Appendix 2. (Table 2a, 2b, 2c and 2d) All measures divided by type, stating the lead author, condition of the participants and pertinent points regarding the measure

2a. Questionnaire based measures of adherence

Author and Condition	[a]Questionnaire name, [b]how devised, [c]description of measure, [d]how scored, , [e] purpose of study [f] number of participants and population, NR= not reported
Barnowski 1998 [62] Surgery: Carpel tunnel	[a] NR [b] NR [c] Questionnaire conducted as an interview. Questions asked pertaining to home exercise performance, frequency, and obstacles concerning the exercise programme. Participants then rated their weekly adherence from week 1-6 on a scale ranging from 3=compliant to 0= non-compliant [d] Score was totalled which could range from 0-18 over the 6 weeks [e] To examine the consequence of sex, age, job and going back to work on the recovery of grip strength after surgery for carpel tunnel and the relationship concerning compliance with exercises and the recovery of grip strength [f] 11 Individuals undergoing carpel tunnel surgery
Bassett 2011 [16] Musculoskeletal conditions: Ankle sprain	[a] NR but referred to as a self-report scale [b] NR [c] Scale listed the 5 methods of treatment; exercise, icing, not participating in activities that could be damaging to recovery, strapping of ankle, resting and elevating ankle [d] Participants rated adherence 1-5 for each applicable method of treatment [e] To assess the effect of an education intervention based around Protection Motivation Theory for patients with ankle sprains and the association between the patients intentions, physiotherapy beliefs, adherence, and the ankle injury and function [f] 69 individuals with ankle sprains
Bennell 2012 [17] Musculoskeletal conditions: Osteoarthritis	[a] NR but referred to as a self- report questionnaire [b] NR [c] Two questions asked at 3,6,9,12,15 and 18 months; one pertaining to the frequency the exercises was performed during the past two weeks, for the second question the participant is asked to rate their adherence to the home based exercises between 1= 'not at all'-11= 'completely as instructed' . [d] NR [e] To assess the effectiveness -both clinical and cost- of coaching over the telephone in addition to physiotherapy for the target population [f] 0 participants as a prospective study but would hope to recruit 168 participants with knee osteoarthritis
Borello-France 2010 [52]	[a] NR [b] NR but based on questionnaire by Sluijs et al '93

Genitourinary conditions: Urge incontinence	[c] Completed at clinical centre at visit number 2, 3 and 4 out of 4 visits and throughout year at 2,4, 6 and 12 months with minor alterations to make it relevant during the follow-up period. Consisted of 9 questions; 2 questions about frequency of carrying out exercises and completing all repetitions with choice of 4 answers. 7 questions regarding exercise barriers with the choices of 'yes', 'no' and 'uncertain' [d] averages were determined based on number of exercises performed per day and number of days per week the exercises were conducted divided by 7. An average of all the means was taken over the intervention and follow-up. [e] To depict adherence to pelvic floor exercises, look at the barriers present preventing exercises being conducted, and detect factors associated with adherence to the exercises [f] 154 females with urinary incontinence
Chen 2009 [54] Genitourinary conditions: Urinary incontinence	[a] NR [b] NR but devised by author [c] Questionnaire consisted of 3 items. Items 1 and 2 regard time spent and number of exercises completed on a 5 and 6 item scale respectively. Item 3 was a Visual Analogue Scale (VAS) ranging from 0-10 where participants rate compliance. Completed face to face if possible but could also be posted. [d] The three items were combined with a possible range scoring between 2-21 [e] To construct a model depicting direct and indirect sources of adherence and then to test the model [f] 106 female participants with urinary incontinance
Courneya 2004 [13] Cancer: Colorectal	[a] Leisure Score Index (LSI) modified from the Godin Leisure-Time Exercise Questionnaire [b] Added a question to the pre-existing questions regarding the average length of time spent exercising [c] 3 open-ended questions regarding the participants average frequency and intensity of exercise. The modification referred to including a question regarding average time spent exercising. Participants complete the measure weekly over the telephone talking to a researcher [d] The average frequency of exercise was multiplied by the average duration of exercise at 3 intensity levels (mild, moderate and strenuous). The minutes spent in moderate and strenuous exercise will then be summed. The moderate and strenuous level minutes were then combined [e] To explore predictors of adherence to exercise and exercise contamination in the target population [f] 102 participants with colorectal cancer
Dobkin 2008 [19] Musculoskeletal conditions: Fibromyalgia	[a] General Adherence Scale (GAS) [b] Used previously in hypertensive medication adherence but not in exercise rehabilitation adherence. [c] a 6 point 1-6 scale regarding general inclination to adhere. Self-reported by participants Carried out at 1, 2 and 3 months. Regarding adherence in the past month [d] The average of the 5 items was calculated and then converted into a

