



# Towards large-scale adaption and tailored implementation of evidence-based primary cancer prevention programmes in Europe and beyond (PIECES)

**Project Number:** 101104390

**Project Acronym:** PIECES

**Call:** HORIZON-MISS-2022-CANCER-0

**Deliverable:** Repository of evidence-based primary prevention programs

**Doc. Ref. No.:** D.1.2

**WP:** 1

**Authors:** Margherita Zeduri<sup>1</sup>, Claudia Cosma<sup>2</sup>, Enrica Stancanelli<sup>2</sup>, Jasmine Giovannoli<sup>3</sup>, Maria Chiara Malevolti<sup>3</sup>, Giulia Carreras<sup>3</sup>, Saverio Caini<sup>3</sup>, Giovanna Masala<sup>3</sup>, Giuseppe Gorini<sup>3</sup>

<sup>1</sup> Department of Public Health, Experimental and Forensic Medicine, University of Pavia, Pavia, Italy

<sup>2</sup> Department of Health Sciences, University of Florence, Florence, Italy

<sup>3</sup> Oncologic network, prevention and research institute (ISPRO), Florence, Italy

**Lead Beneficiary:** ISPRO

**Dissemination level:** Sensitive



This project has received funding from the European Union's Horizon Europe research and innovation programme under grant agreement No. 101104390



## Table of Contents

|   |           |
|---|-----------|
| <b>Methodology of PIECES Repository of Evidence-based Primary Cancer Prevention Programmes (PIECES-EBPCPP Repository) based on Cochrane reviews</b> | <b>2</b>  |
| Objectives  | 2         |
| Dissemination and expansion   | 2         |
| PIECES EBPCPP Repository Programme Areas  | 2         |
| PIECES EBPCPP Repository Review Process   | 3         |
| <b>Preliminary results</b>  | <b>9</b>  |
| <b>Field work for each selected review - Example</b>  | <b>11</b> |
| <b>Intervention program area</b>  | <b>18</b> |
| Alcohol   | 18        |
| Physical activity   | 26        |
| Diet  | 41        |
| HPV   | 51        |
| Tobacco use (smoking cessation and preventive initiation)   | 54        |
| Second-hand Smoke (SHS)   | 80        |
| <b>Methodology of PIECES-EBPCPP Repository based on Interventions from PIECES Implementation sites</b>  | <b>81</b> |
| <b>Methodology of PIECES-EBPCPP Repository based on selection of interventions from the NCI-EBCCP website</b>                                       | <b>88</b> |
| <b>Appendix – Repository</b>  | <b>89</b> |



## Methodology of PIECES Repository of Evidence-based Primary Cancer Prevention Programmes (PIECES EBPCPP Repository) based on Cochrane reviews

### *Introduction*

The PIECES EBPCPP repository is a database of evidence-based primary cancer prevention programmes (EBPCPPs) that are adaptable to the European context build on the basis of published studies. It provides public health professionals access to information about the selected programmes, and, when possible, materials that can be used to implement these programmes. Contacts of researchers involved in these programmes are also available to find additional materials. The Repository can be accessed directly from PIECES website.

### *Objectives*

This guide describes the steps involved in the PIECES EBPCPP Repository review and build process based on Cochrane reviews.

### *Dissemination and expansion*

This Repository is an opportunity to disseminate products of EBPCPPs, and to provide increased visibility and credibility for evidence-based cancer control programmes.

### *PIECES EBPCPP Repository Programme Areas*

Interventions or programmes are defined as complex interventions that combine different behavioural and/or pharmacological components. The PIECES Repository collects programmes or interventions in 7 areas:

1. **Tobacco Control:**
  - a. smoking cessation interventions among adults as individuals, communities, or populations;
  - b. prevention of smoking initiation among adolescents as individuals, communities, or populations.
2. **Second-hand smoke (SHS) exposure:** reducing SHS exposure among individuals, communities, or populations.
3. **Alcohol consumption:** reducing alcohol consumption among adults and adolescents as individuals, communities, or populations.
4. **Physical activity:** improving physical activity over the lifetime among individuals, communities, or populations.



5. **HPV infection:** reducing the risk of getting infected with HPV by means of HPV vaccination and the use of condoms among adolescents as individuals, communities, or populations.
6. **UV and sun exposure:** reducing intermittent sun exposure, sun burns, and the use of sunbeds and similar, especially among children, adolescents, young adults, and outdoor workers.
7. **Diet:** improve diet quality at any age for individuals, communities, or populations.

### *PIECES EBPCPP Repository Review Process*

#### **First step: Selecting Reviews**

From Cochrane Reviews (<https://www.cochranelibrary.com/cdsr/reviews>), through a search strings strategy, we select reviews on the seven programme areas, regarding interventions or programmes designed to improve lifestyles with positive findings in terms of efficacy or effectiveness.

Interventions or programmes are defined as complex interventions that combine different behavioural and/or pharmacological components. Pharmacologic treatments are not considered as interventions or programmes, but as components of interventions or programmes (i.e., reviews on nicotine replacement therapy or vitamin supplementation).

#### *Search strings*

Strings were chosen according to the following methodology:

1. **“Tobacco”** (1a. **“Tobacco Control”** and 1b. **“Second-hand smoke (SHS) exposure”**). This search strategy provides a comprehensive overview of current research and effective strategies in primary cancer prevention, specifically addressing tobacco use and second-hand smoke exposure. The chosen search string <<('smoke\*' OR 'tobacco') AND ('intervention' OR 'cancer prevention' OR 'primary cancer prevention' OR 'cancer' OR 'carcinogenesis' OR 'prevent\*' OR 'oncol\*' OR 'programme\*' OR 'mass-media' OR 'policies')>> explore the multifaceted relationship between tobacco use and cancer prevention. Encompassing terms such as 'smoke\*' and 'tobacco' alongside key concepts like 'intervention' and 'cancer prevention,' the search aims to capture a diverse range of information pertaining to the impact of tobacco on cancer. Additionally, the inclusion of terms like 'mass-media' and 'policies' ensures a nuanced examination of public health initiatives and regulatory measures contributing to tobacco control.
2. **“Alcohol consumption”**. The chosen search string <<('alcohol consumption' OR 'alcohol intake' OR 'drinking alcohol' OR “alcohol”) AND ('cancer prevention' OR 'primary cancer prevention' OR 'cancer' OR 'carcinogenesis' OR 'prevention\*' OR 'oncol\*' OR 'programme\*')>> explore the landscape of primary cancer prevention strategies related to alcohol consumption. By incorporating diverse terms such as 'alcohol,' 'cancer prevention,' and 'carcinogenesis,' the search is tailored to capture a broad spectrum of information regarding the impact of alcohol on cancer development and the preventive measures available. The inclusion of variations and synonyms ensures a thorough examination of the



literature, encompassing different perspectives and approaches to cancer prevention associated with alcohol.

3. **“Physical activity”**. The selected search string <<('physical inactivity' OR 'lack of exercise' OR 'sedentary lifestyle' OR 'physical activity' OR 'exercise' OR 'gym\*' OR 'fitness') AND ('cancer prevention' OR 'primary cancer prevention' OR 'cancer' OR 'carcinogenesis' OR 'prevention\*' OR 'oncol\*' OR 'programme\*')>>, is meticulously formulated to investigate the interplay between physical activity and cancer prevention. Encompassing terms like 'physical inactivity' and 'exercise' alongside related concepts such as 'cancer prevention' and 'carcinogenesis,' the search is designed to capture a diverse range of information on the impact of physical activity on cancer risk. The inclusion of terms like 'gym\*' and 'fitness' ensures coverage of various forms of physical activity.

4. **“HPV infection”**. The chosen search string <<('hpv' OR 'papilloma') AND ('cancer prevention' OR 'primary cancer prevention' OR 'cancer' OR 'carcinogenesis' OR 'prevention\*' OR 'oncol\*' OR 'programme\*')>>, has been designed to explore the intersection between HPV infection and cancer prevention. Incorporating terms such as 'hpv' and 'papilloma' alongside key concepts like 'cancer prevention' and 'carcinogenesis,' the search is tailored to capture a comprehensive range of information concerning the role of HPV in cancer development. By including terms related to cancer prevention strategies, this search strategy aims to provide the international working group with valuable insights into current research and effective preventive measures in the context of HPV infection and its association with cancer.

5. **“UV and sun exposure”**. The chosen search string <<('sun exposure' OR 'UV radiation' OR 'skin cancer prevention' OR 'sun' OR 'UV') AND ('cancer prevention' OR 'primary cancer prevention' OR 'cancer' OR 'carcinogenesis' OR 'prevention\*' OR 'oncol\*' OR 'programme\*')>>, is strategically formulated to investigate the relationship between UV radiation, sun exposure, and cancer prevention. By incorporating terms such as 'sun exposure' and 'UV radiation' along with key concepts like 'skin cancer prevention' and 'cancer prevention,' the search aims to capture a comprehensive spectrum of information on the impact of UV and sun exposure on cancer risk. The inclusion of terms related to prevention strategies ensures a focus on interventions and measures to mitigate the potential carcinogenic effects of UV radiation.

6. **“Diet”**. The selected search string <<('diet' OR 'nutrition' OR 'dietary habits') AND ('cancer prevention' OR 'primary cancer prevention' OR 'cancer' OR 'carcinogenesis' OR 'prevention\*' OR 'oncol\*' OR 'programme\*')>>, is intentionally crafted to investigate the intricate relationship between diet, nutritional habits, and cancer prevention. Encompassing terms such as 'diet' and 'nutrition' alongside key concepts like 'cancer prevention' and 'carcinogenesis,' the search is designed to capture a comprehensive range of information regarding the influence of dietary factors on cancer risk.



### *Selection procedure*

At least two members of the working group revise and blindly select the Cochrane reviews following the search strings strategy, with an agreement in case of different selections. The selection was in two steps: first, reading the title, and second the abstract and the full text. We select reviews that focus on interventions or programmes aimed at modifying the prevalence of each specific risk factor in the study population. We write the process in a file shared among the members of the working group. Reviews are analysed from the latest to the oldest, so we can include updates of past reviews avoiding the analysis of older reviews that have undergone updates (Figure 1).

### **Second step: Selecting studies**

Two members of the working group blindly select, within each selected review, studies that meet all the inclusion criteria, with an agreement in case of different selections (Figure 1).

### *Inclusion criteria of studies*

Studies about programmes or interventions of interest must meet the following criteria to be eligible for the PIECES EBPCPP Repository review:

1. Outcome findings must be published in a peer-reviewed journal.
2. The study must have produced one or more positive behavioural outcomes among individuals, communities, or populations (i.e. evidence of an effect on the intervention in improving the correct behaviour, e.g. physical activity).
3. Evidence must be demonstrated in an experimental or quasi-experimental study. Experimental studies require random assignment, a control group, and pre- and post-assessments. Quasi-experimental studies require a control group and pre- and post-assessments. Studies that are based on single-group, pre-/post-test designs are not included.
4. The programme must have been evaluated within the past 13 years (i.e., when the internet became available on mobile phones), from 2011 onwards (>2010). Some smoking cessation behavioural interventions, such as physician or nurse advice for smoking cessation, have been evaluated since 40 years. Thus, in the Cochrane reviews there are not recent studies on these specific interventions (i.e., >2010). This does not mean that they are not effective, but that recent behavioural interventions include not only face-to-face interventions, but also more recent and innovative tools, such as web or app-based interventions.
5. Studies must be adaptable in the European context, i.e. they must have been conducted in Europe or consider programmes or interventions that could be applied to Europe, based on the judgement of the working group.
6. Studies must regard the general population or large communities, but no specific sub-populations (i.e. we include pregnant women, obese people, subjects with diabetes; but not psychiatrics, homeless, subjects with HIV, etc.).



### *Big and Small Archives implementation*

The working group includes selected studies with both positive and negative findings in a Big Archive (BA) that represents the first step of selection. We write the process in a file shared among the members of the working group.

We read titles and abstracts and we make a further selection, choosing high-quality studies with positive findings. Thus, we produce a Small Archive (SA). Again, we write the process in a file shared among members of the working group.

Then, at least two members of the working group fill in the minimum requirement fields of the repository for every study included in the SA. Studies for which we are not able to fill in the minimum requirements fields, are excluded from the repository.

### *Repository structure*

The Repository fields are as follows. The items highlighted indicate the minimum requirement fields to fill in order to include the study in the Repository.

1. Review's authors.
2. Paper's authors.
3. Name of the intervention (full name(s) of the intervention).
4. **Intervention program area (health topic focus of the intervention).**
5. **Description of the intervention [short description of the intervention, including characteristics intervention target group (age, sex, ethnicity)].**
6. **Geographic area [geographic area of the intervention, such as regions, cities, countries, practices.; include community type (city/ rural etc)].**
7. **Intervention delivery setting (intervention setting, such as hospital, primary care office, dental office, school, etc.).**
8. Recruitment.
9. Stakeholders involved in selecting and tailoring the intervention (description which stakeholders (including patients) are involved in selecting and tailoring the intervention to the local context);
10. **Professionals involved in delivering the intervention (description which professionals deliver the intervention);**
11. Intervention training (description of the training in the intervention needed before intervention is implemented);
12. Materials needed to deliver the intervention;
13. **Intervention language (language of the intervention);**
14. **Intervention target population (short description of the intervention's target population(s));**
15. Direct cost of the intervention (direct cost of the intervention, if the intervention needs to be purchased or licensed);
16. Intervention website (website of the intervention);
17. **Outcomes;**
18. **Control group;**







19. **Strength of the evidence (strength of the intervention's evidence base);**
20. **Effectiveness of the intervention;**
21. **Types of research conducted on the intervention (types of research that has been conducted on the intervention, such as effectiveness trials, implementation studies, etc.);**
22. Scientific publications about the intervention (list of articles published about the intervention, with links to each article);
23. **Intervention developers (name of intervention developers and the name of their institutions);**
24. **Intervention development funder (name of the funder who supported the development of the intervention).**

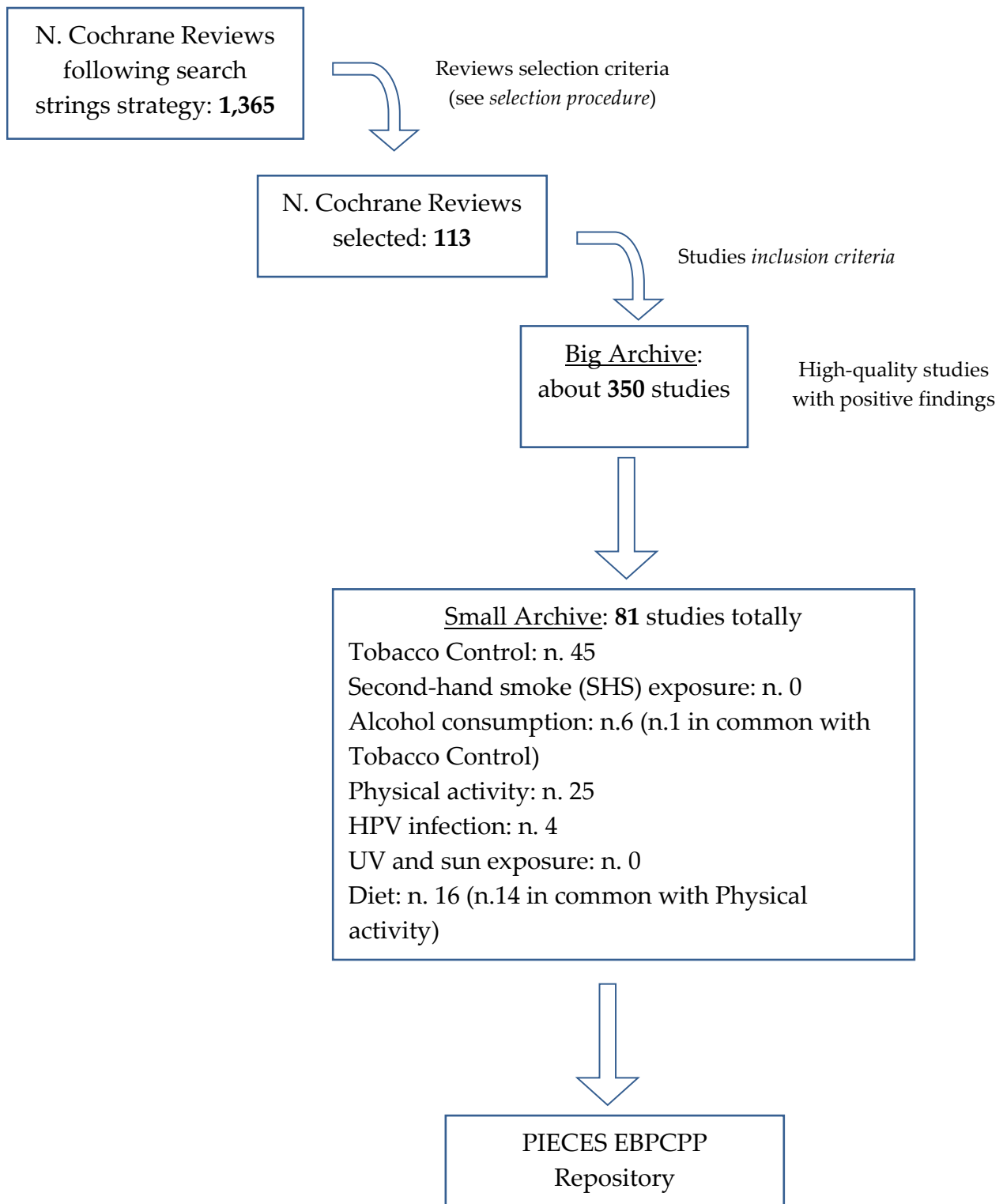
This step of selection allows us to develop the PIECES EBPCPP Repository that is the main objective of [the PIECES Deliverable WP1.2](#) (see the excel file).







Figure 1: Flow chart of the selection of Cochrane reviews and studies within the reviews.





## Preliminary results

### **First step: Selecting studies**

Regarding different programme areas (Figure 1):

#### **1. *Tobacco Control: smoking cessation interventions and prevention of smoking initiation.***

We selected 58 Cochrane reviews (no evidence for mobile app).

Within these, we selected 45 studies to fill the Small Archive (of which 1 in common with the Small Archive of Alcohol consumption).

#### **2. *Second-hand smoke (SHS) exposure.***

We selected 3 Cochrane reviews.

Within these, we selected no studies to fill the Small Archive.

#### **3. *Alcohol consumption.***

We selected 16 Cochrane reviews.

Within these, we selected 6 studies to fill the Small Archive.

#### **4. *Physical activity.***

We selected 15 Cochrane reviews.

Within these, we selected 25 studies to fill the Small Archive.

#### **5. *HPV infection.***

We selected 4 Cochrane reviews.

Within these, we selected 4 studies to fill the Small Archive.

#### **6. *UV and sun exposure intervention.***

We selected 2 Cochrane reviews.

Within these, no studies fill the Small Archive. We could update the research with other future projects.

#### **7. *Diet.***

We selected 15 Cochrane reviews.

Within these, we selected 16 studies to fill the Small Archive (of which 14 in common with the Small Archive of physical activity).

On December 6<sup>th</sup> 2023, the working group completed the repository for physical activity, diet and HPV infection intervention areas and we are continuing to fill it.

We added some items to those selected for the repository: “review”, “papers”, “recruitment methodology”, “outcome”, and “control group” items.

