**Table 1 Study Characteristics (prognostic factors)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Paper ID** | **Recruitment dates** | **Country** | **Participants** | **Study setting** | **Total number of participants** | **Mean age (years)** | **Absence definition** | **Absence duration (baseline)** | **Follow-up (years)** | **Prognostic factors measured** |
| Abasolo et al. 2008[39] | 1998 - 2001 | Spain | Patients receiving temporary work disability  | Primary care | n= 3311Women: 1656 (50%) | 41 (+/- 12) | Days of sick leave per episode | Median 13 days | 2 | AgeFemale sexSelf-employedMarriedLow educational levelResponsible for most or all of the household choresWork position coveredUnemployedManual workerSeated for long periodsMust adopt squatting positionMust stand up for long periodsPhysically demanding jobMust perform anterior flexion of the neck |
| Abasolo et al. 2008[39] |  |  |  |  |  |  | Recurrence of temporary work disability – any successive temporary work disability during the study period |  |  | Female sexGeneral work regimenMarriedLow educational levelResponsible for most or all of the household choresWork position coveredUnemployedManual workerSeated for long periodsMust adopt squatting positionMust kneel frequentlyMust stand up for long periodsPhysically demanding jobMust perform anterior flexion of the neckMust perform anterior flexion of the trunkMust perform later flexion of the trunkDuration of previous temporary disability episode (per day) |
| Abenhaim et al. 1995 [26] | 1988 | Canada | Aged 15-65 with at least 1 day of compensated absence from work, injury to the thoracic, lumbar or sacral segments of the spine | Medical / healthcare records | n= 1848Women: 425 (23%) | Not reported | Compensated absence Chronicity defined as accumulation of 180 days or more od compensated absence from work over all episodes that occurred during the study period  | At least 1 day | 2 | Diagnosis (specific versus non-specific) |
| Gabel et al. 2012 [31] | Not reported | Australia | Acute MSK injury to the spine, upper or lower limb sustain at work within the previous 5 weeks | Outpatients | 143 Women: 61 (43%) | Mean 38.9 (SD 10.5); range 18-65 | Long term absence defined as >28 paid days offNo absenteeism 0 paid days off | 72% absent for 1-28 days26% absent for >28 days | 0.5 | 21 item Orebro Musculoskeletal Pain Questionnaire 12 item Orebro Musculoskeletal Pain Questionnaire |
| Sheehan et al.2022 [43] | 2010-2015 | Australia | Low back pain claims with a minimum of 4 recorded primary care service payments greater than 2 weeks paid time loss and from the workers compensation schemes of 3 Australian states.  | Health records (insurance) | 18,696 claims (not necessarily individual people)Women: 6916 (7%) | Not reported | Working time lost, defined as the number of weeks of income support payments paid (measured in paid calendar weeks) | At least 1 week | 5 | Continuity of care with usual care provider measured with the usual provider continuity index |
| Lederer et al. 2014 [32] | 2000 - 2002 | Canada | Claim incurred between 1st Jan 2001 and 31st Dec 2003, benefits granted for at least 90 days and coded as a new event (not a relapse) with an upper body injury site | Health records (insurance) | 2210Women: 9032 (40.9%) | Not reported | Time on compensated benefits calculated as the difference between the date of injury and date of the last payment of benefits for a maximum of a 3 year period | At least 3 months (90 days) | 0.5 | AgeGross annual incomeDependentsArea of residenceIndustryInjury typeInjury siteClaim history (previous 10 years) |
| Lotters et al. 2006 [34] | Not reported | The Netherlands | On sick leave due to non-specific musculoskeletal disorders for 2-6 weeks | Occupational health | 253Women:76 (30%) | 43 (SD9) | Duration of sickness absence | 2-6 weeks | 1 | Perceived pain – Low back painPerceived pain – other MSKPerceived physical workloadVisiting a specialist 12 months prior to current sickness absenceOwn perception of RTWPresence of sciatica  |
| Nordin et al. 1997 [29] | March 1994 – July 1995 | USA | All employees having a first episode of non-specific low back pain (defined with ICD9 codes) within 1 week of episode onset | Hospital / rehabilitation | 162Women: 33 (20%) | 39.9 (range 20–69) | Number of days (ascertained through computerized company records) | 1 week | 0.12 | Abnormal heel walkOswestry quartileWork related injuryExposure to whole body vibrationPhysically heavy work |
| **\***Okurowski et al. 2003 [28] | Jan 1997 – Mar 2000 | USA | Cases who were out of work at 3 months post injury as a result of uncomplicated low back pain and who had similar level of nurse case manager evaluation | Health records (insurance) | 986Women: 256 (26%) | Not working: 37 (SE 0.41)Working (SE 0.54) | Working or not working at 6 months | 3 months | Not reported | AgeTimeliness of referralLanguage barriersAttorney involvement |
| Richter et al. 2011 [35] | Nov 2004 – Dec 2006 | The Netherlands | New work disability insurance claim episodes from those with non-specific MSK symptoms who were unable to fulfill their job for more than 25% according to medical assessment | Health records (insurance) | 276Women: 20 (7%) | 45 (SD 7) | claim duration, defined as the number of calendar days the participant received work disability compensation between completion of the baseline questionnaire and one-year follow up, without adjustment for the level of work disability (gross duration). The end of a claim period was defined as having less than 25% work disability according to a medical assessment, with a minimum duration of 4 weeks | Mixed duration but up to 6 months | 1 | AgeGenderGeneral healthHistory of similar symptomsPain severity previous 6 monthsLocation of MSK symptoms (upper extremity; back; lower extremity; multiple locationsDuration of symptoms (2-6 months; >6 months)Functional status neck painFunctional status back painInsured daily compensationDeferment periodFear of movementSelf-predicted timing of RTWJob satisfactionWillingness to participate in RTW |
