



**Centre for Clinical Effectiveness**

Enhancing patient outcomes through clinical application of the best available evidence

**EVIDENCE CENTRE**  
**CRITICAL APPRAISAL**  
Series 2003: Therapy

# **Effectiveness of assistive equipment in patients discharged from acute facilities.**

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## **SUMMARY STATEMENT**

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## QUESTION

Does prescription of assistive equipment improve independence and safety in personal care in patients being discharged from acute hospitals?

## REQUESTED BY

**Brian Hoare, Occupational Therapist,** Occupational Therapy Department, Monash Medical Centre, Clayton.

## METHODOLOGY

### Search Strategy

The Centre for Clinical Effectiveness defines the 'best available evidence' as that research we can identify that is least susceptible to bias. We determine this according to pre-defined National Health and Medical Research Council (NHMRC, 2000) criteria (see Appendix 1).

First, we search for systematic reviews, evidence based clinical practice guidelines, health technology assessments and randomised controlled trials. If we identify sound, relevant material of this type, the search stops. Otherwise, our search strategy broadens to include studies that are more prone to bias, less generalisable or have other methodological difficulties. We include case-control and longitudinal cohort studies in our critical appraisal reports. While we cite observational and case series studies, and narrative reviews and consensus statements, in our reports we do not critically appraise them. Such studies can produce accurate results but they are generally too prone to bias to allow determination of their validity beyond their immediate setting.

### Details of Evidence Request

Patients:	Acute inpatients (18 years and over) who were discharged home.
Intervention:	Prescription of assistive devices.
Comparisons:	Any.
Outcomes:	Safety and independence.

### Search terms

(See Appendix 2 for exact search strategy)

Patient:	Discharge, patient discharge, discharge planning, early discharge.
Intervention:	Assistive technology, assistive technology device, self help devices, assistive devices, assistive equipment, adaptive devices, toilet surround/frame/support, bath frame/rail, shower stool/seat/support, home modification.

## Resources Searched

We searched the following databases and Internet websites:

<b>Resource</b>	<b>Issue or Access Date</b>
The Cochrane Library (Online)	Issue 2, 2003
Medline (OVID)	1966 to June Week 1, 2003
EBM Reviews (OVID) -	
Cochrane Database of Systematic Reviews	accessed 12 June 2003
Database of Abstracts of Reviews of Effectiveness	accessed 12 June 2003
Cochrane Controlled Trials Register	accessed 12 June 2003
CINAHL (OVID)	1982 to June Week 1, 2003
Embase (online)	accessed 12 June 2003
Current Contents (OVID)	1993 Week 26 to 2003 Week 24
PREMEDLINE (OVID)	June 11 2003
PsycINFO (OVID)	1974 to June Week 1, 2003
Australasian Medical Index (informit)	Accessed June 12 2003
PubMed (National Library of Medicine, online)	accessed 12 June 2003
National Guideline Clearinghouse (online)	Accessed June 12 2003
OT Seeker (online)	accessed 11 June 2003
OT CATS (online)	accessed 11 June 2003
Clinical Evidence (online)	accessed 12 June 2003

Our searching was conducted on the 11<sup>th</sup> and 12<sup>th</sup> of June 2003.

## RESULTS

From our sources we identified 27 potentially relevant articles. We obtained the full text of these articles to determine their relevance.

After examination of the 27 articles, the following were excluded as follows:

<b>Reason for exclusion</b>	<b>Number</b>
Level IV evidence	7
Not related to supply of equipment at discharge (ie, assessed effectiveness but of community based programs)	16
Provision of equipment not a major focus of intervention (ie, part of a complex discharge intervention)	1
<b>Total</b>	<b>24</b>

3 articles then remained for appraisal. These studies are classified as follows:

<b>Study Design</b>	<b>Number included</b>
Systematic reviews or meta-analyses	0
Evidence-based clinical practice guidelines	0
<b>Randomised controlled trials</b>	<b>3</b>
Pseudorandomised controlled trials	0
Controlled trials, cohort or case-control analytic studies	0
<b>Total</b>	<b>3</b>

Based on our refinements, searching and reporting constraints we are reasonably confident these articles represent the most relevant findings published to date.