Regarding the “Intervention developers” item in the repository, we selected the principal investigator or the corresponding author. Regarding the “Scientific publications about the intervention” item, we searched on PubMed the name of the principal/corresponding

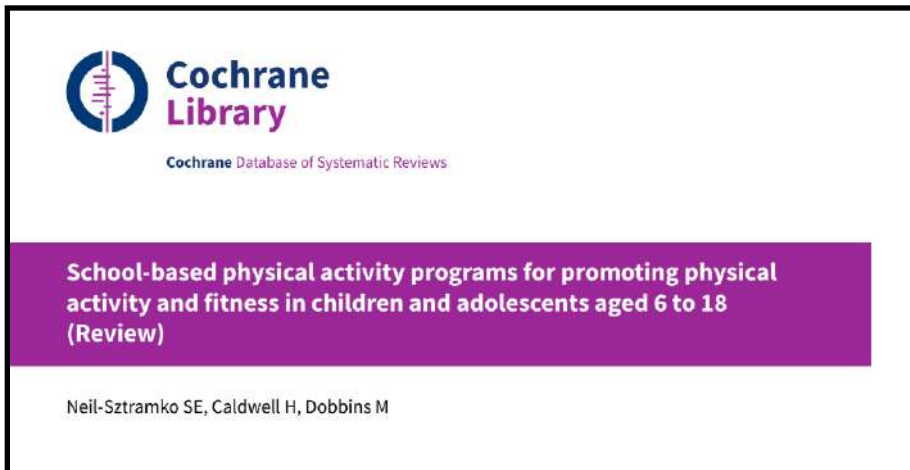


author of the study and the name of intervention. To make an additional check, we also searched the name of the principal/corresponding author and the study protocol number. Moreover, we considered only the studies published since the year in which the study of the intervention was published.

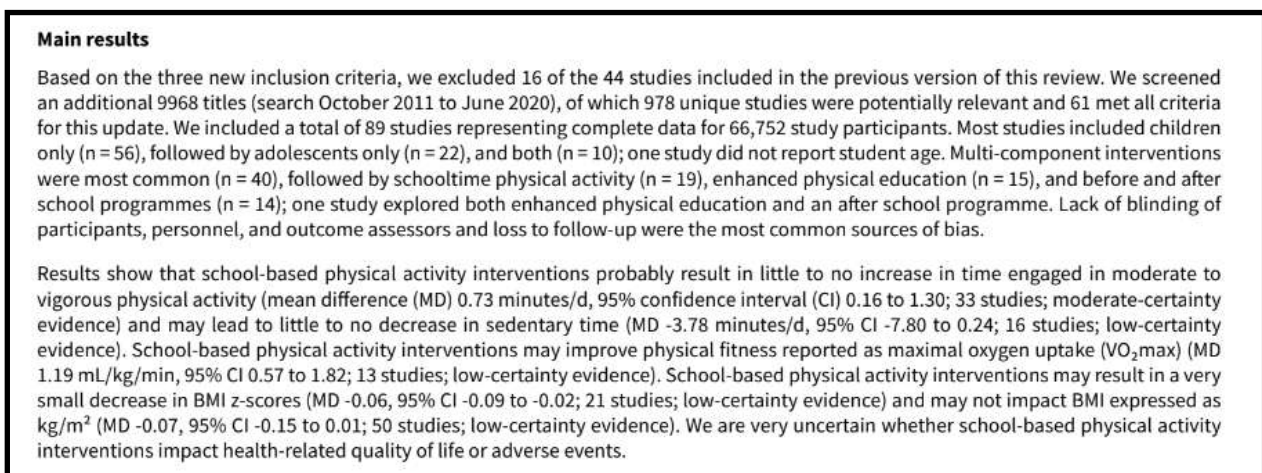


## Field work for each selected review - Example

*Cochrane review on School-based physical activity programs for promoting physical activity and fitness in children and adolescents aged 6 to 18, 2021*



**1. Read the abstract (main results) in order to understand whether there is evidence (at least moderate) that this type of intervention is judged effective or not.**



**2. Read the summary of findings in order to find main comparisons of the review**

- % of participants physically active: very low
- Sedentary time: low
- Physical fitness: low
- BMI: low
- Health-related quality of life: very low
- Adverse events: very low
- Moderate to vigorous physical activity: Moderate (“Overall, school-based physical activity interventions probably have little to no effect on minutes per day of MVPA among children and adolescents”).



**Summary of findings 1. School-based physical activity programmes for promoting physical activity and fitness in children and adolescents aged 6 to 18 years****School-based physical activity programmes for promoting physical activity and fitness in children and adolescents aged 6 to 18 years****Population:** children and adolescents aged 6 to 18 years**Settings:** primarily within the school setting**Intervention:** educational, health promotion, counselling, and management strategies focused on promotion of physical activity and fitness**Comparison:** standard, currently existing physical education programmes in schools

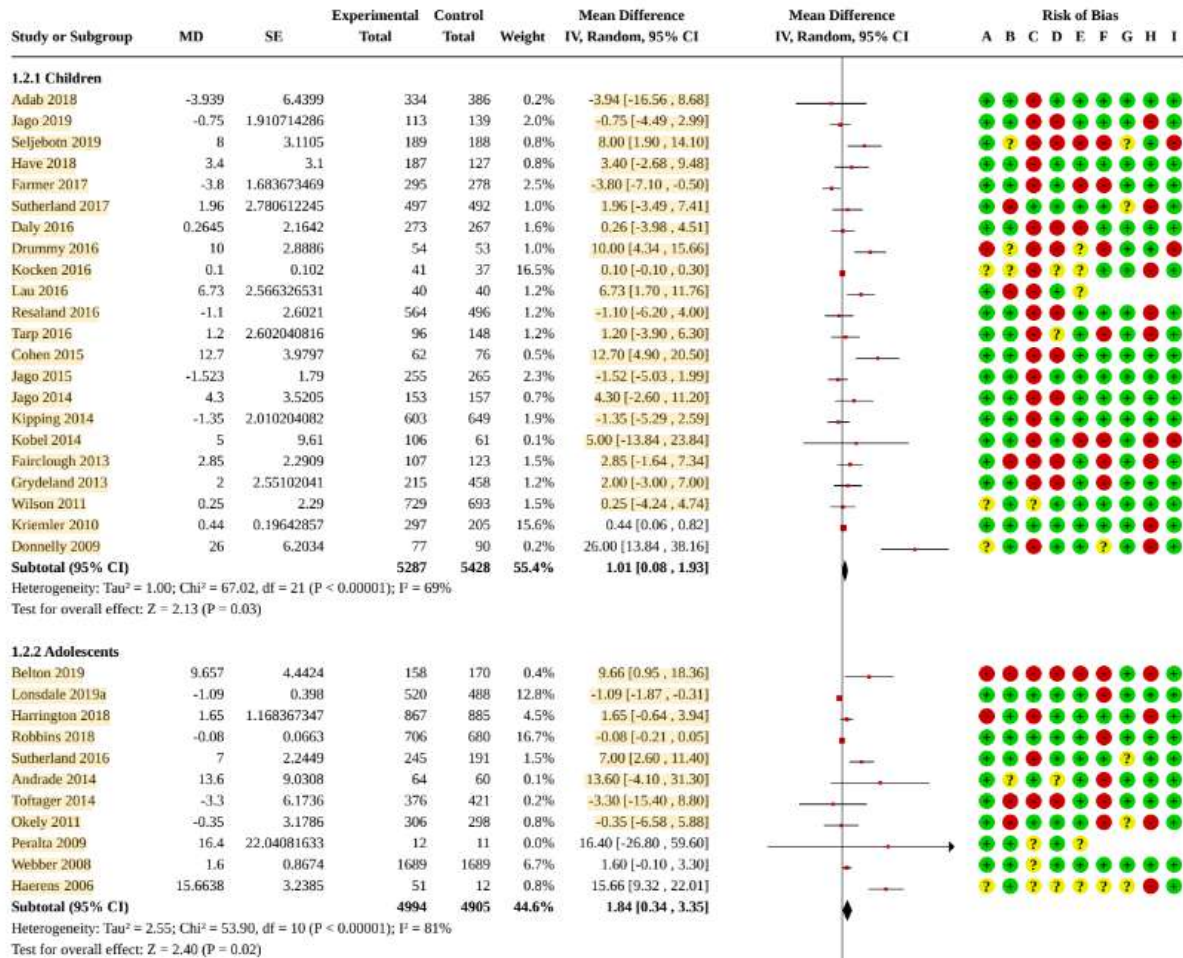
| Outcomes  | Anticipated effects (95% CI)                              |   | No. of participants (trials) | Certainty of the evidence (GRADE)   |
|---|---|---|------------------------------|-------------------------------------|
|   | Risk with control   | Risk with intervention  |                              |                                     |
| <b>% of participants physically active</b><br>[follow-up: 12 weeks to 12 months]              | % physically active ranged from 2% to 50%                 | % physically active ranged from 1.11% lower to 12.22% higher. | 6,068<br>(5)                 | ⊕⊕⊕⊕<br><b>very low<sup>a</sup></b> |
| <b>Moderate to vigorous physical activity (minutes/d)</b><br>[follow-up: 12 weeks to 3 years] | -3.63 (-5.03 to -2.23)                                    | MD 0.73, 95% CI 0.16 to 1.30                                  | 20,614<br>(33)               | ⊕⊕⊕⊕<br><b>moderate<sup>b</sup></b> |
| <b>Sedentary time (minutes/d)</b><br>[follow-up: 12 weeks to 28 months]                       | 27.77 (-21.34 to 76.88)                                   | MD -3.78, 95% CI -7.80 to 0.24                                | 11,914<br>(16)               | ⊕⊕⊕⊕<br><b>low<sup>c</sup></b>      |
| <b>Physical fitness (VO<sub>2</sub> max, mL/kg/min)</b><br>[follow-up: 12 weeks to 1 year]    | -1.00 (-1.59 to -0.41)                                    | MD 1.19, 95% CI 0.57 to 1.82                                  | 3,980<br>(13)                | ⊕⊕⊕⊕<br><b>low<sup>d</sup></b>      |
| <b>BMI (z-score)</b><br>[follow-up: 12 weeks to 4 years]                                      | -0.01 (-0.08 to 0.06)                                     | MD -0.06, 95% CI -0.09 to -0.02                               | 22,948<br>(21)               | ⊕⊕⊕⊕<br><b>low<sup>e</sup></b>      |
| <b>BMI (kg/m<sup>2</sup>)</b><br>[follow-up: 12 weeks to 4 years]                             | -0.35 (-1.06 to 0.36)                                     | MD -0.07, 95% CI -0.15 to 0.01                                | 34,337<br>(50)               |                                     |
| <b>Health-related quality of life</b><br>[follow-up: 15 weeks to 12 months]                   | Not estimable; insufficient data reported within studies  |   | 4,687<br>(7)                 | ⊕⊕⊕⊕<br><b>very low<sup>f</sup></b> |
| <b>Adverse events</b><br>[follow-up: 12 weeks to 3 years]                                     | Not estimable; only 3 studies reported any adverse events |   | 11,698<br>(16)               | ⊕⊕⊕⊕<br><b>very low<sup>g</sup></b> |





### 3. In the forest plot of the main comparisons, find the studies >2010 (year of publication).

#### Analysis 1.2. Comparison 1: PA programme vs no PA programme, Outcome 2: Physical activity duration (minutes/d): meta-analysis



### 4. Read the description of studies in order to find studies from EU (& Australia only for HPV e Sun Exposure) or similar contexts.

A majority of studies were conducted in children 12 years of age or younger at baseline (n = 56); others included only adolescents between the ages of 12 and 18 (n = 22), and some included both children and adolescents (n = 10). One study did not report the age of participants. Most included studies were conducted in the USA (n = 26), Australia (n = 12), and the UK (n = 9). Other countries included Germany (n = 6), Spain (n = 5), The Netherlands (n = 4), Denmark (n = 3), Norway (n = 3), Northern Ireland (n = 3), Belgium (n = 2), Canada (n = 2), China (n = 2), and France (n = 2), and one study each from Albania, Ecuador, Greece, Iceland, Ireland, Italy, Mexico, New Zealand, South Africa, and Switzerland. A range of ethnic groups was represented across trials; however, ethnicity was not reported in 40 of the 89 included studies. Most studies included both male and female students and reported a roughly even split between genders; one study included male students only, 11 included female students only, and 4 did not report the breakdown of male and female students.





5. Read the description of studies in order to control whether all articles selected in the review are included in the main comparisons of the review. If not, read those not included in the main comparison.

6. Report selected articles from Cochrane review and choose high-quality studies with positive findings.

Comparison 1. Interventions for callers to quitlines - effect of additional proactive calls for smoking cessation

- Smoking cessation Self-reported abstinence (majority) Follow-up: 6+ months: Moderate

The green colour defines the Small Archive (high-quality studies with positive findings), while the yellow colour defines the Big Archive.

| Authors               | Country | Risk Ratio        |
|-----------------------|---------|-------------------|
| Cummins et al., 2016b | USA     | 1.74 (1.25, 2.44) |
| Ferguson et al., 2012 | UK      | 0.93 (0.72, 1.21) |
| Nohlert et al., 2014  | Sweden  | 0.9 (0.65, 1.27)  |
| Sims et al., 2013     | USA     | 1.04 (0.5, 2.15)  |
| Zhu et al., 2012      | USA     | 2.05 (1.62, 2.6)  |

Comparison 2. Proactive telephone counselling for smokers not calling quitlines

- Smoking cessation Self-reported abstinence (majority) Follow-up: 6+ months: Moderate

| Authors                | Country                    | Risk Ratio        |
|------------------------|----------------------------|-------------------|
| Chan et al., 2015      | Hong Kong                  | 0.92 (0.47, 1.79) |
| Girgis et al., 2011    | Australia                  | 0.75 (0.41, 1.35) |
| Graham et al., 2011    | USA                        | 1.73 (1.11, 2.69) |
| McClure et al., 2011   | USA<br>(Depressed smokers) | 0.56 (0.15, 2.09) |
| Peterson et al., 2016  | USA                        | 1.02 (0.8, 1.31)  |
| Schuck et al., 2014    | the Netherlands            | 4 (2.33, 6.85)    |
| Tzelepis et al., 2011a | Australia                  | 1.89 (0.7, 5.09)  |





|                       |  |                   |
|-----------------------|--|-------------------|
| Brunette et al., 2017 | USA<br>(Mental illness and low-income) | 1.31 (0.63, 2.73) |
| Cossette et al., 2011 | Canada<br>(study in French)            | 0.83 (0.3, 2.29)  |
| Ramon et al., 2013    | Spain                                  | 1.04 (0.76, 1.42) |
| Bastian et al., 2013  | USA                                    | 0.88 (0.56, 1.38) |
| Blebil et al., 2014   | Malaysia                               | 1.47 (1.18, 1.84) |
| Cummins et al., 2016a | USA                                    | 0.61 (0.4, 0.94)  |
| Fraser et al., 2014   | USA                                    | 0.97 (0.8, 1.18)  |
| Schlam et al., 2016   | USA                                    | 1.56 (0.93, 2.61) |
| Thomas et al., 2016   | USA                                    | 1.05 (0.67, 1.65) |

### Small archive

| Authors                | Country         | Risk Ratio            |
|------------------------|-----------------|-----------------------|
| Cummins et al., 2016b  | USA             | 1.74 (1.25, 2.44)     |
| Zhu et al., 2012       | USA             | 2.05 (1.62, 2.6)      |
| Graham et al., 2011    | USA             | 1.73 (1.11, 2.69)     |
| Schuck et al., 2014    | the Netherlands | 4 (2.33, 6.85)        |
| Blebil et al., 2014    | Malaysia        | 1.47 (1.18, 1.84)     |
| Cummins et al., 2016a  | USA             | 0.61 (0.4, 0.94)      |
| Klemperer et al., 2017 | USA             | II: 2.63 (1.12, 6.14) |

### 8. Fill in the repository for each selected article

In order to do that, we consider parts of the Cochrane reviews that are important for the repository; 8.1 is an example of what we can find in the Cochrane reviews for each included study. Every study has a table with main characteristics of the study; some items are useful for filling in the repository.



## 8.1. Characteristics of included studies from Cochrane reviews

Example for the Belton,2019, study

**Belton 2019**

### Study characteristics

|               |   |
|---------------|---|
| Methods       | <b>Study design:</b> cluster-RCT  |
| Participants  | <p><b>School inclusion criteria:</b> (a) schools have a qualified PE teacher on staff, (b) first year students attending the school were time tabled for a minimum of 70 minutes of PE weekly, (c) schools were mixed gender and were situated in the greater area of a large Irish city</p> <p><b>School exclusion criteria:</b> —</p> <p><b>Student inclusion criteria:</b> first year post primary students (12 to 13 years old) attending post primary education within a particular Irish geographical region</p> <p><b>Student exclusion criteria:</b> —</p> <p><b>Setting:</b> school</p> <p><b>Age group:</b> adolescent</p> <p><b>Gender distribution:</b> females and males</p> <p><b>Country/Countries where trial was performed:</b> Ireland</p>  |
| Interventions | <p><b>Intervention:</b> a whole-school multi-component intervention programme, aimed at reducing the age-related decline of MVPA among adolescents. Key features include</p> <ol style="list-style-type: none"> <li>1. PE component: PE teachers received 4 hours of Y-PATH professional development including 6 targeted lesson plans focusing heavily on motivational climate, integrating health-related activity core knowledge through fun and engaging practical lessons, with an emphasis on functional movement skill proficiency. Resource cards were used to prompt teachers to enable them to integrate a health-related activity and fundamental movement skill focus within other core PE content areas. Students were given a PA journal to learn to track PA behaviours and identify ways to increase PA levels, and a PA directory containing information and contact details for local youth sport and PA clubs</li> <li>2. Whole-school teacher component: PA promotion workshops for teachers, and development and implementation of a school 'charter' for PA. Teachers were encouraged to be 'active role models'</li> <li>3. Parent component: information evening for parents and information leaflets distributed through the school newsletter to highlight key strategies for promoting PA beyond the school environment</li> </ol> <p><b>Comparator:</b> usual care, consisting of regular delivery of the Irish Junior Cycle PE curriculum, and the broader school curricula</p> <p><b>Duration of intervention:</b> 2 years</p> <p><b>Duration of follow-up:</b> 2 years</p> |

**Belton 2019** (Continued)**Number of schools:** 20**Theoretical framework:** social-ecological framework, self-determination theory

|   |  |   |
|---|--|---|
| Outcomes                                    | PA duration  |   |
| Study registration                          | <a href="#">ISRCTN20495704</a>   |   |
| Publication details                         | <b>Language of publication:</b> English<br><b>Funding:</b> Dublin Local Sports Partnerships, Dublin City University Career Start grant<br><b>Publication status:</b> peer-reviewed journal |   |
| Stated aim for study                        | "to investigate the effect of participation in the Y-PATH intervention over a two-year period on objectively measured MVPA levels of young people"   |   |
| Notes                                       |  |   |
| <b>Risk of bias</b>                         |  |   |
| <b>Bias</b>                                 | <b>Authors' judgement</b>  | <b>Support for judgement</b>  |
| Random sequence generation (selection bias) | High risk  | <b>Quote from publication:</b> "one school from each pair was then randomly allocated by the study principal investigator to the control group (and the other to the intervention group) using a manual number generator in blocks of 1:1, prior to the commencement of baseline testing" |
| Allocation concealment (selection bias)     | High risk  | <b>Quote from publication:</b> "one school from each pair was then randomly allocated by the study principal investigator to the control group (and the other to  |





## Intervention program area

### Alcohol

#### **16. Strategies for enhancing the implementation of school-based policies or practices targeting diet, physical activity, obesity, tobacco or alcohol use (Wolfenden et al., 2022)**

- Comparison of strategies for enhancing the implementation of school-based policies or practices targeting risk factors for chronic disease
  - Diet: low
  - Physical activity: low
  - Obesity: moderate
  - Tobacco: very low
  - Alcohol use: the effect was not reported in the abstract and in the summary of results table. In the text: low evidence

