabled or older people to improve access to their domestic facilities.

Efficacy
The ability to bring about an intended outcome or result.

Ethical approval
A research governance term used in conjunction with formal procedures undertaken (usually by an ethics committee) in determining whether proposed research has all the necessary safeguards in place prior to being carried out.

Ethics
Moral principles or rules that govern the way an individual or group behaves.

Evidence-based practice
Practice that takes into account the best evidence available to make informed decisions concerning the treatment of patients and service users.

Focus groups
A research method in which data is collected by using small groups of people who may have similar characteristics (e.g. recipients of home adaptations) to share ideas, thoughts and experiences on a specified topic.

Generalisability
This quantitative term refers to whether the results or findings from research can be viewed as confidently representing or being applicable to the wider population.

Housing Revenue Account
A local authority account used for income and expenditure related to maintaining and providing social housing.

Inclusion/exclusion criteria
A set of principles or specifications that aim to focus the sampling procedure under investigation ensuring that the key research questions can be explored or answered. Inclusion criteria refer to specifications that the identified sample must demonstrate in order to be included within the study (as opposed to exclusion criteria).
**Informed consent**
Describes the agreement process in which research participants are made aware by the researcher of the purposes, processes and outcomes of research activity with clear opportunities to withdraw from the process.

**Mean**
The average value determined by adding together the values of all scores and dividing by the number of scores.

**Median**
The middle value in a range of ascending numbers.

**Medical model of disability**
This model (also known as the individual model) begins with the premise that disability exists within the individual, with subsequent disadvantage linked to the personal nature of a problem rather than focusing on the environmental contexts that produce disability.

**Member-checking**
Usually this would involve checking the accuracy of research contributions (such as interview transcripts) with participants, to verify accuracy and/or interpretation.

**Method**
A research method describes the specific technique involved in the completion of a piece of research.

**Methodology**
A system of recognised rules, procedures and methods used within a research study or activity. Methodology describes the overall approach.

**Participatory action research**
A research approach that seeks to understand the lived experiences of usually oppressed groups and then by raising consciousness strives to enable those groups to seek empowerment within their situations.

**Phenomenology**
A philosophy and qualitative research approach that focuses on the experiences of a phenomenon (such as feelings, emotions, cultures, organisations or events) for a particular person or group of people.

**Population**
A population can be described as a complete set of ‘things’ (e.g. older people or DFG recipients) which all satisfy a particular specification.

**Purposive/purposeful sampling**
This form of non-probability sampling is based on the definition of required criteria or standards that suit the researcher’s purpose in answering the research question.
Qualitative research
Usually contrasted with quantitative research, qualitative research is primarily concerned with the interpretation of the world through exploration, induction and discovery. Empirical methods in qualitative research may include case studies, interviews, observations, historical accounts and life stories. Qualitative research seeks to discover meaning and understanding.

Quantitative research
Quantitative research tends to focus on numbers and measurements and usually controls elements of the natural world. Research tends to seek specific and unequivocal answers to questions or problems aiming to identify generality.

Reliability
A quantitative term associated with validity that relates to the consistency in the performance of a measurement tool, i.e. how reproducible the results are.

Repeated measures design
In this type of design, participants are initially ‘measured’ then following intervention a further measurement is undertaken enabling changes to be identified.

Sample
A sample is a smaller portion or subset of a population. Some samples that, for instance, attempt to achieve statistical representativeness of the overall population are forms of probability sampling, whereas non-probability sampling techniques are under the researcher’s control and judgement.

Service Sensitisation
A term that describes how a service may strive to meet service levels expected by service users. Within participatory terms, service sensitisation offers limited opportunities for the involvement of users compared with democratic control.

Significant
In terms of statistical significance, this relates to the outcome of a statistical test usually indicated by the P-value.

Single-category design
This type of design does not attempt to compare or contrast features and thus uses a single occurrence (although this may incorporate several focus groups for instance) that centres around a single topic area. The aim is to achieve data saturation on the particular subject.

Social model of disability
This model of disability focuses on how society, attitudes and the environment produce disability, rather than the effects of an individual's impairment.

Social role valorisation
A term previously known as ‘normalisation’ that refers to the support or defence of valued social roles for disabled people.
SPSS
Statistical Package for the Social Sciences is a computer software package designed to assist researchers in the analysis of statistical information.

Stratified sampling
The researcher divides the population by way of particular strata or layers (such as social class, sex or region). These layers are relevant to the nature of the study. From these strata, random or systematic sampling can occur ensuring that proportional numbers from each stratum are contained within the final sample.

Thematic analysis
A method of analysis in qualitative research characterised by the linking and/or differentiating of themes derived from the data collected, as interpreted by the researcher.

Transferability
Transferability within qualitative research refers to how relevant the work is to the wider population. In this way readers can judge for themselves whether the findings are based on rich and detailed descriptions of the research and thus applicable to other settings.

Triangulation
This approach, often used in qualitative research, aims to extend the understanding of a particular phenomenon using more than one method to gain data. It is a way in which trustworthiness issues might be addressed.

Trustworthiness
A qualitative term that seeks to ensure that processes within qualitative methods are fully considered and justified, thus improving the rigour of the work.

Validity
A quantitative term describing whether the measuring instrument actually measures what it is supposed to measure.
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Website References and Additional Websites of Interest

http://www.adss.org.uk/
Association of Directors of Social Services.

http://www.cae.org.uk/
Centre for Accessible Environments

http://www.cot.org.uk
College of Occupational Therapists

http://www.google.com/
Google search engine

http://www.hfht.org/
The Help for Health Trust

http://www.hfht.org/chiq/publications.htm
Centre for Health Information Quality

http://www.hfht.org/chiq/reviewers_guidelines.htm
Centre for Health Information Quality (CHIQ) guidelines for information producers and reviewers.

http://www.kingsfund.org.uk
Living Options Partnership Network newsletter 1993-1995

http://www.nihe.gov.uk/
Northern Ireland Housing Executive

http://www.plainenglish.co.uk/plainenglishguide.html
Plain English Campaign.

http://www.scotland.gov.uk/
Scottish Executive

Useful housing resources

http://cebe.cf.ac.uk/resources/links/planelec.html
Centre for Education in the Built Environment
Built Environment Resources

http://www.housing-today.co.uk/index.asp?pubCode=58
Housing Today

http://www.insidehousing.co.uk/
Inside Housing
http://www.cieh.org/pubs/journals.htm
Chartered Institute of Environmental Health

http://www.housingcorp.gov.uk
Housing Corporation

http://www.housing.org.uk/information/aboutus/index.asp
National Housing Federation

http://www.sfha.co.uk/sfha.asp
Scottish Housing Federation

http://www.housingnet.co.uk
Housingnet
Appendices
Appendix 1

Standard Letter/Template

Dear

I am currently in the process of undertaking a review of the current literature on Occupational Therapy and housing for the College of Occupational Therapists Specialist Section in Housing (COTSSIH).

