# Supplementary Table 1. Studies included in the review, descriptive characteristics, by site, in

### order of publication date

A. Low back					
First author, year of publication, city/state, country, setting	Age	n	Primary endpoint, (outcome measure, timing)	Definition of poor outcome at primary endpoint	Observed frequency of outcome
Dillane, 1966, London, UK (general practice) <sup>12</sup>	All patients in one general practice	470	Duration of index attack measured by time between first and last consultation	> 2 weeks duration	131 (38%)
			Recurrence (within 4 years)	Experiencing at least one recurrence of back pain within 4 years of index attack	154 (45%)
Pedersen, 1981, Copenhagen, Denmark (general practice) <sup>13</sup>	>16 years	72	Symptoms Work absence Bed rest Analgesia use	>180 days Unfit for work >1w Any bed rest	21 (29%) 28 (39%) 27 (38%) 56 (72%)
Roland, 1983, London, UK (general practice) <sup>14</sup>	16–64 vears	230 episodes	RMDQ (1w and 4w) Sickness absence	RMDQ ≥ 14	1 month: 15%
Roland, 1983, London, UK (general practice) <sup>15</sup>	16–64 years	230 episodes	RMDQ Pain rating scale Sickness absence Recurrence of pain	RMDQ ≥ 14	1 month: 15%
Chavannes, 1986, multicentre, Netherlands (general practice)	15–66 years	475	Pain persistence (5 weeks) Localisation of pain	Pain 'not better' at follow up (unchanged / aggravated)	116 (25%)
Lanier, 1988, Washington DC, USA (primary care) <sup>17</sup>	18–83 years	116	Days off work Disability (RMDQ) (6 weeks)	>4 days work loss RMDQ score ≥3	27 (26%) 42 (36%)
Coste, 1994, France (primary care) <sup>20</sup>	>18 years	103	Complete recovery from pain (90 days)	Continuing pain at 3 months	2 (2%)
Burton, 1995, England, UK (osteopathy) <sup>21</sup>	>18 years	252	RMDQ (1 year)	RMDQ score >2 = not recovered	70 (41%)
Klenerman, 1995, Merseyside, UK (general practice) <sup>22</sup>	Not given	300	RMDQ (12m) Present pain	Pain and disability	Not given
van den Hoogen, 1997, Amsterdam, Netherlands (general practice) <sup>27</sup>	16+ years	605	Duration of pain (12 and 52 weeks)	Persistent pain at follow up	12 weeks: 35% 52 weeks: 10%
Macfarlane, 1999, Manchester, UK (general practice) <sup>29</sup>	18–75 years	246	Symptom status (2 weeks)	-	-
Reis, 1999, multi-centre, Israel (primary care) <sup>30</sup>	>21 yrs	219	Persistent pain (2 months)	Back pain at 2 month follow up	63%
Schiottz-Christensen, 1998, North Jutland, Denmark (general practice) <sup>31</sup>	18–60 years	503	Sick leave Functional recovery (1 year)	On sick leave between questionnaires or not functionally recovered at follow up	2% on sick leave at 1 year 8% not considered functionally recovered at 1 year
Thomas, 1999, Manchester, UK (general practice) <sup>32</sup>	18–75 years	180	Persistent disabling low back pain (12 months)	Low back pain and disability (Hanover score <75%) at each follow-up interview (1w, 3m, 1y)	61 (34%)