	number ranging 0-100 [e] To describe adherence, determine predictors of adherence and apprise the association between adherence to treatment and outcome in individuals with fibromyalgia [f] 63 participants with Fibromyalgia
	[a] ==Specific Adherence Scale (SAS)== [b] Devised by authors [c] 17 items on 4 point 0-3 scale regarding adherence in the past week. Self-reported by participants and carried out at months 1,2 and 3 [d] The average of the 17 items was calculated and then converted into a number ranging 0-100 [e] To describe adherence, determine predictors of adherence and apprise the association between adherence to treatment and outcome in individuals with fibromyalgia [f] 63 participants with Fibromyalgia
Evangelista 2001 [39] Cardiovascular Conditions: Heart failure	[a] The Heart Failure Compliance Questionnaire [b] based on an existing measure for myocardial infarction. Three heart failure patients were interviewed to create items that were relevant to the target population and decide what other themes the questionnaire should consist of. This was then reviewed by six specialist nurses, one sociologist and ten participants involved in the study regarding comprehensiveness and length of the questionnaire [c] 6 subsections regarding health behaviours were on the questionnaire. Participants responded on a 5 point scale how important they rated each health behaviour. They then had to rate their overall adherence on a 5 point scale. [d] The mean was calculated for each health behaviour and a combined score for all behaviours. Participants were deemed adherent if the combined score was above 75% [e] For health care workers to be able to identify non adherence and contributing factors that could lead to non-adherence [f] 82 participants with heart failure
Forkan 2006 [59] Older people: Impaired balance	[a] NR [b] Devised by authors based on literature and piloted on the target population and physical therapists [c] A 43 item questionnaire containing 1 open ended question and 7 subscales. [d] Subscale scores were summed together after responding on a 4 point scale [e] To ascertain adherence after discharge and the factors limiting adherence in addition to characterising involvement in the exercise [f] 175 participants who were over 65 years of age with impaired balance
Gallo 1997 [55] Genitourinary conditions: Stress urinary incontinence	[a] NR but referred to as a survey [b] Devised by authors for the study. Content validity was attempted using experts but no-one from the target population. Test-retest reliability was also attempted utilising 10 participants over a 1 week timespan. [c] Questionnaire with 4 sections pertaining to: number of times per day the exercises were conducted on average; the duration of time spent performing

	the exercises; the length of time each exercise held for; the reason for conducting exercises. Additional questions pertaining to use of cassette tape if in group utilising this intervention [d] NR [e] To determine if use of a cassette tape improves adherence to pelvic floor exercises in addition to; how many participants perform the exercises regularly, how many perform the exercises as prescribed, length of time spent performing the exercise programme, length of time each exercise held and, what prompts the individuals to conduct the exercises [f] 88 females with urinary incontinence
Hardage 2007 [60] Older people: Activity	[a] ==Adherence to Exercise Scale for Older Patients (AESOP)== [b] Used items from pre-existing scales which could be modified, deleted or added to. This was then checked for applicability in the target population [c] The questionnaire was conducted as an interview with researcher. There were 3 subscales with a total of 45 items with were responded to on a 5 point scale [d] The scores for each of the subscales were summed separately resulting inn 3 totals [e] To produce a questionnaire to predict adherence to home based exercise [f] 50 participants aged 65 years old and over
Howard 2008 [21] Musculoskeletal conditions: Osteopathy patients	[a] No name [b] Devised by authors based on literature and attempts at face and content validity were made piloting the measure on 5 experts and 5 individuals from the target population [c] The self-report questionnaire comprises of 3 subscales; attitudes and experiences in regards to exercise and health; whether the participant had an exercise programme; whether the exercise programme had been carried out as specified. These were all scored on a 5 point scale. The final question required a yes or no answer regarding their completion of prescribed exercises [d] Each subscale was summed based on the scores from the 5 point scales [e] To devise a pilot measure to determine characteristics in the participants that may influence adherence to the prescribed exercise programmes and to investigate if adherent participants differed from non-adherent participants [f] 200 participants who were osteopathy patients
Jurkiewicz 2011 [41] Cardiovascular conditions: Stroke	[a] NR [b] Modified from a questionnaire by Marzolini and literature. State no validity or reliability testing was conducted but face validity was attempted by asking patients, physicians and cardiac rehabilitation staff pertinent questions regarding its relevance and range of questions [c] Self-report questionnaire with 16 items. Multiple choice for most questions but could write different response [d] NR [e] To determine factors affecting adherence to prescribed exercise programme conducted at home for the target population.

