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| **Quantitative studies** | | | | | | | | | | | | |
| **Article** | **Study design** | **Setting of parent RCT** | | | | | **Population** | | | **Intervention or variable assessed** | **Comparator** | **Outcome** |
| Lead country | Discipline | Sub-discipline | Intervention | Design (cluster or individual randomisation) | Recruitment focus (practice, practitioners, patient) | Study size | Participants/decliners/both |
| Markun et al, 2016 (1) | NRSI | Switzerland | Respiratory | COPD | Multifaceted training for PCPs and practice assistants | Cluster | Patients | 216 (71 by case-finding) | Participants | Opportunistic case-finding of patients with undiagnosed COPD | Patients recruited with known COPD | Total number of recruited |
| Powell et al, 2016 (2) | Cross-sectional survey | UK (England) | Dermatology | Eczema | four intervention groups by Emollient type | Individual | Patients | 197 | Participants | Self-referral recruitment | In-consultation recruitment | Total number recruited |
| Horspool et al, 2015 (3) | Cross-sectional survey | UK (England and Wales) | Respiratory  Paediatrics | Asthma | Letter from GP to remind parents/carers to maintain and renew medication | Cluster | Practice | 433 practices invited, 134 expressions of interest, 129 practices recruited. | Both | Practice size and previous research experience | N/A | Total number randomised |
| Jennings et al, 2015(4) | RCT | UK (Scotland), Denmark, Netherlands | Cardiovascular | Adverse drug-related CV effects | Switching to celecoxib | Individual | Patients (Scotland only) | 50 | Participants | £100 financial incentive | No incentive | Total number recruited and randomised |
| Warren et al, 2014 (5) | Feasibility RCT | UK (England) | Public Health | Exercise | two interventions relating to patient education and a pedometer | Individual and Cluster | Practice and Patient | 24 practices; 131 patients | Participants | Recruitment Strategy: opportunistic  Randomisation Strategy: individual | Recruitment Strategy: Systematic  Randomisation  Strategy:  Practice cluster | 1. Time to practice recruitment  2. Time to participant recruitment |
| Williams et al, 2014 (6) | Cross-sectional study | Australia | Musculoskeletal | Low back pain | two interventions arms using Paracetamol | Individual | Patients | 1,195 | Participants | Characteristics of GP and practice  Operational aspects of the study | N/A | Rate of recruitment (number recruited by number of days GP was recruiting for) |
| McLean et al, 2014 (7) | Cross-sectional study | New Zealand | Care of older adults | Unmet need/risk of decline | Brief Risk Identification Geriatric Health Tool (BRIGHT) | Cluster | Patients | 3893 | Participants | Characteristics of GP and Practices | N/A | Rate of recruitment (Recruited over those eligible) |
| Colwell et al, 2012 (8) | NRSI | UK (England) | Diabetology | Type 2 Diabetes | Patient Decision Aid | Cluster | Practices | 54 | Participants | Viral Marketing Techniques | Traditional recruitment | Total number of practices recruited |
| Fletcher et al, 2010 (9) | Time-series analysis | UK (England) | Cardiovascular | Atrial Fibrillation | Warfarin vs aspirin | Individual | Patients | 973 | Participants | Changes to design/conduct of trial | N/A | Recruitment rate per 1000 population |
| Ellis et al, 2007 (10) | NRSI | USA (North Carolina) | Cardiovascular | Cardiovascular risk | Personal digital assistant vs automated BP monitor | Cluster | Practices and practitioners | 68 practices, 184 (84%) practitioners responded to the survey | Participants | 10 different recruitment strategies | N/A | Recruitment as a total number and as a proportion of those contacted |
| Brealey et al, 2007 (11) | NRSI | UK | Musculoskeletal | Knee pathology | Direct access to MRI | Individual | Patients and practices | 553 patients 647 practices invited; 285 (44%) practices recruited | Participants (patients)  Participants and non-participants (practices) | Telephone randomisation of patients  Characteristics of practices | Postal randomisation | Total number of participants recruited |