I was very interested in your work on . Please would it be possible to send me a copy of the information you have in relation to this? For the purposes of the review it may be useful to contact you further. If you are willing for your information to be included in the review please could you indicate your contact details. I look forward to hearing from you soon.

The purpose of the one-year £5000 research grant is to conduct a review of the literature on housing adaptations for disabled people. There is little in the way of published evidence to support the important work that Occupational Therapists, Housing Officers, Environmental Health, Grant Officers and their housing counterparts do on a day-to-day basis in delivering effective housing services for disabled people living in the community...

The research will give a national overview of the current literature and evidence base within social services and housing settings. I know from my own experience that, for example, home adaptations do work and are of immense value to disabled people. However, at the moment, the published pieces of evidence supporting the provision of home adaptations by community OTs are few and far between. This appears to be the case in many areas of practice relating OT working in social services and housing...

As a result a central focus of this review will be on the unpublished material that services have developed. This is the kind of evidence that individual social services may use daily in practice. Having seen a number of presentations and posters at both the COT Conference in Brighton and the WFOT Congress in Stockholm, it was apparent that there is an emerging evidence base in relation to housing and disabled people in the UK. For example, both Hampshire and South Gloucestershire social services have recorded and evaluated outcomes of equipment and adaptation interventions whereas Essex social services have benchmarked their Disabled Facilities Grant process...

The review aims to pull together as much of this kind of information as possible to gauge the strength of the evidence base and identify where the gaps in knowledge are. So, in order to make this review a success, I need all those occupational therapists out there working in social services or in collaboration with other agencies, to get in touch with me as soon as you can. The evidence you are producing is important and should be recognised and together we can create a new baseline of evidence...

The remit is broad and I hope to bring as much of the information as possible into a practical guidebook for practitioners to use to help them identify new ideas for service delivery, the strengths of material currently available in assisting OTs and housing professionals in decision-making, where gaps in knowledge exist and where there are opportunities for future research. A bibliography will also be included in order to help identify useful contacts...

This research represents an important opportunity for professionals to share their findings and good practice with counterparts around the country who may benefit from their experiences. The success of the research largely rests with those OTs, managers, EHOs and housing officers out there who hold this vital information. I urge those working in this area who feel that they may have something useful to contribute to contact me or send me any reports, audits, research, adaptation guides etc as soon as they can. I will be spending most of the autumn collecting and analysing information and the report will be launched at the 2003 COTSSIH conference at the end of next summer...

Yours sincerely

Darren Awang
## Appendix 2

### Published Literature Searching

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117 82 and 116

Example of Ovid saved search
## Appendix 3

### Qualitative Research - Critical Appraisal Checklist

16 questions to help you make sense of a qualitative study

### General comments

Three broad issues need to be considered when appraising a qualitative study:

- Are the findings trustworthy?
- What are the findings?
- How will the findings help me work with my clients?

The 16 questions, which follow, are designed to help you think about these issues systematically.

The questions in italics after each of the main questions are designed to prompt and focus your discussion.

The first 2 questions can act as screening questions. If the answers to these questions are ‘no’ then the study is seriously compromised and should not be seen as appropriate evidence.

### Are the findings trustworthy?

<table>
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<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Was the research question clearly identified?</td>
<td>Yes ←____________________________________→ No</td>
<td></td>
</tr>
<tr>
<td>• Was the purpose of the study clear?</td>
<td></td>
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<tr>
<td>• Was there a clear focus to the study?</td>
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</tr>
<tr>
<td>2. Was a qualitative methodology and approach appropriate?</td>
<td>Yes ←____________________________________→ No</td>
<td></td>
</tr>
<tr>
<td>• Has the researcher identified the research approach</td>
<td></td>
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<tr>
<td>used [ethnography, phenomenology]?</td>
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<tr>
<td>• Is it the most appropriate approach?</td>
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<tr>
<td>3. Was the setting in which the research took place clearly described?</td>
<td>Yes ←____________________________________→ No</td>
<td></td>
</tr>
<tr>
<td>• Is there sufficient detail to allow an assessment of ‘goodness of fit’</td>
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<tr>
<td>between the research setting and settings which you recognise?</td>
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<tr>
<td>4. Were the sampling processes clearly described?</td>
<td>Yes ←____________________________________→ No</td>
<td></td>
</tr>
<tr>
<td>• How was the sampling undertaken?</td>
<td></td>
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</tr>
<tr>
<td>• What attempts were made to have a ‘representative’ sample?</td>
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<td></td>
</tr>
<tr>
<td>5. Was the data collection process clearly described?</td>
<td>Yes ←____________________________________→ No</td>
<td></td>
</tr>
<tr>
<td>• Have you been given enough information about what the research actually did?</td>
<td></td>
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<tr>
<td>6. What methods were used to analyse the data?</td>
<td>Yes ←____________________________________→ No</td>
<td></td>
</tr>
<tr>
<td>• Has the researcher been systematic in the analysis?</td>
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<tr>
<td>7. Were methods to ensure the credibility of the research used?</td>
<td>Yes ←____________________________________→ No</td>
<td></td>
</tr>
<tr>
<td>• Was the data collection process prolonged and varied?</td>
<td></td>
<td></td>
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<tr>
<td>• Were any steps taken to triangulate the results?</td>
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<td></td>
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<tr>
<td>• Is there any evidence of member checking?</td>
<td></td>
<td></td>
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<tr>
<td>• Is there evidence of reflexivity?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
8. Did the research workers address issues of confirmability and dependability?

- Was the research process subjected to an internal and external audit?
- Were the methods of data gathering, analysis and interpretation clearly described?
- Is data which does not fit with the main themes included and explained?

9. Were ethical issues considered?

What are the findings?

10. What were the key findings?

11. Do the results answer the research question?

12. Were the results presented in sufficient detail to assess the interpretation of the findings?

13. If quantitative methods were appropriate as a supplement to the qualitative methods, were they used?

- Sometimes qualitative results lend themselves to being summarised in quantitative formats – was this done, and was it appropriate?
- Sometimes quantitative data is collected, was the presentation of these data used to develop the qualitative findings?
- This question is not applicable to all qualitative studies

How will the findings help me work with my clients?