	[f] 14 stroke survivors
Khalil 2012 [50] Neurological conditions: Huntington's Disease	[a] NR [b] NR [c] Weekly telephone call to conduct verbal questionnaire. Asked if participants had conducted their exercises for the previous week; the frequency with which they had conducted them; which exercises they had carried out; if any difficulties had been encountered whilst conducting the exercise; and if the participant had any concerns [d] NR [e] To examine how individuals with Huntingdon's Disease and their carers perceived and used a specially developed exercise DVD [f] 15 participants with Huntington disease
Kim 2006 [56] Endocrine conditions: Type 2 diabetes	[a] NR [b] NR but based on 7- day physical activity questionnaire [c] recall questionnaire of all physical activity conducted during the last 7 days. Cues such as time of the day were used to aid recall. Participants were asked the frequency, duration and intensity with which they carried out each activity or exercise. [d] MET's were calculated for activates conducted and an overall physical activity energy score was obtained which depended on the amount of time and intensity of the exercises conducted [e] To determine the success of a web based and printed material Trans-Theoretical Model intervention programme for people with type 2 diabetes [f] 73 participants with type 2 diabetes
Levy 2008 [22] Musculoskeletal conditions: Tendonitis over use injury	[a] No name [b] NR but based on Bassett (2003) [c] The measure asked participants about adherence to exercises, cryotherapy and avoiding participating in activities that could aggravate injury on a 5 point scale 1= not at all- 5= as advised [d] scores for each question were summed together to arrive at an adherence total [e] To examine the associations between adherence to rehabilitation, age and perceived autonomy support [f] 70 participants with tendonitis overuse injury
Levy 2008 [23] Musculoskeletal conditions: Tendonitis over use injury	[a] No name [b] NR but based on Bassett (2003) [c] The measure asked participants about adherence to exercises, cryotherapy and avoiding participating in activities that could aggravate injury on a 5 point scale 1= not at all- 5= as advised [d] scores for each question were summed together to arrive at an adherence total [e] To attempt to predict adherence to rehabilitation by examining an adapted integrated psycho-social model [f] 70 participants with tendonitis overuse injury
Lysack	[a] NR