| Selander et al. 2007 [36] | June 2003 – June 2004 | Sweden | Participants were on long term sick leave (over 4 months) due to back pain problems | Hospital/rehabilitation | 347 Women: 160 (46%) | Mean 42 (male) Mean 41 (female) | Absence: Bivariate outcome: Successful rehabilitation if client had lower degree of sickness absence or none at all c.f. their baseline absence. Unsuccessful rehabilitation if client received same or more sickness allowance | Between 3 and 11 weeks Mean 63 days from date of injury | 0.5 and 1 | AgeGeneral healthVitalityInternal locus of control |
| Shiels et al. 2004 [44] | Not reported | UK | Not reported | Primary care | 864Women: 411 (47.6%) | 43.1 | (1) total duration of sickness episode (calculated bytotaling all periods of incapacity on the sickness certificates.In the case of issue not being continuous, separate episodes were assumed) (2) greater than 28-week incapacity | Not reported | Not clear but greater than 0.1 years | AgeSex DeprivationType of MSK disorder |
| Smith et al. 2014 [40] | 1 Jan 2005 – 31 Dec 2007 | Australia | Wage replacement claimants with an incapacity start date between 1st Jan 2005 and 31st Dec 2007 which were either (mental health†), back or upper extremity claims from full or part time employees | Health records (Insurance) | 10,899Women: 4197 (38.5%) | 15-24y = 6.2%; 25- 34y=17.7%; 35-44y=29.7%; 45-54y=36.8%; 55+=16.9% | No. of days of total wage replacement over 2 years from first day of absence | 1 day | 2 | Age when injuredGenderPrior claimDays between injury date and first day of compensationEmployment typeOccupational strength requirementsOccupational time pressureOccupational autonomyManaging employer sizeIndustryYear |
| Steenstra et al. 2015 [41] | 1 Jan – 30 Jun 2005 | Canada | Compensated work absence after an uncomplicated back injury | Health records (Insurance) | 1422Women: 552 (38%) | 41.3 (SD 10.5) | Time on compensation benefits until RTW and time to further period of compensated absence defined as recurrent of same injury | 4 weeks | 2 | AgeGenderPrevious claimPhysical demands manualLanguage (non-French or English)Union memberEarly RTW programEmployer continued salaryEmployer doubt about work related injuryNo recovery expectedWorker signed RTW formsPublic transport to workFunctional abilitiesOpioid prescription |
| Truchon et al. 2012 [37] | Oct 2006 – Nov 2008 | Canada | Workers receiving income replacements benefits because of common low back pain. Aged 18 or over and affected by a first or new episode of low back pain in the last 12 months. On sick leave for a minimum of 28 days but no longer that 83 days | Population / National based | 535 Women: 218 (40.7%) | 42 (SD10) | Number of days of absence. Calculated on the basis of dates supplied by the participants about work events during the phone interviews at follow-ups (e.g. returns to work, recurrence of disabling LBP). A total absence period was calculated for each participant from injury date (minimum 35 days; maximum 340 days). This absence period could include multiple sick leaves. Periods of light duty work were considered as returned to work periods even if treatments were provided one or many days per week. Participants were divided into two groups on the basis of this absence period: 182 cumulative days and less, and more than 182 cumulative days. | Long term >/= 4 weeks | 1 | Fear avoidance beliefs work (FABQ-W)RTW expectations (time)Annual family income (pre-tax)Last level of education attained \_elementaryWork schedule irregularityWork concerns |
| Turner et al. 2006 [33] | Jul 2002 – Jun 2003 | USA | Workers how submitted workers compensation claims for work-related back pain and received at least 1 day of temporary total disability wage replacement (i.e. had at least 4 days of work disability as required for receiving wage replacement) | Health records (insurance) | 1068Women: 328 (31%) | 39.2 (11.1) | Wage replacement compensation for temporary total disability (“work disability”) 6 months (180 days) after claim submission. Number of days of wage replacement receipt in this period was also examined (“work disability duration”).Temporary total disability payments are stopped when a worker returns to work or is judged to be medically stable and able to work. | Mean 21.1 days (SD 9.7) | 0.5 | Recovery expectationsMental HealthCatastrophisingBlame (work)Blame (someone/something else)Relations with co-workersWork fear avoidance |
| Van Duijn et al. 2005 [38] | Not reported | The Netherlands | Participants were on sick leave with musculoskeletal complaints for between 2 and 6 weeks | Occupational health  | 262 enrolled data presented on 164 who completed follow-up dataWomen: proportion not clear | 43 (9) | Duration of sick leave time until RTW on full dutyRTW but in a modified work capacity (reduced hours, modified work during sick leave advised by OH) | 2 – 6 weeks | 1 | Modified workAgeDuration in jobPrior sick leaveChronic healthSeverity of painDisabilityPhysical general healthQuality of life |
| Westman et al. 2008 [42] | 1998-2000 | Sweden | Employed 18-65 year olds sick listed between >28 and <180 days and/or had consulted the doctor about the same problem at least three times in the last 12 months (as recorded by the referring physicians) | Primary care | 158Women: 110 (69%) | 47 (range 24-65) | Worsening or improving sick leave during follow-up | Not clear | 3 | Orebro Musculoskeletal pain questionnaire scoreFunctionPainDistressFear avoidanceRTW expectationsCoping |

