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**Additional File 1:**

3 **WORK-IA Trial: contents of the: Work Self-help Information Pack; Vocational Rehabilitation;**  
4 **and Vocational Rehabilitation Resource Manual.**

5

6 **Work Self-help Information Pack**

7 This was received by all participants. The control group only received this.

8 The participating occupational therapists, patient research partner, working members of the Derby  
9 National Rheumatoid Arthritis Society branch (acting as study advisors) and the Trial Management  
10 Group, agreed what written information could be representative of “usual care”:

- 11
- 12 • a welcome letter, encouraging people to read the enclosed booklets and discuss work  
13 problems with relatives, friends and employers;
  - 14 • a self-help flowchart, suggesting how to identify problems, resulting work difficulties and  
15 solutions to then implement and/or discuss with employers/ line managers;
  - 16 • and two work self-help booklets including a summary of the Equality Act [2010], what  
17 “reasonable adjustments” employers could make, common work problems and solutions, the  
18 importance of discussing work issues with employers and colleagues and how to get further  
19 help [14,15].

19

20 **Vocational rehabilitation (VR: intervention group)**

21 VR was based on that provided in a successful VR trial in the USA [10], with content modified to suit  
22 the UK, as applicable. The occupational therapists received three days face to face VR training,  
23 (including: conducting the Work Experience Survey-Rheumatic Conditions (WES-RC) and task  
24 analysis; legislation and work services available; role play, case studies, manual handling, equipment  
25 options (e.g. seating, computer equipment), and practical workshops), plus self-study [12]. In addition,  
26 each occupational therapist was provided with a VR Resource Manual (developed for the study – see  
27 later for contents), linking problems with potential solutions. These included: solutions fact sheets,  
28 equipment recommendations, equipment sources, work station checklists and other Health and  
29 Safety Executive Guidance (e.g. on manual handling), and work-related guidance. During the study,  
30 the therapists could contact the VR trainers [RO'B, SW] for advice by telephone or e-mail.

31 At the first meeting, the occupational therapist used the WES-RC [16-19] to identify work problems  
32 and specific barriers (physical, psychological, environmental (physical/social) and managerial) to  
33 overcoming these. Three broad priority areas of work problems (e.g. work station modification and  
34 work positioning, moving to/around the workplace), specifying problems within these, were then  
35 collaboratively identified by the therapist and participant. The occupational therapist then  
36 recommended some initial self-management advice tailored to the participant's needs, e.g. hand  
37 exercises, relaxation, sleep hygiene, fatigue and/or joint protection advice and the occupational  
38 therapist provided appropriate booklets, e.g. Arthritis Research UK's "Keep Moving\*" or "Looking After  
39 Your Joints when you have arthritis\*," as applicable. The participant completed an Action Plan, with  
40 the support of the occupational therapist, with a few initial, achievable goals, to meet their identified  
41 needs, to help the participant start taking appropriate actions to resolve work problems.

42

43 Participants were asked, before the next meeting, to complete an activity diary, for 24 hours on a  
44 typical work day, identifying for each 30-minute period: their main activity; any equipment, tools or  
45 materials used; any difficulties or discomfort doing the activity; whether they took a short rest; and to  
46 rate their level of pain and fatigue using a 0 (no) to 10 (severe) scale [modified with permission; 56].  
47 They were asked to reflect on problems identified in the WES-RC and diary and start considering  
48 possible solutions. Between the first and second meeting, the occupational therapist reviewed the  
49 three priority problem areas identified in the WES-RC and developed a range of possible solutions to  
50 discuss/ practice with the participant. At subsequent meetings, the occupational therapist and  
51 participant reviewed progress with action plans set in the previous meeting, collaboratively problem-  
52 solved, and the occupational therapist continued supporting participants to write Action Plans and in  
53 resolving difficulties for themselves. Throughout the meetings, therapists emphasised the importance  
54 of participants taking responsibility to liaise with employers to request and obtain job  
55 accommodations.

