**Appendix Table F36. Association between intermediate outcomes and disability**

| **Author, year** **Study characteristics** | **Adjustment** | **Intermediate outcome** | **Outcomes** | **Regression model** | **Regression coefficient (95% CI)** |
| --- | --- | --- | --- | --- | --- |
| van Baar, 1998381Country: The NetherlandsAge: NRSample: 112 | Pain coping: worrying, resting; range of motion; medication: NSAID; age | Muscle strength | Observed disability determined by studying videos of the patients' performance of a series of standardized tasks using an adaptation of the method described by Keefe | Linear | **-0.24 P value ≤0.01** |
| van Baar, 1998381Country: The NetherlandsAge: NRSample: 112 | Pain coping: resting; range of motion; pain | Muscle strength | Self-reported disability-IRGL, mobility subscale | Linear | **-0.22 P value ≤0.01** |
| van Baar, 1998381Country: The NetherlandsAge: NRSample: 112 | Pain coping: worrying, resting; muscle strength; medication: NSAID; age | Range of Motion | Observed disability determined by studying videos of the patients' performance of a series of standardized tasks using an adaptation of the method described by Keefe | Linear | **-0.27 P value ≤0.01** |
| van Baar, 1998381Country: The NetherlandsAge: NRSample: 112 | Pain coping: resting; muscle strength; pain | Range of motion | Self-reported disability-IRGL, mobility subscale | Linear | **-0.28 P value ≤0.01** |
| Clark, 1998382Country: U.S.Age: >40Sample: 415 | Education, employment, comorbidity, crepitus, bony enlargement, joint tenderness | Osteoarthritis of the Knee Severity Index | SF-36: Role function with physical limitations | Linear | **-1.19 P value <0.001** |
| Clark, 1998382Country: U.S.Age: >40Sample: 415 | Age, education, comorbidity, crepitus, employment, bony enlargement | Joint tenderness | SF-36: Physical function | Linear | 1.07 P value 0.69 |
| Clark, 1998382Country: U.S.Age: >40Sample: 415 | Age, education, comorbidity, crepitus, employment, bony enlargement | Joint tenderness | SF-36: Role function with physical limitations | Linear | -0.84 P value 0.83 |
| van Baar, 1998381Country: The NetherlandsAge: NRSample: 112 | Pain coping: resting; muscle strength; range of motion | Pain | Self-reported disability-IRGL, mobility subscale | Linear | **0.21 P value ≤0.05** |
| van Baar, 1998381Country: The NetherlandsAge: NRSample: 112 | Pain coping: worrying; muscle strength; medication: NSAID; age; range of motion | Pain coping: Resting | Observed disability determined by studying videos of the patients' performance of a series of standardized tasks using an adaptation of the method described by Keefe | Linear | **0.21 P value ≤0.01** |
| van Baar, 1998381Country: The NetherlandsAge: NRSample: 112 | Pain; muscle strength; range of motion | Pain coping: Resting | Self-reported disability-IRGL, mobility subscale | Linear | **0.26 P value ≤0.01** |
| van Baar, 1998381Country: The NetherlandsAge: NRSample: 112 | Pain coping: resting; muscle strength; medication: NSAID; age; range of motion | Pain coping: Worrying | Observed disability determined by studying videos of the patients' performance of a series of standardized tasks using an adaptation of the method described by Keefe | Linear | **0.20 P value ≤0.05** |
| van Dijk, 2009383Country: The NetherlandsAge: >50Sample: 288 | Muscle strength | ROM | Self-reported limitations | Linear | **0.252, P value <0.01** |
| van Dijk, 2009383Country: The NetherlandsAge: >50Sample: 288 | Muscle strength, pain | ROM | Self-reported limitations | Linear | **0.153, P value <0.01** |
| van Dijk, 2009383Country: The NetherlandsAge: >50Sample: 288 | Muscle strength, pain, comorbidity | ROM | Self-reported limitations | Linear | **0.133, P value <0.05** |
| van Dijk, 2009383Country: The NetherlandsAge: >50Sample: 288 | Muscle strength | ROM hip internal rotation | Self-reported limitations | Linear | **0.153, P value <0.05** |
| van Dijk, 2009383Country: The NetherlandsAge: >50Sample: 288 | Muscle strength, pain  | ROM: Hip internal rotation | Self-reported limitations | Linear | 0.044, P value NR |