#### **15. Behavioural interventions delivered through interactive social media for health behaviour change, health outcomes, and health equity in the adult population (Petkovic et al., 2021)**

- Health behaviours: low

#### **14. Alcoholics Anonymous and other 12-step programs for alcohol use disorder (Kelly et al., 2020)**

- Comparison 1. Alcoholics Anonymous (AA)/Twelve-Step Facilitation (TSF) (manualized) compared to other clinical interventions for alcohol use disorder (1A)
  - Abstinence (Proportion of participants (%) completely abstinent): high
- All < 2010
  - Abstinence (The mean PDA in the comparison group ranged from 62.3% to 84.0%): very low
  - Abstinence (The mean LPA in the comparison group ranged from 0.47 to 1.71 months): low
  - Drinking Intensity (drinks per drinking day): moderate
- All < 2010
  - Drinking Intensity (The mean PDHD in the comparison group was 13.4%): low
  - Drinking Intensity (The mean DrInC in the comparison group ranged from 21.8% to 72.9%): moderate
- All < 2010
  - Alcohol addiction severity (assessed with ASI): low
- Comparison 2. Alcoholics Anonymous (AA)/Twelve-Step Facilitation (TSF) (non-manualized) compared to other clinical interventions for alcohol use disorder (1B): Low
- Comparison 3. Alcoholics Anonymous (AA)/Twelve-Step Facilitation (TSF) (manualized) compared to a different type of TSF for alcohol use disorder (2A)
  - Abstinence (Proportion of participants (%) completely abstinent): moderate
- All < 2010





- Abstinence (The mean PDA in the comparison group ranged from 62.3% to 84.0%): moderate
  - All < 2010
- Drinking Intensity (The mean DDD in the comparison group was 6.7): moderate
  - All < 2010
- Alcohol addiction severity (assessed with ASI): moderate
  - All < 2010
- Comparison 4. Alcoholics Anonymous (AA)/Twelve-Step Facilitation (TSF) (non-manualized) compared to a different type of TSF for alcohol use disorder (2B)
  - Abstinence (Proportion of participants (%) completely abstinent): moderate
    - All < 2010
- Comparison 5. Alcoholics Anonymous (AA)/Twelve-Step Facilitation (TSF) (manualized) compared to other clinical interventions for alcohol use disorder: non-randomized studies (3B): Low
- Comparison 6. Alcoholics Anonymous (AA)/Twelve-Step Facilitation (TSF) (non-manualized) compared to a different type of TSF for alcohol use disorder: non-randomized studies (4B): Low
- Comparison 7. Alcoholics Anonymous (AA)/Twelve-Step Facilitation (TSF) compared to other clinical interventions and a different type of TSF for alcohol use disorder: cost-effectiveness studies (5)
  - Healthcare cost savings (assessed with total medical care cost savings): moderate
    - All < 2010

### 13. Family-based prevention programmes for alcohol use in young people (Gilligan et al., 2019)

- Family/parent interventions compared with control for reducing alcohol consumption in adolescents: low e very low

### 12. Individual-, family-, and school-level interventions targeting multiple risk behaviours in young people (MacArthur et al., 2018)

- Comparison 2. Alcohol use: moderate - short-term
  - Individual targeted

| Authors                | Country | Odds Ratio        |
|------------------------|---------|-------------------|
| Bodin et al., 2011     | Sweden  | 1.11 (0.49, 2.51) |
| Nirenberg et al., 2013 | USA     | 1.27 (1, 1.61)    |
| Wagner et al., 2014    | USA     | 0.79 (0.57, 1.08) |

- Individual universal

| Authors | Country | Odds Ratio |
|---------|---------|------------|
|---------|---------|------------|



|                      |                  |                   |
|----------------------|------------------|-------------------|
| Johnson et al., 2015 | USA              | 0.77 (0.47, 1.28) |
| Lana et al., 2014    | Spain and Mexico | 1.43 (0.52, 3.89) |
| Minnis et al., 2014  | USA              | 0.76 (0.35, 1.66) |

- Family targeted

| Authors              | Country | Odds Ratio        |
|----------------------|---------|-------------------|
| Milburn et al., 2012 | USA     | 0.59 (0.25, 1.39) |

- School universal

| Authors              | Country | Odds Ratio        |
|----------------------|---------|-------------------|
| Li et al., 2011      | USA     | 0.43 (0.18, 1.07) |
| Melnyk et al., 2013  | USA     | 0.66 (0.42, 1.03) |
| O'Neill et al., 2011 | USA     | 0.58 (0.37, 0.89) |

- Comparison 3. Binge drinking

- Short-term - individual targeted

| Authors            | Country | Odds Ratio        |
|--------------------|---------|-------------------|
| Bodin et al., 2011 | Sweden  | 1.05 (0.48, 2.28) |

- Short-term - school universal

| Authors         | Country | Odds Ratio        |
|-----------------|---------|-------------------|
| Li et al., 2011 | USA     | 0.52 (0.15, 1.73) |

### Small archive

| Authors              | Country | Odds Ratio        |
|----------------------|---------|-------------------|
| O'Neill et al., 2011 | USA     | 0.58 (0.37, 0.89) |

## 11. Strategies to improve the implementation of workplace-based policies or practices targeting tobacco, alcohol, diet, physical activity and obesity (Wolfenden et al., 2018)

- Comparison 1. Strategies to improve the implementation of workplace-based health promotion versus no implementation strategy



- Implementation of workplace- based policies or practices targeting diet, physical activity, obesity, tobacco use or alcohol use: low and very low
- Employee physical activity, weight status, and alcohol use: No RCTs reported these outcomes.

### 10. Personalised digital interventions for reducing hazardous and harmful alcohol consumption in community-dwelling populations (Kaner et al., 2017)

- Comparison 1. Digital intervention compared to no or minimal intervention for reducing hazardous and harmful alcohol consumption in community-dwelling populations
  - Quantity of drinking (g/week), based on longest follow- up (quantity): moderate

| Authors                       | Country     | Mean Difference   |
|-------------------------------|-------------|---|
| Blankers et al., 2011         | Netherlands | -85 (-166.09, -3.91)  |
| Wallace et al., 2011          | UK          | -12 (-34.01, 10.01)   |
| Delrahim-Howlett et al., 2011 | USA         | -11.1 (-27.99, 5.79)  |
| Doumas et al., 2011           | USA         | -28 (-93.62, 37.62)   |
| Ekman et al., 2011            | Sweden      | -8.5 (-32.2, 15.2)  |
| Hansen et al., 2012           | Denmark     | -14.4 (-39.6, 10.8)   |
| Hester et al., 2012           | USA         | Exp 1: -146.4 (-317.43, 24.63)<br>Exp 2: -56.2 (-107.93, -4.47) |
| Wagener et al., 2012          | USA         | -29.4 (-139.2, 80.4)  |
| Schulz et al., 2013           | Germany     | -35 (-80.64, 10.64)   |
| Voogt et al., 2013            | Netherlands | 5 (-18.11, 28.11)   |
| Brendryen et al., 2013        | Norway      | -30 (-74.32, 14.32)   |
| Voogt et al., 2013            | Netherlands | -9 (-35.75, 17.75)  |
| Brief et al., 2013            | USA         | -84 (-113.74, -54.26)   |
| Labrie et al., 2013           | USA         | -7 (-34.7, 20.7)  |
| Kypri et al., 2013            | New Zealand | -10 (-17.73, -2.27)   |
| Collins et al., 2014 (PNF)    | USA         | 15.7 (-7.2, 38.6)   |
| Weaver et al., 2014           | USA         | -50.5 (-110.09, 9.09)   |





|                            |             |                       |
|----------------------------|-------------|-----------------------|
| Gajecki et al., 2014       | Sweden      | -3.6 (-17.57, 10.37)  |
| Collins et al., 2014 (DBF) | USA         | 5.4 (-16.83, 27.63)   |
| Kypri et al., 2014         | New Zealand | -10 (-14.35, -5.65)   |
| Lewis et al., 2014         | USA         | -19.6 (-49.59, 10.39) |
| Khadjesari et al., 2014    | UK          | 9.5 (-3.17, 22.17)    |
| Bertholet et al., 2015     | Switzerland | -7.1 (-19.46, 5.26)   |
| Geisner et al., 2015       | USA         | -2.7 (-48.79, 43.39)  |
| Bendtsen et al., 2015      | Sweden      | -7.4 (-18.22, 3.42)   |

- Frequency of drinking (number of days drinking/ week), based on longest follow-up (frequency): moderate

| Authors                    | Country     | Mean Difference      |
|----------------------------|-------------|----------------------|
| Wallace et al., 2011       | UK          | -0.1 (-0.37, 0.17)   |
| Cucciare et al., 2013      | USA         | -0.28 (-1.1, 0.54)   |
| Labrie et al., 2013        | USA         | -0.05 (-0.31, 0.21)  |
| Kypri et al., 2013         | New Zealand | -0.25 (-0.35, -0.15) |
| Collins et al., 2014 (PNF) | USA         | 0.01 (-0.35, 0.37)   |
| Lewis et al., 2014         | USA         | -0.19 (-0.51, 0.13)  |
| Collins et al., 2014 (DBF) | USA         | -0.11 (-0.46, 0.24)  |
| Gajecki et al., 2014       | Sweden      | 0.02 (-0.2, 0.24)    |
| Kypri et al., 2014         | New Zealand | -0.13 (-0.21, -0.05) |
| Bendtsen et al., 2015      | Sweden      | -0.04 (-0.24, 0.16)  |

- Frequency of binge drinking (number of binges/ week), based on longest follow-up: moderate

| Authors             | Country | Mean Difference     |
|---------------------|---------|---------------------|
| Doumas et al., 2011 | USA     | -0.14 (-0.34, 0.06) |



|                               |        |                     |
|-------------------------------|--------|---------------------|
| Ekman et al., 2011            | Sweden | -0.12 (-0.56, 0.32) |
| Wallace et al., 2011          | UK     | -0.1 (-0.37, 0.17)  |
| Delrahim-Howlett et al., 2011 | USA    | -0.08 (-0.32, 0.16) |
| Cucciare et al., 2013         | USA    | -0.21 (-0.77, 0.35) |
| Brief et al., 2013            | USA    | -0.6 (-0.81, -0.39) |
| Witkiewitz et al., 2014       | USA    | -0.24 (-1.04, 0.56) |
| Suffoletto et al., 2014       | USA    | -0.21 (-0.44, 0.02) |
| Gajecki et al., 2014          | Sweden | -0.11 (-0.26, 0.04) |

- Intensity of drinking (g/ drinking day), based on longest follow-up (intensity): moderate

| Authors                       | Country     | Mean Difference      |
|-------------------------------|-------------|----------------------|
| Delrahim-Howlett et al., 2011 | USA         | -4.5 (-12.89, 3.89)  |
| Cucciare et al., 2013         | USA         | -1.4 (-17.75, 14.95) |
| Brief et al., 2013            | USA         | -28 (-35.08, -20.92) |
| Kypri et al., 2013            | New Zealand | -5 (-9.29, -0.71)    |
| Witkiewitz et al., 2014       | USA         | -1.22 (-2.66, 0.22)  |
| Kypri et al., 2014            | USA         | 0 (-3.27, 3.27)      |
| Lewis et al., 2014            | USA         | -4.5 (-12.64, 3.64)  |
| Suffoletto et al., 2014       | USA         | -5.6 (-12.83, 1.63)  |
| Bendtsen et al., 2015         | Sweden      | -2.4 (-6.54, 1.74)   |

- Comparison 2. Digital intervention compared to face-to-face intervention for reducing hazardous and harmful alcohol consumption in community-dwelling populations: low

#### Small archive

| Authors               | Country     | Mean Difference      |
|-----------------------|-------------|----------------------|
| Blankers et al., 2011 | Netherlands | -85 (-166.09, -3.91) |



|                     |             |  |
|---------------------|-------------|--|
| Hester et al., 2012 | USA         | Exp 2: -56.2 (-107.93, -4.47)  |
| Brief et al., 2013  | USA         | -84 (-113.74, -54.26)<br>-0.6 (-0.81, -0.39)<br>-28 (-35.08, -20.92) |
| Kypri et al., 2013  | New Zealand | -10 (-17.73, -2.27)<br>-0.25 (-0.35, -0.15)<br>-5 (-9.29, -0.71)     |
| Kypri et al., 2014  | New Zealand | -10 (-14.35, -5.65)<br>-0.13 (-0.21, -0.05)                          |

### 9. Automated telephone communication systems for preventive healthcare and management of long-term conditions (Posadzki, 2016)

- Comparison 7. Long-term management: effects of ATCS (automated telephone communication systems) on alcohol consumption
  - Behavioural outcomes: number of drinks per drinking day: low
  - Behavioural outcomes: drinking days, heavy drinking days, or total number of drinks consumed: low
  - Behavioural outcomes: proportion of days abstinent, other alcohol consumption indices, 12 weeks: low
  - Behavioural outcomes: weekly alcohol consumption, 6 months: low
  - Behavioural outcomes: AUDIT score, 6 weeks: moderate
  - Behavioural outcomes: other alcohol consumption indices, 4 weeks: low

### 8. Family-based programmes for preventing smoking by children and adolescents (Thomas et al., 2015)

- No comparison regarding alcohol

### 7. The WHO Health Promoting School framework for improving the health and well-being of students and their academic achievement (Langford et al., 2014)

- Comparison 5. Alcohol use, Outcome 1 Alcohol use: low

### 6. Restricting or banning alcohol advertising to reduce alcohol consumption in adults and adolescents (Siegfried et al., 2014)

- Non-alcohol commercials compared to alcohol commercials for reduction of alcohol consumption: very low
- Alcohol ban compared to no ban for the general population: very low

### 5. Mobile phone messaging for preventive health care (Vodopivec-Jamsek et al., 2012)

- No comparison regarding alcohol



**4. Universal multi-component prevention programs for alcohol misuse in young people (Foxcroft et al., 2011)**

- All < 2010

**3. Universal school-based prevention programs for alcohol misuse in young people (Foxcroft et al., 2011)**

- All < 2010

**2. Mentoring adolescents to prevent drug and alcohol use (Thomas et al., 2011)**

- All < 2010

**1. Universal family-based prevention programs for alcohol misuse in young people (Foxcroft et al., 2011)**

- All < 2010





## Physical activity

### 15. Strategies for enhancing the implementation of school-based policies or practices targeting diet, physical activity, obesity, tobacco or alcohol use (Wolfenden et al., 2022)

- Physical activity: low

### 14. Interventions for reducing sedentary behaviour in community-dwelling older adults (Chastin et al., 2021)

- Sedentary time: low
- Physical function: low

### 13 Behavioural interventions delivered through interactive social media for health behaviour change, health outcomes, and health equity in the adult population (Petkovic et al., 2021)

- Physical activity: Low

### 12. Interventions in outside-school hours childcare settings for promoting physical activity amongst schoolchildren aged 4 to 12 years (Virgara et al., 2021)

- Total daily moderate-to-vigorous physical activity (MVPA): low
- Outcome Proportion of care session spent in MVPA (% session spent in MVPA) follow up: range 1 years to 2 years (secondary outcome) : moderate

#### Small archive

| Authors            | Country | Odds Ratio  |
|--------------------|---------|---|
| Beets et al., 2015 | USA     | Boys: 2.26 (1.35, 3.80)<br>Girls: 2.85 (1.43, 5.68) |

- Comparison 4. Cost-effectiveness assessed with: USD follow up: 9 months

| Authors               | Country | Mean Difference |
|-----------------------|---------|-----------------|
| Branscum et al., 2013 | USA     | p< .004         |
| Brown et al., 2018    | USA     | p< .05          |
| Lee et al., 2019      | USA     | 0.86 (p= .04)   |
| Weaver et al., 2015   | USA     | p< .001         |

The grey colour indicates the studies to be evaluated as supplementary material.

### 11. School-based physical activity programs for promoting physical activity and fitness in children and adolescents aged 6 to 18 (Neil-Sztramko et al., 2021)

- % of participants physically active: very low
- Sedentary time: low



- Physical fitness: low
- BMI: low
- Health-related quality of life: very low
- Adverse events: very low
- Moderate to vigorous physical activity: Moderate (“Overall, school-based physical activity interventions probably have little to no effect on minutes per day of MVPA among children and adolescents”).

| Authors                 | Country          | Mean Difference      |
|-------------------------|------------------|----------------------|
| Belton et al., 2019     | Ireland          | 9.66 (0.95, 18.36)   |
| Jago et al., 2019       | UK               | -0.75 (-4.49, 2.99)  |
| Lonsdale et al., 2019a  | Australia        | -1.09 (-1.87, -0.31) |
| Seljebotn et al., 2019  | Norway           | 8.00 (1.90, 14.10)   |
| Adab et al., 2018       | UK               | -3.94 (-16.56, 8.68) |
| Harrington et al., 2018 | UK               | 1.65 (-0.64, 3.94)   |
| Have et al., 2018       | Denmark          | 3.40 (-2.68, 9.48)   |
| Robbins et al., 2018    | USA              | -0.08 (-0.21, 0.05)  |
| Farmer et al., 2017     | New Zealand      | -3.80 (-7.10, -0.50) |
| Sutherland et al., 2017 | Australia        | 1.96 (-3.49, 7.41)   |
| Daly et al., 2016       | Australia        | 0.26 (-3.98, 4.51)   |
| Drummy et al., 2016     | Northern Ireland | 10.00 (4.34, 15.66)  |
| Kocken et al., 2016     | Netherlands      | 0.10 (-0.10, 0.30)   |
| Lau et al., 2016        | China            | 6.73 (1.70, 11.76)   |
| Resaland et al., 2016   | Norway           | -1.10 (-6.20, 4.00)  |
| Sutherland et al., 2016 | Australia        | 7.00 (2.60, 11.40)   |
| Tarp et al., 2016       | Denmark          | 1.20 (-3.90, 6.30)   |
| Cohen et al., 2015      | Australia        | 12.70 (4.90, 20.50)  |
| Jago et al., 2015       | UK               | -1.52 (-5.03, 1.99)  |
| Andrade et al., 2014    | Ecuador          | 13.60 (-4.10, 31.30) |
| Jago et al., 2014       | UK               | 4.30 (-2.60, 11.20)  |
| Kipping et al., 2014    | UK               | -1.35 (-5.29, 2.59)  |
| Kobel et al., 2014      | Germany          | 5.00 (-13.84, 23.84) |
| Toftager et al., 2014   | Denmark          | -3.30 (-15.40, 8.80) |





|                              |           |  |
|------------------------------|-----------|--|
| Fairclough et al., 2013      | UK        | 2.85 (-1.64, 7.34)   |
| Grydeland et al., 2013       | Norway    | 2.00 (-3.00, 7.00)   |
| Okely et al., 2011           | Australia | -0.35 (-6.58, 5.88)  |
| Wilson et al., 2011          | USA       | 0.25 (-4.24, 4.74)   |
| Other articles in the review |           |  |
| Zhou et al., 2019            | China     | I1 (Biweekly after school program)<br>1.99 (1.68, 2.30)<br><br>I2 (Enhanced PE + after school program)<br>4.98 (4.62, 5.34)<br><br>I3 (Enhanced PE)<br>3.12 (2.76, 3.48) |
| Ten Hoor et al., 2018        |           | no values reported<br>only <i>p</i> value  |
| Corepal et al., 2019         |           | No MVPA  |
| Ford et al., 2013            |           | No MVPA  |
| Magnusson et al., 2011       |           | No MVPA, only <i>p</i> value   |