## **SUMMARY OF FINDINGS**

There is limited published evidence addressing the issue of independence and safety in supplying aids and appliances to patients on discharge from hospital. The three studies included in this report are too prone to bias to be conclusive. The issue of safety was not addressed by any of the included studies. Independence was addressed by Gosman-Hedstrom et al (2002) and Chamberlain & Thornley (1981). The design of the Gosman-Hedstrom et al (2002) study limited the ability to detect a benefit from the provision of assistive equipment. Chamberlain & Thornley (1981) only included data on independence for the intervention group, making a judgment about effectiveness difficult.

## **EVIDENCE SUMMARIES**

### **Format**

Evidence summaries are presented as spreadsheets attached to this report. Each spreadsheet contains the article citation, details of the study design, patient description, scientific validity of the article, results, and pertinent remarks from the authors and Centre for Clinical Effectiveness reviewer.

## **REFERENCES**

### **ARTICLES CRITICALLY APPRAISED FOR THIS REPORT**

Gosman-Hedstrom G, Claesson L & Blomstrand C (2002). Assistive devices in elderly people after stroke: a longitudinal, randomised study -- the Goteborg 70+ Stroke Study. *Scandinavian Journal of Occupational Therapy* 9(3): 109-118.

Chamberlain MA & Thornley G (1981). Evaluation of aids and equipment for the bath: II. A possible solution to the problem. *Rheumatology and Rehabilitation* 20(1): 38-43.

Hollings EM & Haworth RJ (1978). Supply and use of aids and appliances. *British Journal of Occupational Therapy*. 41(336-339).

### **ARTICLES NOT CRITICALLY APPRAISED**

#### **Level IV evidence**

Kling C, Persson A & Gardulf A (2002). The ADL ability and use of technical aids in persons with late effects of polio. *American Journal of Occupational Therapy* 56(4): 457-461.

Cushman LA & Scherer MJ (1996). Measuring the relationship of assistive technology use, functional status over time, and consumer-therapist perceptions of ATs. *Assistive Technology* 8(2): 103-109.

Gitlin LN, Schemm RL, Landsberg L & Burgh D (1996). Factors predicting assistive device use in the home by older people following rehabilitation. *Journal of Aging and Health* 8(4): 554-575.

Neville-Jan A, Pierson CV, Kielhofner G & Davis K (1993). Adaptive equipment: a study of utilisation after hospital discharge. *Occupational Therapy in Health Care* 8: 3-18.

Finlayson M & Havixbeck K (1992). A post-discharge study on the use of assistive devices. *Canadian Journal of Occupational Therapy - Revue Canadienne d'Ergotherapie*. 59(4): 201-207.

Geiger CM (1990). The utilisation of assistive devices by patients discharged from an acute rehabilitation setting. *Physical & Occupational Therapy in Geriatrics* 9(1): 3-25.

Haworth RJ (1983). Use of Aids During the First Three Months After Total Hip Replacement. *British Journal of Rheumatology* 22: 29-35.

#### **Not related to supply of equipment at discharge**

Hammel J, Lai J & Heller T (2002). The impact of assistive technology and environmental interventions on function and living situation status with people who are ageing with developmental disabilities. *Disability & Rehabilitation* 24: 93-105.

Gottlieb AS & Caro FG (2000). Providing low-tech assistive equipment through home care services: the Massachusetts Assistive Equipment Demonstration. *Technology & Disability* 13(1): 41-53.

Gitlin LN & Miller KS (1999). Bathroom modifications for frail elderly renters: outcomes of a community based program. *Technology and Disability*. 10(3): 141-149.

Mann WC, Ottenbacher KJ, Fraas L, Tomita M & Granger CV (1999). Effectiveness of assistive technology and environmental interventions in maintaining independence and reducing home care costs for the frail elderly. A randomized controlled trial. *Archives of Family Medicine* 8(3): 210-217.

de Klerk MM & Huijsman R (1997). Aids in general daily activities can hardly replace professional home care. Results of a study among single 75-year-olds or older. *Tijdschr Gerontol Geriatr* 28(1): 27-33.