| van Dijk, 2009383Country: The NetherlandsAge: >50Sample: 288 | Muscle strength, pain, comorbidity | ROM: Hip internal rotation | Self-reported limitations | Linear | 0.041, P value NR |
| Maly, 2006384Country: CanadaAge: >50Sample: 54 | NR | Peak knee extension angle (o) | SF-36 (disability) | Linear | **-6.42, P value 0.001** |
| Maly, 2006384Country: CanadaAge: >50Sample: 54 | NR | Range knee flexion/extension angle (o) | SF-36 (disability) | Linear | **3.04, P value 0.021** |
| Steultjens, 2000365Country: The NetherlandsAge: NRSample: 198 | NR | Knee flexion (ROM) | Observed disability | Linear | -0.154, P value NR |
| Steultjens, 2000365Country: The NetherlandsAge: NRSample: 198 | NR | Hip extension (ROM) | Observed disability | Linear | **-0.201, P value <0.05** |
| Steultjens, 2000365Country: The NetherlandsAge: NRSample: 198 | NR  | Hip abduction (ROM) | Observed disability | Linear | -0.186, P value NR |
| Steultjens, 2000365Country: The NetherlandsAge: NRSample: 198 | NR | Hip external rotation (ROM) | Observed disability | Linear | **-0.224, P value <0.05** |
| Steultjens, 2000365Country: The NetherlandsAge: NRSample: 198 | NR | Knee flexion (ROM) | Self-reported disability | Linear | **-0.195, P value <0.05** |
| Steultjens, 2000365Country: The NetherlandsAge: NRSample: 198 | NR | Hip extension (ROM) | Self-reported disability | Linear | **-0.279, P value <0.01** |
| Steultjens, 2000365Country: The NetherlandsAge: NRSample: 198 | NR | Hip external rotation (ROM) | Self-reported disability | Linear | **-0.331, P value <0.01** |
| van Dijk, 2009383Country: The NetherlandsAge: >50Sample: 288 | Muscle strength | ROM: Hip flexion | Performance -based limitations | Linear, standardized beta coefficient | **-0.21, P value <0.01** |
| van Dijk, 2009383Country: The NetherlandsAge: >50Sample: 288 | Unadjusted | ROM: Hip flexion | Self-reported limitations in activities | Linear, standardized beta coefficient | **0.376, P value <0.01** |
| van Dijk, 2009383Country: The NetherlandsAge: >50Sample: 288 | Unadjusted | ROM: Hip flexion | Performance -based limitations in activities | Linear, standardized beta coefficient | **-0.401, P value <0.01** |
| van Dijk, 2009383Country: The NetherlandsAge: >50Sample: 288 | Unadjusted | ROM: Hip internal rotation | Self-reported limitations in activities | Linear, standardized beta coefficient | **0.246, P value <0.01** |
| van Dijk, 2009383Country: The NetherlandsAge: >50Sample: 288 | Unadjusted | ROM: Hip internal rotation | Performance -based limitations in activities | Linear, standardized beta coefficient | **-0.125, P value <0.05** |
| van Dijk, 2009383Country: The NetherlandsAge: >50Sample: 288 | Unadjusted | ROM: Hip external rotation | Self-reported limitations in activities | Linear, standardized beta coefficient | **0.175, P value <0.01** |
| van Dijk, 2009383Country: The NetherlandsAge: >50Sample: 288 | Unadjusted | ROM: Hip external rotation | Performance -based limitations in activities | Linear, standardized beta coefficient | **-0.238, P value <0.01** |
| van Dijk, 2009383Country: The NetherlandsAge: >50Sample: 288 | Unadjusted | ROM: Knee flexion | Self-reported limitations in activities | Linear, standardized beta coefficient | **0.204, P value <0.01** |
| van Dijk, 2009383Country: The NetherlandsAge: >50Sample: 288 | Unadjusted | ROM: Knee flexion | Performance -based limitations in activities | Linear, standardized beta coefficient | **-0.296, P value <0.01** |
| van Dijk, 2009383Country: The NetherlandsAge: >50Sample: 288 | Unadjusted | ROM: Knee extension | Self-reported limitations in activities | Linear, standardized beta coefficient | -0.008, P value NR |
| van Dijk, 2009383Country: The NetherlandsAge: >50Sample: 288 | Unadjusted | ROM: Knee extension | Performance -based limitations in activities | Linear, standardized beta coefficient | **-0.246, P value <0.01** |
| van Dijk, 2009383Country: The NetherlandsAge: >50Sample: 288 | Muscle strength | Muscle strength knee extension | Self-reported limitations | Linear | **0.215, P value <0.01** |
| van Dijk, 2009383Country: The NetherlandsAge: >50Sample: 288 | Muscle strength, pain | Muscle strength knee extension | Self-reported limitations | Linear | **0.136, P value <0.01** |