14. Can the results be applied to my client group and interventions?

15. What have I learnt about this topic that might help me in my work?

- Qualitative findings are not always directly transferable to different settings, however we can often learn something about the topic being researched that might be applicable to our work settings

16. What have I learnt about qualitative research from this paper that might help me in my work?

- Qualitative research is an evolving paradigm, it is often useful to reflect on how a paper has helped develop our knowledge of the nature and process of qualitative research

Taken with kind permission from Taylor 2002 Coventry University WebCT 237OT Reviewing the Evidence module guidance.
# Appendix 4

## CHIQ Adapted Checklist

<table>
<thead>
<tr>
<th>Title of work</th>
<th>Producer</th>
<th>Year of publication</th>
<th>Number of pages</th>
<th>Page size</th>
<th>A5</th>
<th>A4</th>
<th>Other</th>
</tr>
</thead>
</table>

### 1 ACCURATE

Is the information accurate? The four themes here are: consistency, continuity, currency & reliability.

#### 1A Consistent

Is the information presented in a consistent style?
- Messages do not contradict themselves
- Design & layout are consistent
- The brand is instantly identifiable (e.g. logos are clearly visible)

Score = [ ] out of [ ]

- A house style is in place & referred to
- All documents are proof read prior to publication

#### 1B Continuity

Is the information presented in context with other resources?
- It is stated that the resource is part of a series (where applicable)
- Related resources are signposted

Score = [ ] out of [ ]

- Out of date information is withdrawn
- The date of copyright is stated & a copyright symbol is included
- A system is in place for keeping producers up to date on key developments

#### 1C Current

Is the information up to date?
- The date of production is shown
- An expiry or review date is shown (recommended no less than 2 yearly review)
- [The material is no more than two years old - suggested point]
- Sources mentioned are dated

Score = [ ] out of [ ]

- Out of date information is withdrawn
- The date of copyright is stated & a copyright symbol is included
- A system is in place for keeping producers up to date on key developments

#### 1D Reliable

Is the information evidence-based? [Most of these areas may not be relevant to service leaflets.]
- Sources are specified
- It is stated that the information has been checked by an expert in the content area
- It is clear that more than one source is used
- Any sponsorship is declared
- Opinion is stated as such
- Authors are named
- Editorial standards (e.g. these guidelines) are referred to
- It states that readers are advised to discuss questions or concerns with a health social care professional

Score = [ ] out of [ ]

- Information has been peer reviewed prior to publication
## Themes are the appearance of text, presentation & content

### 2A Appearance of text
Is the information clearly communicated?
- One sans serif font is used throughout
- 12 point font or larger is used
- A dark typeface on a pale background is used
- **Bold** is used for emphasis only
- *Italics* are not used for long passages
- Underlining is avoided
- Upper case is used sparingly

Score = out of =

### 2B Presentation
Is the information clearly communicated?
- Information is summarised &/or bullet-pointed
- Lines of type are clearly spaced
- Unrelated sections are clearly separated
- Diagrams & images are labelled & relate to the subject matter
- A single style of design & layout is maintained throughout

Score = out of =

### 2C Content
Is the information clearly communicated?
- Sentences are no longer than 20 words
- Active verbs are used
- The personal tone is used
- Jargon is avoided
- Acronyms, abbreviations & specialist terms are explained (e.g. in a glossary)
- Information can be added/notes pages are provided

Score = out of =
### RELEVANT

Is the information relevant? The themes considered here are accessibility, appropriateness & patient/service user involvement.

<table>
<thead>
<tr>
<th>3A Accessible</th>
<th>Does the information meet patient/service user needs?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Resources in alternative languages &amp; formats are signposted &amp; produced</td>
</tr>
<tr>
<td>Score =</td>
<td>out of =</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3B Appropriate</th>
<th>Is the resource appropriate to the specific target group?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The target group is clearly defined</td>
</tr>
<tr>
<td></td>
<td>The aims of the resource are clearly stated</td>
</tr>
<tr>
<td>Score =</td>
<td>out of =</td>
</tr>
<tr>
<td></td>
<td>Members of the target group are consulted before &amp; during production</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3C Patient/user involvement</th>
<th>Has the information been designed with input from patients /service user &amp; public?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>There is evidence of patient /service user &amp; public involvement of this resource</td>
</tr>
<tr>
<td></td>
<td>Readers are encouraged to &amp; provided with contact details to give feedback on the resource</td>
</tr>
<tr>
<td>Score =</td>
<td>out of =</td>
</tr>
</tbody>
</table>

Total score for reviewing information = out of max score available =

\[
\% = \frac{\text{Score}}{\text{Max Score}} \times 100
\]

Adapted with kind permission from the Centre for Health Information Quality

http://www.hfht.org/chiq/reviewers_guidelines.htm

Comments and strengths/limitations:
### Appendix 5

#### Working Databases

<table>
<thead>
<tr>
<th>Source and aims</th>
<th>Design</th>
<th>Key result</th>
<th>Comments</th>
<th>Application and further study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adams, J (OT) (page 27) 1996 British Journal of Occupational Therapy Part 1 59(3) 115-118 Part 2 59(4) 185-187 Adapting for community care, Part 1 and Part 2. Part 1 aim: to establish - whether disabled people were getting access to fair and consistent adaptation services; who funded adaptations; the state of joint working between adaptation agencies. Part 2: included senior OTs employed by social services department involved in adaptation work over previous 12 months. Service users had applied for or were undergoing adaptations in last 12 months and had raised formal/informal complaints. Part 1: - qualitative and quantitative components to enable comparison. Data collection over 6 months using questionnaire to 6 local authority housing teams and 6 housing associations. Pilot questionnaire designed in consultation with housing agencies 1 month prior to study. Part 2: postal questionnaire sent to 6 OTs (3 inner city, 3 town). 6 service user informal interviews.</td>
<td>Part 1: found that there were differences in the adaptation services that disabled people received dependent on the tenure of the property. This was mainly due to the variation in local interpretation of social policy/legislation. Part 2: OTs reported staff shortages. Delays caused by procedural/agency factors. OTs felt that wait means test delay controlled demand on EHOs. C&amp;R was used with reluctance due to costs. Service users all agreed with use of means test but contributions sometimes not affordable. Poor marketing of DFG (called for better application booklet). Users waited too long for work. VAT exemption confusion.</td>
<td>System had developed into a complicated, multifaceted and bureaucratic one which staff and users found difficult to navigate. System improvements were required. Part 2 provided a user perspective. Also not clear if piloting of interviews had taken place. Ethical considerations required development. Impact on LSVT anticipated.</td>
<td>Useful to assist others in identifying the similarities and differences in approaches particularly in devolved counties. Recommendations were: Setting up countywide housing registers for accessible accommodation. Local special needs housing lists to be developed between all housing agencies. Funding to follow user across housing tenure. Consistency in working practice of team and service managers of OTs, especially in use of STG finance for adaptations. All agencies to carry out tenant profiles with community OTs for proactive planning. Improvement in marketing and application procedures of DFG. Identifies effects of LSVT on DFG demand and impact on service provision and funding problems encountered by HIAs in completing adaptation work for local authorities.</td>
<td></td>
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</tbody>
</table>