2005 [64] Surgery: Hip or knee replacements	[b] NR but the questionnaire was developed for the study [c] Conducted as Interview with researcher. Questions pertained to how regularly exercises were performed, difficulties with doing the exercises, any problems remembering to do the exercises, satisfaction with rehabilitation whilst an inpatient and satisfaction with therapeutic exercises [d] NR [e] To establish if adherence and satisfaction were improved if a personalised video tape with the exercises was used when completing the exercises at home as opposed to written instructions and verbal instruction [f] 40 participants with a hip or knee replacement
Mailloux 2006 [24] Musculoskeletal conditions: Chronic low back pain	[a] NR [b] NR [c] Recorded how often the exercises were performed per week out of 4 adherence caregories ranging from never to more than 5 times a week. Questionnaire completed at evaluation of the programme and at the 2 year follow up [d] NR [e] To try and establish if exercise behaviours were improved after rehabilitation and if they were maintained at follow up 2 years post rehabilitation. [f] 126 participants with back pain over 65 years of age
Marzolini 2010 [43] Cardiovascular conditions: Cardiac patients	[a] NR [b] devised by a physician, researcher and a cardiac rehabilitation clinician, in conjunction with a market research professional [c] Questionnaire contained 52 items [d] NR [e] To determine factors that may influence long term adherence to home based exercise programmes retrospectively [f] 358 participants who were cardiac patients
McCarthy 2004 [26] Musculoskeletal conditions: Osteoarthritis	[a] NR [b] NR [c] Questionnaire was completed at a 6 and 12 month assessment after the intervention. It comprised of four questions; how often are the exercises completed during a week over the past month; the length of time spent conducting the exercises; If they have stopped completing the exercises, the length of time since the individual last did the exercises, and, if the individuals felt there had been any change in physical activity levels during the last six months. There were multi-choice options. [d] NR [e] To determine the effect and cost of delivering an exercise programme to be conducted purely at home opposed to an exercise programme conducted at home in conjunction with a course of exercise classes [f] 214 participants with osteoarthritis
Medina-Mirapeix 2009 [27] Musculoskeletal	[a] NR [b] NR but adapted from Sluijs et al (1993) [c] Asked to record frequency and duration for conducting the exercise programme on a 5 point scale (never, seldom, often, almost always, always)

conditions: Neck and low back pain	for the past week 1 month after finishing physiotherapy [d] Individuals reporting the always, and almost always options on the were deemed as adherent [e] To examine the levels of adherence and if they differ when prescribed home based exercise in relation to the frequency and duration and if the frequency and duration could be predicted by certain factors. [f] 184 participants with neck and low back pain
Milne 2005 [29] Musculoskeletal conditions: Injured athletes	[a] NR [b] NR [c] Three areas in relation to rehabilitation were enquired about; the frequency, duration and quality of the exercises in five questions. The sections regarding frequency and duration each asked 2 questions regarding the physiotherapist's recommendation and what the participant did. 1 question regarded the quality, asking as a percentage how often the participant thought they did the exercises correctly. [d] Percentages were calculated for the two questions regarding frequency and the two regarding duration. Quality was already presented in percentage terms [e] To assess the validity of the Athletic Injury Self- Efficacy Questionnaire (AISEQ) and the predictive associations between the questionnaire measuring self-efficacy, adherence to rehabilitation and imagery use [f] 270 injured athletes participated
Rackwitz 2007 [30] Musculoskeletal conditions: Chronic low back pain	[a] NR [b] NR but devised by the author [c] Questions pertaining to number of days and length of time the rehabilitation programme was conducted during the past week. Questionnaire completed during the 8 week intervention and at a follow up at 3 months [d] NR [e] To assess if the rehabilitation programme was practical, what effects the programme may have and if people were adherent to the programme. [f] 92 participants with low back pain
Radtke 1989 [45] Cardiovascular conditions: Cardiac rehabilitation	[a] Exercise Compliance Questionnaire [b] Devised by author based on literature [c] 8 item measure. 6 questions about frequency, duration, intensity and method of exercise scored on a 5 point scale. 2 questions pertaining to before the heart attack [d] Scores were weighted for questions 1 to 6 which produced a number between 30 to 150. Individuals scoring less than 50 were deemed as low adherers and individuals scoring over 100 deemed high adherence [e] To establish if individuals conducted their home exercises as prescribed and if self-motivation affects their adherence to the prescribed home exercises [f] 28 participants who have suffered a myocardial infarction
Sluijs 1993 [35]	[a] NR [b] NR [c] 1 question asking if the participant regularly exercised in the past week.