### Small archive

| Authors                 | Country          | Mean Difference   |
|-------------------------|------------------|---|
| Belton et al., 2019     | Ireland          | 9.66 (0.95, 18.36)  |
| Seljebotn et al., 2019  | Norway           | 8.00 (1.90, 14.10)  |
| Drummy et al., 2016     | Northern Ireland | 10.00 (4.34, 15.66)   |
| Lau et al., 2016        | China            | 6.73 (1.70, 11.76)  |
| Sutherland et al., 2016 | Australia        | 7.00 (2.60, 11.40)  |
| Cohen et al., 2015      | Australia        | 12.70 (4.90, 20.50)   |
| Zhou et al., 2019       | China            | I1 (Biweekly after school program)<br>1.99 (1.68, 2.30)<br><br>I2 (Enhanced PE + after school program)<br>4.98 (4.62, 5.34) |







|  |  |                                       |
|--|--|---------------------------------------|
|  |  | I3 (Enhanced PE)<br>3.12 (2.76, 3.48) |
|--|--|---------------------------------------|

### 10. Caregiver involvement in interventions for improving children's dietary intake and physical activity behaviors (Morgan et al., 2020)

- Comparison 2. Physical activity interventions with a caregiver component compared to interventions without a caregiver component for improving children's physical activity behaviors:
  - Children's total physical activity (min/h): low
  - Children's MVPA (% time spent/d and min/h): moderate

| Authors                      | Country | Mean Difference    |
|------------------------------|---------|--------------------|
| Adamo et al 2017a            | Canada  | 0.17 (-0.39, 0.73) |
| Alhassan 2018a               | USA     | 0.2 (-0.97, 0.57)  |
| Other articles in the review |         |                    |
| De Bock 2013a                | Germany | 0.6 (-2.58, 3.78)  |

- Comparison 3: Combined dietary and physical activity interventions with a caregiver component compared to interventions without a caregiver component for improving children's dietary intake and physical activity behaviors
  - Children's total physical activity (min/d): low
  - Children's MVPA (min/d): very low

### 9. Strategies to improve the implementation of healthy eating, physical activity and obesity prevention policies, practices or programmes within childcare services (Wolfenden et al., 2020)

- Comparison 1. Implementation of policies, practices or programmes that promote child healthy eating, physical activity and/ or obesity prevention: moderate
  - Implementation Score

| Authors               | Country   | Mean Difference    |
|-----------------------|-----------|--------------------|
| Alkon et al., 2014    | USA       | 1.18 (0.13, 2.24)  |
| Esquivel et al., 2016 | USA       | 0.96 (0.09, 1.84)  |
| Finch et al., 2019    | Australia | 0.07 (-0.27, 0.41) |
| Jones et al., 2015    | Australia | 0.34 (-0.01, 0.7)  |
| Mazzucca et al., 2017 | USA       | 0.89 (0.08, 1.7)   |
| Ward et al., 2017     | USA       | 0.05 (-0.66, 0.76) |



- Percentage of staff: or services implementing a policy or practice: not considered

| Authors              | Country | Odds Ratio       |
|----------------------|---------|------------------|
| Stookey et al., 2017 | USA     | 6.5 (1.1, 38.41) |

- Comparison 2. Adverse consequences of strategies to improve the implementation of policies, practices or programmes in childcare services: low
- Comparison 4. Measures of child physical activity: moderate

| Authors               | Country   | Mean Difference      |
|-----------------------|-----------|----------------------|
| Alkon et al., 2014    | USA       | P value not reported |
| Finch et al., 2014    | Australia | P=0.12               |
| Jones et al., 2015    | Australia | P>0.05               |
| Mazzucca et al., 2017 | USA       | P >0.05              |
| Sharma et al., 2018   | USA       | P = 0.824            |

- Comparison 5. Measures of child weight status: moderate

| Authors               | Country | Mean Difference  |
|-----------------------|---------|--|
| Alkon et al., 2014    | USA     | P = 0.02   |
| Esquivel et al., 2016 | USA     | P = 0.50   |
| Sharma et al., 2018   | USA     | -0.26 (-0.50, -0.01) (zBMI)<br>-6.5 (-12.4, -0.69) (BMI) |
| Stookey et al., 2017  | USA     | P<0.05   |

#### Small archive

| Authors               | Country | Mean Difference   |
|-----------------------|---------|-------------------|
| Alkon et al., 2014    | USA     | 1.18 (0.13, 2.24) |
| Esquivel et al., 2016 | USA     | 0.96 (0.09, 1.84) |
| Mazzucca et al., 2017 | USA     | 0.89 (0.08, 1.7)  |
| Stookey et al., 2017  | USA     | P<0.05            |

#### 8. Interventions for preventing obesity in children (Brown et al., 2019)

- Comparison 2. Physical activity interventions compared to control for preventing obesity in children aged 0 to 5 years
  - Body-mass index (BMI): high (Physical activity interventions likely do not reduce BMI)



| Authors             | Country | Mean Difference    |
|---------------------|---------|--------------------|
| Birken et al., 2012 | Canada  | 0.01 (-0.23, 0.25) |
| Yilmaz et al., 2015 | Turkey  | 0.02 (-0.19, 0.23) |

- Body-mass index z score (zBMI): high (Physical activity interventions likely do not reduce zBMI)

| Authors               | Country     | Mean Difference     |
|-----------------------|-------------|---------------------|
| De Vries et al., 2015 | Netherlands | -0.2 (-0.59, 0.19)  |
| Annesi et al., 2013   | USA         | -0.06 (-0.3, 0.18)  |
| Bonvin et al., 2013   | France      | -0.7 (-1.09, -0.31) |

- Comparison 3. Diet and physical activity interventions combined compared to control for preventing obesity in children aged 0 to 5 years
  - Body-mass index z score (zBMI): moderate

| Authors                 | Country     | Mean Difference      |
|-------------------------|-------------|----------------------|
| Alkon et al., 2014      | USA         | -0.26 (-0.46, -0.06) |
| De Coen et al., 2012    | Belgium     | -0.04 (-0.15, 0.07)  |
| Fitzgibbon et al., 2011 | USA         | -0.05 (-0.15, 0.05)  |
| Natale et al., 2014     | USA         | 0.32 (-0.85, 1.49)   |
| Rush et al., 2012       | New Zealand | 0.00 (-0.06, 0.06)   |
| Story et al., 2012      | USA         | 0.01 (-0.13, 0.15)   |
| Verbestel et al., 2014  | Belgium     | 0.08 (-0.23, 0.39)   |
| Zask et al., 2012       | Australia   | -0.15 (-0.29, -0.01) |
| Slusser et al., 2012    | USA         | -0.24 (-0.46, -0.02) |
| Campbell et al., 2013   | Australia   | -0.01 (-0.15, 0.113) |
| Skouteris et al., 2016  | Australia   | -0.04 (-0.22, 0.14)  |
| Haines et al., 2013     | USA         | -0.17 (-0.41, 0.07)  |



|                      |     |                    |
|----------------------|-----|--------------------|
| Ostbyke et al., 2012 | USA | 0.05 (-0.09, 0.19) |
|----------------------|-----|--------------------|

- Body-mass index (BMI): moderate

| Authors                 | Country     | Mean Difference                                    |
|-------------------------|-------------|--|
| Haines et al., 2013     | USA         | -0.4 (-0.79, -0.01)                                |
| Wen et al., 2012        | Australia   | -0.29 (-0.56, -0.02)                               |
| Barkin et al., 2012     | USA         | -0.59 (-0.94, -0.24)                               |
| Bonis et al., 2014      | USA         | 0.00 (-0.61, 0.61)                                 |
| Fitzgibbon et al., 2011 | USA         | -0.08 (-0.24, 0.08)                                |
| Nemet et al., 2011      | Israel      | I1: -0.07 (-0.18, 0.04)<br>I2: -0.3 (-0.47, -0.13) |
| Puder et al., 2011      | Switzerland | -0.07 (-0.19, 0.05)                                |
| Story et al., 2012      | USA         | 0.67 (-0.26, 1.60)                                 |

- Comparison 4. Adverse event outcomes for dietary combined with physical activity interventions compared to control in children aged 0 to 5 years: low e very low
- Comparison 6. Physical activity interventions compared to control for preventing obesity in children aged 6 to 12 years
  - Body-mass index z score (zBMI): moderate

| Authors           | Country | Mean Difference                                    |
|-------------------|---------|--|
| Khan et al., 2014 | USA     | I1: -0.08 (-0.19, 0.03)<br>I2: -0.2 (-0.36, -0.04) |
| Meng et al., 2013 | China   | 0.01 (-0.17, 0.19)                                 |

- Body-mass index (BMI): moderate

| Authors           | Country | Mean Difference                                 |
|-------------------|---------|---|
| Khan et al., 2014 | USA     | I1: -0.53 (-1.12, 0.06)<br>I2: -0.29 (-0.58, 0) |



|                                |        |  |
|--------------------------------|--------|--|
| Martinez-Vizcaino et al., 2014 | Spain  | I1:0.01 (-0.09, 0.11)<br>I2:-0.2 (-0.45, 0.05)   |
| Meng et al., 2013              | China  | 0.04 (-0.47, 0.55)                               |
| Sevinc et al., 2011            | Turkey | -0.05 (-0.26, 0.16)                              |
| Thivel et al., 2011            | France | I1: -0.16(-0.48, 0.16)<br>I2: -0.03(-1.33, 1.27) |

- Comparison 7. Adverse event outcomes for physical activity interventions compared to no intervention in children aged 6 to 12 years (not considered)
  - Physical injuries: low
  - Underweight: high
  - Depression: low
  - Body satisfaction: low
  - Increased weight concerns: low
- Comparison 8. Diet and physical activity interventions combined compared to control for preventing obesity in children aged 6 to 12 years: low
- Comparison 9. Adverse event outcomes for dietary combined with physical activity interventions compared to no intervention or usual care for preventing obesity in children aged 6 to 12 years (not considered)
  - Underweight (Assessed with counts of children assessed as underweight): moderate
  - Depression: low
  - Increased weight concern: high
  - Body satisfaction: high
  - Visits to a healthcare provider: low
  - Adverse events related to taking of blood samples: moderate
  - Underweight (Assessed with waist circumference of children < 10th centile): moderate
  - Injuries: low
- Comparison 11. Physical activity interventions compared to control for preventing obesity in children aged 13 to 18 years: low e very low
- Comparison 12. Adverse events outcomes for physical activity interventions compared to control in children aged 13 to 18 years (not considered)
  - Body satisfaction: low
  - Unhealthy weight gain: moderate
  - Self-acceptance/self-worth: moderate
  - Binge eating: moderate
- Comparison 13. Diet and physical activity interventions combined compared to control for preventing obesity in children aged 13 to 18 years: low



- Comparison 14. Adverse event outcomes for dietary combined with physical activity interventions compared to control for preventing obesity in children aged 13 to 18 years (not considered)
  - Depression: high
  - Clinical levels of shape and weight concern: low
  - Anxiety: high
- Comparison 15. Dietary interventions compared to physical activity interventions for preventing obesity in children aged 6 to 12 years
  - Body-mass index (BMI): high

| Authors             | Country | Mean Difference     |
|---------------------|---------|---------------------|
| Meng et al., 2013   | China   | -0.32 (-0.91, 1.27) |
| Sevinc et al., 2011 | Turkey  | -0.02 (-0.25, 0.21) |

- Body-mass index z score (zBMI): high

| Authors           | Country | Mean Difference   |
|-------------------|---------|-------------------|
| Meng et al., 2013 | China   | -0.11(-0.62, 0.4) |

- Comparison 16. Diet and physical activity interventions combined compared to physical activity interventions alone for preventing obesity in children aged 6 to 12 years
  - Body-mass index (BMI): high

| Authors           | Country | Mean Difference     |
|-------------------|---------|---------------------|
| Meng et al., 2013 | China   | -0.04 (-1.05, 0.97) |

- Body-mass index z score (zBMI): high

| Authors           | Country | Mean Difference     |
|-------------------|---------|---------------------|
| Meng et al., 2013 | China   | -0.16 (-0.57, 0.25) |

- Comparison 17. Dietary interventions alone compared to diet and physical activity interventions combined for preventing obesity in children aged 6 to 12 years
  - Body-mass index (BMI): high



| Authors           | Country | Mean Difference     |
|-------------------|---------|---------------------|
| Meng et al., 2013 | China   | -0.28 (-1.67, 1.11) |

- Body-mass index z score (zBMI): high

| Authors           | Country | Mean Difference    |
|-------------------|---------|--------------------|
| Meng et al., 2013 | China   | 0.05 (-0.38, 0.48) |

### Small archive

| Authors              | Country   | Mean Difference         |
|----------------------|-----------|-------------------------|
| Alkon et al., 2014   | USA       | -0.26 (-0.46, -0.06)    |
| Zask et al., 2012    | Australia | -0.15 (-0.29, -0.01)    |
| Slusser et al., 2012 | USA       | -0.24 (-0.46, -0.02)    |
| Haines et al., 2013  | USA       | -0.4 (-0.79, -0.01)     |
| Wen et al., 2012     | Australia | -0.29 (-0.56, -0.02)    |
| Barkin et al., 2012  | USA       | -0.59 (-0.94, -0.24)    |
| Nemet et al., 2011   | Israel    | I2: -0.3 (-0.47, -0.13) |
| Khan et al., 2014    | USA       | I2: -0.2 (-0.36, -0.04) |

### **7. Individual-, family-, and school-level interventions targeting multiple risk behaviours in young people (MacArthur et al., 2018)**

- Effectiveness of targeted individual-level multiple risk behaviour interventions compared to usual practice for outcomes up to 12 months post intervention: no physical activity
- Effectiveness of universal individual-level multiple risk behaviour interventions compared to usual practice for outcomes up to 12 months post intervention: moderate

| Authors           | Country          | Odds Ratio        |
|-------------------|------------------|-------------------|
| Lana et al., 2014 | Spain and Mexico | 1.00 (0.61, 1.63) |



- Effectiveness of targeted family-level multiple risk behaviour interventions compared to usual practice for outcomes up to 12 months post intervention: moderate

| Authors              | Country | Odds Ratio        |
|----------------------|---------|-------------------|
| Schwinn et al., 2014 | USA     | 0.72 (0.29, 1.79) |

- Effectiveness of targeted school-level multiple risk behaviour interventions compared to usual practice for outcomes up to 12 months post intervention: no physical activity
- Effectiveness of universal school-level multiple risk behaviour interventions compared to usual practice for outcomes up to 12 months post intervention: moderate

| Authors              | Country | Odds Ratio                      |
|----------------------|---------|---------------------------------|
| Saraf et al., 2015   | India   | 1.20 (0.99, 1.45)               |
| Melnyk et al., 2013  | USA     | 1.53 (1.17, 2.00)               |
| Other articles       |         |                                 |
| O'Neill et al., 2011 | USA     | data not reported in the review |

#### Small archive

| Authors             | Country | Odds Ratio        |
|---------------------|---------|-------------------|
| Melnyk et al., 2013 | USA     | 1.53 (1.17, 2.00) |

#### **6. Strategies to improve the implementation of workplace-based policies or practices targeting tobacco, alcohol, diet, physical activity and obesity (Wolfenden et al., 2018)**

- Physical activity: No RCTs reported these outcomes.

#### **5. Automated telephone communication systems for preventive healthcare and management of long-term conditions (Posadzki et al., 2016)**

- Preventive healthcare: effects of ATCS on physical activity levels
  - Physical activity, Multimodal/complex intervention versus no calls: low
  - Physical activity, Automated Telephone Communication System (ATCS) Plus versus IVR control: low
  - Physical activity, Interactive Voice Response (IVR) versus usual care, control or health education: low
  - Body weight measures, Multimodal/complex intervention ATCS Plus versus usual care or control: low
- Preventive healthcare: effects of ATCS on weight management
  - Behavioural outcome: physical activity, dietary habits in children at median follow-up of 7.5 months: moderate





| Authors             | Country | Risk Ratio |
|---------------------|---------|------------|
| Wright et al., 2013 | USA     | P=0.22     |

#### 4. Community wide interventions for increasing physical activity (Baker et al., 2015)

- Comparison 1. Community wide interventions for promoting physical activity
  - % Physically active; Intervention compared to control adjusted pre/post cross-sectional sampling (end of intervention to 6 years): low
  - % physically active; Intervention compared to control adjusted pre-post cross-sectional sampling (end of intervention to 3 years, 4 months): high

| Authors               | Country | Relative Risk     |
|-----------------------|---------|-------------------|
| Kamada et al., 2013   | Japan   | 1.00 (0.99, 1.00) |
| Phillips et al., 2014 | England | 1.08 (0.95, 1.22) |
| Solomon et al., 2014  | England | 1.02 (0.88, 1.17) |

- Energy expenditure; METS/week score, adjusted mean difference (follow up; end of intervention to 4 years): low
- Physical activity; Average daily minutes of moderate to vigorous (24 months): moderate

| Authors             | Country | Mean Difference    |
|---------------------|---------|--------------------|
| Wilson et al., 2014 | USA     | 0.69 (-0.14, 1.39) |

#### 3. The WHO Health Promoting School framework for improving the health and well-being of students and their academic achievement (Langford et al., 2014)

- Comparison 1. Overweight or obesity, Outcome 1: BMI: moderate
  - Physical activity only

| Authors             | Country   | Mean Difference     |
|---------------------|-----------|---------------------|
| Eather et al., 2013 | Australia | -0.96 (-1.41,-0.51) |

- Physical activity + nutrition



| Authors                   | Country     | Mean Difference      |
|---------------------------|-------------|----------------------|
| Brandstetter et al., 2012 | Germany     | -0.08 (-0.3, 0.14)   |
| Grydeland et al., 2013    | Norway      | -0.1 (-0.18, -0.02)  |
| Jansen et al., 2011       | Netherlands | -0.04 (-0.14, 0.06)  |
| Levy et al., 2012         | Mexico      | -0.61 (-0.94, -0.28) |
| Llargues et al., 2011     | Spain       | -0.96 (-1.33, -0.59) |

- Comparison 1. Overweight or obesity, Outcome 2: zBMI:moderate
- Physical activity only

| Authors             | Country   | Mean Difference      |
|---------------------|-----------|----------------------|
| Eather et al., 2013 | Australia | -0.47 (-0.69, -0.25) |

- Physical activity + nutrition

| Authors                 | Country     | Mean Difference     |
|-------------------------|-------------|---------------------|
| Crespo et al., 2012     | USA         | -0.14 (-0.3, 0.02)  |
| Grydeland et al., 2013  | Norway      | -0.03 (-0.07, 0.01) |
| Rush et al., 2012       | New Zealand | 0.03 (-0.03, 0.09)  |
| Williamson et al., 2012 | USA         | -0.01(-0.07, 0.05)  |

- Comparison 2. Physical activity, Outcome 1: Physical activity: low/moderate
- Physical activity + nutrition

| Authors                 | Country | Mean Difference    |
|-------------------------|---------|--------------------|
| Grydeland et al., 2013  | Norway  | 0.09 (-0.13, 0.31) |
| Williamson et al., 2012 | USA     | 0.22 (-0.02, 0.46) |

- Comparison 2. Physical activity, Outcome 2: Physical fitness: low/moderate
- Physical activity only

| Authors             | Country   | Mean Difference  |
|---------------------|-----------|------------------|
| Eather et al., 2013 | Australia | 0.64 (0.4, 0.88) |

- Physical activity + nutrition



| Authors             | Country     | Mean Difference    |
|---------------------|-------------|--------------------|
| Jansen et al., 2011 | Netherlands | 0.13 (-0.01, 0.27) |

- Comparison 3. Nutrition, Outcome 1: Fat intake; Outcome 2: Fruit and vegetable intake: low
  - Nutrition only
  - Nutrition + physical activity

Small archive

| Authors                | Country   | Mean Difference   |
|------------------------|-----------|---|
| Eather et al., 2013    | Australia | -0.96 (-1.41,-0.51)<br>-0.47 (-0.69, -0.25)<br>0.64 (0.4, 0.88) |
| Grydeland et al., 2013 | Norway    | -0.1 (-0.18, -0.02)   |
| Levy et al., 2012      | Mexico    | -0.61 (-0.94, -0.28)  |
| Llargues et al., 2011  | Spain     | -0.96 (-1.33, -0.59)  |