**Key: \*** Study also presents a prognostic model: † Not included in the analyses: SE – Standard Error: SD – Standard Deviation:

**Table 2: Study Characteristics (prognostic models)**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Paper ID** | **Recruitment dates** | **Country** | **Participants** | **Study setting** | **Total number of participants** | **Mean age (years)** | **Absence definition** | **Absence duration (baseline)** | **Follow-up (years)** | **Predictors in final model** | **Prognostic model performance** |
| Bosman et al. 2019 [45] | 2016-2018 | The Netherlands | On sick leave at baseline for low back pain defined using ICD codes | Occupational Health | 103Women 28 (25%) | 47.4 (SD 10.49) | Still being sick listed due to low back pain at 180 days follow-up. Sick leave was defined as temporary paid leave off work with any injury or illness both work related and not work related | Mean 53.9 days (SD 30.0 days) | 0.5 | CatastrophisingMusculoskeletal work loadDisability | Calibration slope = 0.761  |
| Branton et al. 2010 [46] | Oct 2004- May 2005 | Canada | Claimants undergoing Functional Capacity Evaluation | Occupational Health | 147Women: 45 (31%) | 43.3 (SD 11.1) | Future recurrence of benefits | 611 days | 1 | AgeTimeliness of referralLanguage barriersAttorney involvement | C statistic = 0.6PPV 60%NPV 54% |
| Du Bois et al. 2009 [47] | Not reported | Belgium | Sickness fund claimants who were work in capacitated by low back pain not requiring surgery | Health records (insurance) | 346Women: 162 (47%) | 41 | The period an employee is absence from work with full pay as a result of injury | 98% reported absence duration of >12 weeks at baseline | 0.5 | Pain below the kneeNot very sure to return to work within 6 months (<10 on 10 point likert scale)Very important interference of pain in daily activities ≥8 on 10 point likert scale) | c statistic = 0.801: 95% Confidence Interval: 0.727–0.876ROC correctly identified 73.7% of the non-resumers and 78.4% of the resumers |
| Fulton-Kehoe et al. 2008 [48] | July 2002 – April 2004 | USA | Workers with accepted or provisional workers compensation back sprain claims for wage replacement benefits (work disability) | Health records (insurance) | 1885Women: 603 (32%) | 39.4 | Long-term disability defined as the receipt of work disability payments 1 year after claim submission', where work disability payments 'end when a worker has returned to work or has been determined to be able to work' | Mean 83 days  | 1 | Pain interference with workCurrent work status (working vs not working)Radiating pain | Primary model AUC 0.79Sensitivity 72%Specificity 78%PPV 35% |
| Okurowski et al. 2003 [28] | Jan 1997 – Mar 2000 | USA | Cases who were out of work at 3 months post injury as the result of uncomplicated low back pain | Health records (insurance) | 982Women: 256 (26%) | Not working group 37.3 (SE0.42)Working group 35.0 (SE0.54) | Absence defined as working or not working at 6 months | 3 months | 0.5 | AgeTimeliness of referralLanguage barriersAttorney involvement | C statistic = 0.6PPV 60%NPV 54% |
| Richter et al. 2011 [35] | Nov 2004 – Dec 2006 | The Netherlands | Individuals with: New work disability insurance claim episode from November 2004 until December 2006Participants with non-specific musculoskeletal symptomsUnable to fulfill job for more than 25% according to a medical assessment.  | Health records (insurance) | 276Women: 20 (7%) | 45 (SD 7) | claim duration, defined as the number of calendar days the participant received work disability compensation between completion of the baseline questionnaire and one-year follow up, without adjustment for the level of work disability (gross duration). The end of a claim period was defined as having less than 25% work disability according to a medical assessment, with a minimum duration of 4 weeks. | Mixed | 1 | AgeHistory of similar symptomsDuration of symptomsSelf-predicted timing of RTWJob satisfaction | Not reported |
| Smith et al. 2014 [40] | Jan 2005 – Dec 2007 | Australia (Victoria) | Wage-replacement claimants with anincapacity start date between January 1st, 2005 andDecember 31st, 2007, which were either (mental health or)back or upper extremity musculoskeletal claims; claims fromfull-time or part-time employees | Health records (insurance) | 10,899Women: 4197 (38,5%) | 15-24y = 6.2%; 25-34y=17.7%; 35-44y=29.7%; 45-54y=36.8%; 55+=16.9% | No. of days of total wage replacement over 2 years from first day of absence | 1 day | 2 | Not reported | 14.12% of predicted days of absence within 30 days of actual days of absence (22.31% within 31-60d; 25.68% within 61-90d; 37.89% more than 90 days out) |