| Fletcher et al, 2007 (12) | Cross-sectional study | UK (England and Wales) | Cardiovascular | Atrial Fibrillation | Warfarin vs aspirin | Individual | Patients | 1740 attended study appointment and eligible, 973 consented | Both | practice/practitioner and patient characteristics | N/A | Consent to participate in the study |
| Pearl et al, 2003 (13) | Cross-sectional survey | New Zealand | Cardiovascular | Heart Failure | Brain natriuretic peptide result | Individual | Patients and practitioner | 186 practitioners recruited of whom 84 recruited patients | Participants (those practitioners who did/did not refer patients) | 7 questions in a survey | N/A | N/A |
| Richardson et al, 2002 (14) | Cross-sectional survey | New Zealand | Gastrointestinal | Dyspepsia | *H.pylori* breath testing | Individual | Patients | 100 GPs (response rate 95 (97%)) | Participants | 6 Practice and practitioner characteristics | N/A | 1 or more patients enrolled vs no patients enrolled |
| Welsh et al, 2002 (15) | Cross-sectional study | USA (Minneapolis) | Obstetrics | Maternal infection/preterm labor | Vaginal pH testing | Individual | Patients | 310 patients eligible (71 recruited, 239 not recruited) 309 charts reviewed (1 chart missing from recruited) | Both | 5 participant characteristics | N/A | Enrolled/did not enroll |
| de Wit et al, 2001 (16) | Cross-sectional survey | Netherlands | Gastrointestinal | Dyspepsia | Cisapride vs Ranitidine | Individual | Patients and practitioners | 165 GP practitioners, 128 completed survey, 793 patients recruited. | Participants | 4 practice and practitioner characteristics | N/A | Total number of patients recruited |
| Durham et al, 1991 (17) | Cross-sectional study | USA | Public Health | Health Promotion | Not adequately specified | No protocol | Patients | 5,011 invited  2713 participants,  2208 non-participants | Both | 7 participant characteristics | N/A | Number of patients recruited and %age of those invited |

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| **Qualitative Studies** | | | | | | | | | | |
| **Article** | **Study Design** | **Setting of parent RCT** | | | | | **Population** | | | **Interest** |
| Lead country | Discipline | Sub-discipline | Intervention | Design (cluster or individual randomisation) | Recruitment focus | Study Size | Participants/ decliners/both |
| Flokstra-de Blok et al, 2018 (18) | Semi-structured interviews | Netherlands | Allergy | IgE-mediated allergy | Allergy Management Support system (AMSS) | Cluster | Patients | 10 GPs | Participants (GPs who did not recruit) | Why GPs who were part of the study did not recruit. |
| Van der Gaag, 2017 (18) | Open-ended survey question | Netherlands | MSK | Sciatica | Stepped up medication or immediate morphine | Individual | Patients | 22 GPs | Decliners | Determinants in the recruitment process leading to discontinuation of the trial. |
| Attwood et al, 2016 (19) | Semi-structured interview | UK (England) | Public Health | Physical Activity | Very brief pedometer intervention | Individual | Patients | 25 | Decliners | Reasons for not taking part in the trial. |
| Bleidorn et al, 2015 (20) | Semi-structured interview | Germany | Infectious disease | Urinary Tract Infection | Ibuprofen and conditional use of antibiotics | Individual | Patients | 20 | Participants | Motivation and barriers to participation |
| van Staa et al, 2014 (21) | In-depth interview | UK – England and Scotland | Cardiovascular and Respiratory (2 trials) | Cardiovascular risk and COPD respectively | Statin and antibiotics respectively | Individual | Practitioners and patients | 27 GP interviews (15 participants, 12 decliners) 10 patients | Participants (patients) and both (GPs) | Barriers and facilitators for GPs and patients |
| Maeland et al, 2011 (22) | Survey | Norway | Occupational health | Sick-leave certification | Sick leave vs not | Individual | Patients | 50 GPs | Neither | Reluctance to recruit patients for a sick leave RCT. |
| Dormandy et al, 2008 (23) | Informal interviews | UK - England | Obstetrics/Haematology | Antenatal sickle cell/thalassaemia screening | Screening in primary care | Cluster | Patients | 20 GPs | Participants | GP motivations for taking part in the trial |
