**Supplementary table 2. Risk of bias tool (adapted from the EPHPP)**

**Study ID (Author Year): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Rater initials: \_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_**

**Notes:**

**A) SELECTION BIAS**

**(A1) Are the individuals selected to participate in the study likely to be representative of the target population?**

1. 1 Very likely
2. 2 Somewhat likely
3. 3 Not likely
4. 4 Can’t tell

*Patients would be representative if they comprised the entire source population, an unselected sample of consecutive patients, or a random sample (score very likely). They may not be representative if they are referred from a source (e.g. clinic) in a systematic manner (score somewhat likely) or self-referred (score not likely).*

**(A2) What percentage of selected individuals agreed to participate / replied to survey?**

1. 1 80 - 100% agreement (60-100% response rate if survey)
2. 2 60 – 79% agreement (40-60% response rate if survey)
3. 3 less than 60% agreement (<40% response rate if survey)
4. 4 Not applicable
5. 5 Can’t tell

*For interventional studies: Refers to the % of subjects that agreed to participate before they were assigned to a group*

*For survey-based studies: Refers to the % of subjects that returned the questionnaire/survey in cross-sectional studies (not the % of subjects without missing data)*

|  |  |  |  |
| --- | --- | --- | --- |
| **RATE THIS SECTION** | **STRONG** | **MODERATE** | **WEAK** |
| **Strong**: Selected individuals are very likely to be representative of the target population (Q1 is 1) **and** > 80% participation / 60-100% response rate (Q2 is 1).  **Moderate**: Selected individuals are at least somewhat likely to be representative of the target population (Q1 is 1 or 2); **and** 60 - 79% participation / 40-60% response rate (Q2 is 2). ‘Moderate’ may also be assigned if Q1 is 1 or 2 **and** Q2 is 5 (can’t tell).  **Weak**: Selected individuals are not likely to be representative of the target population (Q1 is 3); **or** there is <60% participation / <40% response rate (Q2 is 3) **or** selection is not described (Q1 is 4); and level of participation is not described (Q2 is 5). | 1 | 2 | 3 |

**B) STUDY DESIGN**

**(B1) Indicate the study design**

1 Randomized controlled trial (RCT) 2 Controlled clinical trial (CCT)

3 Cohort analytic (two group pre + post) 4 Case-control

5 Cohort (one group pre + post (before and after)) (BA) 6 Interrupted time series (ITS)

7 Cross-sectional study (XS) 8 Other specify \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

9 Can’t tell

**(B2) Were there two study groups?**

No Yes

**(B3) Was the study described as randomized?**

No Yes Not applicable

**(B4) If Yes, was the method of randomization described? (See dictionary)**

No Yes Not applicable

**(B5) If Yes, was the method appropriate? (See dictionary)**

No Yes Not applicable

|  |  |  |  |
| --- | --- | --- | --- |
| **RATE THIS SECTION** | **STRONG** | **MODERATE** | **WEAK** |
| **Strong**: RCTs, CCT; **Moderate**: cohort study, case control study, before-after, ITS; **Weak**: cross-sectional, other design | 1 | 2 | 3 |

**C) CONFOUNDERS**

**(C1) Were there important differences between groups prior to the intervention?**

1 Yes 3 Can’t tell

2 No 4 Not applicable (for cross-sectional or before-after studies with one study group only)

**The following are examples of confounders:**

1 Race 2 Sex

3 Marital status/family 4 Age

5 SES (income or class) 6 Education

7 Health status 8 Pre-intervention score on outcome measure

**(C2) If yes, indicate the percentage of relevant confounders that were controlled (either in the design (e.g. stratification, matching) or analysis)?**

1. 1 80 – 100% (most)
2. 2 60 – 79% (some)
3. 3 Less than 60% (few or none)
4. 4 Can’t Tell
5. 5 Not applicable (for cross-sectional or before-after studies with one study group only)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **RATE THIS SECTION** | **STRONG** | **MODERATE** | **WEAK** | **N/A** |
| **Strong**: will be assigned to those articles that controlled for at least 80% of relevant confounders (Q1 is 2); **or** (Q2 is 1).  **Moderate**: will be given to those studies that controlled for 60 – 79% of relevant confounders (Q1 is 1) **and** (Q2 is 2).  **Weak**: will be assigned when < 60% of relevant confounders were controlled (Q1 is 1) **and** (Q2 is 3) **or** control of confounders was not described (Q1 is 3) **and** (Q2 is 4). | 1 | 2 | 3 | 4 |