Musculoskeletal conditions: Physiotherapy patients	Responses were recorded in 1 of 4 categories ranging from not at all to very regularly. [d] NR [e] To determine if adherence to exercise was associated with characteristics of the individual in or the behaviour of the physical therapist [f] 1681
Terpstra 1992 [37] Musculoskeletal Conditions: Rheumatoid arthritis	[a]No name [b] NR [c] Questionnaire had two sections. One section regarding conducting the exercise programme with 6 questions and the other section about factors that may influence conducting the programme with 11 questions. Face validity was conducted and the authors attempted to establish applicability [d] means and frequencies were calculated combining the two sections of the questionnaire [e] to establish the degree with which individuals adhered and what factors are associated with adherence to their exercise programmes [f] 104 participants with rheumatoid arthritis
White 2007 [49] Respiratory conditions: Cystic fibrosis	[a] NR [b] NR but developed for this study and based on the Manchester Cystic Fibrosis Compliance Questionnaire. It was also piloted by 2 individuals from the target population who provided feedback which was utilised [c] Consisted of three sections; background; adherence to airway clearance; and, adherence to exercise programmes. It was conducted as an interview with a physiotherapist [d] NR [e] To establish the level of adherence in the target population and determine factors that increased or decreased levels of adherence [f] 57 participants with cystic fibrosis

2b. Log based measures of adherence

Author and Condition	[a] Log/ Diary name [b]how devised, [c]description of measure, [d]how scored, [e] purpose of study, [f] number of participants and population, NR= not reported
Alewijnse 2003 [51] Genitourinary conditions: Urinary incontinence	[a]7- day diary [b] NR [c] Participants were asked to report the number of days during the week that the participants had carried out the exercises as per the physiotherapist's instructions. They were asked to report this on a 5 point scale with the first three response options in regards to non-adherence, the fourth option in regards to moderate adherence and the final option in response to ideal levels of adherence [d] NR [e] To identify long term predictors of adherence in the target population [f] 192 participants with urinary incontinence
Alexandre	[a] NR but referred to as a diary

2002 [15] Musculoskeletal Conditions: Low back pain	[b] NR but physical therapists had input into the adherence rating categories [c] The diary recorded exercise frequency each week. Adherence was rated between 0-2 A rating of 2 was someone who was highly adherent and the individual completed 80% of the prescribed exercise, a rating of 1 was a low adherer and the individual had completed less than 80% of the prescribed programme and a rating of 0 was the rating for an individual who was not adherent [d] The diary score was summed with a score for attendance at a clinic session and score for using an educational videotape to obtain an overall adherence score [e] To examine if a number of factors such as demographics, quality of life, barriers in regards to completing the treatment and depression among others were able to predict the adherence of the individual to the programme. [f] 120 participants with back pain
Borello-France 2008 [53] Genitourinary conditions: Stress urinary incontinence	[a] NR but referred to as Exercise Diary [b] NR [c] The diary was used to record exercise sessions that were carried out each week [d] scored as a percentage which was obtained by dividing the number of exercise sessions conducted as reported in the diary by the number of exercises sessions that were prescribed [e] To assess quality of life and continence after a six month intervention and to determine the effectiveness of maintaining the exercise programme over the follow up [f] 28 female participants with urinary incontinence
Brovold 2012 [58] Older People: Activity	[a] NR but referred to as Exercise Log [b] NR [c] Log recorded various activities frequency and duration providing the duration was more than 10 minutes. [d] The mean of reported activities conducted each week was calculated [e] To assess the effects of an exercise and counselling intervention on HRQL and physical ability [f] 108 participants in adults over 60
Chen 1999 [18] Musculoskeletal conditions: Physiotherapy patients	[a] NR but referred to as self-report and follows a log format [b] NR but designed for study [c] The log recorded each exercise conducted, the number of times the exercise was repeated in the session and the number of sessions that were recommended by therapists to do each day. Also recorded were the frequency and duration of exercise sessions in addition to the number of exercise sessions conducted typically per day during the week [d] Percentages were calculated comparing the number of exercise sessions actually completed to the participants recollection of prescribed exercise sessions and to the actual prescribed amount [e] To examine predictive factors for increased adherence and satisfaction to exercise programmes conducted at home