#### Supplementary reading


<table>
<thead>
<tr>
<th>Source and aims</th>
<th>Design</th>
<th>Key result</th>
<th>Comments</th>
<th>Application and further study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awang, D (OT) (page 29) 2002a British Journal of Occupational Therapy 65(6), 261-268</td>
<td>Took place over 3 research sites within the West Midlands (2 local authorities and 1 HIA). Agencies nominated service. Criteria were that participants had to be homeowners over 60 with an adaptation completed using a DFG in previous 6 months. Also had to be willing to be interviewed. 9 users (range 62-78, mean 77 years) and 7 agency staff participated. Participatory action research identified as research methodology. Semi structured interviews used with older participants and agency staff. Agency documentation also collected. Ethical considerations, trustworthiness issues addressed. Data analysis used within and cross-case analysis.</td>
<td>DFG publicity was poor making it difficult for older homeowners to find out about services. This was linked to differences in legislative requirements between housing and social care providers. Where information and support systems were integrated, perceptions of processes were positive. There was variation in feedback mechanisms affecting the ability of users to shape service delivery.</td>
<td>Focus was on participation with emphasis on information provision and user ability to influence the service being provided. HIA appeared to have poorly developed feedback systems compared with local authorities. Offered older persons perspective but PAR ideals were difficult to achieve</td>
<td>Suggested the need to consider how HIA's link in with local authorities and to monitor the effectiveness of transferring individual from one agency to another. Linked the lack of publicity surrounding DFGs as creating organisational (bureaucratic) barriers for older people entitled to service provision. Highlighted the need for suitable information provided with appropriate choices to support its use. Advocated the use of service user groups as a means of providing informal support and also feedback for agencies- area for further research. Advised that research was required to determine the full future extent of adaptation resource allocations.</td>
</tr>
</tbody>
</table>

**Supplementary reading**


### Source and aims
Baldwin, M (OT) (page 31) January 2003 Royal Borough of Kingston-upon-Thames Social Services Learning from experience: occupational therapy service housing adaptations - survey report. Aim: survey to assess effectiveness of major adaptations within borough with regard to user satisfaction and achieved level of independence.

### Design
Single local authority setting. Initial population of 112 with 86 appropriate to contact. Users had major adaptations completed during 2000/1 via adaptations officers at the Environmental Health department. Used similar questionnaire to Heywood (2001) 27 questions, 7 pages long Quantitative methodology Descriptive statistics used. Report doesn’t state if piloted. Low response rates to certain questions were evident.

### Key result
High level of response to questionnaire - 54/86 = 63% Overall high level of satisfaction with adaptations (74% scored 6/10 or more) with majority of respondents using them regularly and finding them beneficial. 70% of users felt they had been involved in adaptation process as much as they wanted to be. Majority of users (65%) learnt of possible entitlement via their OT.

### Comments
Subsequent actions included: revising adaptation service leaflets supplying to an identified list - CAB, libraries, hospitals, GP, pharmacies, etc; producing local borough booklet to inform DFG applicants of roles/responsibilities of those involved in services; photo collection of schemes; list of users willing to show works. Introduced formal feedback system between agencies with a 6-month, 1 yr and 3 yr review questionnaire. Recommended user groups to review process. Not clear how comparison was made between housing dept (council) and DFG (private) adaptations. Original data needs to be revisited for further comparative analysis.

### Application and further study
Report is readily accessible via the Internet for service users who may have contributed. A relatively straightforward and useful small-scale local study demonstrating that reviews of service provision from users’ perspectives are an achievable and necessary part of service delivery to identify areas for improvement. Practical implications for practice were: Service users found out about entitlement to adaptations via OTs indicating the need for more external publicity. Highlighted disparity between information given to council tenants and lack of equivalent material to DFG applicants. Improvements could be made to providing satisfactory answers to users questions and carers could be more involved in process. Following survey it was identified that Adaptation Service routinely sends out survey to users but the information is not fed back to OTs - interagency communication issue.

### Supplementary reading
<table>
<thead>
<tr>
<th>Source and aims</th>
<th>Design</th>
<th>Key result</th>
<th>Comments</th>
<th>Application and further study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chamberlain, E (OT)</td>
<td>Social services work based setting. Total population 381 adult service users were identified who had received OT/OTA home visit and equipment/adaptation completed during 1998 and were still living in Oct 1999. 100 service users randomly identified via computer generated technique. 57 participated. Audit used a retrospective telephone survey. Pilot study completed. Audit questions derived from themes identified in introductory review. Telephone surveys completed in 2 sessions - Nov 1999 and Jan 2000. Standardised questionnaire devised. OT team members (5) completed surveys but did not interview own service users to reduce bias.</td>
<td>85% of equipment/adaptations still being used 18-24 months after provision. 69% being used on a daily basis. Higher satisfaction reported by users when equipment was being used independently compared with those requiring assistance. Although 98% would recommend service the majority of users did not recall without prompting who had provided the service suggesting difficulties with recall and service profile. Reasons for non use were mainly due to changes in functional ability or personal circumstances.</td>
<td>Called for introduction of standardised outcome measure for social services OTs to use with all users. A greater justification and critique of methodology would have been beneficial. Mixed methods used but analysis of data was conducted. No mention of unmet needs and if these still persisted or had been resolved. Some potential findings not explored regarding gender issues.</td>
<td>Although a small sample was used the findings were encouraging from an OT perspective. The extent of adaptation work surveyed was not clear. Given the methodological limitations it was felt that the work was useful in encouraging other authorities to consider this important process of checking/auditing performance as a regular means of providing essential feedback from service users. Methods could be expanded to include qualitative data collection to gain a deeper understanding of how adaptations were being used. Issues of service user recall of problems highlighted need for carefully considered approaches to evaluation of outcomes over time.</td>
</tr>
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</table>