| Steenstra et al. 2015 [41] | Jan 2005 – Jun 2005 | Canada | Individuals with compensated work absence after uncomplicated back injury | Health records (insurance) | 1442Women: 552 (38%) | 41.3 (SD 10.5) | 1) time on compensation benefits until RTW2) time to further period of compensated absence defined as recurrence of same injury | 4 weeks | 2 | *Time on benefits:*AgeSexPhysical demandsUnion memberEarly RTWRecovery expectedFunctional abilitiesOpioid prescription*Time until recurrence:*AgeSexPhysical demandsOpioid prescriptionEarly RTWFunctional ability | *Time on benefits:*AUC: 0.71 (95%CI0.67-0.75) at 6 monthsAUC: 0.79 (95%CI 0.74-0.84) at 24 months*Time until recurrence:*AUC: 0.60 (95%CI 0.54-0.64) at 1 monthAUC: 0.61 (95%CI 0.57-0.65) at 3 monthsAUC: 0.61 (95%CI 0.57-0.65) at 6 months  |
| Steenstra et al. 2016[49] | Jan 2005 – Jun 2005 | Canada | Workers who had a lost-time claim (LTC) for an uncomplicated back injury (strain or sprain) approved by the Workplace Safety and Insurance Board (WSIB) of OntarioAnd participants from a RTW cohort study | Health records (insurance) | 1555Women: 605 (39%) | WSIB group 41.3 (SD 10.5)RTW group 44.0 (SD 10.2) | Time on benefits during a first claim for back pain as the length in calendar days of the first continuous episode of any wage replacement | At least 4 weeks | 1 | Model reported in Steenstra 2015 (above) plus: Pain score | AUC = 0.80, (95 % CI 0.68, 0.91) at 180 days, AUC = 0.88, (95 % CI 0.74, 1.00) at 360 days |
| Truchon et al. 2010 [50] | Apr 2002 – Sept 2013 | Canada | Compensated workers aged between 18 and 60 years, on sick leave for common LBP for a minimum of 3 weeks but no more than 11 weeks, and no previous episode of LBP in the preceding year | Health records (insurance) | 439 Women: 178 (40%) | 38 (SD 10) | Number of days absence | Between 3 and 11 weeks Median 63 days from date of injury | 1 | Stress process model which included: Life eventsCognitive appraisal of LBPAvoidanceCopingEmotional distressDisability | The adapted stress process model explained less than 20% of the variance of number of days of absence at 6 and 12 months |
| Truchon et al. 2012[37] | Not reported | Canada | French-speaking workers receiving income replacement benefits because of common LBP. | Health records (insurance) | 535Women: 218 (40.7%) | 42 (± 10) | Number of days absence calculated from injury date | 61.7% had less than 182 days 38.3% had more than 182 days | 1 | Fear avoidance beliefsRTW expectationsAnnual family incomeLast level of education attained\_elementaryWork schedule\_irregularWork concerns | C statistic = 0.73 for predicting absence >182 days |
| Turner et al. 2006 [33] | Jul 2002 – Jun 2003 | USA | Workers 18 years or older who submitted Workers’ Compensation claims for work-related back pain and received at least 1 day of temporary total disability wage replacement (i.e., had at least 4 days of work disability, as required for receiving wage replacement) | Population based | 1080 Women: 328 (31%) | 45 (SD7) | The primary outcome was wage replacement compensation for temporary total disability (“work disability”) 6 months (180 days) after claim submission. Number of days of wage replacement receipt in this period was also examined (“work disability duration”).Temporary total disability payments are stopped when a worker returns to work or is judged to be medically stable and able to work. | Mixed | 0.5 | Recovery expectationsWork fear avoidance | Not reported |
| Westman et al. 2008 [42] | 1998 - 2000 | Sweden | Employed -18 and 65 years old, sick listed ≥28 days - ≤180 days and/or had consulted the doctor about the same problem 3 times the last 12 months according to information from the referring physicians | Primary care | 158 Women 110 (69%) | 47 (range 24-65) | Impaired sick leave defined as a patient who maintains or increases her/his sick leave level at the follow-up or improved sick leave during follow-up defined as a patient who has decreased her/his sick leave level at follow-up | Sick leave, days previous 12 months 0–30 days 49 31 31–60 days 46 30 61–90 days 21 13 91–180 days 40 26 | 3 | Adjusting for age and earlier sick leave (p less than 0.2) factor I (function) and factor II (pain) significantly predicted sick leave after 3 years (factors derived from Orebro)Orebro full scale | Sensitivity 63% Specificity 77%A cutoff ‘‘at-risk” score of 117 correctly classified (sensitivity) 78% of the poor outcomes (failed to reduce sick leave) and a cut-off score of 139 correctly classified 44% of those who failed to reduce their sick leave. For the same score levels 49% and 89% of those who succeeded in reducing their sick leave were correctly classified (specificity). |

