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Title: A survey of Local Authorities and Home Improvement Agencies: identifying the hidden costs of providing a home adaptations service.

Short title: Home adaptation costs

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Abstract

Introduction: The Royal College of Occupational Therapists has launched a campaign to demonstrate that occupational therapists improve lives and save money for health and social care services. Occupational therapists play a major part in supporting older and disabled people to remain in their own homes through the provision of home adaptations. Among other benefits, studies have shown that home adaptations can reduce falls in the home and could therefore help reduce hospital admissions. To evidence savings however, information on the full costs of supplying and fitting home adaptations are needed.

Method. Local authorities and Home Improvement Agencies were surveyed in 2013/14 to obtain the information required to estimate these costs. Time inputs for staff involved in their provision have been collected and staff costs and total costs calculated for 18 commonly fitted adaptations. The process of obtaining publicly funded home adaptations is also discussed.

Findings. For major adaptations, the total mean cost was £16,647, ranging from £2474 to £36,681. Staffing costs absorbed up to 24% of the total mean cost. The total mean cost for minor adaptations was £451 with average staffing costs forming 76%.

Conclusion: Staff costs are an important consideration when estimating the costs of providing home adaptations.

Key words. Occupational therapists, home adaptations, costs, ageing and older people, Better Care Fund, Disabled Facilities Grant

Introduction

The Royal College of Occupational Therapists (RCOT) is gathering evidence for its UK-wide 'Improving Lives, Saving Money' campaign to make the case for occupational therapists (OTs) involvement in three pressure points across health care: keeping people out of hospital, reducing pressure on primary care and addressing over reliance on social care [Royal College of Occupational Therapists, 2017a]. More specifically they have called for an urgent increase in the use of OTs to prevent falls-related hospital admissions [Royal College of Occupational Therapists, 2017b], which could assist local areas in reducing non-elective admissions [Department of Health, 2016].

Guidance is provided by the RCOT on how to use unit costs to calculate potential cost savings made through the use of occupational therapy interventions (<http://cotimprovinglives.com/tell-your-story/>). OTs are responsible for assessing and recommending adaptations which may help keep people out of hospital but there is a paucity of information on how much it costs to provide home adaptations [HM Government, 2016; Government Office for Science, 2016:18, 50-55; Oswald et al., 2007; The Housing and Ageing Alliance, 2013]. Availability of a 'unit cost' for providing home adaptations may help the RCOT develop cost-savings arguments for OTs.

The RCOT method draws on the annual *Unit Costs of Health and Social Care* publications to support their calculations on cost-savings (see <http://www.pssru.ac.uk/project-pages/unit-costs/>). To contribute to the RCOT initiative and to enable inclusion of unit costs for home adaptations in the annual publication, this study uses a commensurate cost estimation

method for the most commonly provided home adaptations that includes the costs of all staff involved in the process plus the cost of materials. We also seek to clarify the process for obtaining home adaptations through public funds, such as the Disabled Facilities Grant (DFG). For these publicly funded adaptations, major adaptations are defined as those costing over £1000, for example a bathroom alteration or stairlift and minor adaptations, such as handrails and ramps, are defined as those costing £1000 or less and are provided to the user free of charge [Communities and Local Government, 2009; NHS 2015a].

Commissioned by PSSRU through our Department of Health funded Unit Costs programme and carried out in 2014 by Foundations, the national body of Home Improvement Agencies (HIAs) and Handyperson Services, the overarching project aim was to estimate the total costs of supplying and fitting commonly used adaptations. The study focused on the system in England, although the method has wider applicability.

Literature review

There is evidence to suggest that home adaptations can improve health and provide a range of positive effects for older people [see, for example: Heywood, 2004; Keall et al., 2015] however, there are very few studies to inform our research on the costs of aids and adaptations. Two online searches of the Web of Science, PubMed Central, Ebsco and Wiley Online Library identified only one article, funded by the Health Research Council of New Zealand, which discussed costs in any detail; it provided material, travel and labour costs [Keall et al., 2015].

