

## PI(E)COS Worksheet and Search Strategy

1. Define your question using PI(E)COS by identifying: Patient/Population/Problem; Intervention/Exposure, Comparison/Control Group and Outcome/s

### Patient/Population/Problem:

1. People aged 18 years or older (i.e. adults)
2. Currently employed

### Intervention:

Workplace-based interventions

Interventions must meet the following criteria to be considered a workplace-based intervention:

1. Interventions must be sourced through, subsidised or provided by the employer (e.g potentially eligible interventions would be drug screening / testing, screening / assessment and referral, psychoeducation, group-based or individual psychosocial interventions, tele- or e-health, peer-support groups or self-help programs).

### Comparison/Control:

Studies with or without a control group (e.g., usual care, active control, wait list control)

### Outcomes of Relevance:

Substance use outcomes measured at the level of the individual (e.g. quantity and/or frequency of substance use measured via self-report of biological testing; severity of symptoms of substance use disorder measured by scores on self- or clinician-rated diagnostic questionnaires). Substance use outcomes at the organisational level will not be included in the review.

## 2. Type of question/problem: Treatment/Therapy/Intervention/Exposure

Primary question:

What is the efficacy, effectiveness and cost-effectiveness of workplace-based interventions for the prevention and treatment of substance use?

Secondary questions:

- (a) Which modalities of workplace-based interventions are effective for preventing and/or treating problematic substance use?
- (b) How do characteristics of the workplace or the workforce impact on which types of interventions are most effective to prevent and/or treat problematic substance use?
- (c) What are the challenges and difficulties in implementing interventions for different drug classes in the workplace?

### 3. Types of studies/publication to include in the search

Study designs INCLUDED in the review	Study designs EXCLUDED from the review
Primary research studies, including: <ul style="list-style-type: none"><li>• Randomised controlled trials and other experimental studies</li><li>• Quasi-experimental studies (e.g. uncontrolled trials, pre-test/post-test designs)</li></ul> Literature reviews, including: <ul style="list-style-type: none"><li>• Systematic reviews</li><li>• Narrative reviews</li><li>• Meta-analyses</li><li>• Economic evaluations</li></ul>	Non-intervention/treatment studies, including: <ul style="list-style-type: none"><li>• Observational studies (e.g. cross-sectional surveys, cohort and case studies)</li><li>• Qualitative studies</li><li>• Case report or series</li><li>• Protocol and conference papers</li><li>• Editorials or commentaries</li></ul> Animal studies

### 4. List the main topics and alternative terms from your PI(E)COS question that can be used for your search:

#### **Condition (alcohol or other drug related terms)**

substance use / drug use / alcohol use / substance abuse / drug abuse / alcohol abuse / substance dependence/ drug dependence / alcohol dependence / substance use disorder / drug use disorder / alcohol use disorder / SUD / hazardous drinking / problem drinking / harmful drinking / risky drinking / drug testing

#### Subject heading

MeSH (MEDLINE/PubMed; Cochrane; CINAHL)

- substance-related disorders

Emtree (EMBASE)

- substance abuse
- drug abuse

APA's Thesaurus of Psychological Index Terms (PsychINFO)

- substance use disorder

#### **Interventions (prevention or treatment related terms)**

workplace / work-place / workforce / work-force / worksite / work-site / employee\* / job\* / employer\* / vocation\* / compan\* / office / offices / factory / factories

AND

prevent\* / program\* / intervention\* / train\* / polic\* / treatment\* / service\* / promotion\* / education/ psychoeducation / peer-support\* / peer support\* / self-help\* / self help\*/support\* / testing

#### Subject heading

*MeSH (MEDLINE/PubMed; Cochrane; CINAHL)*

- occupational health services

*APA's Thesaurus of Psychological Index Terms (PsychINFO)*

- employee assistance programs
- workplace intervention

### **Efficacy and effectiveness terms**

RCT / randomi?ed controlled trial\* / clinical trial\* / efficacy trial\* / efficacy evaluation\* / systematic review\* / meta analy\* / meta-analy\* / effectiveness evaluation\* / pragmatic trial\* / effectiveness trial\* / outcome evaluation\* / impact evaluation\* / objective-based evaluation\* / summative evaluation\*