	[f] 62 participants with upper extremity impairment
Cockram 2006 [47] Respiratory conditions: Pulmonary rehabilitation	[a] NR [b] NR [c] Standardised questions used (not reported) to record the type and frequency of exercises carried out at home in addition to any attendance at exercise classes and other physical activity. [d] NR [e] To outline referral and uptake patterns to rehabilitation and the benefits of the rehabilitation in individuals participating in maintenance programmes in a community setting [f] 21 participants undergoing pulmonary rehabilitation
Donesky-Cuenco 2007 [48] Respiratory conditions: COPD	[a] NR but referred to as a daily log [b] NR [c] Recorded the length of time, number of walks along and level of dyspnea after each walk per day [d] dependent on the number of walks conducted compared with the number prescribed, participants were separated into seven categories of adherence [e] To examine behaviour and adherence in regards to the exercise treatment and to validate the adherence categories [f] 103 participants with Chronic Obstructive Pulmonary Disease
Duncan 2002 [38] Cardiovascular conditions: Heart failure	[a] NR but referred to as an exercise diary [b] The targets for the participants to meet in terms of exercise frequency etc were written in the diaries for the participants to conduct unsupervised [c] the diaries recorded the duration and frequency of the prescribed exercises in addition to the type of exercise carried out and an RPE [d] Adherence was measured by a percentage, dividing the number of exercise sessions carried out by the number of sessions prescribed. [e] To evaluate the efficacy of the adherence intervention [f] 13 participants with heart failure
Ettinger 1997 [20] Musculoskeletal conditions: Osteoarthritis	[a] NR but referred to as an exercise log [b] NR [c] The log recorded the frequency and duration of the exercises. [d] Adherence was calculated as a percentage based on the number of exercise sessions completed compared to the number of exercise sessions prescribed [e] To evaluate the effect exercise programmes have on self-reported disability for the target population [f] 439 participants aged 60 years and above with knee osteoarthritis
Fukuoka 2011 [67] Sedentary lifestyles: Activity program for Sedentary Women	[a] Daily Mobile phone diary [b] NR [c] The log was completed every evening between 7pm-12am. It recorded the frequency, intensity and duration of physical activity carried out and the number of steps taken that day and if they wore the pedometer as they were supposed to for the study [d] adherence was calculated by dividing the number of diary entries

	over a month by 21 days resulting in a percentage [e] To assess adherence to pedometer and diary use and the congruence between the steps taken as reported in the diary and the steps recorded by the pedometer [f] 41 sedentary female participants
Gary 2011 [40] Cardiovascular conditions: Heart failure	[a] NR but referred to as a Step/ chord calendar [b] NR [c] Recorded adherence to resistance exercises. The number of exercises carried out, the number of repetitions and Thera-chord colour were all recorded each week which was then collected by nurse or exercise specialist and inputted onto the log sheet. [d] 2 resistance exercise sessions had to be recorded on the calendar in addition to another exercise session recorded differently to be deemed adherent [e] To examine the outcome of the exercise programme on the participants physical function [f] 24 participants with heart failure
Hardage et al, 2007 [60] Older people: Activity	[a]NR but referred to as a daily home exercise log [b] NR [c] Days where participants exercised, an 'E' was marked on the calendar log. If participant had a fall they marked an 'F' to detract from the variable of adherence [d] Individuals were rated adherent if exercise was conducted three times a week [e] To produce a questionnaire to predict adherence to home based exercise programmes [f] 50 participants aged 65 years old and over
Khalil 2012 [50] Neurological conditions: Huntington's Disease	[a] NR but referred to as an exercise diary [b] NR [c] The log recorded which exercises were carried out each week between one and three times. [d] NR [e] To examine how individuals with Huntingdon's Disease and their carers perceived and used a specially developed exercise DVD [f] 15 participants with Huntington disease
King 1991 [68] Sedentary lifestyles: Activity program	[a] NR but described as an exercise log [b] NR [c] The log recorded the type of exercise carried out, the frequency and duration of exercise, heart rate while exercising and an RPE was recorded for each exercise session [d] an adherence score was calculated each month by expressing the number of sessions completed as a percentage of the number of sessions that were set for the 4 week period [e] to examine how effective group based exercise training was in comparison to home based training at high and low intensities [f] 357 participants leading a sedentary lifestyle between the ages of 50 and 65