A further 4 studies were identified by google and other search engines [Pleace, 2011; Snell et al., 2012; Heywood and Turner, 2007; Garrett et al., 2016], but only three provided costs for individual adaptations. Of these, one did not specify which costs were included [Garrett et al., 2016:22] and the other two [Snell et al., 2012:21 & Pleace, 2011] drew on previous work [see, for example, Curtis, 2010:121], which this study was designed to improve. Pleace [2011] also looked at hours of care staff time to fit a range of home adaptations, for example, the author found providing stairlifts required 11 hours of staff time. In their review, Heywood and Turner [2007] discussed only one study focusing on adaptations fitted later than 2000 [Heywood et al., 2005] which provided mean costs for specific adaptations; a straight stairlift, downstairs WC, level access shower and double bed extension with tracking hoists and en-suite. No comparisons with this study would be possible as respondents had been asked to include professional fees rather than full costs.

Process

Obtaining home adaptations through public sources can be a complex process. HIAs and LAs which support users either arrange for minor adaptations to be fitted through a handyman service free of charge, or coordinate and oversee the planning and supply of major adaptations, including supporting the person's application for funding through the DFG [Communities and Local Government, 2009]. The DFG is the main source of funding for major adaptations and the DFG budget for England is projected to increase from £220 million in 2015/16 to over £500 million in 2019/20 [Foundations, 2016]. The DFG budget is now part of the Better Care Fund (BCF) which is administered by Clinical Commissioning Groups (CCGs). CCGs, which include representatives from the local housing authority and

other parts of the LA, decide how the BCF should be allocated to meet national performance targets [Department of Health, 2016:12].

For people requiring public funding for their home adaptations, a health and social care 'assessment of need' to decide whether they meet the national eligibility criteria for services is usually the first step [NHS, 2015b]. Assessments are commonly undertaken by an OT. For minor adaptations such as grab or handrails, HIAs often provide a handyperson service and following an eligibility check [Foundations, 2010] the adaptation can be fitted free of charge to the service user [NHS, 2015b].

Although there is some variation in processes across authorities, table 1 shows there are six distinct stages for installing major adaptations. After the initial enquiry (stage 1), an OT carries out an assessment and a means test to confirm eligibility for DFG funding (stage 2) and then a referral is made to an LA grants officer who checks eligibility and draws up a schedule (stage 3) . Prices are collected from building contractors after which HIA caseworkers help clients to submit the application for LA approval (stages 4 and 5). Under current rules councils have six months from that submission date to decide whether to provide funding [Communities and Local Government, 2009:9]. Once a decision has been made to fund the adaptation, caseworkers work with technicians/surveyors to manage the building process on behalf of the customer through to completion (stage 6).

Summarised data from the study show that supplying major adaptations can take from 5 to 23 months (on average 18 months) depending on the complexity of work and speed of DFG approval. Table 1 also shows which staff groups undertook each task and their mean hourly costs, which range from £23.70 to £54.50.

<Table 1 about here>

Methods

Design

A questionnaire was designed to quantify the time-inputs of staff involved in supplying and fitting the most commonly required permanent or fixed alterations (home adaptations) to make homes more suitable for older or disabled occupants (see appendix 1). The questions were drawn up by Foundations with PSSRU, and Foundations also provided a list of 7 major adaptations and 11 minor adaptations which were fitted by their handyperson services.

Ethical approval was obtained from the SRC Ethics Panel of the University of Kent School of Social Policy, Sociology and Social Research.

The study's budget allowed up to twenty organisations across England to be contacted.

Foundations' regional staff were asked to identify organisations that would ensure that a range of different types could be included in terms of their size, geographical spread, work undertaken and structure. The sample included a mix of unitary (5), district (3) and county councils (2) based mainly in the South West or South East (5) and London (2) but the North West (1) and Midlands (2) were also represented. Some of the HIAs were smaller independent organisations (4) and others were based within housing associations or local authority services (2). The HIAs were also located in the South (2), London (2) and the North West (1) and Midlands (1).