**Supplementary reading**

<table>
<thead>
<tr>
<th>Source and aims</th>
<th>Design</th>
<th>Key result</th>
<th>Comments</th>
<th>Application and further study</th>
</tr>
</thead>
</table>
| Department of the Environment (page 35) 1996 London: HMSO *An evaluation of the Disabled Facilities Grant process*  
Aim: to quantify a profile of DFG applicants and ranges of work funded, identifying those who did not receive funding.  
Identify local authority perceptions of DFGs in relation to their objectives and funding priorities.  
Assess the roles and relationships between welfare and housing personnel.  
Examine how different funding sources were being used and the management of DFG demand  
Establish DFG implementation and the referral approaches adopted.  
Identify the best service for users.  | Approximately 1 out of 3.5 local authorities were selected from 354 authorities. 74 out of 100 of the authorities participated in the collection of 1521 DFG enquiries. 69 housing authorities and 41 welfare authorities participated in the postal survey.  
14 case studies were undertaken with housing, welfare, home improvement agencies and disability groups.  
Collection and data analysis of DFG enquiries.  
Postal survey of housing and welfare authorities.  
Case studies were selected from local authority settings using telephone interviews and face-to-face interviews. Participants from five case studies were interviewed at the outset of the project and re-interviewed at the end of the research programme.  | DFG system was effectively targeted at those in greatest demand.  
Approximately 35% of applicants dropped out of system.  
Major problems identified included: DFG enquiry delays, waiting lists for assessment, complexity of the system and complications when two-tier systems were in operation.  | Makes a number of recommendations:  
Awarding grants to enable people to move to more suitable accommodation.  
Passing the full responsibility of the grant system to welfare authorities to fund all adaptations for disabled people.  
Monitor effects of £20,000 grant limit.  
Local authorities should investigate the possibility of 'one-stop shop' services.  
Simple leaflets should be produced explaining DFG procedures  
Inform users of progress. Authorities needed to encourage the establishment of disabled peoples' forums, with appropriate feedback systems and ensure that those who drop out are followed up.  | A comprehensive study that sets the initial baseline with respect to adaptation provision using DFGs.  
Main focus is on the grant rather than other sources of potential funding. Strongly promotes the use of HIAs in assisting with the process. Doesn't deal with the issue of grant publicity and how that should be approached.  |

**Supplementary reading**  
Source and aims

Grisbrooke, J (OT)
2003
British Journal of Therapy and Rehabilitation
10(2) 76-81
Living with lifts: a study of users’ experiences
Aim: to investigate the experiences of individuals who acquired and lived with a through floor lift.

Design

Service users from a single local authority. Population of 9 identified following application of inclusion criteria. Final sample comprised of 8 participants. Users not known to researcher. Main carers in 4 cases contributed to findings. Phenomenological approach used and justified. Semi structured interviews used with a schedule of questions related to the area under investigation. The schedule had been designed in consultation with one service user, a social services OT and local housing officers. Inclusion criteria were users living with any vertical lift style acquired via local authority route within the previous 1-5 years of study start date. Thematic analysis of transcribed data through an interpretive, iterative process.

Key result

Dissatisfaction occurred when problems were not taken seriously/not resolved. Some problems were expected and gave users the opportunity to solve lift problems that on occasion increased confidence in lift use. Successful adaptations faded from sight and were taken for granted. All users required post installation work with 3 of the 8 requiring re-siting of lifts. Maintenance engineers identified as a valuable resource.

Comments

Population is limited to 1 local authority and the number of participants was small. OTs should recognise and develop working relationships with lift engineers as their role is viewed as significant and highly valued by service users. Identify sourcing for emergency repair/replacement rather than have to wait for unit to fully breakdown before funding can be accessed. Money saved by timely replacement could reduce the costs of respite care (if available at time of need) and additional anxiety placed on service users. Party wall through floor lifts were problematic due to noise problems for 3 users - additional costs and delays for successful usage were incurred when lifts had to be resited. As good adaptations tend to fade into background following a potentially difficult first phase of getting used to living with the lift, the process of review/evaluation of long-term adaptations becomes an issue which needs careful consideration.

Supplementary reading

Grisbrooke J (1995) An investigation into the experience of acquiring and living with housing adaptations funded with Disabled Facilities Grants. University of Southampton, Faculty of Social Sciences, Department of Sociology and Social Policy: Unpublished MSc (Social Sciences).
<table>
<thead>
<tr>
<th>Source and aims</th>
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<th>Key result</th>
<th>Comments</th>
<th>Application and further study</th>
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<tbody>
<tr>
<td>Heywood, F (page 38) 2001 Bristol: The Policy Press Money Well Spent: the effectiveness and value of housing adaptations.</td>
<td>The research population included all service users regardless of age, race/ethnic groups, tenure and geographical area within 7 local authorities. The stratified sample included individuals who had acquired major and minor adaptations between January 1992 and December 1998. Minor adaptation recipients surveyed from 6 authorities. 162 responses obtained from 300 sent out (54%). Samples for major adaptations were from 5 authorities. 84 face-to-face interviews and 20 telephone interviews were conducted. Participants were grouped into children, those under 60 and those over 60. Data collection methods were mixed using postal questionnaires, telephone and face-to-face interviews. Most of the fieldwork was carried out by local authority professionals from England and Wales most closely involved in the adaptation processes. The main research occurred between October 1999 and September 2000 following a pilot study April - August 1999.</td>
<td>Overwhelming endorsement of effectiveness of minor adaptations. Minor adaptations had a role in prevention (falls), bathing remained problematic even with minor adaptations, needs changed following provision but no follow up to see if adaptation was still meeting need. With major adaptations very high levels of satisfaction expressed, 91/104 felt money had been well spent. But when problems with adaptations occurred, effects could be disastrous. Problems related to poor processes of communication prior to specification, poor quality implementation and specification did not adequately meet need.</td>
<td>Mental health aspects of well-being are shown to be an area for OTs to seriously consider when recommending adaptations. Causes of waste identified as specification not meeting need, poor quality implementation and poor consultation.</td>
<td>Reproducing the questionnaire will help other agencies evaluate minor adaptations for replication of this aspect of study identifies that poor assessment is a major cause of waste (not listening, insufficient attention to detail, although much of this is wrapped up in institutional/structural arrangements. Advises that more work should be done on the costs and benefits of adaptation services so that money from preventative sources can be accessed.</td>
</tr>
</tbody>
</table>

**Supplementary reading**

### Source and Aims
Higham E (page 41) 1999 Research project SCS98/1/0002 for Wales Office of Research and Development in Health and Social Care Changing rooms: a survey of the adaptations service in six Welsh authorities and the outcomes for service users with physical disabilities. Aim: to examine the organisation and provision of adaptations within the 3 core principles of enabling individuals to live as normal a life as possible, achieving maximum independence and having a say in how they could live their lives.