56

57 VR was individualised to include (based on the WES-RC, activity diary and priority problem areas), as  
58 applicable:

- 59 a. applying ergonomic, fatigue and stress management approaches to the workplace
- 60 b. recommendations for assistive technology/equipment adaptation, workplace/work station  
61 modification, transport advice
- 62 c. practical advice and support enabling participants to disclose their condition and negotiate job  
63 modifications with employers, e.g. discussion of strategies, how to explain their condition its  
64 impact on work, proactively make suggestions for addressing issues and role play, when  
65 applicable.
- 66 d. explaining rights under the Equality Act 2010, how and why their condition meets being one  
67 applicable under the Equality Act, what are "reasonable adjustments" employers can make in

68 the workplace, and the facilities available to support employers making "reasonable  
69 adjustments," e.g. Access to Work [47]; and how the participant could apply to Access to  
70 Work.

- 71 e. psychological support, through listening to and discussing work problems; encouraging ability  
72 and confidence in solving work problems, managing arthritis when working and continuing  
73 working in future
- 74 f. advice on other activities of daily living and hand function difficulties affecting work ability
- 75 g. to discuss, if necessary, about considering a change in job or career. Referral to a Disability  
76 Employment Advisor (DEA) at their local Jobcentre for advice and support in doing so, if the  
77 participant wishes
- 78 h. referral to other relevant services such as 'mainstream' occupational therapy (e.g. for  
79 splinting, activities of daily living training, self-management education groups), physiotherapy,  
80 rheumatology or other work rehabilitation services (e.g. DEA, or advice to contact their  
81 employer's occupational health department).
- 82 i. provision of relevant work and self-management advice booklets and other information as  
83 appropriate
- 84 j. general advice on disease flare management and contacting the Rheumatology department  
85 quickly in a flare for review and medication changes, if necessary, to reduce the risk of longer  
86 sickness absences
- 87 k. optional: if applicable, to conduct a workplace job assessment and meeting the participant  
88 and line manager together to discuss job accommodations and enabling referral to Access to  
89 Work for equipment / other support funding, as applicable.
- 90 l. A telephone review, several weeks after the final meeting, to discuss participants' progress  
91 implementing changes, check recommended job accommodations were in place and if any  
92 further action was needed.

93

94 \*Arthritis Research UK downloads available from:

95

96 Keep Moving:

97 [http://www.arthritisresearchuk.org/shop/products/publications/patient-information/living-with-  
98 arthritis/keep-moving.aspx](http://www.arthritisresearchuk.org/shop/products/publications/patient-information/living-with-<br/>98 arthritis/keep-moving.aspx)

99 Looking After Your Joints:

100 [http://www.arthritisresearchuk.org/shop/products/publications/patient-information/living-with-  
101 arthritis/looking-after-your-joints.aspx](http://www.arthritisresearchuk.org/shop/products/publications/patient-information/living-with-<br/>101 arthritis/looking-after-your-joints.aspx)

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## **WORK REHABILITATION IN INFLAMMATORY ARTHRITIS TRIAL**

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### **Vocational Rehabilitation Resource Manual for OT**

108

109 **Contents List:**

110

#### **111 1. Research project**

- 112 • Lecture: Work Rehabilitation in Inflammatory Arthritis:  
113 “Effectiveness and cost effectiveness of an occupational therapy job retention vocational  
114 rehabilitation intervention: a pilot randomised controlled trial”
- 115 • Gantt chart – timeline for project
- 116 • WORK-IA Study diagram
- 117 • Work Rehabilitation in Inflammatory Arthritis: research protocol
- 118 • Roles and Responsibilities of the research team/ participating therapists
- 119 • Contact details: therapists; research team.

120

#### **121 2. Vocational Rehabilitation Intervention, Work Assessment Tool, VR Treatment Record, 122 Information Pack,**

- 123 • Summary of the Vocational Rehabilitation intervention content
- 124 • The UK Work Experience Survey- Rheumatic Conditions (UK WES-RC): assessment  
125 [Hammond A, Woodbridge S, O'Brien R, Grant M. The UK Work Experience Survey for  
126 persons with Rheumatic Conditions (UK WES-RC). 2013. University of Salford [16].
- 127 • UK Work Experience Survey- Rheumatic Conditions (WES-RC): Manual v2 Hammond A,  
128 Woodbridge S, O'Brien R, Grant M. The UK Work Experience Survey for persons with  
129 Rheumatic Conditions (UK WES-RC) Manual version 2. 2013. University of Salford [17].
- 130 • Vocational Rehabilitation Treatment Record
- 131 • The Information Pack (Intervention and Control Groups) content: Cover letter to all  
132 participants; Finding Solutions flowchart; NRAS and Arthritis Care booklets