All organisations received a telephone call from Foundations to discuss how the information provided by them would be used, and to obtain their verbal consent to participate. The

questionnaire was then sent to the organisations to complete: individuals who used the home adaptations were not contacted. When the questionnaires were returned, a face-to-face interview was carried out by a researcher knowledgeable about the topic and recruited by Foundations. The process of supplying adaptations and any cost-savings strategies used were discussed and where necessary, responses to questions were clarified. A simple table was constructed by Foundations to describe the processes (see table 1), the staff involved, and the length of time each process might take. Additional information on DFGs funding was found in the policy and guidance literature.

To reduce the burden for participating organisations, they were asked to provide data for one example of 16 home adaptations and then three examples for level access showers and straight stairlifts, the most commonly fitted adaptations. The questionnaire also asked for the average number of days it took from referral to completion of the work, the number of home adaptations provided, material costs and time inputs of staff (see appendix 1). In addition, questions asked for detailed information on the organisation's direct revenue costs (such as salaries, heat and light and consumables), and an estimate of their indirect revenue costs (for example, human resources and finance departments).

Estimating costs

Drawing on the PSSRUs well-established approach [Curtis, 2010:11], we estimated the cost per hour for staff groups involved in organising and installing each major and minor adaptation. Where staff grades were reported (LA grants officer, administrator/finance officer and OT; NJC points 27, 19, and AFC bands 2-7) salary and overhead costs were calculated using national sources and a weighted average cost applied to reflect the number

of cases seen by each grade of staff [Curtis, 2014:209; Navca, 2014]. As no national pay scales exist for HIA staff, salaries were taken from the questionnaires. Mean salaries were calculated for technical officers (n=10, £30,311; range £27,000-£31,192), caseworkers (n=28, £19,317; range £17,250-£22,000) and customer service or administrative officers (n=8, £17,333; range £14,748-18,808). Where the study data showed the professional's grade varied, the salaries were weighted by the number of cases seen. Five HIAs provided overhead costs and we calculated these as the mean percentage of salary costs for each professional (42%, range 17%-57%). Estimates for building and land (capital) costs were taken from national sources [Curtis, 2014:209]. We have no data on costs incurred by other parts of the LA, such as for planning permission or building control, or for maintenance, nor were data collected on time spent with the user after the initial installation. The value of time inputs from household members and volunteers have also been excluded. All costs are shown at 2013-14 prices.

The average time input for each professional for each type of adaptation (including travel time) was calculated by Foundations using microsoft excel, which we multiplied by the appropriate hourly cost to give the 'staff cost per adaptation'.

As the adaptation type was rarely recorded when an initial enquiry was made, the average enquiry time for all adaptations has been applied. For minor adaptations, the data allowed the cost for fitting the adaptation to be separated from the price of the materials, but for major adaptations this was not possible because HIAs commonly request a fixed price for this work.

To calculate the 'total cost of an adaptation', LA and HIA staff costs were added to the prices reported for the 18 selected adaptations. From the returned questionnaires we identified the lowest, highest and mean price per adaptation type.

Results

Sixteen organisations (80%) returned questionnaires including 10 LAs (5 unitary authorities, 2 county councils and 3 district councils) and 6 HIAs. All were involved in the provision of major adaptations (cost threshold, over £1000) but only half of the participating HIAs supplied minor adaptations (cost threshold, less than £1000). The organisations provided data on 120 installations covering the 7 types of major adaptation (52/120) and 11 types of minor adaptations (68/120). The observed data showed the size of the organisation did not influence the number of adaptations supplied over the last 3 years.