### Design
7 Welsh authorities were originally approached with 6 participating. All had previously been involved in benchmarking activities. Took place between October 1998 and March 1999. Survey approach adopted incorporating a literature review. Structured interviews with professional staff from 6 authorities. User surveys employing postal questionnaires, face-to-face interviews and telephone interviews. Interviews and telephone interviews with voluntary organisation representatives.

### Key Result
Delays were commonly reported by users an could have been improved by efficient use of informative or reassurance letters. Organisations had not consistently formulated policies and joint working procedures. Heating was an area of high demand. Over a quarter of users found it difficult to contact staff and 22% wanted more information at the point of enquiry. 30% had difficulty with grant forms. Those using C&R found this process easier with 99% expressing satisfaction with such agencies.

### Comments
A private sector questionnaire, interview schedules and glossary were reproduced in appendices. Some basic results needed clarification e.g. numbers of questionnaires sent out, returned and response rates and also how tenures were targeted. Unclear whether all aspect of data collection were piloted. 3 case studies were used to illustrate the themes of the interviews from service users. Unclear how rest of data collection methods and their analyses e.g. with professionals were integrated into the report findings.

### Application and Further Study
Areas requiring improvement were: Providing ‘one stop shop’ referral systems for accessing services User information Promotion of complaints procedures Early information/support to assist younger disabled people in avoiding crisis situations. Joint working practices including written arrangements for dealing with referral procedures, joint visits, response time criteria and contentious issues. Regular agency review meetings. Designated DFG co-ordinators or alternatively regular reports to members and user forums via an adaptations committee could be used to ensure consistency. Key worker systems. Post completion and follow up procedures to check that facilities fulfilled users needs Public sector adaptation registers. Development of performance indicators Strategies to deal with OT shortages included using private and hospital OTs. The investigation highlighted the need for research into the needs of disabled people from minority ethnic groups and disabled children.

### Supplementary Reading
### Source and aims

<table>
<thead>
<tr>
<th>Johnson, MRD (researcher) (page 43)</th>
<th>Wright A (OT)</th>
<th>Jeffcoat MA (OT)</th>
<th>Petherick R (OT)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Local authority occupational therapy services and ethnic minority clients.</strong></td>
<td><strong>Aim:</strong> to audit service users records to identify -</td>
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<tr>
<td>Representation of ethnic minority groups.</td>
<td>Language and religion</td>
<td>Expressed needs</td>
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<td></td>
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<td>Primary action.</td>
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<td>Waiting times causes and sources of referral.</td>
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<td>Agreed/delivered outcome.</td>
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</table>

### Design

| Audit of case file material for entire OT caseload (monitored in January - year not stated) of 1004 current users within a district OT office. | An anonymised 'questionnaire-like form' was devised to record data from files. Coding frame was drawn up which took into account needs of service, ethnic group data available from 1991 Census and what known locally about ethnic minority group use or needs. Trial of method through piloting not addressed. | SPSS-PC used for analysis. Local variation of ethnic groups compared with national stats and trends identified. 1004 cases were analysed. | |

### Key result

| 30% of users were from south Asian groups. 10% were Black Caribbean. Most popular languages were Punjabi (33%) and Mipuri (28%). Asians religions were Muslim (50%), Sikh (31%) Hindu (11%). Needs: nearly half of all request related to hygiene needs. High proportions of Asian people sought major works (50%) compared with black (20%) and white (8%). Subsequent greater delays evident with Asians 78% being assessed by qualified OT (rather than OTAs) compared with 57% for white and black users. | |

### Comments

| No overall evidence that service was addressing mainly white users' needs, to the exclusion of black and Asian users. | |

### Application and further study

| Call for further study identified in this area. Areas needed clarification in methods used and research was location specific. Few Asian people preferred English to communicate. Recommendations made relating to: Better info service and ethnic monitoring. Regular monitoring and evaluation Specific training for language support for staff in relation to OT service. Cultural awareness training for all staff. Demonstrates that audit can be a useful retrospective tool within social services setting to detect issues relating to parity of service provision. | |

### Supplementary reading

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<td>Johnson, R G (OT) (page 44) 1998 Unpublished Masters in Health Practice University of Salford Measuring the impact of adaptations to the home for people with physical disability: a pilot study using the Canadian Occupational Performance Measure.</td>
<td>A non-probability purposive sample of service users identified who were likely to have adaptations completed between October 1997 and March 1998. 69 potential social services participants identified, with 43 eligible after the application of explicit exclusion criteria. 24 identified for 1st measure but only 18 progressed to 2nd measure. Ages ranged from 33-84 (mean 66) with 20% aged 80 and over. Users were not informed of 1st scores during second phase. Parametric statistical analysis applied using Pearson’s product-moment co-efficient (correlates between performance and satisfaction with performance). Also examined test-retest reliability of the measure. Related t-Test used to demonstrate the changes in performance and satisfaction with performance following the adaptation process.</td>
<td>21 adaptations completed (n=18). 73 problems identified. Self-care accounted for 79.4%. Scores for performance and satisfaction with performance indicated highly significant changes following adaptation. Correlations of scores for performance and satisfaction with performance between time 1 and time 2 found a Pearson’s r=0.4 and 0.11 indicating a poor correlation. This meant that unrelated initial problems (which should not have been affected by the intervention) showed improvement when there should not have been following the adaptation.</td>
<td>COPM was unlikely to replace existing Community care assessments but could be incorporated within the process to assist in needs assessment. COPM helped to identify the need for referral to other agencies. The issue of proxy scoring was raised as a point for exploration where cognitive impairment was evident. COPM appeared to be sensitive to change over time even though performances might have been variable.</td>
<td>There was a clear demonstration that COPM could be an effective measure within the social services setting and could link into user centred adaptation goals. The limitations for use of COPM were apparent particularly with people who had cognitive difficulties. This study would be worth replicating on a greater scale and could potentially provide social services OTs with a valuable measure that could identify that goals had been achieved. This could assist with providing valuable evidence of successful OT intervention.</td>
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**Supplementary reading**


Source and aims

Nocon, A  
Pleace, N (page 46)  
1998  
*Health and Social Care in the Community*, 6(5), 361-369

The housing needs of disabled people.  
**Aim:** to identify what issues needed to be addressed to meet the housing needs of disabled adults.  
Collect quantitative information.  
Provide local policy recommendations regarding planning and service delivery.

Design

The research used a collaborative interagency group approach consisting of the Shropshire Disability Consortium, housing officers’ group, social services and the health authority.  
Methods included 3 focus groups with a total of 22 disabled people, individual and group discussions with interagency staff (26 people), the collation of statistical information and a postal questionnaire sent to 500 disabled people. 210 questionnaires were returned (42% response rate).