King 2012 [42] Cardiovascular conditions: Stroke	[a] NR but referred to as diaries [b] NR but reference to Bassett 2003 commenting self-report measures are a good technique to assess adherence [c] Recorded frequency and duration of sessions. Participants were aware sessions must be less than 90 minutes. [d] NR [e] To assess the potential of using computer games in the target population for therapy [f] 3 participant who were recovering from a stroke
Lyngcoln 2005 [63] Surgery: Distal radius fracture	[a] NR but referred to as a home exercise diary [b] NR [c] Recorded the number of exercise sessions the participant carried out and the number of exercises conducted per session [d] A percentage was calculated based on the number of exercise sessions completed compared to the number of exercise sessions prescribed [e] To study the association between adherence to the prescribed exercise and the outcome [f] 15 participants with distal radius fracture
Mannion 2009 [25] Musculoskeletal conditions: Chronic low back pain	[a] NR but referred to as a daily exercise diary [b] NR [c] The log recorded the frequency with which the exercises were completed [d] A percentage was calculated based on the number of exercise sessions completed compared to the number of exercise sessions prescribed [e] To observe how adherence influences self reported disability and pain scores and to establish factors that may influence adherence [f] 32 participants with chronic low back pain
Mori 2006 [57] War veterans: Gulf war veterans illness	[a] NR but referred to as a daily log [b] NR [c] The frequency, intensity and duration of exercise were recorded. In addition the participants had to report as to how they had measured the exercise intensity from the choice of; heart rate, METs or RPEs [d] NR [e] To examine predictors of exercise adherence for the condition of the target population [f] 531 participants with Gulf War Veterans illness
Oka 2000 [44] Cardiovascular conditions: Heart failure	[a] NR but referred to as an activity log [b] NR [c] The logs were filled in daily and recorded RPE, heart rate, exercises completed and the duration of the exercises, and any symptoms that occurred [d] A percentage was calculated based on the number of exercise sessions completed compared to the number of exercise sessions prescribed [e] To assess the outcome of a home based exercise programme on

	levels of fitness, quality of life and symptoms in the population of interest [f] 40 participants with heart failure
Pickett 2002 [14] Cancer: Breast	[a]NR but referred to as a daily diary [b] Devised by authors and used in previous studies but not measuring adherence. Content validity was attempted by a panel of oncology nurses and nurse researchers and exercise physiologists. No target population input. [c] The diary recorded fatigue, duration of walking, pulse rate before and after walking in addition to any side effects or symptoms of disease experienced [d] NR [e] To observe adherence patterns to the exercise programme and examine if the disease of the target population or side effects from the treatment affect the levels of exercise completed. In addition to propose other methods that could improve future studies examining moderate intensity exercise in comparable groups to the target population [f] 52 participants breast cancer recently diagnosed
Saez 2004 [32] Musculoskeletal conditions: Injured athletes	[a]NR but referred to as a personalised record sheet [b] designed by the authors for the particular individual factoring in the rehabilitation programme suggested by the doctor [c] Content of sheet regards rehabilitation recommended for individual participant by doctor and is completed each week [d] Adherence throughout the study was established by determining a weekly mean to calculate an overall mean for adherence [e] To examine psychological responses and the impact they have on the recovery of the participant [f] 20 participants with injuries sustained via football
Salo 2012 [33] Musculoskeletal conditions: Chronic neck pain	[a] NR but referred to as exercise diaries [b] NR [c] Recorded how often an exercise session took place, which exercises were conducted, the repetitions of the exercises and weights used. [d] A mean and standard deviation of the training frequency was calculated [e] To assess if exercises for the target population can increase HRQL [f] 101 participants with neck pain
Schoo 2005 [34] Musculoskeletal conditions: Osteoarthritis	[a] NR but referred to as a diary and log sheet [b] taken from pre-existing diary recording wet episodes in incontinence patients [c] Recorded how many exercises- as in all, some or none- had been carried out each day [d] A percentage was calculated regarding how much of the exercise programme was performed. [e] To determine factors related to exercise programme adherence [f] 90 participants with osteoarthritis over the age of 60