Staff time and costs

Table 2 provides the staff cost and time inputs reported for each type of adaptation and for each professional involved in the process. Time spent by contractors who fit the adaptations is excluded from this table. Across all major adaptations, OTs accounted for 18% of staff time and grant officers, technicians and administrators accounted for 82% of staff time. The total mean staff cost (excluding fitting costs) was £1811 for 47 staff hours. The lowest time inputs were required for straight stairlifts (16 hours) costing £600 (OT time 7%), but this accounts for a relatively high proportion of total costs (24%, see table 3). The highest staff costs (£3042) were for downstairs bedroom/bathroom extensions, absorbing 80 staff hours (OT time 22%). The study data showed considerable variations in staff time for each adaptation (not tabulated). For example, for straight stairlifts grant officer time varied

between 8 and 18 hours, and technical officer time was between 0 and 6 hours. Increased staff time was reported as being due to higher user needs.

Across all minor adaptations identified for our study, total mean staff time (excluding handyman or contractor time) was 3.7 hours, costing £133. The minimum time was 1.3 hours for processing a bath handrail (£42) and the maximum was 8.5 hours to support a request to widen a doorway (£312). OT time accounted for 81% of the total hours. A band 5 junior OT carried out most of the OT assessments (55%), and for 40% of the items, an OT assistant or support worker either carried out the assessment or was also present. The remaining cases were assessed by specialist or advanced OTs. A fixed labour cost was provided for handymen /contractors (see col. 6 on table 2). When these were included, mean staff costs for the minor adaptations increased to £244 (range £56-£529), see table 3.

<Table 2 about here>

Total costs

Table 3 brings these data together and shows the total costs per type of adaptation. The first three data columns show the prices for materials, and for major adaptations this includes the labour costs (contract price). The fourth data column shows the mean staff cost (excludes contractor costs for major adaptations) and the fifth shows the total mean cost.

The total mean cost across all seven major adaptation types was £16,648, ranging from £2474 for a straight stairlift to £36,681 for a downstairs bedroom/bathroom extension. For

minor adaptations, the total mean cost across all eleven adaptation types was £451, ranging from £63 for fitting a handrail over the bath to £1424 for fitting a shower over a bath. On average for minor adaptations OT costs absorbed 51 per cent of total costs staffing costs but there was considerable variation; from 14% for fitting a shower over a bath to 81% for laying a new path. Some regional variation was observed in the raw data. Although this could not be tested statistically, higher contract costs were observed for London and the South East than for the rest of England.

<Table 3 about here>

Discussion

The costs of organising, supplying and fitting the most commonly requested major and minor home adaptations have been calculated for this study. Table 2 shows the average time taken to supply each adaptation together with the staff costs and table 3 reports costs for materials and labour, as well as mean total costs. The study findings suggest that if only the costs of the items (handrail, stairlift, etc) are considered, this markedly underestimates the cost of adapting people's homes. Even for major adaptations, where the contract price includes both materials and labour, we found that HIA and LA costs (including OTs) added a further 17% at the mean rising to 22% for level access showers and 32% for straight stairlifts. Across all 11 minor adaptations, staff costs formed a much higher proportion - on average 76% of the total cost.

This study was designed to calculate costs for supplying and fitting home adaptations to include in the *Unit Costs of Health and Social Care* volumes (<http://www.pssru.ac.uk/project-pages/unit-costs/>) and few comparisons could be drawn with earlier work. Pleace [2011] looked at hours of care staff time to fit a range of home adaptations, for example the author found that providing stairlifts required 11 hours of staff time, but their tasks were not identified. In this study, 17 hours of staff time were required. The Keall et al. [2015] estimate of labour costs (37%) was substantially lower than our estimate of labour costs for minor adaptations (76%), but higher than that for major adaptations (15%, excluding the costs of supplying and fitting). However, descriptions of the modifications studied were too broad (e.g. bathroom and other) to draw any specific comparisons with this work.

The recent RCOT 'Improving Lives, Saving Money' campaign [2017a] launched in response to the ongoing pressures faced by the NHS, calls upon service providers to recognise the true value that OTs across the UK provide. To support this campaign the RCOT calls for more studies which demonstrate both clinical and cost-effectiveness. While this study cannot demonstrate the cost-effectiveness of a home adaptations service, the paucity of existing research on the costs of home adaptations means that the robust costs provided here are an important benchmark and can be used to support future cost-related analyses. For example, used alongside local data on the need for adaptations, costs can be estimated to support discussions about allocating the BCF budget.