133

134 **3. Vocational Rehabilitation Training Programme**

135 • Lectures

136 a. Legislation and Policy impacting on Work

137 b. Role of the Disability Employment Adviser (DEA)

138 c. Rheumatoid Arthritis and Work: a service user's perspective

139 d. We are not Alone! – Setting the Scene in which we work

140 e. Work rehabilitation strategies

141 i. Work station assessment

142 ii. Work Rehabilitation strategies: the Upper Limb

143 iii. Work Rehabilitation strategies: the Environment

144 iv. Load Handling

145 v. Work Rehabilitation strategies: Disclosure

146 • Case studies: six cases (problems plus solutions)

147 • Example: Two completed WES-RCs, with solutions based on telephone role play activity

148 • Bakery case study and solutions

149 • Practical workshops: notes

150 • Peer teaching: notes/ handouts teaching how to practically do the following: conduct a

151 worksite assessment; take micro-breaks; manage de Quervain's tendinitis; manual handling;

152 pacing; relationships at work; disclosing arthritis at work

153 • Key Messages

154

155

156 **4. Vocational Rehabilitation Solutions: Getting to Work & the Work Environment**

157 • Travel

158 a. Public transport

159 b. Driving

160 • Access

161 a. Access

162 b. Flooring

163 Floor protection

164 Specialist flooring

165 c. Emergency exit

166 Personal evacuation plan

167 d. Toilet

- 168 • Welfare at work – Health and Safety Executive (**HSE**) Guidance for employers on welfare  
169 provisions [<http://www.hse.gov.uk/pubns/indg293.htm>]  
170

171 e. Refreshments

- 172 • Working conditions

173 a. Lighting

174 b. Temperature

175 c. Noise  
176

## 177 **5. Vocational Rehabilitation Solutions: Physical job demands**

- 178 • MSD Hazards & Solutions

179 [[https://www.uwo.ca/hr/form\\_doc/health\\_safety/doc/ergo/msd\\_hazards\\_solutions.pdf](https://www.uwo.ca/hr/form_doc/health_safety/doc/ergo/msd_hazards_solutions.pdf)]

180 a) Lifting strategies:

- 181 • HSE Are you making the best use of lifting and handling aids HSE getting to grips with  
182 manual handling [<http://www.hse.gov.uk/pubns/indg143.pdf>]

- 183 • HSE Manual handling assessment chart (MAC) [<http://www.hse.gov.uk/msd/mac/>]

184 a) Pushing and pulling

185 b) Ladders

186 HSE Safe use of ladders and step ladders

187 [<http://www.hse.gov.uk/pubns/indg455.htm>]  
188

## 189 **6. Vocational Rehabilitation Solutions: Work Station Evaluation**

190 a) Seating

191 Osmond Ergonomics seating assessment chart

192 [<http://www.ergonomics.co.uk/downloads.html>]

193 Selecting a chair, issues for consideration

194 National seating suppliers

195 b) Desk

196 RSIA repetitive strain awareness leaflet – [www.keytools.com](http://www.keytools.com)

197 c) Computer monitor

198 My computer My way – Abilitynet <https://www.abilitynet.org.uk/>

199 d) Keyboard

200 Osmond Ergonomics range of inputting devices – keyboards

201 (<http://www.ergonomics.co.uk/>)