Spink 2012 [61] Older People: Podiatry/ falls	[a] NR but referred to as a daily exercise diary [b] NR [c] Recorded the frequency with which the exercises were carried out. [d] Adherence was deemed as the participant reporting 50% or more of the prescribed exercise being completed [e] To examine adherence, predictors of adherence and barriers to the intervention in the target population [f] 153 participants aged 65 years and over that are prone to falling
Steinhilber 2012 [36] Musculoskeletal conditions: Osteoarthritis	[a] NR but referred to as exercise logs [b] NR [c] Recorded frequency and duration of exercise in addition to pain and exertion experienced whilst conducting the exercises. [d] Adherence was measured by comparing the number of exercise sessions conducted compared to the number of sessions prescribed [e] To add a home based exercise programme to a pre-existing group based exercise session and to discover if it can be conducted by the target population [f] 36 participants with osteoarthritis of the hip or have had a hip replacement
Tooth 1993 [46] Cardiovascular Conditions: Myocardial Infarction	[a] NR but referred to as a log book [b] NR [c] the logs recorded the duration and frequency of exercises per week [d] Frequency and duration of exercise completed was summed and compared to the amount of exercise prescribed [e] To explore if certain characteristics at baseline could be predict participants adherence to the exercise programme [f] 30 participants that have suffered a myocardial infarction
Wang 2012 [69] Sedentary lifestyles: Weight loss	[a] NR but referred to as diaries [b] NR [c] the logs recorded the frequency of the exercise providing it was more than twice a week and the duration of the exercise providing it was a minimum of 30 minutes [d] NR [e] To discern the effectiveness of self- reported logs for weight loss in the target population [f] 50 chronically ill obese participants
Wilbur 2001 [70] Sedentary lifestyles: activity programme for sedentary healthy women	[a] NR but referred to as exercise logs [b] NR [c] The logs recorded date, if they completed the warm up and cool down properly and in entirety, the duration of time spent walking and estimated number of miles walked. Participants were encouraged to note weather, terrain, route taken, and how the participant felt whilst walking. [d] NR [e] To exhibit the used of an exercise log in conjunction with a heart rate monitor to measure adherence to prescribed exercise in addition to recommending a different way to describe adherence to an exercise

Author and Condition	programme that reflects the process of behaviour change [f] 156 female participants leading sedentary lifestyles
Zagarins 2011 [65] Surgery: Bariatric surgery patients	[a]NR but referred to as a weekly exercise log [b] NR [c] the logs recorded the frequency and duration of the exercise sessions, the type of exercise performed, Borg scale rating during exercise and data pertaining to pedometer use per week [d] means and standard deviations were calculated from the results [e] To assess adherence and evaluate the efficacy of an exercise programme [f] 46 participants who have undergone bariatric surgery

2c. Visual Analogue Scale (VAS) based measures of adherence

Author and Condition	[a] ==VAS name== [b]how devised, [c]description of measure, [d]how scored, [e] purpose of study, [f] number of participants and population, NR= not reported
Michener 2001 [28] Musculoskeletal conditions: Physiotherapy patients	[a] NR but was a VAS [b] NR [c] 14.5cm long line with percentages 0, 25, 50, 75 and 100% marked on the line to anchor it. [d] The mark on the line from the participant measuring their percentage adherence was converted into cm [e] To establish if grip strength recovery was related to work performance and functional results after completing occupational therapy [f] 15 participants with hand trauma
Roddey 2002 [31] Musculoskeletal conditions: Physiotherapy patients	[a] NR but was a VAS [b] NR [c] a 10 cm line with the anchors at each end regarded completing no exercise to completing all exercises for the week. A mark was then made on the line to denote the participants adherence levels [d] Adherence was assessed depending on the number of VAS' returned to the researchers by the participant and the level of adherence they had indicated [e] To evaluate the success of a video tape intervention as opposed to a physical therapist providing instruction on adherence to home based exercises and the outcome of individuals in the target population [f] 108 participants following Rotator Cuff repair surgery

2d. Other based measures of adherence

Author and Condition	[a] <mark>measure name</mark> [b]how devised, [c]description of measure, [d]how scored, [e] purpose of study, [f] number of participants and population, NR= not reported
van Leer 2012 [66] Vocal: Voice therapy	b[a] Tally counter [b] NR [c] A small devise that the participant had on their person to record each time the exercises were performed for at least a 2 minute duration. This form of monitoring adherence was conducted for the 1st 2 weeks and data was obtained at 3 time points during these 2 weeks [d] NR [e] To assess if adherence and motivation can be enhanced by interventions put In place (support for practice using mobile videos) [f] 14 participants undergoing voice therapy