## 2. Remote and web 2.0 interventions for promoting physical activity (Foster et al., 2013)

- Remote and web 2.0 versus control for promoting physical activity
  - Cardio-respiratory fitness: 12 months: high
    - No articles after 2010
  - Dichotomous outcomes: 12 months Self-reported physical activity questionnaire  
Follow-up: mean 12 months: moderate
    - No articles after 2010
  - Dichotomous outcomes: 24 months Self-reported physical activity questionnaire  
Follow-up: mean 24 months: moderate
    - No articles after 2010
  - Self-reported physical activity: 24 months Self-reported physical activity questionnaire  
Follow-up: mean 24 months: moderate
    - No articles after 2010
  - Self-reported physical activity: 12 months Follow-up: mean 12 months: moderate

| Authors                  | Country     | Mean Difference    |
|--------------------------|-------------|--------------------|
| Castro et al., 2011      | USA         | 0.47 (0.15, 0.78)  |
| Van Stralen et al., 2011 | Netherlands | 0.11 (-0.01, 0.22) |

Small archive



| Authors             | Country | Mean Difference   |
|---------------------|---------|-------------------|
| Castro et al., 2011 | USA     | 0.47 (0.15, 0.78) |

1. **Mobile phone messaging for preventive health care (Vodopivec-Jamsek et al., 2012)**
  - Health behaviour outcomes, Healthy behaviour in children (Physical activity): very low





## Diet

### 15. Strategies for enhancing the implementation of school-based policies or practices targeting diet, physical activity, obesity, tobacco or alcohol use (Wolfenden et al., 2022)

- Comparison of strategies for enhancing the implementation of school-based policies or practices targeting risk factors for chronic disease
  - Diet: low
  - Physical activity: low
  - Obesity: moderate
  - Tobacco: very low
  - Alcohol use: the effect was not reported in the abstract and summary of findings table

#### Big Archive

| Authors             | Country     | Mean Difference      |
|---------------------|-------------|----------------------|
| Farmer et al., 2017 | New Zealand | 0.05 (-0.10 , 0.21)  |
| Mobley et al., 2012 | USA         | -0.01 (-0.14 , 0.12) |
| Waters et al., 2017 | Australia   | -0.03 (-0.10 , 0.05) |

### 14. Behavioural interventions delivered through interactive social media for health behaviour change, health outcomes, and health equity in the adult population (Petkovic et al., 2021)

- Diet: Low

### 13. Strategies to improve the implementation of healthy eating, physical activity and obesity prevention policies, practices or programmes within childcare services (Wolfenden et al., 2020)

- Comparison 1. Implementation of policies, practices or programmes that promote child healthy eating, physical activity and/ or obesity prevention: moderate
  - Implementation Score

| Authors               | Country   | Mean Difference   |
|-----------------------|-----------|-------------------|
| Alkon et al., 2014    | USA       | 1.18 (0.13,2.24)  |
| Esquivel et al., 2016 | USA       | 0.96 (0.09,1.84)  |
| Finch et al., 2019    | Australia | 0.07 (-0.27,0.41) |
| Jones et al., 2015    | Australia | 0.34 (-0.01,0.7)  |
| Mazzucca et al., 2017 | USA       | 0.89 (0.08,1.7)   |
| Seward et al., 2017   | Australia | 1.27 (0.61,1.92)  |
| Ward et al., 2017     | USA       | 0.05 (-0.66,0.76) |



- Comparison 2. Adverse consequences of strategies to improve the implementation of policies, practices or programmes in childcare services: low
- Comparison 3. Measures of child diet: low
- Comparison 5. Measures of child weight status: moderate

| Authors               | Country | Mean Difference  |
|-----------------------|---------|--|
| Esquivel et al., 2016 | USA     | P = 0.50   |
| Sharma et al., 2018   | USA     | -0.26 (-0.50, -0.01) (zBMI)<br>-6.5 (-12.4, -0.69) (BMI) |
| Stookey et al., 2017  | USA     | both P<0.05 for BMI and for zBMI                         |

#### Small archive

| Authors               | Country   | Mean Difference   |
|-----------------------|-----------|-------------------|
| Alkon et al., 2014    | USA       | 1.18 (0.13, 2.24) |
| Esquivel et al., 2016 | USA       | 0.96 (0.09, 1.84) |
| Mazzucca et al., 2017 | USA       | 0.89 (0.08, 1.7)  |
| Seward et al., 2017   | Australia | 1.27 (0.61, 1.92) |
| Stookey et al., 2017  | USA       | P<0.05            |

### **12. Taxation of unprocessed sugar or sugar-added foods for reducing their consumption and preventing obesity or other adverse health outcomes (Pfinder et al., 2020)**

- Comparison 1. Taxation of sugar-added foods compared to no taxation for reducing consumption of sugar-added foods: very low
- Comparison 2. Taxation of sugar-added foods compared to no taxation for reducing expenditure on and assessing substitution of sugar-added foods: very low

### **11. Caregiver involvement in interventions for improving children's dietary intake and physical activity behaviors (Morgan et al., 2020)**

- Comparison 1. Dietary behavior change interventions with a caregiver component compared to interventions without a caregiver component for improving children's dietary intake: low
- Comparison 3. Combined dietary and physical activity interventions with a caregiver component compared to interventions without a caregiver component for improving children's dietary intake and physical activity behaviors
  - Children's percentage of total energy intake from saturated fat: very low
  - Children's sodium intake (mg/d): very low



- Children's fruit and vegetable intake (servings/d): very low
- Children's SSB intake (SSB drinks/d, soI drink glasses/d and regular soda servings/d): moderate

| Authors             | Country | Mean Difference     |
|---------------------|---------|---------------------|
| Crespo et al., 2012 | USA     | -0.23 (-0.58, 0.12) |

#### 10. Interventions for preventing obesity in children (Brown et al., 2019)

- Comparison 1. Dietary interventions compared to control for preventing obesity in children aged 0 to 5 years
  - Body-mass index z score (zBMI): moderate

| Authors              | Country   | Mean Difference     |
|----------------------|-----------|---------------------|
| Daniels et al., 2012 | Australia | -0.14 (-0.32, 0.04) |

- Comparison 3. Diet and physical activity interventions combined compared to control for preventing obesity in children aged 0 to 5 years (già inserita nella physical activity)
  - Body-mass index z score (zBMI): moderate

| Authors                 | Country     | Mean Difference      |
|-------------------------|-------------|----------------------|
| Alkon et al., 2014      | USA         | -0.26 (-0.46, -0.06) |
| De Coen et al., 2012    | Belgium     | -0.04 (-0.15, 0.07)  |
| Fitzgibbon et al., 2011 | USA         | -0.05 (-0.15, 0.05)  |
| Natale et al., 2014     | USA         | 0.32 (-0.85, 1.49)   |
| Rush et al., 2012       | New Zealand | 0.00 (-0.06, 0.06)   |
| Story et al., 2012      | USA         | 0.01 (-0.13, 0.15)   |
| Verbestel et al., 2014  | Belgium     | 0.08 (-0.23, 0.39)   |
| Zask et al., 2012       | Australia   | -0.15 (-0.29, -0.01) |
| Slusser et al., 2012    | USA         | -0.24 (-0.46, -0.02) |
| Campbell et al., 2013   | Australia   | -0.01 (-0.15, 0.113) |
| Skouteris et al., 2016  | Australia   | -0.04 (-0.22, 0.14)  |
| Haines et al., 2013     | USA         | -0.17 (-0.41, 0.07)  |





|                      |     |                    |
|----------------------|-----|--------------------|
| Ostbyke et al., 2012 | USA | 0.05 (-0.09, 0.19) |
|----------------------|-----|--------------------|

○ Body-mass index (BMI): moderate

| Authors                 | Country     | Mean Difference                                    |
|-------------------------|-------------|--|
| Haines et al., 2013     | USA         | -0.4 (-0.79, -0.01)                                |
| Wen et al., 2012        | Australia   | -0.29 (-0.56, -0.02)                               |
| Barkin et al., 2012     | USA         | -0.59 (-0.94, -0.24)                               |
| Bonis et al., 2014      | USA         | 0.00 (-0.61, 0.61)                                 |
| Fitzgibbon et al., 2011 | USA         | -0.08 (-0.24, 0.08)                                |
| Nemet et al., 2011      | Israel      | I1: -0.07 (-0.18, 0.04)<br>I2: -0.3 (-0.47, -0.13) |
| Puder et al., 2011      | Switzerland | -0.07 (-0.19, 0.05)                                |
| Story et al., 2012      | USA         | 0.67 (-0.26, 1.60)                                 |

- Comparison 4. Adverse event outcomes for dietary combined with physical activity interventions compared to control in children aged 0 to 5 years: low e very low
- Comparison 5. Dietary interventions compared to control for preventing obesity in children aged 6 to 12 years

○ Body-mass index z score (zBMI): high

| Authors                | Country     | Mean Difference      |
|------------------------|-------------|----------------------|
| Damsgaard et al., 2014 | Denmark     | 0.01 (-0.01, 0.03)   |
| De Ruyter et al., 2012 | Netherlands | -0.13 (-0.21, -0.05) |
| Meng et al., 2013      | China       | 0 (-0.23, 0.23)      |
| Rosario et al., 2012   | Portugal    | -0.02 (-0.25, 0.21)  |

○ Body-mass index (BMI): high

| Authors             | Country | Mean Difference         |
|---------------------|---------|-------------------------|
| Meng et al., 2013   | China   | 0.02 (-0.49, 0.53)      |
| Sevinc et al., 2011 | Turkey  | -0.07 (-942.87, 942.73) |



- Comparison 8. Diet and physical activity interventions combined compared to control for preventing obesity in children aged 6 to 12 years: low
- Comparison 9. Adverse event outcomes for dietary combined with physical activity interventions compared to control for preventing obesity in children aged 6 to 12 years (not considered)
  - Underweight: moderate
  - Depression: low
  - Increased weight concern: high
  - Body satisfaction: high
  - Visits to a healthcare provider: low
  - Adverse events related to taking of blood samples: moderate
  - Underweight: moderate
  - Injuries: low
- Comparison 10. Diet interventions compared to control for preventing obesity in children aged 13 to 18 years: low
- Comparison 13. Diet and physical activity interventions combined compared to control for preventing obesity in children aged 13 to 18 years: low
- Comparison 14. Adverse event outcomes for dietary combined with physical activity interventions compared to control for preventing obesity in children aged 13 to 18 years (not considered)
  - Depression: high
  - Clinical levels of shape and weight concern: low
  - Anxiety: high
- Comparison 15. Dietary interventions compared to physical activity interventions for preventing obesity in children aged 6 to 12 years
  - Body-mass index z score (zBMI): high

| Authors           | Country | Mean Difference    |
|-------------------|---------|--------------------|
| Meng et al., 2013 | China   | -0.11 (-0.62, 0.4) |

- Body-mass index (BMI): high

| Authors             | Country | Mean Difference     |
|---------------------|---------|---------------------|
| Meng et al., 2013   | China   | -0.32 (-1.91, 1.27) |
| Sevinc et al., 2011 | Turkey  | -0.02 (-0.25, 0.21) |

- Comparison 16. Diet and physical activity interventions combined compared to physical activity interventions alone for preventing obesity in children aged 6 to 12 years
  - Body-mass index (BMI): high



| Authors           | Country | Mean Difference     |
|-------------------|---------|---------------------|
| Meng et al., 2013 | China   | -0.04 (-1.05, 0.97) |

- Body-mass index z score (zBMI): high

| Authors           | Country | Mean Difference     |
|-------------------|---------|---------------------|
| Meng et al., 2013 | China   | -0.16 (-0.57, 0.25) |

- Comparison 17. Dietary interventions alone compared to diet and physical activity interventions combined for preventing obesity in children aged 6 to 12 years

- Body-mass index (BMI): high

| Authors           | Country | Mean Difference     |
|-------------------|---------|---------------------|
| Meng et al., 2013 | China   | -0.28 (-1.67, 1.11) |

- Body-mass index z score (zBMI): high

| Authors           | Country | Mean Difference    |
|-------------------|---------|--------------------|
| Meng et al., 2013 | China   | 0.05 (-0.38, 0.48) |

### Small archive

| Authors                | Country     | Mean Difference         |
|------------------------|-------------|-------------------------|
| Alkon et al., 2014     | USA         | -0.26 (-0.46, -0.06)    |
| Zask et al., 2012      | Australia   | -0.15 (-0.29, -0.01)    |
| Slusser et al., 2012   | USA         | -0.24 (-0.46, -0.02)    |
| Haines et al., 2013    | USA         | -0.4 (-0.79, -0.01)     |
| Wen et al., 2012       | Australia   | -0.29 (-0.56, -0.02)    |
| Barkin et al., 2012    | USA         | -0.59 (-0.94, -0.24)    |
| Nemet et al., 2011     | Israel      | I2: -0.3 (-0.47, -0.13) |
| De Ruyter et al., 2012 | Netherlands | -0.13 (-0.21, -0.05)    |

- 9. Strategies to improve the implementation of workplace-based policies or practices targeting tobacco, alcohol, diet, physical activity and obesity (Wolfenden et al., 2018)



- Comparison 1. Strategies to improve the implementation of workplace-based health promotion versus no implementation strategy
  - Implementation of workplace- based policies or practices targeting diet, physical activity, obesity, tobacco use or alcohol use: low e very low
  - Employee dietary intake: very low

### 8. Individual-, family-, and school-level interventions targeting multiple risk behaviours in young people (MacArthur et al., 2018)

- Comparison 12 (da forest plot e non SOF). Unhealthy diet: moderate
  - Outcome 1 BMI - individual universal

| Authors           | Country          | Odds Ratio       |
|-------------------|------------------|------------------|
| Lana et al., 2014 | Spain and Mexico | 0.8 (0.48, 1.31) |

- Outcome 1 BMI - school universal

| Authors             | Country | Odds Ratio        |
|---------------------|---------|-------------------|
| Melnyk et al., 2013 | USA     | 0.66 (0.49, 0.87) |

- Outcome 2 Unhealthy Diet - individual universal

| Authors           | Country          | Odds Ratio        |
|-------------------|------------------|-------------------|
| Lana et al., 2014 | Spain and Mexico | 0.94 (0.65, 1.35) |

- Outcome 2 Unhealthy Diet - school universal

| Authors              | Country | Odds Ratio   |
|----------------------|---------|--|
| Saraf et al., 2011   | India   | Significant but excluded because it was conducted in Indian villages, rural Northern India |
| Other articles       |         |  |
| O'Neill et al., 2011 | USA     | data not reported in the review  |
| Schwinn et al., 2014 | USA     | data not reported in the review  |

#### Small archive

| Authors             | Country | Odds Ratio        |
|---------------------|---------|-------------------|
| Melnyk et al., 2013 | USA     | 0.66 (0.49, 0.87) |



## 7. Implementation strategies for health systems in low-income countries: an overview of systematic reviews (Pantoja et al., 2017)

Review of review

### 6. Later school start times for supporting the education, health, and well-being of high school students (Marx et al., 2017)

- Comparison of students who shifted from afternoon (13:00 to 17:30) to morning (07:30 to 12:00) classes right after the July vacation in 2009, to those that remained in afternoon classes.

- BMI z-score

| Authors                 | Country | Mean Difference    |
|-------------------------|---------|--------------------|
| Brandalize et al., 2011 | Brazil  | -0.08 (-0.3, 0.13) |

- Body fat percentage

| Authors                 | Country | Mean Difference      |
|-------------------------|---------|----------------------|
| Brandalize et al., 2011 | Brazil  | -1.45 (-2.63, -0.27) |

- Waist circumference

| Authors                 | Country | Mean Difference     |
|-------------------------|---------|---------------------|
| Brandalize et al., 2011 | Brazil  | -1.14 (-3.34, 1.06) |

### 5. Targeted mass media interventions promoting healthy behaviours to reduce risk of non-communicable diseases in adult, ethnic minorities (Mosdøl et al., 2017)

- Comparison 2. Targeted mass media intervention for promoting healthy behaviours versus no intervention

- BMI (kg/m<sup>2</sup>), 12 months from baseline: low
- Changes in dietary composition, 12 months from baseline: very low

- Comparison 3. Targeted mass media intervention versus targeted mass media intervention plus personalised content

- BMI (kg/m<sup>2</sup>), 12 months from baseline: low
- Intake meeting target from dietary guidelines, 3 months from baseline: very low
- Changes in dietary composition, 12 months from baseline: very low
- Knowledge of nutrition and physical activity guidelines: very low

### 4. The WHO Health Promoting School framework for improving the health and well-being of students and their academic achievement (Langford et al., 2014)

- Comparison 1. Overweight or obesity, Outcome 1 BMI: moderate
- Nutrition only: no studies >2010
- Physical activity + nutrition



| Authors                   | Country     | Mean Difference     |
|---------------------------|-------------|---------------------|
| Brandstetter et al., 2012 | Germany     | -0.08 (-0.3, 0.14)  |
| Grydeland et al., 2013    | Norway      | -0.1 (-0.18, -0.02) |
| Jansen et al., 2011       | Netherlands | -0.04 (-0.14, 0.06) |
| Levy et al., 2012         | Mexico      | -0.61(-0.94, -0.28) |
| Llargues et al., 2011     | Spain       | -0.96(-1.33, -0.59) |

- Comparison 1. Overweight or obesity, Outcome 2 zBMI:moderate
  - Nutrition only: no studies >2010
  - Physical activity + nutrition

| Authors                 | Country     | Mean difference    |
|-------------------------|-------------|--------------------|
| Crespo et al., 2012     | USA         | -0.14 (-0.3, 0.02) |
| Grydeland et al., 2013  | Norway      | -0.03(-0.07, 0.01) |
| Rush et al., 2012       | New Zealand | 0.03 (-0.03, 0.09) |
| Williamson et al., 2012 | USA         | -0.01(-0.07, 0.05) |

- Comparison 2 Physical activity, Outcome 1 Physical activity: low/moderate
  - Nutrition only: no studies >2010
  - Physical activity + nutrition

| Authors                 | Country | Mean difference    |
|-------------------------|---------|--------------------|
| Grydeland et al., 2013  | Norway  | 0.09 (-0.13, 0.31) |
| Williamson et al., 2012 | USA     | 0.22 (-0.02, 0.46) |

- Comparison 2 Physical activity, Outcome 2 Physical fitness: low/moderate
  - Physical activity + nutrition

| Authors             | Country     | Mean difference    |
|---------------------|-------------|--------------------|
| Jansen et al., 2011 | Netherlands | 0.13 (-0.01, 0.27) |

- Comparison 3 Nutrition, Outcome 1 Fat intake; Outcome 2 Fruit and vegetable intake: low
  - Nutrition only
  - Nutrition + physical activity

#### Small archive

| Authors                | Country | Mean difference     |
|------------------------|---------|---------------------|
| Grydeland et al., 2013 | Norway  | -0.1 (-0.18, -0.02) |



|                       |        |                     |
|-----------------------|--------|---------------------|
| Levy et al., 2012     | Mexico | -0.61(-0.94, -0.28) |
| Llargues et al., 2011 | Spain  | -0.96(-1.33, -0.59) |

### 3. Interactive computer-based interventions for weight loss or weight maintenance in overweight or obese people (Wieland et al., 2012)

- Comparison 1. Interactive computer intervention compared to usual care for weight loss or maintenance of weight loss in adults
  - Weight loss (change in kg weight), Follow-up 6 months: moderate
    - No studies >2010
  - Weight regain (change in kg weight), Follow-up 12 months: moderate
    - No studies >2010

### 2. Mobile phone messaging for preventive health care (Vodopivec-Jamsek et al., 2012)

- Comparison 1. Information and support for healthy behaviours delivered by mobile phone messaging
  - Healthy behaviour in children (Tracking of healthy behaviours in children using mobile phone messages did not result in any significant differences on their level of physical activity, consumption of sugar-sweetened beverages or screen time, compared to tracking using a paper diary or no tracking at all): very low

### 1. Dietary fibre for the prevention of recurrent colorectal adenomas and carcinomas (Yao et al., 2017). Not applicable.