**Table 3: GRADE assessing strength of the evidence for predicting absence (prognostic factors)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | **1** | **2** | **3** | **4** |  |
| **Prognostic factor** | **Number of participants / studies** | **Effect size** | **QUIPS ROB** | **Inconsistency** | **Indirectness** | **Imprecision** | **Strength of evidence** |
| Age\* | 28,251 participants7 studies | Range: 0.54 -1.27 HR0.9-0.97 ORSignificant association: 5 studies all indicating older age to be protective | Downgrade 1 as more than half have high ROB | Downgrade 1 estimates of effect vary with points either side of the line of no effect and heterogeneity between studies in prognostic factor definition | No concerns | No concerns | **Low** |
| Sex† | 7,219 participants4 studies | Range: 0.84-1.59 HRSignificant association: 4 studies mixed direction | Downgrade 1 as more than half have high ROB | Downgrade 1 estimates of effect vary with points either side of the line of no effect and heterogeneity between studies in prognostic factor definition | No concerns | No concerns | **Low** |
| Recovery expectations | 3,019 participants4 studies | Range: 0.23-2.32 HR1.44-3,08 OR (from 1 study)Significant association: 4 studies mixed direction | Downgrade 1 as more than half have moderate/high ROB | Downgrade 1 heterogeneity between studies in prognostic factor definition | No concerns | No concerns | **Low** |
| Previous absence | 7,107 participants4 studies | Range: 0.91-1.50 HRSignificant association: 2 both different directions | Downgrade 1 as more than half have high ROB | Downgrade 1 estimates of effect vary with points either side of the line of no effect and heterogeneity between studies in prognostic factor definition | No concerns | No concerns | **Low** |
| Mental health ‡ | 1,691 participants3 studies | Range: 0.83-4.64 ORSignificant association: 1 study | Downgrade 1 as more than half have high ROB | Downgrade 1 estimates of effect vary with points either side of the line of no effect and heterogeneity between studies in prognostic factor definition | No concerns | No concerns | **Low** |
| Physical work demands | 5,148 participants5 studies | Range: 0.81–1.45 HRSignificant association: 2 studies mixed direction | Downgrade 1 as more than half have high ROB | Downgrade 1 estimates of effect vary with points either side of the line of no effect and heterogeneity between studies in prognostic factor definition | No concerns | No concerns | **Low** |
| Work culture§ | 3,028 participants4 studies | Range:1.11-1.85 HRSignificant association: 4 studies | Downgrade 1 as more than half have moderate/high ROB | Downgrade 1 estimates of effect vary with points either side of the line of no effect and heterogeneity between studies in prognostic factor definition | No concerns | No concerns | **Low** |
| Pain‖ | 851 participants4 studies | Range:0.96-1.17 HRSignificant association: 3 | Downgrade 1 as more than half have moderate/high ROB | Downgrade 1 estimates of effect vary with points either side of the line of no effect and heterogeneity between studies in prognostic factor definition | Downgrade 1Westman et al 2008 include those who are not absent from work but do not present the results separately | No concerns | **Very low** |
| Function | 2,182 participants5 studies | Range:0.56-2.32 HRSignificant association: 4 studies | Downgrade 1 as more than half have high ROB | Downgrade 1 estimates of effect vary with points either side of the line of no effect and heterogeneity between studies in prognostic factor definition | Downgrade 1Westman et al 2008 include those who are not absent from work but do not present the results separately | No concerns | **Very low** |
| General health and quality of life | 787 participants3 studies | Range: 0.90-1.60 HR1.51-2.26 ORSignificant association: 2 | Downgrade 1 as more than half have high ROB | Downgrade 1 estimates of effect vary with points either side of the line of no effect and heterogeneity between studies in prognostic factor definition | No concerns | No concerns | **Low** |