First author, year of publication, city/state, country, setting	Age	n	Primary endpoint, (outcome measure, timing)	Definition of poor outcome at primary endpoint	Observed frequency of outcome
Carey, 2000, North Carolina, USA (primary care) <sup>33</sup>	18+ years	1246	Functional recovery (22 months)	Persistence of disabling symptoms (inability to perform usual ADL as well as before having LBP) 3 months after seeking care for a episode of acute low back pain.	8% develop chronic low back pain 5% unremitting pain at 22m
Werneke, 2001, Virginia, USA (physiotherapy) <sup>35</sup>		223	Maximal pain intensity Work status	Pain ≥6 (out of 10)	-
			Sick leave Activity interference Healthcare utilisation	Working less than full time, full duty >7 days lost from work >7 days lost from home activity 1+ additional visit or	
Sieben, 2002, Southern Netherlands & Eastern Belgium (general practice) <sup>38</sup>	18–65 years	44	RMDQ (2w, 3m, 1y) Pain related fear (TSK) Pain catastrophising (PCS)	consultation -	-
Enthoven, 2003, Southern Sweden (primary care) <sup>40</sup>	18–60 years	44	Pain (VAS) Back related disability ODI (12 months)	Reporting >5mm on VAS	18 (41%)
Burton, 2004, UK (chiropractor)	Not stated	252	Pain intensity RMDQ Care seeking	-	-
Coste, 2004, France (general practice) <sup>42</sup>	>18 years	113	RMDQ (3m) VAS pain	Recovery: pain ≤ 20mm, RDQ ≤ 3	6 participants (5%) developed chronic low back
Dunn, 2004, North Staffordshire, UK (general practice) <sup>43</sup>	30–59 years	556	RMDQ (12 months)	RMDQ >14	pain 138 (30%)
Leboeuf-Yde, 2004, Multicentre, Norway (chiropractor) <sup>44</sup>	12–80 years	875	Pain free patients	Max. pain score>1, max. Oswestry score>15/100	467 (91%)
Grotle, 2004, Oslo, Norway (primary care) <sup>49</sup>	18–60 years	123	Pain intensity RMDQ Sickness absence (3 months)	Recovered if scored 4 or less on RMDQ at both baseline and 3 month follow up	24% not recovered at 3 months
Kovacs, 2005, Multicentre, Spain (primary care) <sup>50</sup>	18–87 years	366	Quality of Life at 15 and 60 days. Disability at 15 and 60 days	No improvement in disability or quality of life scores	11.5% (n = 42)
Sieben, 2005, Multicentre, Netherlands (general practice) <sup>52</sup>	>18 years	222	Chronic Pain Grade (12 months)	Grades III / IV	17/167 (14.4%)
Koleck, 2006, Multicentre, France (general practice) <sup>54</sup>	18–60 years	99	Chronic pain (1 year)	Chronic pain	30 (33.3%) chronic pain at 1 year
Swinkels-Meewisse, 2006, Multicentre, Netherlands (general practice and physiotherapy) <sup>56</sup>	18–65 years	431	RMDQ and participation (6 months)	-	-

B. Spinal pain					
First author, year of publication, city/state, country	Age	n	Primary endpoint, (outcome measure, timing)	Definition of poor outcome at primary endpoint	Observed frequency of poor outcome
Von Korff, 1993, Seattle, USA (Group Health Cooperative) <sup>19</sup>	18–74 years	1128	Characteristic back pain severity (1 year)	Chronic Pain Grade III or IV (high disability, moderately or severely limiting pain)	182 (21%)
Engel, 1996, Washington, USA (primary care) <sup>24</sup>	18–75 years	1059	Healthcare utilisation and costs (1 year)	High back pain costs (≥ \$600)	222 (21%)
Dionne, 1997, Quebec, Canada (primary care) <sup>26</sup>	18–75 years	1213	RMDQ (2 years)	50% cut-off in modified RMDQ (from recursive partitioning model)	-
Linton, 1998, multiple sites, Sweden (primary care) <sup>28</sup>	22–63 years	142	Accumulated sick leave (6 months)	Short term leave (1–30 days) Long term leave (≥31	18% 20%
Leroux, 2004, Quebec, Canada (primary care) 45	18–64 years	849	Functional limitation (1 year) RMDQ	days)	
Dionne, 2005, Quebec, Canada (primary care) <sup>48</sup>	18–64 years	1007	Return to work in good health (2 years)	Failure and failure after attempt group on RWGH index	Approx 20% in the two failure groups