**HPV****4. Improving vaccination uptake among adolescents (Abdullahi et al., 2020)**

- Comparison 1. health education compared to usual practice
  - Uptake of HPV vaccine: high

| Authors                 | Country | Risk Ratio        |
|-------------------------|---------|-------------------|
| Staras et al., 2015     | USA     | 1.84 (1.34, 2.54) |
| Diclemente et al., 2015 | USA     | 1 (0.47, 2.13)    |
| Grandahl et al., 2016   | Sweden  | 1.44 (1.15, 1.79) |
| Winer et al., 2016      | USA     | 2.3 (0.93, 5.72)  |

- Comparison 3. financial incentives compared to usual practice
  - Uptake of HPV vaccine: low
- Comparison 6. provider prompts compared to usual practice
  - Uptake of HPV vaccine: moderate

| Authors               | Country | Odds Ratio                                     |
|-----------------------|---------|--|
| Szilagyi et al., 2015 | USA     | I1: 1.13 (0.41, 3.12)<br>I2: 0.93 (0.44, 1.95) |

- Comparison 7: provider education with performance feedback compared to usual practice
  - Uptake of HPV vaccination: low
- Comparison 8: class-based compared to age-based HPV vaccination in schools
  - HPV vaccine uptake: moderate
  - Not applicable to European context.
- Comparison 9: multi-component provider intervention compared to usual practice
  - HPV vaccine uptake: moderate

| Authors              | Country | Odds Ratio  |
|----------------------|---------|---|
| Perkins et al., 2015 | USA     | Girls: 1.6 (1.1, 2.2)<br>Boys: 25.00 (15.00, 40.00) |



- Comparison 10: multi-component provider and parent intervention compared to usual practice
  - HPV vaccine uptake at 3 months: low
  - HPV vaccine uptake at 6 months: low

#### Small Archive

| Authors               | Country | Risk Ratio  |
|-----------------------|---------|---|
| Staras et al., 2015   | USA     | 1.84 (1.34, 2.54)                                   |
| Grandahl et al., 2016 | Sweden  | 1.44 (1.15, 1.79)                                   |
| Perkins et al., 2015  | USA     | Girls: 1.6 (1.1, 2.2)<br>Boys: 25.00 (15.00, 40.00) |

### 3. Face-to-face interventions for informing or educating parents about early childhood vaccination (Kaufman et al., 2018)

- Comparison 1. Face-to-face interventions directed to parents for informing or educating parents about early childhood vaccination, as compared with control
  - Vaccination status: low
  - Knowledge or understanding: moderate

| Authors              | Country | Mean Difference    |
|----------------------|---------|--------------------|
| Jackson et al., 2011 | England | 0.16 (-0.26, 0.57) |
| Saitoh et al., 2013  | Japan   | 0.55 (0.14, 0.96)  |
| Saitoh et al., 2017  | Japan   | 0.11 (-0.29, 0.51) |

- Attitudes or beliefs: low
- Intention to vaccinate: low
- Adverse effects (anxiety associated with intervention): low
- Cost: low

#### Small Archive

| Authors             | Country | Mean Difference   |
|---------------------|---------|-------------------|
| Saitoh et al., 2013 | Japan   | 0.55 (0.14, 0.96) |



## **2. Prophylactic vaccination against human papillomaviruses to prevent cervical cancer and its precursors (Arbyn, 2018)**

- Comparison 1. HPV vaccine effects on cervical lesions in adolescent girls and women who are hrHPV DNA negative at baseline. Not considered.

## **1. Interventions for encouraging sexual behaviours intended to prevent cervical cancer**

All < 2010.





## *Tobacco use (smoking cessation and preventive initiation)*

### **1. Different doses, durations and modes of delivery of nicotine replacement therapy for SC (smoking cessation) (Theodoulou et al., 2023)**

- Comparison 1. Combination compared to single-form nicotine replacement therapy for smoking cessation
  - Smoking cessation: high
  - All < 2010
  - Overall serious adverse events: low
  - Treatment withdrawals: very low
- Comparison 2. Longer compared to shorter duration of combination nicotine replacement therapy for smoking cessation: low e very low
- Comparison 3. Higher-dose compared to lower-dose nicotine patch for smoking cessation
  - Smoking cessation - 42/44 mg versus 21/22 mg (24-hour patches): Moderate
  - Smoking cessation - 25 mg versus 15 mg (16-hour patches): Moderate
  - Smoking cessation - 21 mg versus 14 mg (24-hour patches): Moderate
  - Tutti < 2010
  - Overall SAEs - 42/44 mg versus 21/22 mg (24 hr patches): Low
  - Overall SAEs - 21 mg versus 14 mg (24hour patches): Low
  - Treatment withdrawals - 42/44 mg versus 21/22 mg (24-hour patches): Low
  - Treatment withdrawals - 21 mg versus 14 mg (24-hour patches): Low
- Comparison 4. Longer compared to shorter duration of nicotine patch therapy for smoking cessation: low e very low
- Comparison 5. Fast-acting nicotine replacement therapy compared to nicotine patch for smoking cessation
  - Smoking cessation: high
  - Tutti < 2010
  - Overall serious adverse events: very low
  - Treatment withdrawals: very low
- Comparison 6. Comparing types of fast-acting nicotine replacement therapy for smoking cessation: very low
- Comparison 7. Preloading nicotine replacement therapy (NRT) compared to standard-use NRT for smoking cessation
  - Smoking cessation: moderate



| Authors                        | Country | Risk Ratio   |
|--------------------------------|---------|--|
| Piper et al., 2016             | USA     | I1: 1.05 [0.61 , 1.83]<br>I2: 1.08 [0.63 , 1.88]<br>I3: 1.38 [0.79 , 2.42] |
| Preloading investigators, 2018 | UK      | 1.24 [0.97 , 1.58]   |

- Overall serious adverse events: low
- Treatment withdrawals: very low
- Comparison 12. Duration of free NRT
- Smoking cessation

## 2. Pharmacological and electronic cigarette interventions for smoking cessation in adults: component network meta-analyses (Nicola Lindson et al., 2023) SC

- Review of reviews, excluded.

## 3. Mindfulness for smoking cessation (Jackson et al., 2022) SC

- Comparison 1. Mindfulness training compared with control for smoking cessation: very low e low
- Comparison 2. Acceptance and commitment therapy (ACT) compared with control for smoking cessation: very low e low
- Comparison 3. Distress tolerance training compared with control for smoking cessation: low
- Comparison 4. Yoga compared with control for smoking cessation: low

## 4. Strategies for enhancing the implementation of school-based policies or practices targeting diet, physical activity, obesity, tobacco or alcohol use (Wolfenden et al., 2022) PI

- Comparison 1. Strategies for enhancing the implementation of school-based policies or practices targeting risk factors for chronic disease
  - Tobacco use: very low

## 5. Behavioural interventions delivered through interactive social media for health behaviour change, health outcomes, and health equity in the adult population (Petkovic et al., 2021)

- Comparison 1. Interactive Social Media compared to non-interactive social media
  - Health behaviours: low

## 6. Behavioural interventions for smoking cessation: an overview and network meta-analysis (Hartmann-Boyce et al., 2021) SC



Review di review, excluded

### 7. Interventions for tobacco cessation delivered by dental professionals (Holliday et al., 2021) SC

- Multi-session behavioural support versus usual care, brief advice, or very brief advice, or less active treatment: very low
- Single session behavioural support versus usual care, brief advice, or very brief advice: very low
- Behavioural intervention + NRT/e-cigarette versus no intervention/usual care, brief advice, or very brief advice: moderate

| Authors               | Country | Risk Ratio          |
|-----------------------|---------|---------------------|
| Holliday et al., 2019 | UK      | 3.00 (0.64 , 13.98) |

- Behavioural support from dental professional at high school/college versus usual care/no intervention: very low

### 8. Strategies to improve smoking cessation rates in primary care (Lindson et al., 2021) SC

- Comparison 1. Adjunctive counseling in addition to standard smoking cessation care in primary care
  - Smoking abstinence at 6-month follow-up or more. All studies: Moderate

| Authors                 | Country         | Risk Ratio        |
|-------------------------|-----------------|-------------------|
| Girgis et al., 2011     | Australia       | 0.75 (0.41, 1.35) |
| Kalkhoran et al., 2018  | USA             | 1.44 (0.42, 4.91) |
| Van Rossem et al., 2017 | The Netherlands | 0.89 (0.61, 1.29) |
| Bock et al., 2014       | UK              | 0.92 (0.64, 1.31) |
| Leppänen et al., 2019   | Sweden          | 3.13 (1.16, 8.43) |

- Smoking abstinence at 6-month follow-up or more. Subgroup comparator: standard care: Moderate
- Smoking abstinence at 6-month follow-up or more. Subgroup comparator: multicomponent intervention: Low
- Comparison 2. Cost-free medications used in addition to standard care in primary care:
  - Smoking abstinence at 6-month follow-up or more: Moderate



| Authors                    | Country | Risk Ratio        |
|----------------------------|---------|-------------------|
| Carpenter et al., 2020     | USA     | 1.48 (1.05, 2.08) |
| Minué-Lorenzo et al., 2019 | Spain   | 2.06 (1.11, 3.83) |

- Comparison 3. Biomedical feedback in addition to standard smoking cessation treatment in primary care
  - Smoking abstinence at 6-month follow-up or more: Low
- Comparison 4. Tailored print materials in addition to standard smoking cessation treatment in primary care
  - Smoking abstinence at 6-month follow-up or more: Moderate

| Authors              | Country | Risk Ratio        |
|----------------------|---------|-------------------|
| Gilbert et al., 2013 | UK      | 1.19 (0.90, 1.57) |
| Gilbert et al., 2017 | UK      | 1.66 (1.24, 2.22) |

- Comparison 5. Provider training in addition to standard smoking cessation treatment in primary care
  - Smoking abstinence at 6-month follow-up or more: low.
- Comparison 6. Provider incentives in addition to standard smoking cessation treatment in primary care
  - Smoking abstinence at 6-month follow-up or more: very low.

#### Small archive

| Authors                    | Country | Risk Ratio        |
|----------------------------|---------|-------------------|
| Leppänen et al., 2019      | Sweden  | 3.13 (1.16, 8.43) |
| Carpenter et al., 2020     | USA     | 1.48 (1.05, 2.08) |
| Minué-Lorenzo et al., 2019 | Spain   | 2.06 (1.11, 3.83) |
| Gilbert et al., 2017       | UK      | 1.66 (1.24, 2.22) |

### 9. Pharmacological interventions for promoting smoking cessation during pregnancy (Claire et al., 2020) SC

- Comparison 1. Nicotine replacement therapy compared to control for smoking cessation during pregnancy
  - Biochemically validated smoking cessation at the latest point in pregnancy (20 weeks' gestation or more): low.





- Comparison 2. Bupropion compared to control for smoking cessation during pregnancy
  - Biochemically validated smoking cessation at the latest point in pregnancy (20 weeks' gestation or more): low.

#### 10. Print-based self-help interventions for smoking cessation (Livingstone-Banks et al., 2019) SC

- Comparison 1. Print-based self-help compared to no materials for smoking cessation
  - Abstinence - non-tailored self-help Follow-up: 6+ months: Moderate

| Authors             | Country   | Risk Ratio        |
|---------------------|-----------|-------------------|
| Parekh et al., 2014 | Australia | 0.96 (0.69, 1.33) |

- Abstinence - individually tailored self-help Follow-up: 6+ months: Moderate

| Authors   | Country                     | Risk Ratio                                    |
|---|-----------------------------|---|
| <b>Tailored self-help vs no self-help</b>           |                             |   |
| Meyer et al., 2016                                  | Germany                     | 1.18 (0.64, 2.17)                             |
| Meyer et al., 2012                                  | Germany                     | I1: 1.2 (0.82, 1.76)<br>I2: 1.55 (1.05, 2.28) |
| <b>Tailored self-help vs non-tailored self-help</b> |                             |   |
| van der Aalst et al., 2012                          | Belgium and the Netherlands | 0.8 (0.61, 1.06)                              |
| Gilbert et al., 2013                                | UK                          | 1.19 (0.91, 1.57)                             |

#### Small archive

| Authors            | Country | Risk Ratio            |
|--------------------|---------|-----------------------|
| Meyer et al., 2012 | Germany | I2: 1.55 (1.05, 2.28) |

#### 11. Exercise interventions for smoking cessation (Ussher et al., 2019) SC

- Comparison 1. Exercise interventions for smoking cessation
  - Smoking abstinence at longest follow-up assessed with: self-report and biochemical validation Follow-up: range 6 months to 16 months: low
  - Relapse prevention at longest follow-up assessed with: Self-report and biochemical validation Follow-up: range 6 months to 12 months: Very low



## 12. Telephone counselling for smoking cessation (Matkin et al., 2019) SC

- Comparison 1. Interventions for callers to quitlines - effect of additional proactive calls for smoking cessation
  - Smoking cessation Self-reported abstinence (majority) Follow-up: 6+ months: Moderate

| Authors               | Country | Risk Ratio        |
|-----------------------|---------|-------------------|
| Cummins et al., 2016b | USA     | 1.74 (1.25, 2.44) |
| Ferguson et al., 2012 | UK      | 0.93 (0.72, 1.21) |
| Nohlert et al., 2014  | Sweden  | 0.9 (0.65, 1.27)  |
| Sims et al., 2013     | USA     | 1.04 (0.5, 2.15)  |
| Zhu et al., 2012      | USA     | 2.05 (1.62, 2.6)  |

- Comparison 2. Proactive telephone counselling for smokers not calling quitlines
  - Smoking cessation Self-reported abstinence (majority) Follow-up: 6+ months: Moderate

| Authors                | Country                                | Risk Ratio        |
|------------------------|--|-------------------|
| Chan et al., 2015      | Hong Kong                              | 0.92 (0.47, 1.79) |
| Girgis et al., 2011    | Australia                              | 0.75 (0.41, 1.35) |
| Graham et al., 2011    | USA                                    | 1.73 (1.11, 2.69) |
| McClure et al., 2011   | USA<br>(Depressed smokers)             | 0.56 (0.15, 2.09) |
| Peterson et al., 2016  | USA                                    | 1.02 (0.8, 1.31)  |
| Schuck et al., 2014    | the Netherlands                        | 4 (2.33, 6.85)    |
| Tzelepis et al., 2011a | Australia                              | 1.89 (0.7, 5.09)  |
| Brunette et al., 2017  | USA<br>(Mental illness and low-income) | 1.31 (0.63, 2.73) |
| Ramon et al., 2013     | Spain                                  | 1.04 (0.76, 1.42) |
| Bastian et al., 2013   | USA                                    | 0.88 (0.56, 1.38) |
| Blebil et al., 2014    | Malaysia                               | 1.47 (1.18, 1.84) |



|                       |     |                   |
|-----------------------|-----|-------------------|
| Cummins et al., 2016a | USA | 0.61 (0.4, 0.94)  |
| Fraser et al., 2014   | USA | 0.97 (0.8, 1.18)  |
| Schlam et al., 2016   | USA | 1.56 (0.93, 2.61) |
| Thomas et al., 2016   | USA | 1.05 (0.67, 1.65) |

- Comparison 10. Other studies, Outcome 1 Cessation at longest follow-up.  
(Not included in the main findings)

| Authors                | Country | Risk Ratio  |
|------------------------|---------|---|
| Collins et al., 2018   | USA     | 2.01 (0.97, 4.17)   |
| Klemperer et al., 2017 | USA     | I1: 2.63 (1.12, 6.14)<br>I2: 0.88 (0.47, 1.68)<br>I3: 2.32 (0.98, 5.52) |
| Sumner et al., 2016    | USA     | 1.15 (0.82, 1.62)   |
| Warner et al., 2016    | USA     | 1.62 (0.96, 2.72)   |
| Wu et al., 2017        | China   | 2.86 (0.93, 8.81)   |
| Smith et al., 2013     | USA     | 0.98 (0.83, 1.15)   |
| Reid et al., 2018      | Canada  | 1.22 (0.92, 1.6)  |

### Small archive

| Authors                | Country         | Risk Ratio            |
|------------------------|-----------------|-----------------------|
| Cummins et al., 2016b  | USA             | 1.74 (1.25, 2.44)     |
| Zhu et al., 2012       | USA             | 2.05 (1.62, 2.6)      |
| Graham et al., 2011    | USA             | 1.73 (1.11, 2.69)     |
| Schuck et al., 2014    | the Netherlands | 4 (2.33, 6.85)        |
| Blebil et al., 2014    | Malaysia        | 1.47 (1.18, 1.84)     |
| Klemperer et al., 2017 | USA             | I1: 2.63 (1.12, 6.14) |

13. Community pharmacy personnel interventions for smoking cessation (Carson-Chahhoud et al., 2019) SC



- Comparison 1. Community pharmacy personnel interventions compared with standard care or less intensive support for smoking cessation: Low.