| van Dijk, 2009383Country: The NetherlandsAge: >50Sample: 288 | Muscle strength, pain, comorbidity | Muscle strength knee extension | Self-reported limitations | Linear | **0.128, P value <0.01** |
| O’Reilly, 1998380Country: UKAge: >40Sample: 300 each of cases and controls | Age, sex, BMI, depression, anxiety, activation (%), radiographic score | MVC (Maximum voluntary contraction of quadriceps) (kgF): >30 | Disability (WOMAC function score >19) | Logistic | 1.00 (1.00; 1.00) reference |
| O’Reilly, 1998380Country: UKAge: >40Sample: 300 each of cases and controls | Age, sex, BMI, depression, anxiety, activation (%), radiographic score | MVC (Maximum voluntary contraction of quadriceps) (kgF): 20-30 | Disability (WOMAC function score >19) | Logistic | 1.48 (0.37; 5.93) |
| O’Reilly, 1998380Country: UKAge: >40Sample: 300 each of cases and controls | Age, sex, BMI, depression, anxiety, activation (%), radiographic score | MVC (Maximum voluntary contraction of quadriceps) (kgF): 10-20 | Disability (WOMAC function score >19) | Logistic | **4.88 (1.18; 20.14)** |
| O’Reilly, 1998380Country: UKAge: >40Sample: 300 each of cases and controls | Age, sex, BMI, depression, anxiety, activation (%), radiographic score | MVC (Maximum voluntary contraction of quadriceps) (kgF): <=10 | Disability (WOMAC function score >19) | Logistic | **8.23 (1.53; 44.38)** |
| O’Reilly, 1998380Country: UKAge: >40Sample: 300 each of cases and controls | Age, sex, BMI, depression, anxiety, activation (%), radiographic score | MVC (Maximum voluntary contraction) (kgF): >40 | Disability (SF-36 function score <90) | Logistic | 1.00 (1.00; 1.00) reference |
| O’Reilly, 1998380Country: UKAge: >40Sample: 300 each of cases and controls | Age, sex, BMI, depression, anxiety, activation (%), radiographic score | MVC (Maximum voluntary contraction) (kgF): 30 -40 | Disability (SF-36 function score <90) | Logistic | 3.04 (0.86; 10.71) |
| O’Reilly, 1998380Country: UKAge: >40Sample: 300 each of cases and controls | Age, sex, BMI, depression, anxiety, activation (%), radiographic score | MVC (Maximum voluntary contraction) (kgF): 20-30 | Disability (SF-36 function score <90) | Logistic | **3.77 (1.02; 13.91)** |
| O’Reilly, 1998380Country: UKAge: >40Sample: 300 each of cases and controls | Age, sex, BMI, depression, anxiety, activation (%), radiographic score | MVC (Maximum voluntary contraction) (kgF): <=20 | Disability (SF-36 function score <90) | Logistic | **4.98 (1.08; 22.97)** |
| van Dijk, 2009383Country: The NetherlandsAge: >50Sample: 288 | Muscle strength | Muscle strength hip abduction | Performance -based limitations | Linear | **-0.184, P value <0.01** |
| van Dijk, 2009383Country: The NetherlandsAge: >50Sample: 288 | Muscle strength, pain | Muscle strength hip abduction | Performance -based limitations | Linear | **-0.174, P value <0.01** |
| van Dijk, 2009383Country: The NetherlandsAge: >50Sample: 288 | Muscle strength, pain, cognitive functioning | Muscle strength hip abduction | Performance -based limitations | Linear | **-0.186, P value <0.01** |
| van Dijk, 2009383Country: The NetherlandsAge: >50Sample: 288 | Muscle strength, pain, cognitive functioning, age/BMI | Muscle strength hip abduction | Performance -based limitations | Linear | **-0.17, P value <0.01** |
| van Dijk, 2009383Country: The NetherlandsAge: >50Sample: 288 | Unadjusted | Muscle strength hip abduction | Self-reported limitations in activities | Linear | **0.318, P value <0.01** |
| van Dijk, 2009383Country: The NetherlandsAge: >50Sample: 288 | Unadjusted | Muscle strength hip abduction | Performance -based limitations in activities | Linear | **-0.356, P value <0.01** |
| van Dijk, 2009383Country: The NetherlandsAge: >50Sample: 288 | Unadjusted | Muscle strength knee extension | Self-reported limitations in activities | Linear | **0.306, P value <0.01** |
| van Dijk, 2009383Country: The NetherlandsAge: >50Sample: 288 | NR | Muscle strength knee extension | Performance -based limitations in activities | Linear | **-0.274, P value <0.01** |

Bold-statistically significant results