#### Subject headings

*MeSH (MEDLINE/PubMed; Cochrane; CINAHL)*

- treatment outcome

*Emtree (EMBASE)*

- treatment outcome

*APA's Thesaurus of Psychological Index Terms (PsychINFO)*

- treatment outcomes

### **Cost-effectiveness terms**

cost benefit analys?s/ cost-benefit analys?s/ economic evaluation\* / costs and cost analys?s/ cost analys?s/ return on investment/ return to investment/ cost effectiveness analys?s/ cost-effectiveness analy?s/ cost utility analys?s/ cost effectiveness evaluation\* / cost-effectiveness evaluation\* / cost-utility analys?s

#### Subject headings

*MeSH (MEDLINE/PubMed; Cochrane; CINAHL)*

- cost-benefit analysis

*Emtree (EMBASE)*

- cost benefit analysis

**5. Write out your search strategy (adapt for each database)**

**PsychINFO (via Ovid)**

1. exp "Substance Use Disorder"/
2. ((use\* or abuse\* or misuse\* or dependenc\* or addict\* or disorder\* or problem\* or hazard\* or harm\* or risk\* or test\*) adj4 (substance or drug\* or alcohol\* or amphetamine\* or cannabis or marijuana or cocaine or inhalant\* or hallucinogen\* or phencyclidine or heroin or morphine or opioid\* or stimulant\* or sedative\* or hypnotic\* or anxiolytic\* or benzodiazepine\*)).mp.
3. SUD.mp.
4. **1 or 2 or 3**
5. ((organi?ation\* or busines\* or labor or labour or corporat\* or occupation\* or workplace or work-place or workforce or work-force or worksite or work-site or employee\* or job\* or employer\* or vocation\* or compan\* or office or offices or factory or factories) adj4 (prevent\* or program\* or intervention\* or train\* or polic\* or treatment\* or service\* or promotion\* or education\* or psychoeducation or peer-support\* or peer support\* or self-help\* or self help\* or support\* or test\*)).mp.
6. ("employee assistance program" or EAP or "critical incident stress debriefing" or CISD).mp.
7. workplace intervention/ or employee assistance programs/
8. **5 or 6 or 7**
9. treatment outcomes/
10. ("cost benefit analys?s" or "cost-benefit analys?s" or "economic evaluation\*" or "cost and cost anals?s" or "cost analys?s" or "return on investment" or "return to investment" or "cost effectiveness analys?s" or "cost-effectiveness analys?s" or "cost utility analysis" or "cost-utility analysis" or "cost effectiveness evaluation\*" or cost-effectiveness evaluation\* or RCT or randomi?ed controlled trial\* or clinical trial\* or efficacy trial\* or efficacy evaluation\* or systematic review\* or meta analy\* or meta-analy\*" or "effectiveness evaluation\*" or "pragmatic trial\*" or "effectiveness trial\*" or "outcome evaluation\*" or "impact evaluation\*" or "objective-based evaluation\*" or "summative evaluation\*").tw.
11. **9 or 10**
12. **4 and 8 and 11**