#### 14. Incentives for smoking cessation (Notley et al., 2019) SC

- Comparison 1. Incentives vs no incentives for smoking cessation in mixed populations
  - Smoking cessation in mixed populations - Longest follow-up: high

| Authors                    | Country         | Risk Ratio                                     |
|----------------------------|-----------------|--|
| Drummond et al., 2014      | USA             | 3 (0.32, 27.87)                                |
| Fraser et al., 2017        | USA             | 1.57 (1.29, 1.92)                              |
| Ghosh et al., 2016         | USA             | 6.43 (0.36, 113.52)                            |
| Lasser et al., 2017        | USA             | 5.19 (1.82, 14.81)                             |
| Van den Brand et al., 2018 | The Netherlands | 1.55 (1.22, 1.99)                              |
| Alessi et al., 2014        | USA             | 0.53 (0.14, 1.94)                              |
| Cheung et al., 2017        | China           | 0.88 (0.49, 1.57)                              |
| Cooney et al., 2017        | USA             | 2.44 (0.5, 11.88)                              |
| Dallery et al., 2016       | USA             | 1.76 (0.71, 4.36)                              |
| Etter et al., 2016         | Switzerland     | 2.07 (1.22, 3.52)                              |
| Halpern et al., 2015       | USA             | I1: 1.39 (0.67, 2.89)<br>I2: 2.36 (1.16, 4.81) |
| Halpern et al., 2018       | USA             | 3.83 (1.48, 9.87)                              |
| Ledgerwood et al., 2014    | USA             | 1.06 (0.13, 8.9)                               |
| Rettig et al., 2018        | USA             | 5.4 (0.32, 91.76)                              |
| Rohsenow et al., 2015      | USA             | 0.89 (0.23, 3.44)                              |
| Rohsenow et al., 2017      | USA             | 1.95 (0.5, 7.68)                               |
| Romanowich et al., 2015    | USA             | 0.61 (0.25, 1.48)                              |
| Secades-Villa et al., 2014 | Spain           | 1.49 (0.82, 2.7)                               |
| White et al., 2013         | Thailand        | 2.35 (1.39, 3.98)                              |
| White et al., 2018         | Thailand        | 1.65 (1.15, 2.36)                              |

- Comparison 2. Incentives vs no incentives for smoking cessation in pregnant women at longest follow-up
  - Smoking cessation in pregnancy at longest follow-up: moderate

| Authors | Country | Risk Ratio |
|---------|---------|------------|
|---------|---------|------------|



|                       |     |                      |
|-----------------------|-----|----------------------|
| Baker et al., 2018    | USA | 1.59 (1.12, 2.24)    |
| Harris et al., 2015   | USA | 0.48 (0.06, 3.69)    |
| Higgins et al., 2014  | USA | 2.28 (0.63, 8.17)    |
| Ondersma et al., 2012 | USA | 3.35 (0.44, 25.68)   |
| Tappin et al., 2015a  | UK  | 3.88 (2.1, 7.16)     |
| Tuten et al., 2012    | USA | 20.72 (1.28, 336.01) |

### Small archive

| Authors                    | Country         | Risk Ratio            |
|----------------------------|-----------------|-----------------------|
| Fraser et al., 2017        | USA             | 1.57 (1.29, 1.92)     |
| Lasser et al., 2017        | USA             | 5.19 (1.82, 14.81)    |
| Van den Brand et al., 2018 | The Netherlands | 1.55 (1.22, 1.99)     |
| Etter et al., 2016         | Switzerland     | 2.07 (1.22, 3.52)     |
| Halpern et al., 2015       | USA             | I2: 2.36 (1.16, 4.81) |
| Halpern et al., 2018       | USA             | 3.83 (1.48, 9.87)     |
| White et al., 2013         | Thailand        | 2.35 (1.39, 3.98)     |
| White et al., 2018         | Thailand        | 1.65 (1.15, 2.36)     |
| Baker et al., 2018         | USA             | 1.59 (1.12, 2.24)     |
| Tappin et al., 2015a       | UK              | 3.88 (2.1, 7.16)      |

### 15. Biomedical risk assessment as an aid for smoking cessation (Clair et al., 2019) SC

- Comparison 1. Biomedical risk assessment compared with standard care or minimal intervention for smoking cessation
  - Feedback on smoking exposure Smoking cessation at longest follow-up over 6 months: Moderate

| Authors               | Country                        | Risk Ratio        |
|-----------------------|--------------------------------|-------------------|
| Brunette et al., 2013 | USA<br>(mental health illness) | 0.81 (0.46, 1.42) |
| Shahab et al., 2011   | UK                             | 1.63 (0.4, 6.57)  |

- Feedback on smoking-related risk Smoking cessation at longest follow-up over 6 months: Low
- Feedback on smoking-related harm Smoking cessation at longest follow-up over 6 months: Moderate



| Authors                      | Country     | Risk Ratio        |
|------------------------------|-------------|-------------------|
| Irizar Aramburu et al., 2013 | Spain       | 0.79 (0.42, 1.48) |
| Rodondi et al., 2012         | Switzerland | 1.13 (0.83, 1.53) |

#### 16. Mobile phone text messaging and app-based interventions for smoking cessation (Whittaker et al., 2019) SC

- Comparison 1. Text messaging versus minimal smoking cessation support
  - Long-term abstinence (all randomised): moderate

| Authors                   | Country     | Risk Ratio                                     |
|---------------------------|-------------|--|
| <b>Main Comparison</b>    |             |  |
| Abroms et al., 2014       | USA         | 1.4 (0.89, 2.2)                                |
| Abroms et al., 2017       | USA         | 1.04 (0.76, 1.43)                              |
| Borland et al., 2013      | Australia   | 1.46 (0.94, 2.26)                              |
| Chan et al., 2015         | China       | 0.58 (0.27, 1.25)                              |
| Cobos-Campos et al., 2017 | Spain       | 2.4 (1.37, 4.21)                               |
| Ferguson et al., 2015     | Australia   | 0.87 (0.43, 1.75)                              |
| Free et al., 2011         | UK          | 2.18 (1.8, 2.65)                               |
| Haug et al., 2013         | Switzerland | 1.24 (0.63, 2.41)                              |
| Liao et al., 2018         | China       | I1: 3.08 (1.35, 7.03)<br>I2: 3.35 (1.59, 7.05) |
| Whittaker et al., 2011    | New Zealand | 0.96 (0.62, 1.47)                              |
| Yu et al., 2017           | China       | 2.44 (1.18, 5.08)                              |
| <b>Other articles</b>     |             |  |
| Augustson et al., 2017    | China       | (p>.05)  |
| Bock et al., 2013         | USA         | (p>.05)  |
| Naughton., 2014           | UK          | (p<.05)  |
| Squiers et al., 2017      | USA         | (p>.05)  |

- Comparison 2. Text messaging in addition to other smoking cessation support compared to other smoking cessation support alone for smoking cessation.
  - Long-term abstinence (all randomised): moderate.

| Authors               | Country | Risk Ratio        |
|-----------------------|---------|-------------------|
| Bock et al., 2013     | USA     | 6.0 (0.77, 46.87) |
| Naughton et al., 2014 | UK      | 1.81 (1.06, 3.11) |



|                    |       |                   |
|--------------------|-------|-------------------|
| Tseng et al., 2017 | USA   | 0.98 (0.14, 6.71) |
| Yu et al., 2017    | China | 1.29 (0.73, 2.3)  |

### **Small archive**

| Authors                   | Country | Risk Ratio                                     |
|---------------------------|---------|--|
| Cobos-Campos et al., 2017 | Spain   | 2.4 (1.37, 4.21)                               |
| Free et al., 2011         | UK      | 2.18 (1.8, 2.65)                               |
| Liao et al., 2018         | China   | I1: 3.08 (1.35, 7.03)<br>I2: 3.35 (1.59, 7.05) |
| Yu et al., 2017           | China   | 2.44 (1.18, 5.08)                              |
| Naughton et al., 2014     | UK      | 1.81 (1.06, 3.11)                              |

- Comparison 3. Smartphone app compared to lower-intensity support for smoking cessation.

- Long-term abstinence (all randomised): very low.

### **17. Motivational interviewing for smoking cessation (Lindson et al., 2019) SC**

- Comparison 1. Motivational interviewing compared with no treatment for smoking cessation

- Smoking cessation at ≥ 6 months follow-up: Low

- Comparison 2. Motivational interviewing in addition to other smoking cessation treatment for smoking cessation

- Smoking cessation at ≥ 6 months follow-up: Low

- Comparison 3. Motivational interviewing compared with another smoking cessation intervention for smoking cessation.

- Smoking cessation at ≥ 6 months follow-up: Low

- Comparison 4. Higher compared with lower intensity motivational interviewing for smoking cessation.

- Smoking cessation at ≥ 6 months follow-up: Low

### **18. Additional behavioural support as an adjunct to pharmacotherapy for smoking cessation (Hartmann-Boyce et al., 2019) SC**

- Comparison 1. Behavioural interventions as adjuncts to pharmacotherapy for smoking cessation

- Smoking cessation at longest follow-up Follow-up: 6 24 months: High





| Authors                  | Country                           | Risk Ratio                                     |
|--------------------------|-----------------------------------|--|
| Bailey et al., 2013      | USA                               | 2.96 (1.14, 7.71)                              |
| Baker et al., 2015       | Australia<br>(psychotic disorder) | 1.34 (0.59, 3.01)                              |
| Berndt et al., 2014      | the Netherlands                   | 0.96 (0.75, 1.23)                              |
| Bloom et al., 2017       | USA                               | 2.07 (0.69, 6.15)                              |
| Bock et al., 2014        | USA                               | 0.9 (0.63, 1.28)                               |
| Brown et al., 2013       | USA                               | 1.63 (0.33, 8.08)                              |
| Busch et al., 2017       | USA                               | 1.06 (0.54, 2.09)                              |
| Calabro et al., 2012     | USA                               | 1.9 (1.22, 2.98)                               |
| Cook et al., 2016        | USA                               | 0.44 (0.18, 1.1)                               |
| Cropsey et al., 2015     | USA                               | 0.48 (0.21, 1.09)                              |
| Ferguson et al., 2012    | UK                                | 1.12 (0.89, 1.42)                              |
| Hasan et al., 2014       | USA                               | 1.9 (0.85, 4.27)                               |
| Kim et al., 2015         | USA<br>(Korean immigrants)        | 2.67 (0.85, 8.39)                              |
| Prapavessis et al., 2016 | Canada                            | 1.39 (0.71, 2.72)                              |
| Rohsenow et al., 2014    | USA<br>(alcoholic smokers)        | 0.15 (0.01, 2.89)                              |
| Schlam et al., 2016      | USA                               | 1.06 (0.55, 2.06)                              |
| Vidrine et al., 2016     | USA                               | I1: 1.32 (0.57, 3.04)<br>I2: 1.13 (0.48, 2.65) |
| Wewers et al., 2017      | USA                               | 1.24 (0.83, 1.85)                              |
| Gifford et al., 2011     | USA                               | 1.71 (0.88, 3.31)                              |
| Van Rossem et al., 2017  | the Netherlands                   | 0.9 (0.62, 1.31)                               |
| Yalcin et al., 2014      | Turkey                            | 1.6 (1.2, 2.15)                                |
| <b>Other studies</b>     |                                   |  |
| Smith et al., 2013a      | USA                               | 0.98 (0.83, 1.15)                              |
| Wagner et al., 2016      | USA                               | 0.96 (0.51, 1.81)                              |
| Matthews et al., 2018    | USA                               | 0.84 (0.56, 1.25)                              |
| Warner et al., 2016      | USA                               | 1.57 (0.62, 4)                                 |
| Webb Hooper et al., 2017 | USA                               | 1.19 (0.79, 1.79)                              |
| LaChance et al., 2015    | USA                               | 0.72 (0.37, 1.43)                              |





|                      |     |                     |
|----------------------|-----|---------------------|
| Bastian et al., 2012 | USA | 1.02 (0.72, 1.45)   |
| Begh et al., 2015    | UK  | 1.09 (0.48, 2.5)    |
| Bricker et al., 2014 | USA | 1.35 (0.74, 2.46)   |
| Kahler et al., 2015  | USA | 8.78 (0.49, 157.62) |
| Patten et al., 2017  | USA | 0.67 (0.23, 1.89)   |

#### Small archive

| Authors              | Country | Risk Ratio        |
|----------------------|---------|-------------------|
| Bailey et al., 2013  | USA     | 2.96 (1.14, 7.71) |
| Calabro et al., 2012 | USA     | 1.9 (1.22, 2.98)  |
| Yalcin et al., 2014  | Turkey  | 1.6 (1.2, 2.15)   |

#### 19. Real-time video counselling for smoking cessation (Tzelepis et al., 2019) SC

- Comparison 1. Real-time video counselling compared with telephone counselling for smoking cessation
  - Smoking cessation (strictest definition and longest follow-up): very low

#### 20. Competitions for smoking cessation (Fanshawe et al., 2019) SC

- Comparison 1. Effects of smoking cessation competitions on smoking abstinence
  - Smoking cessation: performance-based eligibility competitions versus alternative cessation intervention: very low
  - Smoking cessation: performance-based reward competitions versus alternative cessation intervention: very low

#### 21. Relapse prevention interventions for smoking cessation (Livingstone-Banks et al., 2019) SC

- Comparison 1. Behavioural interventions for relapse prevention for people who have quit smoking using a cessation intervention
  - Smoking cessation: moderate

| Authors                 | Country | Risk Ratio                                     |
|-------------------------|---------|--|
| Blyth et al., 2015      | UK      | 0.91 (0.78, 1.06)                              |
| Cheung et al., 2015     | China   | 1.73 (0.83, 3.62)                              |
| Hayes et al., 2018      | USA     | 1.41 (0.98, 2.02)                              |
| McDaniel et al., 2015   | USA     | I1: 1.03 (0.86, 1.23)<br>I2: 0.79 (0.66, 0.96) |
| McNaughton et al., 2013 | Canada  | 0.51 (0.2, 1.27)                               |
| Veldheer et al., 2018   | USA     | 0.91 (0.6, 1.39)                               |



- Comparison 2. Pharmacotherapy for relapse prevention for people who have quit smoking using a cessation intervention
  - NRT versus placebo Smoking cessation: low
  - Bupropion versus placebo Smoking cessation: moderate
- All <2010
  - Combination NRT & bupropion versus placebo Smoking cessation: low
  - Varenicline versus placebo Smoking cessation: moderate

| Authors            | Country | Risk Ratio        |
|--------------------|---------|-------------------|
| Evins et al., 2014 | USA     | 3.02 (1.41, 6.49) |

## 22. Individual-, family-, and school-level interventions targeting multiple risk behaviours in young people (MacArthur et al., 2018)

- Comparison 1. Tobacco use - short term
  - Individual targeted: moderate

| Authors              | Country | Odds Ratio        |
|----------------------|---------|-------------------|
| Bodin et al., 2011   | Sweden  | 1.74 (0.71, 4.25) |
| Redding et al., 2015 | USA     | 0.61 (0.32, 1.14) |

- Individual universal: low
- Family targeted: moderate
- Tutti < 2010
  - School universal: moderate

| Authors              | Country | Odds Ratio        |
|----------------------|---------|-------------------|
| Li et al., 2011      | USA     | 1.06 (0.57, 1.96) |
| O'Neill et al., 2011 | USA     | 0.32 (0.17, 0.6)  |

### Small archive

| Authors              | Country | Odds Ratio       |
|----------------------|---------|------------------|
| O'Neill et al., 2011 | USA     | 0.32 (0.17, 0.6) |

## 23. Nicotine replacement therapy versus control for smoking cessation (Hartmann-Boyce et al., 2018) SC

- Nicotine replacement therapy versus control for smoking cessation
  - Smoking cessation at 6+ months follow-up: high

| Authors                 | Country | Risk Ratio        |
|-------------------------|---------|-------------------|
| Anthenelli et al., 2016 | USA     | 1.67 (1.41, 1.98) |
| Coleman et al., 2012    | UK      | 1.24 (0.83, 1.86) |



|                         |                |                    |
|-------------------------|----------------|--------------------|
| Cummins et al., 2016    | USA            | 1.15 (0.76, 1.75)  |
| Cunningham et al., 2016 | Canada         | 2.79 (1.01, 7.7)   |
| Heydari et al., 2012    | Iran           | 3.79 (1.62, 8.88)  |
| Lerman et al., 2015     | USA and Canada | 1.35 (0.96, 1.89)  |
| Scherphof et al., 2014  | Netherlands    | 0.71 (0.25, 1.99)  |
| Tuisku et al., 2016     | Finland        | 1.34 (0.7, 2.54)   |
| Ward et al., 2013       | Syria          | 1.07 (0.56, 2.03)  |
| Fraser et al., 2014     | USA            | 1.08 (0.89, 1.32)  |
| Tønnesen et al., 2012   | Denmark        | 2.48 (1.24, 4.94)  |
| Graham et al., 2017     | USA            | 1.19 (1.03, 1.37)  |
| Johns et al., 2017      | India          | 1.69 (0.97, 2.93)  |
| Ortega et al., 2011     | Spain          | 1.57 (1.35, 1.84)  |
| Wittchen et al., 2011   | Germany        | 1.38 (0.83, 2.3)   |
| Hasan et al., 2014      | USA            | 0.89 (0.49, 1.62)  |
| Stein et al., 2013      | USA            | 3.72 (0.49, 28.03) |
| Heydari et al., 2013    | Iran           | 15 (2, 112.54)     |

### Small archive

| Authors                 | Country | Risk Ratio        |
|-------------------------|---------|-------------------|
| Cunningham et al., 2016 | Canada  | 2.79 (1.01, 7.7)  |
| Heydari et al., 2012    | Iran    | 3.79 (1.62, 8.88) |
| Tønnesen et al., 2012   | Denmark | 2.48 (1.24, 4.94) |
| Graham et al., 2017     | USA     | 1.19 (1.03, 1.37) |

24. **Enhancing partner support to improve smoking cessation (Faseru et al., 2018) SC**
- Comparison 1. Smoking cessation interventions with a partner support component compared to smoking cessation interventions without a partner support component for people who want to quit smoking
    - Long-term smoking abstinence (6 to 9 months): Low
    - Long-term smoking abstinence (12 months+): Low
25. **Strategies to improve the implementation of workplace-based policies or practices targeting tobacco, alcohol, diet, physical activity and obesity (Wolfenden et al., 2018) PI**
- Comparison 1. Strategies to improve the implementation of workplace-based health promotion versus no implementation strategy



- Implementation of workplace- based policies or practices targeting diet, physical activity, obesity, tobacco use or alcohol use: low
- Employee tobacco use: low

**26. Mass media interventions for preventing smoking in young people (Carson-Chahhoud et al., 2017) PI**

- Comparison 1. Mass media interventions for preventing smoking in young people. Smoking rates (follow-up 18 months to 6 years): Very low.

**27. Incentives for preventing smoking in children and adolescents (Hefler et al., 2017) PI**

- Comparison 1. Smokefree Class Competitions (SFC) for preventing smoking uptake
  - Smoking uptake at longest follow-up (RCTs): Low
  - Smoking uptake at longest follow-up (Non-RCTs): Very low

**28. Tobacco packaging design for reducing tobacco use (McNeill et al., 2017)**

- Comparison 1. Effects of standardised tobacco packaging design on smoking behaviour
  - Prevalence of tobacco use assessed with: Self report up to 1 year post policy introduction: Low.
  - Change in tobacco consumption among smokers assessed with: Selfreport and volume of smoke inhaled: Very Low.
  - Attempts to quit smoking assessed with: self report: Low.