Verbrugge LM, Rennert C & Madans JH (1997). The great efficacy of personal and equipment assistance in reducing disability. *American Journal of Public Health* 87(3): 384-392.

Clemson L & Martin R (1996). Usage and effectiveness of rails, bathing and toileting aids. *Occupational Therapy in Health Care*. 10(1): 41-59.

de Klerk MM & Huijsman R (1996). [Effects of technical aids on the utilisation of professional care. A study among single 75-year olds]. *Tijdschr Gerontol Geriatr* 27(3): 105-114.

Sonn U, Davegardh H, Lindskog AC & Steen B (1996). The use and effectiveness of assistive devices in an elderly urban population. *Aging (Milano)* 8(3): 176-183.

Sanford JA, Arch M & Megrew MB (1995). An evaluation of grab bars to meet the needs of elderly people. *Assistive Technology* 7(1): 36-47.

Bohannon R, Mahoney J & Portnow J (1994). Self-help aids for minor disabilities. *Patient Care* 28(5): 141-146.

Hart D, Bowling A, Ellis M & Silman A (1990). Locomotor disability in very elderly people: value of a programme for screening and provision of aids for daily living. *British Medical Journal* 301(6745): 216-220.

Strong J (1990). Adaptive equipment: its effectiveness for people with chronic lower back pain. *Occupational Therapy Journal of Research*. 10(2): 126-128.

George J, Binns VE, Clayden AD & Mulley GP (1988). Aids and adaptations for the elderly at home: underprovided, underused, and undermaintained. *British Medical Journal (Clinical Research Edition)* 296(6633): 1365-1366.

Bynum HS & Rogers JC (1987). The use and effectiveness of assistive devices possessed by patients seen in home care. *Occupational Therapy Journal of Research* 7(181-191).

Chamberlain MA (1979). Aids and appliances in the home: a critical survey of bath aids and their use. *International Rehabilitation Medicine*. 1(204-207).

### **Provision of equipment not a major focus of intervention**

Steultjens EMJ, Dekker J, Bouter LM, van Schaardenburg D, van Kuyk MAH, van den Ende CHM, Van de Nes JCM, Cardol M, Sander L, Barnes P, Johansen A, Jones S, Kemp A, Lannon S, Lyons R, Rolfe B, Weightman A & Williams J (2003). Effectiveness of assistive technology and environmental interventions in maintaining independence and reducing home care costs for the frail elderly. A randomised controlled trial. *Cochrane Database of Systematic Reviews* 1: 1.

# APPENDIX 1

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## Levels Of Evidence

Based on "How to use the evidence: assessment and application of scientific evidence" (National Health & Medical Research Council, Canberra, 2000):

Level I		Evidence obtained from a systematic review (or meta-analysis) of all relevant randomised controlled trials.
Level II		Evidence obtained from at least one randomised controlled trial.
Level III	-1	Evidence obtained from pseudo-randomised controlled trials(alternate allocation or some other method).
	-2	Evidence obtained from comparative studies (including systematic reviews of such studies) with concurrent controls and allocation not randomised, cohort studies, case control studies or interrupted time series with a control group.
	-3	Evidence obtained from comparative studies with historical control, two or more single-arm studies or interrupted time series without a parallel control group.
Level IV		Evidence obtained from case series, either post-test or pretest/post-test.

## APPENDIX 2

### Search strategy (only CINAHL shown)

	Search terms for CINAHL
1	Assistive technology.mp
2	Exp Assistive Technology Devices/
3	Exp Assistive Technology/
4	Exp Self-Help Devices/
5	(assis\$ adj3 technology).mp
6	(assis\$ adj3 device\$).mp
7	(assis\$ adj3 equip\$).mp
8	(adaptive adj3 device\$).mp
9	(adaptive adj3 equipment).mp
10	(toilet adj3 (surround OR frame OR support)).mp
11	(bath adj (frame OR rail)).mp
12	(shower adj3 (stool OR support OR seat)).mp
13	(home adj3 modification).mp
14	Or/ 1-12
15	Exp Patient Discharge/
16	(patient adj3 discharge).mp
17	Exp Discharge Planning/
18	(discharge adj3 plan\$).mp
19	Exp Early Patient Discharge/
20	(early adj3 discharge).mp
21	Or/ 14-19
22	13 AND 20

Similar terms were adapted and used in other databases searched.