## **Medline (via Ovid)**

1. exp Substance-Related Disorders/
2. ((use\* or abuse\* or misuse\* or dependenc\* or addict\* or disorder\* or problem\* or hazard\* or harm\* or risk\* or test\*) adj4 (substance or drug\* or alcohol\* or amphetamine\* or cannabis or marijuana or cocaine or inhalant\* or hallucinogen\* or phencyclidine or heroin or morphine or opioid\* or stimulant\* or sedative\* or hypnotic\* or anxiolytic\* or benzodiazepine\*))).mp.
3. SUD.mp.
- 4. 1 or 2 or 3**
5. ((organi?ation\* or busines\* or labor or labour or corporat\* or occupation\* or workplace or work-place or workforce or work-force or worksite or work-site or employee\* or job\* or employer\* or vocation\* or compan\* or office or offices or factory or factories) adj4 (prevent\* or program\* or intervention\* or train\* or polic\* or treatment\* or service\* or promotion\* or education\* or psychoeducation or peer-support\* or peer support\* or self-help\* or self help\* or support\* or test\*))).mp.
6. ("employee assistance program" or EAP or "critical incident stress debriefing" or CISD).mp.
- 7. 5 or 6**
8. Treatment Outcome/
9. Cost-Benefit Analysis/
10. ("cost benefit analys?s" or "cost-benefit analys?s" or "economic evaluation\*" or "cost and cost analys?s" or "cost analys?s" or "return on investment" or "return to investment" or "cost effectiveness analys?s" or "cost-effectiveness analys?s" or "cost utility analysis" or "cost-utility analysis" or "cost effectiveness evaluation\*" or cost-effectiveness evaluation\* or RCT or randomi?ed controlled trial\* or clinical trial\* or efficacy trial\* or efficacy evaluation\* or systematic review\* or meta analy\* or meta-analy\*" or "effectiveness evaluation\*" or "pragmatic trial\*" or "effectiveness trial\*" or "outcome evaluation\*" or "impact evaluation\*" or "objective-based evaluation\*" or "summative evaluation\*").tw.
- 11. 8 or 9 or 10**
- 12. 4 and 7 and 11**

## **EMBASE**

1. exp substance abuse/
2. exp drug abuse/
3. ((use\* or abuse\* or misuse\* or dependenc\* or addict\* or disorder\* or problem\* or hazard\* or harm\* or risk\* or test\*) adj4 (substance or drug\* or alcohol\* or amphetamine\* or cannabis or marijuana or cocaine or inhalant\* or hallucinogen\* or phencyclidine or heroin or morphine or opioid\* or stimulant\* or sedative\* or hypnotic\* or anxiolytic\* or benzodiazepine\*)).mp.
4. SUD.mp.
5. **1 or 2 or 3 or 4**
6. ((organi?ation\* or busines\* or labor or labour or corporat\* or occupation\* or workplace or work-place or workforce or work-force or worksite or work-site or employee\* or job\* or employer\* or vocation\* or compan\* or office or offices or factory or factories) adj4 (prevent\* or program\* or intervention\* or train\* or polic\* or treatment\* or service\* or promotion\* or education\* or psychoeducation or peer-support\* or peer support\* or self-help\* or self help\* or support\* or test\*)).mp.
7. ("employee assistance program" or EAP or "critical incident stress debriefing" or CISD).mp.
8. **6 or 7**
9. treatment outcome/
10. cost benefit analysis/
11. ("cost benefit analys?s" or "cost-benefit analys?s" or "economic evaluation\*" or "cost and cost analys?s" or "cost analys?s" or "return on investment" or "return to investment" or "cost effectiveness analys?s" or "cost-effectiveness analys?s" or "cost utility analysis" or "cost-utility analysis" or "cost effectiveness evaluation\*" or cost-effectiveness evaluation\* or RCT or randomi?ed controlled trial\* or clinical trial\* or efficacy trial\* or efficacy evaluation\* or systematic review\* or meta analy\* or meta-analy\*" or "effectiveness evaluation\*" or "pragmatic trial\*" or "effectiveness trial\*" or "outcome evaluation\*" or "impact evaluation\*" or "objective-based evaluation\*" or "summative evaluation\*").tw.
12. **9 or 10 or 11**
13. **5 and 8 and 12**

## **Scopus**

(TITLE-ABS-KEY (((use\* OR abuse\* OR misuse\* OR dependenc\* OR addict\* OR disorder\* OR problem\* OR hazard\* OR harm\* OR risk\* or test\*) W/4 (substance OR drug\* OR alcohol\* OR amphetamine\* OR cannabis OR marijuana OR cocaine OR inhalant\* OR hallucinogen\* OR phencyclidine OR heroin OR morphine OR opioid\* OR stimulant\* OR sedative\* OR hypnotic\* OR anxiolytic\* OR benzodiazepine\*)) OR SUD))

### **AND**

(TITLE-ABS-KEY (((organi?ation\* OR busines\* OR labor OR labour OR corporat\* OR occupation\* OR workplace OR work-place OR workforce OR work-force OR worksite OR work-site OR employee\* OR job\* OR employer\* OR vocation\* OR compan\* OR office OR offices OR factory OR factories) W/4 (prevent\* OR program\* OR intervention\* OR train\* OR polic\* OR treatment\* OR service\* OR promotion\* OR education\* OR psychoeducation OR peer-support\* OR "peer support\*" OR self-help\* OR "self help\*" OR support\* or test\*)) OR "employee assistance program" OR EAP OR "critical incident stress debriefing" OR CISD))