This work can also support managers and commissioners who invest money into the service and have to show how it can make savings in the longer term. For example, at 2013/14

prices, the average cost per episode for a non-elective inpatient stay in hospital plus a six week reablement package was £4798 (Curtis, 2014:111; 229). If a stairlift (costing £2474) could have prevented the admission, the savings would be around £2000.

The processes to provide home adaptations may also impact on use of hospital care. For example both Stage 4 (drawing up plans etc.) and Stage 6 (arranging the work and grant payment) can take up to six months (Table 1), and obtaining an OT assessment can take between 1 and 3 months. One study found some hospital discharge delays were due to hold-ups in the provision of adaptations [Bryan et al., 2006:196]. Two others found that 29.3% [Jasinarachchi et al., 2009] 25.8 % [Hendy et al., 2012:321] of delayed discharges occurred because people were waiting for therapy or social work assessments. Discharge delays are costly for hospitals [Bryan et al., 2006].

Identifying the components of complex processes can sometimes help identify whether the staff mix can be optimised [Twigg et al., 2012] or modified to reduce costs [Curtis and Netten, 2007]. Six methods were employed in organisations participating in this study:

- Joint visits for OTs and housing grant officers to reduce high travel costs in rural areas: our data suggest savings of approximately £30 per adaptation could be made (assumes 49 minutes of travel per home visit [Drummond et al., 2012, p. 399], reimbursed at £0.56 per mile [Curtis, 2014:180]).
- Caseworkers referring stairlift installations directly to contractors rather than technicians: this could lower the cost from £2474 to £2444, or to £2335 if technician time is also excluded (assuming the contractor price remains constant).

- Administrative staff completing some paperwork for caseworkers: using our data for straight stairlifts, a total saving of £153 could be generated if HIA administrators could work half of the caseworker hours.
- Trusted Assessors could make ‘prescriptions’ for some adaptations [Winchcombe and Ballinger, 2005] which may mean that OTs can be reserved for those with complex high risk needs [Twigg et al., 2012]. Although many LAs now require self-assessment for minor adaptations [Tucker et al., 2011], this study found that face-to-face assessments were the norm, and OT time can account for up to 80% of the total cost.
- Integrated teams for those involved in processing DFG applications
- Procuring contracts using a schedule of rates.

This study has also found that there may be a need to revisit the current DFG cost thresholds which currently have a ceiling in England of £1000 for minor adaptations and £30,000 for major adaptations. The lowest contract prices for major adaptations in this study (table 3) fall within the DFG cost thresholds for assessing needs, supplying, and fitting home adaptations [Communities and Local Government, 2009:7]. However, the mean and higher contract prices listed for building a downstairs extension or bedroom and en suite facilities exceed the current threshold (£33,639 v £30,000). For minor adaptations, some participating organisations suggested that the threshold should be raised to £2000. This may avoid the sometimes lengthy process of applying for DFG funding for less costly items.

This study has calculated nationally applicable costs for England and therefore caution is advised when using the data in other countries. However, the methods used here are transferable. Although home adaptation services will be organised differently in other countries, many will share the characteristic of involving different organisations. In Sweden, for example, people requiring an adaptation have to navigate through a network of service organisations to obtain their home adaptation [Johansson et al., 2009]. This suggests that many different staff are involved in the process of supplying and fitting adaptations. Collecting detailed and quantified data on that process and attaching costs to each element using a method similar to that described here will support development of better unit costs.

Three limitations to this study can be mentioned. First, that data were collected from just 20 organisations (HIA n=6/200; LAs, n=10/152), although all participating organisations fitted commonly used adaptations. Second, the costs reflect prices for 2013-2014 (the year of data collection). However, inflation indices and current unit costs for OTs and other staff can be found in more recent volumes of the *Unit Costs of Health and Social Care* publication. Third, because the data were collected from organisations that organise the supply and fitting of home adaptations, information on staff inputs after the item was fitted could not be collected. For example, commonly OTs make follow-up visits to verify that the home adaptations are being used correctly and to their full potential. Again, the method identified here can facilitate estimation of these costs. Quantified data on the time spent by OTs on follow-up visits can be collected and multiplied by the OT cost per hour, either using local data or that provided in the *Unit Costs of Health and Social Care* volumes.