\$=truncation symbol to represent a series of letters at the end of a word segment.

( )= nested terms to be searched together.

adj=terms must be close to one another in the record.

.tw/textword=search term used as free text keyword anywhere in the Medline record.

.mp/textword = keyword in the text of the title, abstract or subject heading fields

<p style="text-align: center;"><b>Evidence Summary Therapy/Intervention</b></p>	<p style="text-align: center;"><b>Study 1</b></p> <p>Gosman-Hedstrom G, Claesson L &amp; Blomstrand C (2002). Assistive devices in elderly people after stroke: a longitudinal, randomized study: the Goteborg 70+ Stroke Study. Scandinavian Journal of Occupational Therapy 9(3): 109-118.</p>	<p style="text-align: center;"><b>Study 2</b></p> <p>Chamberlain MA &amp; Thornley G (1981). Evaluation of aids and equipment for the bath: II. A possible solution to the problem. Rheumatology and Rehabilitation 20: 38-43.</p>
<p><b>STUDY DESIGN &amp; NHMRC LEVELS OF EVIDENCE</b></p>	<p>Randomised Controlled Trial Level II</p>	<p>Randomised Controlled Trial Level II</p>
<p><b>DESCRIPTION:</b></p>	<p><b>Patients (subjects):</b> 249 subjects admitted consecutively to the Sahlgrenska University Hospital for acute stroke, between February 1993 and May 1994.</p> <p><b>Intervention:</b> Patients were treated in the Stroke Unit (SU) which involved a coordinated model of care, with medical treatment, rehabilitation and participation of relatives starting early. A dedicated occupational therapist, physiotherapist and stroke nurse were employed in the SU. Careful discharge planning was practised and assistive devices (ADs) were prescribed. Between both groups, 56 different types of AD's were prescribed.</p> <p><b>Comparisons:</b> The comparator group was 'conventional care' and involved treatment on a general ward (GW). Patients received conventional medical care with occupational therapy and physiotherapy only when prescribed by the doctor.</p> <p><b>Outcomes:</b> Two registered occupational therapists evaluated outcomes, via personal visits to patient's homes, four times over the first year after stroke. Outcomes included activities of daily living (ADL) with the Functional Independence Measure (FIM). Data were also collected with a structured questionnaire, including living and social conditions, utilisation of health and social care including ADs. Time of receiving assistive devices, and their utilisation, or reason for not using was recorded. Costs were also compared, with only cost of the AD, storage space hire and personnel costs included. Costs were estimated at 1996 prices, in Swedish krona).</p> <p><b>Inclusion Criteria:</b> Patients had to be living in their own home prior to the stroke. Patients must have participated in both three and 12 month follow up. Only ADs for performing daily activities were included in the analysis.</p> <p><b>Exclusion Criteria:</b> None stated.</p>	<p><b>Patients (subjects):</b> 100 patients who had been discharged from one of four Leeds hospitals. Patient diagnosis included; rheumatoid arthritis, osteoarthritis, other arthritis, strokes, neurological, orthopaedic and other diagnosis.</p> <p><b>Intervention:</b> Treated patients were seen at home 2-3 times by a peripatetic occupational therapist. Visit 1 was within 10 days of discharge, where aids were provided and instruction was given. The patient used the equipment on the second visit, and equipment was checked for safety and correct fitting. No third visit was undertaken if the procedure was understood and performed satisfactorily.</p> <p><b>Comparisons:</b> The exact service provided to the control group was not documented explicitly. It was inferred that aids were not provided within 10 days of discharge, and reinforced teaching of use was not provided.</p> <p><b>Outcomes:</b> All patients were visited by an independent research occupational therapist three to six months after discharge. Outcome measures were numbers bathing, supply and use of bath aids, waiting time for aids and unsatisfactory aids.</p> <p><b>Inclusion Criteria:</b> Assessed as requiring bath and toilet aids by an occupational therapist in the hospital.</p> <p><b>Exclusion Criteria:</b> Specific exclusion criteria are not documented.</p>