### **AND**

(TITLE-ABS-KEY ("randomi?ed controlled trial\*" OR "clinical trial\*" OR "efficacy trial\*" OR "efficacy evaluation\*" OR "systematic review\*" OR "meta analy\*" OR "meta-analy\*" OR "effectiveness evaluation\*" OR "pragmatic trial\*" OR "effectiveness trial\*" OR "outcome evaluation\*" OR "impact evaluation\*" OR "objective-based evaluation\*" OR "summative evaluation\*" OR "cost benefit analys?s" OR "cost-benefit analys?s" OR "economic evaluation\*" OR "costs and cost analys?s" OR "cost analys?s" OR "return on investment" OR "return to investment" OR "cost effectiveness analys?s" OR "cost-effectiveness analy?s" OR "cost utility analys?s" OR "cost effectiveness evaluation\*" OR "cost-effectiveness evaluation\*" OR "cost-utility analys?s" OR RCT))

## **Cochrane Database**

1. exp substance-related disorders/
2. (((use\* OR abuse\* OR misuse\* OR dependenc\* OR addict\* OR disorder\* OR problem\* OR hazard\* OR harm\* OR risk\* OR test\*) adj4 (substance OR drug\* OR alcohol\* OR amphetamine\* OR cannabis OR marijuana OR cocaine OR inhalant\* OR hallucinogen\* OR phencyclidine OR heroin OR morphine OR opioid\* OR stimulant\* OR sedative\* OR hypnotic\* OR anxiolytic\* OR benzodiazepine\*)) OR SUD)
3. occupational health services/
4. (((organi?ation\* OR busines\* OR labor OR labour OR corporat\* OR occupation\* OR workplace OR work-place OR workforce OR work-force OR worksite OR work-site OR employee\* OR job\* OR employer\* OR vocation\* OR compan\* OR office OR offices OR factory OR factories) adj4 (prevent\* OR program\* OR intervention\* OR train\* OR polic\* OR treatment\* OR service\* OR promotion\* OR education\* OR psychoeducation OR peer-support\* OR "peer support\*" OR self-help\* OR "self help\*" OR support\* OR test\*)) OR "employee assistance program" OR EAP OR "critical incident stress debriefing" OR CISD)
5. Treatment outcome/
6. Cost-benefit analysis/
7. ("randomi?ed controlled trial\*" OR "clinical trial\*" OR "efficacy trial\*" OR "efficacy evaluation\*" OR "systematic review\*" OR "meta analy\*" OR "meta-analy\*" OR "effectiveness evaluation\*" OR "pragmatic trial\*" OR "effectiveness trial\*" OR "outcome evaluation\*" OR "impact evaluation\*" OR "objective-based evaluation\*" OR "summative evaluation\*" OR "cost benefit analys?s" OR "cost-benefit analys?s" OR "economic evaluation\*" OR "costs and cost analys?s" OR "cost analys?s" OR "return on investment" OR "return to investment" OR "cost effectiveness analys?s" OR "cost-effectiveness analy?s" OR "cost utility analys?s" OR "cost effectiveness evaluation\*" OR "cost-effectiveness evaluation\*" OR "cost-utility analys?s" OR RCT)
8. **(#1 OR #2) AND (#3 OR #4) AND (#5 OR #6 OR #7)**

## **6. List any limits that may apply to your search:**

*Gender:* Any

*Age:* 18 years+

*Year(s) of publication:* 2010 to present

*Language(s):* English only

*Subjects:* Humans only

## **7. List the databases you will search:**

Academic databases:

- i. PsychINFO via Ovid
- ii. MEDLINE via Ovid
- iii. EMBASE via Ovid
- iv. Scopus via Ovid
- v. Cochrane Library

Grey literature databases:

- i. OpenGrey
- ii. WHOLIS (World Health Organisation library database)
- iii. APO (Analysis & Policy Observatory)