| Salmon et al, 2007 (24) | Interview | UK - England | Medically unexplained symptoms | N/A | Peer learning and video feedback | Cluster | Practitioners | 16 GPs | Decliners | Barriers of taking part in the study |
| Prout et al, 2003 (25) | Semi-structured interview | UK - Wales | Infectious Disease/Respiratory | Upper Respiratory Tract infection | intranasal disodium cromoglycate | Individual | Practitioners | 9 GPs, 1 practice nurse | Participants | Accounts of taking part in a trial using opportunistic recruitment |
| Fairhurst et al, 1996 (26) | Semi-structured interview | UK – England | Mental Health | Counselling | Counselling | Individual | Patients | 8 GPs | Participants | Reasons for difficulties in recruiting patients |

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| **Mixed-methods studies** | | | | | | | | | | | |
| **Article** | **Study Design** | **Setting of parent RCT** | | | | | **Population** | | | **Intervention, variable assessed, or interest** | **Outcome** |
| **Lead country** | **Discipline** | **Sub-discipline** | **Intervention** | **Design (cluster or individual randomisation)** | **Recruitment focus** | **Study size** | **Participants//decliners/**  **both** |
| Loskutova et al, 2018 (27) | Sequential explanatory | USA | Renal/Cardiovascular | Chronic Kidney Disease | Clinical Decision support + facilitation | Cluster | Practices | 114 – 25 participants, 89 non-participants (quant & qual) | Both (Quant), decliners (Qual) | Barriers in recruiting practices | Number of practices enrolled |
| Brodaty et al, 2013 (28) | Convergent | Australia | Mental Health | Dementia | Educational | Cluster | Practitioners | 30 – 20 participants, 10 refusers | Both | reasons for,  and barriers against, participation | N/A |
| Blair et al, 2017 (29) | Sequential Explanatory | UK – England | Infectious disease | Antimicrobial resistance | Multi-modal intervention including clinical decision support | Cluster | Patients | 28 clinicians (qual – semi-structured interview) | Participants | Recruitment inc differential recruitment | Numbers and proportions of patients recruited |
| Normansell et al, 2016 (30) | Sequential explanatory | UK (England) | Public Health | Physical Activity | 2 intervention arms including pedometer +/- support | Cluster (by household not practice) | Patients | 1140 survey, 30 interviewed | Decliners | Reasons for non-participation. | N/A |
| Foster et al, 2015 (31) | Survey | Australia | Respiratory | Asthma | 4 intervention groups relating to inhaler adherence | Professional-cluster | Patients | 55 GPs participated | Participants | Barriers and facilitators to patient recruitment | N/A |
| Rogers et al, 2014 (32) | Sequential explanatory | UK – England | Public Health | Physical Activity | Nurse-led exercise intervention | Cluster | Patients | 988 cross-sectional study (690 non-participants, 298 participants),  15 interviews | Both (cross-sectional study), decliners (qual – semi-structured interview) | Factors influencing recruitment (quant)  Reason for not participating (qual) | Number recruited |
| Page et al, 2011 (33) | Survey | Australia | MSK | Low back pain | Behaviour change intervention – guideline adherence | Cluster (practitioner) | Patients | 79 GPs (quant), 44 GPs (qual) | Both | Factors contributing to GPs’ recruitment of patients | N/A |
| Gunn et al, 2008 (34) | Survey | Australia | Public Health | Childhood overweight/obesity | 4 GP consultations re: weight loss | Individual | Practitioners | 30 | Participants | Why GPs took part in the trial | N/A |
| Shelton et al, 2002 (35) | cross-sectional study and interviews | USA | Cancer | Screening/counselling | Not stated and protocol not available | Cluster | Practitioners | 136 participants  59 decliners | Both | Practice and physician characteristics | Number of participants |
| Petty et al, 2001 (36) | Cross-sectional study and interviews | UK - England | Care of older adults | Prescribing | Pharmacist-run medication review | Individual | Patients | 2403 – 1214 consented, 1189 non-consented (quant), 68 (qual) | Both (quant), decliners (qual) | A number of patient factors. Quant  Reasons why patients declined to consent to the study | Number of patients recruited and rates |

Table 1: Summary of study characteristics

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