<p><b>VALIDITY:</b></p>	<p><b>Randomisation:</b> Patients were 'consecutively' randomised. It was unclear what method was used, or if allocation was concealed from investigators. Twice as many patients were randomised to the SU group to ensure a continuous input to the SU.</p> <p><b>Blinding:</b> Blinding for investigators and patients was not described, though would have been impossible as patients were managed on separate wards. It was unclear if the occupational therapists assessing outcome were blinded to patient group.</p> <p><b>Similar Groups:</b> There were no significant differences between the groups at baseline in age, gender, comorbidities or patients living alone. Similar numbers of patients in each group had ADs prescribed before the onset of stroke. Severity of stroke or baseline functional level was not described.</p> <p><b>Follow up:</b> Of the original 249 patients, 173 (69%) were included in the analysis. Details of those lost to follow up and their usage of AD's were reported in two previous papers, and not reproduced.</p>	<p><b>Randomisation:</b> Patients were randomly allocated "according to a predetermined schedule". The nature of this schedule and whether the investigator was blinded to it was not documented.</p> <p><b>Blinding:</b> Not reported. It was unclear if there was any blinding of investigators, patients or outcome assessors.</p> <p><b>Similar groups:</b> There were similar numbers of patients in each group. The groups differed in age, sex and diagnosis. The control group had a larger number over 70 years of age (50% vs. 38%). There were 23 males in the treatment group and 11 in the control group. With regard to diagnosis, the control group had more patients with rheumatoid arthritis (36% vs. 24%), and the treated group has more patients with strokes (34% vs. 24%). Further, the treatment group had a greater number with "additional diagnosis" (56% vs. 36%), though the exact definition of this was not provided. The authors did not assess the significance of the difference.</p> <p><b>Follow up:</b> Patients were followed for 3 – 6 months. All patients appear accounted for, though no mention was made if any patients were lost to follow up.</p>
<p><b>RESULTS:</b></p>	<p><u>Independence:</u> At 12 months, 67 (66%) and 18 (40%) of SU and GW patients lived alone, respectively (p=0.003). Overall, 12% of SU and 21% of GW patients lived in accommodation where assistance was provided (p=0.094). In the SU group 82% had at least one AD prescribed at 12 months, compared to 77% of GW patients (p&gt;0.2). A total of 41% of SU and 40% of GW patients were independent or modified independent as assessed with the FIM at 12 months.</p> <p><u>Use/ prescription of aids:</u> Among dependant patients in the SU and GW groups, 72 and 68% had aids for bathing, respectively; 44 and 53% had aids for toileting and 74 and 65% had aids for walking. Statistical significance of these was not reported.</p> <p>Overall, 76% of SU and 72% of GW patients had at least one AD prescribed at the three-month assessment.</p> <p>There were no differences in mean cost per patient between the groups.</p> <p><u>Impact of aids:</u> There was no significant difference between the groups regarding the impact of the ADs, with 'impact' related to patients perception of increased confidence, activity as well as independence.</p> <p>The percentage of patients using ADs at 12 months who reported an impact on different activities were presented graphically. They indicate that over 80% of all patients reported an impact for baths/shower, toileting, bed/chair, grip/reach, walking and training devices, wheelchairs and appliances (except GW patients, &lt;80% impact on grip/reach).</p>	<p>Numbers bathing: At independent assessment (3 – 6 months) 100% of treatment group patients bathed, compared to 82% of control group patients. This was statistically significant (p=0.003), though this was not reported.</p> <p>Supply and use of bath aids: 149 aids were provided to the treatment group and 121 to the control group. 'Usage' was reported at 80%, though how this was defined or verified was not reported.</p> <p>Environmental factors: 90% of treated patients sat to transfer, but only 50% of controls did.</p> <p>Independence: was assessed at the treating therapists last visit, but not by the independent research occupational therapist. Thus, only figures for the treatment group are reported.</p> <p>Waiting time for bath aids: 74% of treated patients had bath aids within 2 weeks, compared to 39% of controls (p=0.001). 6 of the treatment group and 17 controls had not received equipment at 3 months.</p> <p>Unsatisfactory aids: 31% of aids supplied by social services and 7% of hospital supplied were unsatisfactory, usually due to poor fitting or design.</p>