This study highlights one further important point. In this sample of organisations, it took between one to three months after an initial enquiry for an assessment to be carried out by an OT. A separate study involving local authorities and HIAs in other parts of the country and focusing just on this point could identify where it would be most beneficial to recruit more OTs to reduce this delay.

Conclusion

The findings from this study can assist service managers and Head OTs whose work is to provide a home adaptations service and who are responding to the RCOT's campaign to evidence how savings can be made to the health and social care budget. It has been undertaken in the absence of any up-to-date research on the costs of the service.

OTs play a major role in assessing older or disabled people for home adaptations. Findings from this study could therefore contribute to the RCOT 'Improving lives, Saving money' campaign by highlighting the importance of OTs in the provision of a home adaptations service, and identifying the process of supplying and fitting home adaptations and the associated costs. An important part of the study was to identify ways in which processes could be improved. These findings may therefore reduce waiting times for adaptations to be fitted. In turn, this may reduce falls in the home [Allen and Glasby, 2013; Pighills et al., 2011; Nikolaus and Bach, 2003] and help people stay in their own homes for longer.

What the study has added

Costs for organising, supplying and fitting commonly requested home adaptations have been calculated. Major adaptations cost between £2474 and £36,681 and minor adaptations cost between £63 and £1424.

Key findings

- a) To obtain a major adaptation, three of the six stages can each take up to six months.
- b) Staff costs are an important consideration when estimating the costs of providing home adaptations.
- c) Participating organisations identified six ways of optimising their staff mix which may reduce their costs.

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Research ethics

Ethical approval was obtained from the SRC Ethics Panel of the University of Kent School of Social Policy, Sociology and Social Research, SRCEA id 196, 29 November 2017. Prior to giving verbal consent to participate, all participants received a telephone call from Foundations to discuss how the information provided by them would be used.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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Table 1 – Process for major adaptations and hourly costs of staff

Stages	Process	Time period	Staffing	Mean staff cost per hour
Stage 1	Initial Enquiry	1 day	Home Improvement Agency administrator / Local Authority administrator	£31/£23.70
Stage 2	Occupational therapist assessment	1-3 months	Occupational therapist	£37.70
Stage 3	Work scoped and costed	1-2 months depending on complexity and agreement of schedule by applicant.	Local Authority housing grant officer	£30.80
Stage 4	Plans drawn up and work scheduled. Costings collected from contractors by Home Improvement Agency or other agency service.	1-6 months depending on tendering process and work required for planning consents and building control.	Home Improvement Agency case worker / technical officer (technician)	£34.50/£54.50
Stage 5	Grant application determined	1 month or longer. Local Authorities can delay approval for up to 6 months if Disabled Facilities Grants budget for year is exhausted.	Local Authority housing grant officer	£30.80
Stage 6	Work arranged and carried out/arranging for grant to be paid	1-6 months depending on complexity of work	Home Improvement Agency caseworker / technical worker (technician)	£34.50/£54.50

Table 2 Mean costs and time inputs (minutes) per adaptation.