- 202 Voice recognition software – Abilitynet: <https://www.abilitynet.org.uk/>
- 203 e) Mouse
- 204 Selecting a mouse
- 205 Osmond Ergonomics inputting devices, mice etc
- 206 (<http://www.ergonomics.co.uk/>)
- 207 RSIA repetitive strain awareness – no cost computer tips
- 208 (<https://www.rsitips.com/>; [http://www.rsiprevention.com/rsi\\_prevention.php](http://www.rsiprevention.com/rsi_prevention.php))
- 209 f) Wrist rest
- 210 Summary sheet
- 211 g) Document holder / writing slope
- 212 Osmond Ergonomics range of holders (<http://www.ergonomics.co.uk/>)
- 213 h) Laptop
- 214 Range of laptop stands
- 215 i) Writing
- 216 Range of products by EmpTech (<http://www.emptech.info/>)
- 217 j) Telephone
- 218 k) HSE VDU Work Station Checklist [<http://www.hse.gov.uk/pubns/ck1.pdf>]
- 219

## 220 7. Vocational Rehabilitation Strategies: Policies, Benefits & Legislation

- 221 • Company policies
  - 222 • Benefits / assistance
    - 223 a. Disabled Living Allowance (DLA)
    - 224 b. Carers allowance
    - 225 c. Employment and Support Allowance
    - 226 d. Blue Badge scheme
    - 227 e. Work choice
    - 228 f. If an individual is in employment and becomes disabled
    - 229 g. Access to Work
    - 230 h. Legislation Summary
- 231
- 232
- 233
- 234

235 **8. Supporting documents**

- 236 • Manager support for return to work following long-term sickness absence: Guidance  
237 [Chartered Institute of Personnel Development: CIPD:  
238 <https://www.cipd.co.uk/knowledge/fundamentals/relations/absence/return-to-work-guide>]
- 239 • Working together? Matching work ambitions with health provision for people with arthritis –  
240 Arthritis Care
- 241 • Recruitment: an overview - CIPD  
242 [<https://www.cipd.co.uk/knowledge/fundamentals/people/recruitment/factsheet>]
- 243 • Disability and employment – CIPD [<https://www.cipd.co.uk/knowledge/fundamentals/emp-law/disability-discrimination/factsheet>]
- 244
- 245 • Harassment and bullying at work – CIPD  
246 [<https://www.cipd.co.uk/knowledge/fundamentals/emp-law/harassment/factsheet>]
- 247 • Managing sickness absence and return to work [Health and Safety Executive:  
248 <http://www.hse.gov.uk/pubns/priced/hsg249.pdf>]
- 249 • Health Work Wellbeing : Health Care Professionals' consensus statement  
250 [<https://www.nhs.uk/Livewell/workplacehealth/Documents/hwwb-healthcare-professionals-consensus-statement-04-03-2008.pdf>]
- 251
- 252 • College of Occupational Therapists' Vocational Rehabilitation strategy  
253 [[https://www.cot.co.uk/sites/default/files/publications/public/Work\\_Matters\\_Vocational\\_Rehab\\_English.pdf](https://www.cot.co.uk/sites/default/files/publications/public/Work_Matters_Vocational_Rehab_English.pdf)]
- 254
- 255 • The Health and Work Handbook. Patient care and occupational health: a partnership guide  
256 for primary care and occupational health teams [Royal College of General Practitioners:  
257 <http://www.fom.ac.uk/wp-content/uploads/hw.pdf>].
- 258 • NICE Checklist to help employers and employees discuss sickness absence using NICE  
259 guidance [<https://www.nice.org.uk/guidance/ph19/checklist-for-managing-absence-65786221>]
- 260
- 261 • Fit note [<https://www.gov.uk/government/collections/fit-note>]
- 262 • UK Rehabilitation Council: Rehabilitation Standards  
263 [<http://www.rehabcouncil.org.uk/pages/DownloadForm.aspx?Type=Standards>]
- 264 • Categories for Return to Work
- 265 • HSE Ergonomics and human factors at work: <http://www.hse.gov.uk/pubns/indg90.pdf>
- 266

267 **9. Relevant Articles**

- 268 • Allaire S, Li W, la Valley M. Reduction of job loss in persons with rheumatic diseases  
269 receiving vocational rehabilitation. *Arthritis Rheum* 2003;48:3212-3218
- 270 • Allaire SH, Niu J, LaValley MP. Employment and satisfaction outcomes from a job retention  
271 intervention delivered to persons with chronic diseases. *Arthritis Care Res* 2005;48:3212-  
272 3218