<p><b>AUTHOR(S) CONCLUSIONS:</b></p>	<p>The authors concluded there were no significant differences between the SU and GW groups, except for a more frequent prescription of simple and inexpensive ADs in the 0-3 month period after stroke.</p> <p>The authors noted the limitation of dichotomising the FIM to dependant and independent, in that dependence may indicate the patient is dependant on assistance daily, weekly or more seldom.</p> <p>'Elderly patients followed longitudinally, made frequent use of ADs, and the ADs had a high impact on the performance of daily activities.'</p>	<p>The treatment group "received the correct aids... immediately after discharge, and the ...occupational therapist was able to teach the patient in her real environment."</p> <p>"Where hospitals were the agents of social services...and prescribed the aids for their own patients, much delay was avoided"</p> <p>"it is not possible to separate the effect of personal instruction from prompt aid provision..."</p> <p>"although this service requires an investment of occupational therapy time, it prevents the misuse of the time of other professionals."</p> <p>"We thus recommend that aids be provided from the hospital... and that early instruction in their use at home be given by an occupational therapist"</p>
<p><b>OUR COMMENTS:</b></p>	<p><i>Selection bias</i> – A randomisation process was undertaken, though limited details regarding concealment of allocation make it difficult to assess for potential bias. There were no differences in reported baseline characteristics, though items such as stroke severity or baseline functional status were not reported.</p> <p><i>Performance bias</i> – There was potential for performance bias in assessing the impact of ADs. This is due the groups being treated differently in the acute phase. Thus, it was the ward (SU versus GW) being manipulated rather than the prescription of ADs.</p> <p><i>Attrition bias</i> – There was a potential for an attrition bias, as a large number of randomised subjects (n=76, 31%) were not included in this paper. Reasons for loss to follow up or details of AD use were not reported, though referred to in two previous papers.</p> <p><i>Detection bias</i> – It was unclear if the occupational therapists conducting the outcome evaluation were blinded to group allocation, making it impossible to determine the potential for a detection bias.</p> <p><b>Strength/s:</b> This study uses a homogenous patient group and aims to answer an important question in the impact of ADs in daily activities, in addition to prescription, frequency, cost and types of ADs.</p> <p><b>Weaknesses:</b> The study design limits the potential to assess the effectiveness of ADs as it was the ward was the variable investigated, not the provision of ADs. No descriptions of functional levels at baseline make it difficult to determine if the groups were similar on this important variable. No significant differences between groups at three and 12 months with respect to ADs make it impossible to assess any difference in effect between the two groups.</p> <p>Use of patient's subjective report of 'impact' of ADs may introduce the potential for bias. Dichotomising the FIM may have missed subtle changes within groups, or difference between groups.</p>	<p><b>Potential for bias:</b> <i>Selection bias</i> – it was unclear whether or not the investigators were blinded from the allocation sequence, even though it was random. This may affect results as some patients may have been placed in a group based on investigator preference. This may over or underestimate the effect of the intervention.</p> <p><i>Performance bias</i> – it was unclear how the control group were treated, making it difficult to assess whether or not groups would have behaved differently. <i>Attrition bias</i> – no follow up figures were reported. Patient numbers were complete, except for one patient not accounted for in Table 3 ('numbers bathing'). <i>Detection bias</i> – it was unclear whether or not the independent assessor was blind to allocation of patients, making it difficult to assess whether or not there was potential for a detection bias.</p> <p><b>Strength/s:</b> This study addresses an important issue as previous studies had shown significant dissatisfaction with the time it took patients to get aids, and poor usage when they did receive them.</p> <p><b>Weaknesses:</b> The sources of bias listed above limit the validity of the study. Further, the applicability of the study may be affected by which patients were included and which were not (no exclusion criteria were reported). A significant omission in the methods section was how usage of equipment was assessed at 3 – 6 months (self report of usage might have allowed the introduction of bias). The significance of more treated patients being seated to transfer was not discussed.</p>