Key result

Key themes were lack of choice (where to live, what adaptations and support were provided) and lack of control over housing arrangements.  
Survey identified 3 areas:  
75% reported housing problems. Internally most difficulties were with stairs (40%), bathroom (28%) and kitchen (20%).  
39% wanted 1 or more adaptations regarding access to property, adaptations to bathroom or kitchen or provision of downstairs toilet.  
The need for adaptations was not associated with personal assistance required.  
34% wanted to move due to housing problems.

Comments

The Shropshire Disability Consortium was closely involved in advising on the research.  
Rural area examined – one of first studies to look at this.  
Article does not discuss limitations of the study.  
Piloting, member checking, choices of methods and ethical issues not fully addressed.

Application and further study

Disabled peoples’ rights within this area required consideration by therapists concerning in the planning and delivery of adaptation work and greater openness was required in dealing with peoples’ needs. There was criticism about the professional attitudes displayed by staff and communication issues. Resources and high levels of general housing need were apparent.

Supplementary reading


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<td>O’Brien, P (OT) (page 48) 2003 <em>British Journal of Occupational Therapy</em>, 66(6), 277-280. Disabled Facilities Grants: are they meeting the assessed needs of children in Northern Ireland? Aim: to identify - The number of families with disabled children withdrawing for financial reasons from DFG system. Non-financial factors contributing to withdrawal. Constraints of DFG withdrawal monitoring.</td>
<td>Desk-top survey used due to ethical concern about raising expectations of families about retrospective grant aid. Sample comprised of children with a disability up to age of 18 years identified by 5 of the 11 Northern Ireland trusts during 2002-2003. There were 44 returns and ages ranged from 2-18 (mean=8.8). All met disability criteria/definition under the CSDP (Northern Ireland) Act (1978). Ethical approval and written consent not required. Data was collected by paediatric OTs who reviewed retrospective, anonymised case files and recorded age, diagnosis, adaptations requested, problems encountered and outcome on standardised forms. The results were analysed and presented using descriptive statistics.</td>
<td>In total there were requests for 31 types of adaptation, 25 of which were for ground floor bedroom/shower rooms. 55% had withdrawn for financial reasons and 45% for non-financial reasons. It was noted that similar numbers of families receiving partial grant aid were withdrawing compared with those not eligible for grant aid.</td>
<td>It was not possible to gauge overall numbers of families withdrawing from the system as this was not known. The sample looked only at the families known to trusts that were withdrawing and did not reflect other populations who may have been withdrawing through assessments via housing routes.</td>
<td>Called for closer collaboration between trusts and housing executive regarding how and what information was held. Statistical information needed to be sensitive to a variety of withdrawal factors. Recommendations included: Integrated interagency monitoring. Need for a full retrospective study. Alternative data collection methods to determine family reasons for withdrawal. Survey the impact of withdrawal in terms of personal care and equipment packages. Identifying additional routes into system and subsequent withdrawal.</td>
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<td>Oldman, C. Beresford, B (page 52) 1998 Bristol: The Policy Press <em>Homes unfit for children: housing disabled children and their families.</em></td>
<td>Research took place in 1997 and had 4 components A postal survey of families from Northern and Yorkshire regions drawn from the Family Fund database. 234 replies were received (70% response rate) 2 pools were identified of higher (n=96) and lower (n=138) income families. 40 interviews were conducted 30 lower and 10 higher income parents. 7 out of 16 children who did not having severe learning, communication or behavioural difficulties were interviewed. Interviews from 4 sites (matching families authorities) with housing and social services professionals.</td>
<td>Identified that housing needs of families were much broader than access around the home. Most frequently reported problems were using the stairs and access to a downstairs toilet. Lack of space was also a feature. Aspects of poverty impacted on poorer income families in terms of employment opportunities, location and housing repair. Housing access difficulties contributed to lack of spontaneity. Unsuitable housing impacted on both care aspects of parents and child's ability to attain independence.</td>
<td>5 families from minority ethnic groups were identified from the survey but declined to take part in interviews. Creative methods were used to interview children who drew plans of their homes and described areas they liked or disliked. Interviews concluded with children describing their ‘ideal home’.</td>
<td>It was recommended that families required much more help from a policy perspective than they were getting and the report confirmed Heywood’s findings that disabled children slip through the net especially regarding the DFG. It was recommended that the test of resources be modified. A second recommendation was directed at professionals and related to the need to raise awareness of the specific needs of disabled children and their families. Play was an area highlighted as being important to children with sufficient space to be able to move around the home easily.</td>
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**Supplementary reading**


### Source and aims

Payne A (OT) (page 55) 1998
MSc OT Brunel University

**Aim:** to explore whether adaptations met carers’ and children’s needs.

- Safety aspects.
- Features which helped or hindered care-giving and planned or unplanned outcomes of intervention.
- Whether developmental needs were being met.

### Design

The research took place in a social services department in a London Borough. Mixed methods were used including a piloted survey, subsequent semi-structured interviews and examination of departmental records. The sample was identified from 1,215 cases over a 6-year period (January 1992-December 1997). 24 main carers were surveyed with 12 responding (50% response rate), 3 of whom completed interviews.

Open-ended qualitative questions were included in the survey and married with interview data for analysis and categorisation into themes. Content analysis including coding and thematic analysis was used for interview data, with transcription checked by participants for accuracy.

### Key result

11/12 found adaptations easy to use and as meeting both carers’ and children’s needs. Floor drainage showers seemed to meet carers’ needs. Baths and overbath showers scored lowest (2.7, and 2.8 respectively out of 5) for safety. Overbath showers did not facilitate play. Portable hoists, screen and slings restricted space and hindered care giving. Adaptations reduced/or removed needs. New skills through play were noted due to improved hygiene access (except in overbath showers). Least helpful items were shower screens and portable hoists although they did provide some benefits. Satisfaction did not appear to relate to room size - a disadvantage of larger rooms were lower temperatures.

### Comments

Used photographs, camcorder and factual and descriptive field notes to facilitate researcher understanding post interview. Appropriate ethical considerations were evident. Mentions lack of standardised outcome measures to assist in research.

### Application and further study

Provides new insights into the use of bathing adaptations. Findings need to be clearly focused. Could provide a useful checklist of considerations for other OTs who are working with families with disabled children. Needs further development. Suggested routine provision of booster heating in both bed and bath/shower rooms and making details related to specific adaptations readily available to housing maintenance and allocation departments.