QUIPS – Quality in Prognostic Studies, ROB – Risk of bias, HR – Hazard Ratio

\* 2 studies do not report data to calculate effect sizes (Shiels *et al*. 2004, Smith *et al*. 2014)

† 3 studies do not report data to calculate effect sizes (Shiels *et al*. 2004, Smith *et al*. 2014, Truchon *et al*. 2010)

1 study did not report data to calculate effect size (Westman *et al*. 2008)

§1 study did not report data to calculate effect size (Smith *et al*. 2014)

‖1 study did not report data to calculate effect size (Truchon *et al*. 2010)

Not able to include in the GRADE assessment due to wide heterogeneity: Other demographics; work schedule; specific work demands; work characteristics; other work variables; injury location; other health conditions reported.

**Table 4: GRADE assessing strength of the evidence for predicting absence (models)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | **1** | **2** | **3** | **4** |  |
| **Prognostic models** | **Number of participants / studies** | **Rating of performance\*** | **PROBAST ROB**† | **Inconsistency**‡ | **Indirectness** | **Imprecision** | **Strength of evidence** |
|  | 20,139/ 13 studies | c-statistic (AUC)Range 0.6 – 0.88Sensitivity range 63%-72% Specificityrange Sp 64%-78%Positive predictive valueRange 35%-60%Negative predictive value range 54%-83% | No concerns | Downgrade 1 due to missing confidence intervals when reporting c-statistics | Downgrade 1Westman et al 2008 include those who are not absent from work but do not present the results separately | No concerns | **Low** |

PROBAST - Prediction model Risk Of Bias ASsessment Tool – ROB Risk of Bias – AUC Area Under the Curve

\*c-statistic or AUC >0.7 would indicate a good/strong model

† Five of the 13 included studies had high or unclear risk of bias, as this did not meet the criteria for downgrading no concerns were reported here

‡ Three tudies reported confidence intervals (Dubois *et al* 2009, Steenstra *et al* 2015 & 2016)