<p style="text-align: center;"><b>Evidence Summary Therapy/Intervention</b></p>	<p style="text-align: center;"><b>Study 3</b></p> <p>Hollings EM &amp; Haworth RJ (1978). Supply and use of aids and appliances. British Journal of Occupational Therapy. 41(336-339).</p>
<p><b>STUDY DESIGN &amp; NHMRC LEVELS OF EVIDENCE</b></p>	<p>Randomised Controlled Trial Level II</p>
<p><b>DESCRIPTION:</b></p>	<p><b>Patients (subjects):</b> 119 patients with rheumatoid arthritis, who lived within 50 miles of Oxford, United Kingdom. All were entered to the study at the end of an admission to the rheumatology unit for not less than two weeks. 96 women and 23 men took part (mean age 55 sd 12.3 yrs).</p> <p><b>Intervention:</b> The intervention was based around the type of follow up patients received. Follow up was at outpatients, by the general practitioner or by the research occupational therapist. All patients were provided aids and appliances, regardless of group.</p> <p><b>Comparisons:</b> see 'intervention' above. No further detail was provided on the varying types of follow up.</p> <p><b>Outcomes:</b> Activities of daily living (37 activities, method of assessment not reported); supply of aids (source, type and number); use of aids and reason for non-use.</p> <p><b>Inclusion criteria:</b> Patients lived within 50 miles of Oxford, and had length of stay greater than two weeks.</p> <p><b>Exclusion criteria:</b> None stated.</p>
<p><b>VALIDITY:</b></p>	<p><b>Randomisation:</b> The method of randomisation was inadequately described.</p> <p><b>Blinding:</b> It was unclear if allocation to groups was concealed. It was unclear if the outcome assessment at one year by the research social worker was blind to patient group.</p> <p><b>Similar groups:</b> The authors reported no significant differences between the 42 patients allocated to the therapist follow up group and the rest of the patients in terms of age, sex, number of previous admissions or on three factors relating to disease activity.</p> <p><b>Follow up:</b> Subjects were followed up for one year after discharge. No mention was made of any subjects that were lost to follow up.</p>

<p><b>RESULTS:</b></p>	<p>2 out of 37 items of activities of daily living showed a significant difference (reach above shoulder level, <math>p &lt; 0.05</math>) and interest/hobby, <math>p &lt; 0.025</math>). It was unclear if this significant difference was between groups or within one of the groups.</p> <p>Data were reported on where aids came from, and what type of aids these were.</p> <p>After one year, 21% of all aids and appliances were not in use. Patient improvement accounted for 60% of non-use, reported subjectively by patients.</p>
<p><b>AUTHOR(S) CONCLUSIONS:</b></p>	<p>"Careful assessment of the functional capabilities of patients is required in the provision of aids and appliances. A proportion of aids and appliances may have only temporary relevance following an acute episode requiring hospitalisation. Re-assessment of the suitability of aids is necessary in chronic disability, particularly if the disease is progressive or fluctuating."</p>
<p><b>OUR COMMENTS:</b></p>	<p><b>Potential for bias:</b> <i>Selection bias</i> – it was unclear whether or not the investigators were blinded from the random allocation sequence. This may affect results as some patients may have been placed in a group based on investigator preference. This may over or underestimate the effect of the intervention. <i>Performance bias</i> – the paper was unclear on the actual nature of the intervention, making it difficult to assess the potential for a performance bias. It appeared to be largely an observational study on supply and use of aids, with random allocation to follow up process. <i>Attrition bias</i> – inadequate detail was provided to determine the potential for an attrition bias. <i>Detection bias</i> – Unclear. It was not stated whether or not the independent assessment at one year was blinded to patient group.</p> <p><b>Strength/s:</b> This study addresses an important issue, and utilises a homogenous patient group.</p> <p><b>Weaknesses:</b> It was unclear exactly what the nature of the follow up regimes was. The lack of clarity about randomisation, management of the groups and outcome measurement make it impossible to assess the potential for bias. It was unclear if the "significant difference" reported was within a group or between groups, and should be interpreted cautiously due to the large number of statistical comparisons undertaken, and the associated increased type I error rate.</p>