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<td>Picking, C (OT) Pain, H (OT) (page 57) 2003 British Journal of Occupational Therapy, 66(1), 2-8 Home adaptations: user perspectives on the role of the professionals. Aim: to explore whether disabled people felt they received appropriate professional support, information and practical help when adapting their homes. Sought to learn more about their feelings regarding the process.</td>
<td>Purposive sample from 3 geographical locations (2 county council towns and 1 unitary authority) covering mixed urban and rural areas 17 participants were identified via OT closed cases. They were over 18 yrs, lived in appropriate area, had received adaptation works between values of £1K-£10K and had good communication skills for discussions. 3 focus groups used (1n=7, 2n=4, 3n=6). A 5-point question guide was developed and open-ended questions were used with a ‘funnelling’ technique. Author 1 was moderator and an observer took notes to supplement audio recording. Ethical approval acquired. Anonymity and confidentiality addressed Data transcribed verbatim and themes were coded and placed into categorical groupings with more descriptive sub themes. Initial separate group analysis was completed prior to intergroup comparisons.</td>
<td>4 key themes identified Factual accounts, understanding process, experience of ‘others’ and opinions and feelings. Most participants were aware of process and roles of individuals. People were more likely to want to take control if they had prior knowledge of system or were well informed although some wanted decisions made for them. Some described stress when unprepared and unable to visualise final scheme compared with those who had seen examples of work or who knew what was involved and timescales. People valued phone calls, regular visits, being listened to with someone who could empathise with stress of the experience.</td>
<td>Excluded minor and more complex adaptations that might involve structural alterations to home and take a long time to complete. Practical limitations of focus groups needed to be addressed with alternatives for dealing with those unable to participate in this method. Opposes assumption that OTs need to take key roles in adaptation co-ordination. Alternatives should include HIAs or local authority staff with appropriate training. Encouraged support for individuals to have opportunities and choices and to take control and responsibility within process from outset.</td>
<td>Suggested person with ‘right attitude’ better than right ‘job description’. Valued OTs who did not pressurise rather than those who ‘knew best’. Suggested that not all data was saturated calling for further work including those undergoing major alterations.</td>
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**Supplementary reading**


### Source and aims

Stewart, S (OT/PT lecturer)  
Neyerlin-Beale, J (OT)  
(2000)  
*British Journal of Occupational Therapy, 63*(8), 373-379

The impact of community paediatric occupational therapy on children with disabilities.

**Aim:** to investigate whether OT enabled disabled children to become more independent and whether interventions reduced the strain on caring for a child.

### Design

Same-subject before and after experimental design was used. Children were assessed using the COPM and CDI. Parents were assessed with the Caregiver Strain Index, Subjective Burden Scale and Perceived Stress Scale.

46 referred/newly disabled children allocated to a social services OT team were identified over 18 months. 33 formed main sample. 30 carers from 27 households completed carer outcome measures.

At initial assessment both CDI and COPM were completed. The researcher completed carers' scales. OT provided interventions - equipment, minor and major ads, and advice. 6-9 months later, on completion of intervention, children and carers were reassessed. Carers were asked to rate OT service received from 1 (not satisfied) to 5 (very satisfied). 100% of sample received equipment advice and/or provision, 97% had manual handling issues whilst 64% and 61% received minor and major adaptations interventions respectively.

### Key result

A statistical shift in scores for improvement was found in both CDI and COPM for children.

With regard to carers there was a slight shift in scores but only the SBS showed a statistically significant downward shift. The CSI and PSS showed no statistical systematic reduction in scores.

Satisfaction of service mean was 4.3 out of 5.

### Comments

Note that OT brief included regular contact with schools and other therapy professionals i.e. interventions were not given in isolation. Also carers received education and support.

Part of rationale of study was to raise profile of OT within predominantly social work environment.

Changes needed to be measured systematically to verify effectiveness of service.

It was not possible to identify the importance of adaptations in isolation in affecting changes perceived by children.

### Application and further study

An advantage of the CDI was in the identification of the need for further services e.g. need for improved care package.

COPM had advantages in that it could measure client-centred change in a highly individualised intervention programme. Unlike the CDI, COPM did not seek to be predictive. Shown that combining both CDI (objective - therapist controlled) and COPM (subjective - user-centred) as standardised measurement tools could have useful applications in measuring change for service users. It could provide employers with clear evidence of the effectiveness of OT service provision within social services.

Suggested larger study with more time to enable adaptations to be completed within time frame. Waiting lists could be used as control group. Suggested qualitative research to enable a deeper understanding of the issues.

Economic costs could also be factored in to future research comparing results to permanent council residential care.

### Supplementary reading


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<td>Syniad Benchmarking Centre (page 61) 2001</td>
<td>Advice and information Referral taking Referral processing Screening for eligibility Prioritisation for assessment Allocation to appropriately skilled personnel Monitoring mechanism</td>
<td>The good practice guides come in 5 separate laminated sheets (4xA3 and 1xA4 size) The background/context to each guide is identified. Critical success factors (CSFs) are produced providing a basis for the development of performance indicators (this should be a two way process). Possible performance indicators are identified and referenced. Advice on targets is shown. Key activities are clearly presented followed by 3 columns containing a standard continuum from 'minimum standards', to 'good practice' and 'better practice'. Under each are a number of specific tasks to be achieved before success within that standard can be claimed. The purpose is to enable organisations to evaluate current performance against others and set future improvement goals. Advises that all agencies should be achieving the minimum standards. The relevant target audiences are identified.</td>
<td>Although Disability Wales was involved there could have been a greater emphasis on user involvement within the standards as 'minimum' requirement rather than emphasis on better practice. If users are central to the process this philosophy should be viewed as a minimum requirement. Standards offer limited opportunities for users to shape or control service delivery. Report would benefit from a clear section on the methodology used. Highly relevant for agencies who wish to improve their service and are looking for a relevant framework to work from. The report provides detailed information on a variety of OT specific areas throughout the adaptation process. OT teams will find the good practice guides valuable tools in ascertaining service strengths and limitations enabling comparability over time or between local authorities.</td>
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1) Screening for eligibility and prioritisation for assessment

2) Adaptation needs assessment

3) Time taken

4) Ensuring a quality outcome

Advice and information Referral taking Referral processing Screening for eligibility Prioritisation for assessment Allocation to appropriately skilled personnel Monitoring mechanism

Assessment of need Options analysis

Screening Assessment of what is 'necessary and appropriate' Assessment of financial contribution Assessment of what is 'reasonable and practicable' Assembly of application package [grants], design and works scheduling [housing] Processing application and reaching decision Carrying physical work

Initial enquiry Assessment Provision of recommendations for adaptation to meet needs Consideration of alternative options to meet need Determination of formal application/provision of adaptation Consultation throughout process

The relevant target audiences are identified.
5) Ensure an effective communications process

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Building in evidence: reviewing housing and occupational therapy

Darren Awang