- 273       • Tang K, Beaton DE, Gignac MAM, et al. The Work Instability Scale for rheumatoid arthritis  
274       predicts arthritis-related work transitions within 12 months. Arthritis Care Res 2010;62:1578-  
275       1587
- 276       • Allaire S, Keysor J. Development of a structured interview tool to help patients identify and  
277       solve rheumatic condition related work barriers. Arthritis Care Res 2009; 61:988-995
- 278       • Hammond A. Rehabilitation in Musculoskeletal Diseases. Best Practice Res Clin Rheum  
279       2008;22:435-449
- 280       • Edgar J. Rheumatoid Arthritis, Work & Disability. WebMD  
281       [[http://www.webmd.com/rheumatoid-arthritis/features/rheumatoid-arthritis-work-and-](http://www.webmd.com/rheumatoid-arthritis/features/rheumatoid-arthritis-work-and-disability#1)  
282       [disability#1](http://www.webmd.com/rheumatoid-arthritis/features/rheumatoid-arthritis-work-and-disability#1) Downloaded 14 October 2016].
- 283       • ES Bowers. About to Resign? Accommodations for RA at Work.  
284       <http://www.webmd.com/rheumatoid-arthritis/life-with-ra-11/ra-work-accommodations>  
285       • Downloaded 14 October 2016

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287   **10. Own Notes**

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289   **11. Further Resources.**

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291   **12. Other information**

292   ©Alison Hammond, Rachel O'Brien, Sarah Woodbridge (2016).

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294 Table S6: Self-reported health and personal resource use at six and nine months.

Resource	6m: Intervention (n = 23)	6m: Control (n =21)	9m: Intervention (n = 22)	9m: Control (n =21)
<b>Hospital service use:</b>				
<b>Contact with any hospital services (n):</b>	21	19	19	19
Rheumatology outpatient appointments:				
- no. attending;	21	18	16	17
- median no. visits (min-max) of attenders	2 [1-18]	3.5 [1-12]	2 [1-9]	2 [1-9]
Other appointments:				
- no. attending;	6	10	7	10
- median (min-max)	4 [1-11]	2.5 [1-30]	2 [1-6]	2 [1-3]
Day Unit attendance:				
- no. attending;	5	5	5	1
- median (min-max)	4 [2-4]	2 [1-6]	2 [1-2]	2
Accident and Emergency:				
- no. attending;	1	4	0	0
- median (min-max)	1	1.5 [1-2]		
In-patient stays:				
- no. admitted;	0	1	0	0
Rheumatology telephone helpline:				
- no. using;	6	9	6	6
- median (min-max)	2 [1-5]	2 [1-4]	1 [1-5]	2 [1-3]
Occupational Therapy appointments:				
- no. attending;	10	6	3	1
- median (min-max)	6 [1-11]	3.5 [2-4]	1 [1-2]	2
Physiotherapy appointments:				
- no. attending;	4	8	1	4
- median (min-max)	2 [1-5]	3 [1-60]	2	1 [1-2]
GP Contacts:				
- no. attending;	17	15	12	13
- median (min-max)	2.5 [1-15]	3 [1-10]	1.5 [1-4]	2 [1-4]
District and other Nurse appointments:				
- no. attending;	9	7	4	5
- median (min-max)	6 [1-26]	2 [1-6]	3 [1-6]	1 [1-2]
<b>Personal service use:</b>				
Home-help/cleaner (paid)				
- no. using;	2	0	2	1
- median contacts (min-max)	64 [24-104]	0	32 [12-52]	12 [12-52]

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**Unpaid help from friends/relatives:**

Help with childcare:

- no. using;	2	0	1	0
- median hours/week (min-max)	2	0	3	0

Help with personal care:

- no. using;	6	8	3	9
- median hours/week (min-max)	2 [2-9]	2.5 [1-8]	3 [2-4]	5.5 [1-14]

Help in and around the house:

- no. using;	10	13	9	11
- median hours/week (min-max)	9.5 [2-26]	5 [3-20]	12 [1-35]	15 [4-30]

Help outside the house:

- no. using;	9	8	7	8
- median hours/week (min-max)	3 [1-9]	3 [2-6]	5 [4-20]	8 [2-30]

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