## C. Shoulder / neck pain

First author, year of publication, city/state, country	Age	n	Primary endpoint, (outcome measure, timing)	Definition of poor outcome at primary endpoint	Observed frequency of poor outcome
Croft, 1996, multicentre, UK (general practice) <sup>23</sup>	Age not given	166	Disability (validated questionnaire) (6 and 18 months)	-	-
van der Windt, 1996, Netherlands (general practice) 25	>18 yrears	349	Persistent symptoms (12 months)	Self reported persistent shoulder symptoms	41%
Bot, 2005, Multicentre, Netherlands (general practice) <sup>47</sup>	>18 years	443	Patient perceived recovery, pain intensity, functional disability (3 and 12 months)	Symptoms still bothering patients	76% non- recovery 3m, 68% non- recovery 12m
Kuijpers, 2006, Netherlands, (general practice) <sup>55</sup>	>18 years	587	Persistent symptoms at 6 weeks and 6 months	Less than 'full recovery' or 'very much recovered' on 8 point scale	340 (70%) 6 weeks 249 (46%) 6 months

## D. Hip pain

First author, year of publication, city/state, country	Age	n	Primary endpoint, (outcome measure, timing)	Definition of poor outcome at primary endpoint	Observed frequency of poor outcome
Birrell, 2003, multicentre, UK (general practice) <sup>39</sup>	All consecutive consulters with a new episode of hip pain	195	Hip replacement listing (1 and 4 years)	Being place on a waiting list for, or having received, a hip replacement	7% 1 year 23% 4 years
Lievense, 2005, SW Netherlands (general practice) <sup>51</sup>	>18 years	164	Persistent pain (1 and 5 years)	Persistent pain	36% persistent pain (1 year) 29% persistent pain (5 years)

#### E. General musculoskeletal pain

First author, year of publication, city/state, country, setting	Age	n	Primary endpoint, (outcome measure, timing)	Definition of poor outcome at primary endpoint	Observed frequency of poor outcome
Potter, 1992, Cheshire, UK (general practice) <sup>18</sup>	18–65 years	45	Chronic pain (26 weeks)	Chronic pain	20 (44%)
Jorgensen, 2000, Aarhus, Denmark (primary care) <sup>34</sup>	18+ years	905	Physical health	SF–36: Dichotomised reliable change index (RCI) ≤ 1.96 indicates no change or statistically significant decrease	-
			Sick leave Medication use	Sick leave: yes Medication use: increased or unchanged	
			Self-rated improvement (3 months)	Self rated improvement: no improvement or marginal improvement	
Gureje, 2001, multinational (primary care) <sup>36</sup>	18–65 years	3197	Persistent pain (12 months)	Non recovery from baseline persistent pain	555 (49%)
Atroshi, 2002, North-eastern Skåne , Sweden (primary care) 37	17–64 years	189	Long term sick leave (>3 months)	Continuous full-time sick leave for three months or longer because of musculoskeletal disorders	36 (19%)

#### F. Knee pain

First author, year of publication, city/state, country	Age	n	Primary endpoint, (outcome measure, timing)	Definition of poor outcome at primary endpoint	Observed frequency of poor outcome
Van der Waal, 2005, multicentre, Netherlands (general practice) 53	> 18 years	251	Patient perceived recovery, change in pain and physical function (3 and 12 months)	Persistent symptoms	25% recovery 3 months 44% recovered 12 months

### G. Elbow pain

First author, year of publication, city/state, country	Age	n	Primary endpoint, (outcome measure, timing)	Definition of poor outcome at primary endpoint	Observed frequency of poor outcome
Bot, 2005, multicentre, Netherlands (general practice) <sup>46</sup>	> 18 years	181	Patient perceived recovery, change in pain and physical function (3 and 12 months)	Persistent symptoms	20 (13%) recovered 3 months 51 (34%) recovered 12 months

Key: RMDQ Roland Morris Disability Questionnaire. VAS: Visual Analogue Scale. ODI: Oswestry Disability Inventory. TSK: Tampa Scale for Kinesiophobia. LBP: Lower Back Pain. ADL: Activity of Daily Living. PCS: Pain Catastrophising. RWGH: Return to Work in Good Health.

Mallen CD, Peat G, Thomas E, et al. Prognostic factors for musculoskeletal pain in primary care: a systematic review. Br J Gen Pract 2007; 57(541): 665–661. ©British Journal of General Practice