**D) BLINDING**

**(D1) Was the outcome assessor aware of the intervention or exposure status of participants?**

1 Yes 3 Can’t tell

2 No 4 Not applicable (for cross-sectional or before-after studies with one study group only)

**(D2) Were the study participants aware of the research question?**

1 Yes 3 Can’t tell

2 No 4 Not applicable (for cross-sectional or before-after studies with one study group only)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **RATE THIS SECTION** | **STRONG** | **MODERA** | **WEAK** | **N/A** |
| **Strong**: Outcome assessor is not aware of the intervention status of participants (Q1 is 2); **and** study participants are not aware of the research question (Q2 is 2).  **Moderate**: Outcome assessor is not aware of the intervention status of participants (Q1 is 2); **or** study participants are not aware of the research question (Q2 is 2); **or** blinding is not described (Q1 is 3 and Q2 is 3).  **Weak**: Outcome assessor is aware of the intervention status of participants (Q1 is 1); **and** study participants are aware of the research question (Q2 is 1). | 1 | 2 | 3 | 4 |

**E) DATA COLLECTION METHODS** -> STRONG

**(E1 and E2) Were data collection tools shown to be valid and reliable?** Yes

**F) WITHDRAWALS, DROP-OUTS AND MISSING DATA**

**(F1) Were withdrawals and drop-outs reported in terms of numbers and/or reasons per group?**

1. 1 Yes 3 Can’t tell
2. 2 No 4 Not applicable (for cross-sectional studies)

**(F2) Indicate the percentage of participants completing the study (at the final data collection period) (If the percentage differs by groups, record the lowest).**

1 80 -100% 4 Can’t tell

2 60 - 79% 5 Not applicable (for cross-sectional studies)

3 less than 60%

**(F3) Was the proportion of missing data similar in the intervention and control groups or 10% or less in studies without comparison groups?**

1 Yes 3 Can’t tell

2 No (-> indicate % missing data:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_)

|  |  |  |  |
| --- | --- | --- | --- |
| **RATE THIS SECTION** | **STRONG** | **MODERATE** | **WEAK** |
| **Strong**: will be assigned when the follow-up rate is >=80% (Q2 is 1) **or** the proportion is similar or missing data <=10% (Q3 is 1).  **Moderate**: will be assigned when the follow-up rate is 60 – 79% (Q2 is 2) or when missing data is 11-20% (Q3 is 2) or if the withdrawals, drop-outs and missing data are not described (Q1 is 3, Q2 is 4, or Q3 is 3)  **Weak**: will be assigned when a follow-up rate is < 60% (Q2 is 3) **or** when missing data is >20% (Q2 is 3). | 1 | 2 | 3 |

**G) INTERVENTION INTEGRITY**

**(G1) What percentage of participants received the allocated intervention or exposure of interest?**

1. 1 80 -100%
2. 2 60 - 79%
3. 3 less than 60%
4. 4 Can’t tell
5. 5 Not applicable (studies without interventions)

**(G2) Was the consistency of the intervention measured?**

1. 1 Yes 3 Can’t tell
2. 2 No 4 Not applicable (studies without interventions)

**(G3) Is it likely that subjects received an unintended intervention (contamination or co-intervention) that may influence the results?**

1. 1 Yes 3 Can’t tell
2. 2 No 4 Not applicable (studies without interventions)

**H) ANALYSES**

**(H1) Indicate the unit of allocation (circle one) if interventional study**

community organization/institution practice/office individual not applicable

**(H2) Indicate the unit of analysis (circle one) if interventional study**

community organization/institution practice/office individual not applicable

**(H3) Are the statistical methods appropriate for the study design?**

1. 1 Yes
2. 2 No
3. 3 Can’t tell

**(H4) Is the analysis performed by intervention allocation status (i.e. intention to treat) rather than the actual intervention received?**

1. 1 Yes 3 Can’t tell
2. 2 No 4 Not applicable (studies without interventions)

**COMPONENT RATINGS AND GLOBAL RATING**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **A. SELECTION BIAS** | STRONG | MODERATE | WEAK |  |
| **B. STUDY DESIGN** | STRONG | MODERATE | WEAK |  |
| **C. CONFOUNDERS** | STRONG | MODERATE | WEAK | N/A |
| **D. BLINDING** | STRONG | MODERATE | WEAK | N/A |
| **E. DATA COLLECTION METHODS** | STRONG | MODERATE | WEAK |  |
| **F. WITHDRAWALS, DROPOUTS, MISSING DATA** | STRONG | MODERATE | WEAK |  |

**Global rating for the paper (circle one): Final decision of both reviewers (circle one):**

1 STRONG (no WEAK ratings and 4 or more STRONG ratings) **1 STRONG**

2 MODERATE (one WEAK rating) **2 MODERATE**

3 WEAK (two or more WEAK ratings) **3 WEAK**