Major Adaptations (number of items)	Initial enquiry	Occupational Therapist	LA grants officer	LA administrator or finance officer	HIA technical officer and caseworker	HIA administrator
Level access shower (21)	£4 (9.8)	£132 (210)	£237 (462)	£24 (60)	£546 (707)	£87 (168)
Stairlift (straight) (21)	£4 (9.8)	£45 (72)	£96 (186)	£12 (30)	£381 (594)	£62 (120)
Stairlift (more complex) (7)	£4 (9.8)	£98 (156)	£388 (756)	£26 (66)	£333 (402)	£62 (120)
Convert room for downstairs WC /washroom £(7)	£4 (9.8)	£313 (498)	£407 (792)	£52 (132)	£769 (948)	£161 (312)
Build downstairs extension for WC/washroom (5)	£4 (9.8)	£512 (816)	£610 (1188)	£95 (240)	£1515 (1722)	£90 (174)
Build downstairs extension for bedroom (5)	£4 (9.8)	£403 (642)	£478 (930)	£95 (240)	£1439 (1770)	£143 (276)
Build downstairs extension for bedroom and en suite facilities (6)	£4 (9.8)	£670 (1068)	£696 (1356)	£182 (462)	£1369 (1644)	£121 (234)
Minor Adaptations (number of items)	Initial enquiry	Occupational Therapist	LA grants officer	LA administrator or finance officer	Handyman/ contractor	HIA administrator
Fit handrail - external (6)	£4 (9.8)	£53 (84)	NA	NA	£10	£13 (30)
Fit handrail - internal (8)	£4 (9.8)	£45 (72)	NA	NA	£23	£16 (30)
Fit handrail to bath (6)	£4 (9.8)	£26 (42)	NA	NA	£14	£12 (24)
Fit over-bath shower (6)	£4 (9.8)	£53 (84)	NA	NA	£293	£22 (42)
Create step to front/back door (5)	£4 (9.8)	£83 (132)	NA	NA	£32	£16 (30)
Create ramp to front/back door (3)	£4 (9.8)	£226 (360)	NA	NA	£320	£16 (30)
Lay path, cost per metre (excl materials)	£4 (9.8)	£120 (192)	NA	NA	NA	£25 (48)
Widen doorway for wheelchair access (6)	£4 (9.8)	£286 (456)	NA	NA	£217	£22 (42)
Install lighting to outside steps/path (3)	£4 (9.8)	£200 (318)	NA	NA	£227	£6 (12)
Move bed to downstairs room (0)	£4 (9.8)	£49 (78)	NA	NA	£40	£22 (42)
Raise electrical sockets/lower light switches (4)	£4 (9.8)	£98 (156)	NA	NA	£40	£19 (36)

Table 3 – Mean contract prices plus staffing costs

Adaptations (number of items)	Major adaptations: contract price for labour and materials			LA and HIA staffing costs	Total mean cost
	Lowest cost	Highest cost	Mean cost	Mean staff cost	
Level access shower (21)	£2500	£12,000	£4651	£1029	£5680
Stairlift (straight) (21)	£1050	£2829	£1874	£600	£2474
Stairlift (more complex) (7)	£2300	£6613	£4564	£911	£5475
Convert room for downstairs WC /washroom £(7)	£2800	£22,000	£9856	£1705	£11,561
Build downstairs extension for WC/washroom (5)	£12,000	£30,000	£22,563	£2826	£25,389
Build downstairs extension for bedroom (5)	£12,000	£45,000	£26,715	£2560	£29,275
Build downstairs extension for bedroom and en suite facilities (6)	£23,000	£45,000	£33,639	£3042	£36,681
	Minor adaptations: materials only			Staffing costs: includes building contractor	Total mean cost
Adaptation	Lowest cost	Highest cost	Mean cost	Mean staff cost	
Fit handrail - external (6)	£5	£24.24	£13.26	£79	£92
Fit handrail - internal (8)	£4.50	£20.00	£9.5	£87	£97
Fit handrail to bath (6)	£4.20	£12.54	£7.26	£56	£63
Fit over-bath shower (3)	£260	£1800	£1052	£372	£1424
Create step to front/back door (3)	£5	£1500	£711	£134	£845
Create ramp to front/ back door (3)	£120	£400	£320	£565	£885
Lay new path, cost per metre cost				£149	£149
Widen doorway for wheelchair access (3)	£6	£476	£100	£529	£629
Install lighting to outside steps/path (3)	£3	£150	£60	£437	£497
Move bed to downstairs room (3)	£0	0	0	£115	£115
Raise electrical sockets/lower light switches (3)	£4	£89	£5	£161	£166