**29. Group behaviour therapy programmes for smoking cessation (Stead et al., 2017) SC**

- Comparison 1. Group-format behavioural programmes compared to alternative support for smoking cessation
  - Group programme compared to self-help programme: moderate
  - Tutti <2010
    - Group programme compared to brief support: low
    - Group programme compared to face-to-face individual intervention: moderate
  - Tutti <2010
    - Group programme plus pharmacotherapy versus pharmacotherapy and brief support alone: moderate



| Authors              | Country | Risk Ratio        |
|----------------------|---------|-------------------|
| Gifford et al., 2011 | USA     | 1.71 (0.88, 3.31) |

- Group programme versus 'no intervention' controls: low

### 30. Nursing interventions for smoking cessation (Rice et al., 2017) SC

- Comparison 1. Nursing interventions for smoking cessation
  - Smoking cessation at longest follow-up (high and low intensity) Follow-up: 6+ months: Moderate

| Authors                      | Country         | Risk Ratio        |
|------------------------------|-----------------|-------------------|
| Berndt et al., 2014          | the Netherlands | 1.29 (0.99, 1.69) |
| Chan et al., 2012            | Hong Kong       | 1.36 (0.94, 1.98) |
| Hornnes et al., 2014         | Denmark         | 1.84 (0.85, 4)    |
| Jorstad et al., 2013         | the Netherlands | 1.18 (0.93, 1.49) |
| Kadda et al., 2015           | Greece          | 1.11 (0.88, 1.39) |
| Pardavila-Belio et al., 2015 | Spain           | 3.21 (1.52, 6.77) |
| Smit et al., 2016            | the Netherlands | 0.57 (0.3, 1.08)  |
| Zwar et al., 2015            | Australia       | 1.82 (1.09, 3.05) |

#### Small archive

| Authors                      | Country   | Risk Ratio        |
|------------------------------|-----------|-------------------|
| Pardavila-Belio et al., 2015 | Spain     | 3.21 (1.52, 6.77) |
| Zwar et al., 2015            | Australia | 1.82 (1.09, 3.05) |

- Smoking cessation at longest follow-up - High intensity intervention Follow-up: 6+ months: Moderate
- Smoking cessation at longest follow-up - Low intensity intervention Follow-up: 6+ months: Moderate

### 31. Individual behavioural counselling for smoking cessation (Lancaster et al., 2017) SC

- Comparison 1. Individual counselling compared to minimal contact control for smoking cessation
  - Smoking cessation at longest follow-up - 6 months or more - No systematic pharmacotherapy: high

| Authors | Country | Risk Ratio |
|---------|---------|------------|
|---------|---------|------------|



|                         |             |                   |
|-------------------------|-------------|-------------------|
| Chan et al., 2012       | China       | 1.36 (0.94, 1.98) |
| Chen et al., 2014       | China       | 2.25 (1.13, 4.49) |
| Marley et al., 2014     | Australia   | 2.36 (0.75, 7.38) |
| Marshall et al., 2016   | Australia   | 0.77 (0.23, 2.57) |
| Mueller et al., 2012    | Switzerland | 0.13 (0.01, 2.55) |
| Thankappan et al., 2013 | India       | 4.14 (2.46, 6.98) |

- Smoking cessation at longest follow-up - 6 months or more - Pharmacotherapy offered to all participants: moderate

| Authors              | Country | Risk Ratio        |
|----------------------|---------|-------------------|
| Cropsey et al., 2015 | USA     | 0.58 (0.25, 1.36) |

- Comparison 2. More intensive compared to less intensive counselling for smoking cessation

- Smoking cessation at longest follow-up - no pharmacotherapy: high

| Authors              | Country  | Risk Ratio        |
|----------------------|--|-------------------|
| Brunner et al., 2012 | Denmark<br>(inpatients with acute ischaemic stroke or TIA) | 1.13 (0.61, 2.08) |

- Smoking cessation at longest follow-up - Adjunct to pharmacotherapy: high

| Authors          | Country | Risk Ratio       |
|------------------|---------|------------------|
| Kim et al., 2015 | USA     | 3.44 (1.5, 7.85) |

### Small archive

| Authors                 | Country     | Risk Ratio        |
|-------------------------|-------------|-------------------|
| Chen et al., 2014       | China       | 2.25 (1.13, 4.49) |
| Thankappan et al., 2013 | India       | 4.14 (2.46, 6.98) |
| Kim et al., 2015        | South Korea | 3.44 (1.5, 7.85)  |

### 32. Tobacco cessation interventions for young people (Fanshawe et al., 2017) SC

- Behavioural interventions compared to minimal control for smoking cessation in young people: low/very low.
- Pharmacological interventions compared to placebo for smoking cessation in young people: very low

### 33. Healthcare financing systems for increasing the use of tobacco dependence treatment (van den Brand et al, 2017) SC



- Comparison 1. Interventions directed at individuals: full financial coverage compared to no financial coverage for increasing abstinence from smoking
  - Abstinence from smoking: Moderate

| Authors              | Country | Risk Ratio        |
|----------------------|---------|-------------------|
| Pakhale et al., 2015 | Canada  | 2.36 (0.48, 11.7) |

- Comparison 2. Interventions directed at healthcare providers compared to no interventions for increasing the use of smoking cessation treatment
  - Abstinence from smoking: Moderate
- All studies < 2010

#### 34. Mass media interventions for smoking cessation in adults (Bala et al., 2017) SC

- Mass media smoking cessation intervention compared with no intervention for smoking cessation: very low

#### 35. Internet-based interventions for smoking cessation (Taylor et al., 2017) SC

- Comparison 1. Internet-based interventions for adults who want to stop smoking
  - Interactive and tailored versus non-active control Self-report or bio-verified smoking cessation Follow-up: 6 - 12 months: low
  - Internet versus active control Self-report or bio-verified smoking cessation Follow-up: 6 - 12 months: moderate

| Authors                  | Country   | Risk Ratio        |
|--------------------------|-----------|-------------------|
| Humfleet et al., 2013    | USA       | 1.19 (0.56, 2.54) |
| Borland et al., 2013     | Australia | 0.96 (0.7, 1.32)  |
| Skov-Ettrup et al., 2016 | Denmark   | 0.73 (0.44, 1.21) |
| Simmons et al., 2011     | USA       | 1.42 (0.74, 2.71) |

- Internet plus behavioural support versus non-Internet-based non-active control Self-report or bio-verified smoking cessation Follow-up: 6 - 12 months: moderate

| Authors              | Country     | Risk Ratio        |
|----------------------|-------------|-------------------|
| Borland et al., 2013 | Australia   | 1.37 (0.88, 2.12) |
| Burford et al., 2013 | Australia   | 11 (1.45, 83.21)  |
| Smit et al., 2016    | Netherlands | 0.85 (0.41, 1.77) |

- Internet plus behavioural support versus non-Internet-based active control Self-report or bio-verified smoking cessation Follow-up: 6 - 7 months: moderate

| Authors              | Country   | Risk Ratio        |
|----------------------|-----------|-------------------|
| Choi et al., 2014    | USA       | 1.03 (0.42, 2.53) |
| Borland et al., 2013 | Australia | 0.93 (0.68, 1.29) |





- Comparisons between Internet interventions (programmes): tailored/interactive versus not tailored/interactive Self-report or bio-verified smoking cessation Follow-up: 6 - 12 months: moderate

| Authors               | Country     | Risk Ratio        |
|-----------------------|-------------|-------------------|
| Wangberg et al., 2011 | Norway      | 1.04 (0.72, 1.51) |
| Graham et al., 2011   | USA         | 1.26 (0.74, 2.14) |
| Simmons et al., 2011  | USA         | 1.21 (0.66, 2.25) |
| Brown et al., 2014    | UK          | 1.06 (0.89, 1.27) |
| McClure et al., 2016  | USA         | 1.5 (0.71, 3.19)  |
| Mavrot et al., 2016   | Switzerland | 1.09 (0.83, 1.42) |

- Comparisons between Internet interventions (messages): tailored/interactive versus not tailored/interactive Self-reported smoking cessation Follow-up: 6 months: low

#### Small archive

| Authors              | Country   | Risk Ratio       |
|----------------------|-----------|------------------|
| Burford et al., 2013 | Australia | 11 (1.45, 83.21) |

#### 36. System change interventions for smoking cessation (Thomas et al., 2017) SC

- Comparison 1. System change interventions for tobacco control (primary cessation outcome): very low.
- Comparison 2. System change interventions for tobacco control (secondary outcomes): low/very low.

#### 37. Psychosocial interventions for supporting women to stop smoking in pregnancy (Chamberlain et al., 2017) SC

- Comparison 1. Separate intervention comparisons for supporting women to stop smoking in pregnancy
  - Counselling vs usual care: high
  - Health education vs usual care: moderate

| Authors               | Country | Risk Ratio       |
|-----------------------|---------|------------------|
| Ondersma et al., 2012 | USA     | 1.93 (0.84, 4.4) |

- Feedback vs usual care: moderate
- All studies < 2010
- Incentives vs alternative interventions: high

| Authors                    | Country | Risk Ratio        |
|----------------------------|---------|-------------------|
| Higgins et al., 2014 (AvB) | USA     | 1.79 (0.68, 4.74) |



|                            |     |                   |
|----------------------------|-----|-------------------|
| Higgins et al., 2014 (AvC) | USA | 2.85 (0.95, 8.51) |
|----------------------------|-----|-------------------|

- Social support vs less intensive interventions: high
- All studies <2010
- Exercise vs usual care: moderate

| Authors             | Country | Risk Ratio       |
|---------------------|---------|------------------|
| Ussher et al., 2015 | UK      | 1.2 (0.72, 2.01) |

- Other (active dissemination vs passive dissemination): moderate
- All studies <2010
- Comparison 2. Outcomes for all interventions for smoking cessation in pregnancy compared to all controls: subgrouped by main intervention strategy
  - Abstinence in late pregnancy: self-reported and biochemically validated: moderate

| Authors                           | Country         | Risk Ratio        |
|-----------------------------------|-----------------|-------------------|
| El-Mohandes et al., 2011          | USA             | 1 (0.72, 1.4)     |
| Lee et al., 2015                  | USA             | 1.28 (0.7, 2.35)  |
| Wilkinson et al., 2012            | Australia       | 0.6 (0.35, 1.34)  |
| Windsor et al., 2011              | USA             | 1.18 (0.84, 1.66) |
| Herbec et al., 2014               | UK              | 1.36 (0.83, 2.23) |
| Naughton et al., 2012             | UK              | 1.59 (0.68, 3.73) |
| Ondersma et al., 2012 (A+C v B+D) | USA             | 2.7 (0.84, 8.67)  |
| Pollak et al., 2013               | USA             | 1.88 (0.19, 18.6) |
| Harris et al., 2015               | USA             | 0.95 (0.21, 4.29) |
| Higgins et al., 2014 (AvB)        | USA             | 1.79 (0.68, 4.74) |
| Higgins et al., 2014 (AvC)        | USA             | 2.85 (0.95, 8.51) |
| Ondersma et al., 2012 (AvC)       | USA             | 0.86 (0.14, 5.2)  |
| Ondersma et al., 2012 (AvD)       | USA             | 0.8 (0.09, 7.26)  |
| Tappin et al., 2015               | UK              | 2.63 (1.72, 4.01) |
| Mejdoubi et al., 2014             | the Netherlands | 0.86 (0.56, 1.32) |
| Robling et al., 2016              | UK              | 1.03 (0.88, 1.2)  |
| Ussher et al., 2015               | UK              | 1.2 (0.72, 2.01)  |

- Abstinence at 0 to 5 months postpartum: high

| Authors                  | Country | Risk Ratio        |
|--------------------------|---------|-------------------|
| El-Mohandes et al., 2011 | USA     | 1.46 (0.97, 2.19) |



|                            |                 |                   |
|----------------------------|-----------------|-------------------|
| Lee et al., 2015           | USA             | 1.28 (0.7, 2.35)  |
| Higgins et al., 2014 (AvB) | USA             | 1.15 (0.4, 3.29)  |
| Higgins et al., 2014 (AvC) | USA             | 1.11 (0.32, 3.82) |
| Mejdoubi et al., 2014      | the Netherlands | 1.23 (0.87, 1.74) |

○ Low birthweight (under 2500 g): high

| Authors                    | Country | Risk Ratio        |
|----------------------------|---------|-------------------|
| Higgins et al., 2014 (AvB) | USA     | 0.71 (0.13, 3.89) |
| Higgins et al., 2014 (AvC) | USA     | 0.97 (0.2, 4.82)  |
| Ussher et al., 2015        | UK      | 0.88 (0.58, 1.32) |

○ Preterm birth (under 37 weeks): high

| Authors                    | Country | Risk Ratio        |
|----------------------------|---------|-------------------|
| Higgins et al., 2014 (AvB) | USA     | 0.47 (0.07, 3.1)  |
| Higgins et al., 2014 (AvC) | USA     | 0.73 (0.13, 3.99) |
| Tappin et al., 2015        | UK      | 1.58 (1, 2.52)    |
| Ussher et al., 2015        | UK      | 1.32 (0.81, 2.14) |

○ Mean birthweight (g): high

| Authors                    | Country | Mean Difference        |
|----------------------------|---------|------------------------|
| Higgins et al., 2014 (AvB) | USA     | 160.2 (101.87, 218.53) |
| Higgins et al., 2014 (AvC) | USA     | 96.3 (37.01, 155.59)   |
| Tappin et al., 2015        | UK      | 38 (-58.68, 134.68)    |
| Ussher et al., 2015        | UK      | -14.4 (-104.15, 75.35) |

○ Stillbirths: high

| Authors             | Country | Risk Ratio       |
|---------------------|---------|------------------|
| Ussher et al., 2015 | UK      | 1.01 (0.14, 7.1) |

○ NICU admissions: high

| Authors                    | Country | Risk Ratio        |
|----------------------------|---------|-------------------|
| Higgins et al., 2014 (AvB) | USA     | 0.24 (0.02, 2.44) |
| Higgins et al., 2014 (AvC) | USA     | 0.73 (0.13, 3.99) |
| Ussher et al., 2015        | UK      | 0.76 (0.47, 1.22) |

○ Adverse events and psychological impact: high



- All studies <2010

Small archive

| Authors                    | Country | Risk Ratio             |
|----------------------------|---------|------------------------|
| Tappin et al., 2015        | UK      | 2.63 (1.72, 4.01)      |
| Higgins et al., 2014 (AvB) | USA     | 160.2 (101.87, 218.53) |
| Higgins et al., 2014 (AvC) | USA     | 96.3 (37.01, 155.59)   |

**38. Interventions to reduce harm from continued tobacco use (Lindson-Hawley et al., 2016)**

- Comparison 1. Interventions to reduce the harms caused by continued smoking: low/very low.

**39. Combined pharmacotherapy and behavioural interventions for smoking cessation (Stead et al., 2016) SC**

- Combined pharmacotherapy and behavioural interventions for smoking cessation
  - Cessation at longest follow-up (all but Lung Health Study) Follow-up: 6 months+: high

| Authors                    | Country | Risk Ratio        |
|----------------------------|---------|-------------------|
| Brandstein et al., 2011    | USA     | 1.45 (0.43, 4.9)  |
| Lee et al., 2015           | Canada  | 3.4 (1.31, 8.79)  |
| Murray et al., 2013        | UK      | 2.14 (0.93, 4.88) |
| Rigotti et al., 2014       | USA     | 2.56 (1.59, 4.13) |
| Haas et al., 2015          | USA     | 2.19 (1.42, 3.37) |
| Bernstein et al., 2015     | USA     | 1.4 (0.98, 2)     |
| Perez-Tortosa et al., 2015 | Spain   | 1.45 (1.09, 1.94) |

- Cessation at longest follow-up (Lung Health Study only) Follow-up: mean 12 months: moderate

- All studies < 2010

Small archive

| Authors                    | Country | Risk Ratio        |
|----------------------------|---------|-------------------|
| Lee et al., 2015           | Canada  | 3.4 (1.31, 8.79)  |
| Rigotti et al., 2014       | USA     | 2.56 (1.59, 4.13) |
| Haas et al., 2015          | USA     | 2.19 (1.42, 3.37) |
| Perez-Tortosa et al., 2015 | Spain   | 1.45 (1.09, 1.94) |

**40. Family-based programmes for preventing smoking by children and adolescents (Thomas et al., 2015) PI**

- Comparison 1. Family interventions for preventing smoking by children and adolescents
  - New smoking at follow-up. Baseline Never smokers only: Moderate

| Authors               | Country     | Risk Ratio        |
|-----------------------|-------------|-------------------|
| Fosco et al., 2013    | USA         | 0.55 (0.29, 1.07) |
| Hiemstra et al., 2014 | Netherlands | 0.91 (0.66, 1.24) |

- Comparison 2. Family and school intervention compared to school intervention only for preventing smoking by children and adolescents
  - New smoking at follow-up. Baseline never smokers only: moderate
- All studies < 2010

**41. Portion, package or tableware size for changing selection and consumption of food, alcohol and tobacco (Hollands et al., 2015)**

- Comparison 1. Tobacco: Longer versus shorter cigarettes for changing quantity consumed or selected: low.

**42. Interventions for smokeless tobacco use cessation (Ebbert et al., 2015) SC**

- Comparison 1. Pharmacotherapy: Varenicline versus placebo, Outcome 1: All tobacco abstinence at 6 months: moderate.

| Authors             | Country | Risk Ratio        |
|---------------------|---------|-------------------|
| Ebbert et al., 2011 | USA     | 1.42 (0.79, 2.55) |

**43. Psychosocial interventions for smoking cessation in patients with coronary heart disease (Barth et al., 2015) SC**

- No GRADE.

**44. School policies for preventing smoking among young people (Coppo et al., 2014)**

- Comparison 1. School tobacco policy compared to no policy: very low.

**45. Acupuncture and related interventions for smoking cessation (White et al., 2014) SC**

- No comparison, no GRADE.
- All studies < 2010

**46. Workplace interventions for smoking cessation (Cahill et al., 2014) SC**

- Comparison 1. Smoking cessation interventions for the workplace
  - Group therapy, Follow-up: 6-24 months: moderate.
- All studies < 2010
  - Individual counselling, Follow-up: 6-24 months: moderate.

| Authors | Country | Odds Ratio |
|---------|---------|------------|
|---------|---------|------------|



|                         |             |                   |
|-------------------------|-------------|-------------------|
| Groeneveld et al., 2011 | Netherlands | 1.32 (0.64, 2.72) |
|-------------------------|-------------|-------------------|

- Self-help interventions, Follow-up: 6-24 months: high.
- All studies < 2010
- Pharmacological interventions, Follow-up: 6-24 months: high.

| Authors           | Country  | Odds Ratio        |
|-------------------|----------|-------------------|
| Noor et al., 2011 | Malaysia | 2.51 (1.06, 5.96) |

- Incentives, Follow-up: 6-18 months: moderate.
- All studies < 2010
- Multiple interventions, Follow-up: 6-36 months: moderate.
- All studies < 2010

#### 47. Use of electronic health records to support smoking cessation (Boyle et al., 2014) SC

- Comparison 1. Use of electronic health records to support smoking cessation
- Smoking cessation: very low.
- Guideline recommended actions: moderate.
- No numeric data.

#### 48. School-based programmes for preventing smoking (Thomas et al., 2013) PI

- No GRADE

#### 49. Physician advice for smoking cessation (Stead et al., 2013) SC

- No GRADE, All studies < 2010

#### 50. Smoking cessation interventions for smokers with current or past depression (van der Meer et al., 2013) SC

- Comparison 1. Psychosocial mood management versus control for smokers with current depression. Abstinence at 6 m or longer follow-up: low.
- Comparison 2. Bupropion vs control for smokers with current depression. Abstinence at 6 m or longer follow-up: low.
- Comparison 3. Psychosocial mood management versus control for smokers with past depression. Abstinence at 6 months or longer follow-up: low.
- Comparison 4. Bupropion for smokers with past depression: low.

#### 51. Pharmacological interventions for smoking cessation: an overview and network meta-analysis (Cahill et al., 2013) SC

- Review of reviews, excluded.

#### 52. Training health professionals in smoking cessation (Carson et al., 2012)

- Comparison 1. Training health professionals for smoking cessation
- Point prevalence of smoking cessation: moderate.
- All studies < 2010
- Continuous smoking abstinence: moderate.
- All studies < 2010
- Number of smokers counselled: low.



- Patients asked to make a follow-up appointment: very low.
- Number of smokers receiving self-help material: very low.
- Number of smokers receiving nicotine gum/replacement therapy: low.
- 53. Lobeline for smoking cessation (Stead et al., 2012) SC**
  - All studies < 2010
- 54. Silver acetate for smoking cessation (Lancaster et al., 2012) SC**
  - All studies < 2010
- 55. Interventions for smoking cessation in hospitalised patients (Rigotti et al., 2012) SC**
  - No GRADE
- 56. Nicotine vaccines for smoking cessation (Hartmann-Boyce et al., 2012) SC**
  - No GRADE
- 57. Community interventions for preventing smoking in young people (Carson et al., 2011) PI**
  - Comparison 1. Community interventions for preventing smoking in young people: very low.
- 58. Cannabinoid type 1 receptor antagonists for smoking cessation (Cahill et al., 2011) SC**
  - No GRADE



## ***Second-hand Smoke (SHS)***

### **1. Family and carer smoking control programmes for reducing children's exposure to environmental tobacco smoke (Behbod et al., 2018)**

- Community-based interventions for reducing children's exposure to environmental tobacco smoke (ETS): Very low, Low;
- Interventions in the ill-child setting for reducing children's exposure to environmental tobacco smoke (ETS): Very low;
- Interventions in the well-child setting for reducing children's exposure to environmental tobacco smoke (ETS): Very low, Low.

### **2. Legislative smoking bans for reducing harms from secondhand smoke exposure, smoking prevalence and tobacco consumption (Frazer et al., 2016)**

- Comprehensive or partial smoking bans in public places implemented by legislation
  - Cardiovascular health: moderate
  - Respiratory health: very low
  - Perinatal health: very low
  - Mortality: low

No interventions of interest to this repository reported.

### **3. Impact of institutional smoking bans on reducing harms and secondhand smoke exposure (Frazer et al., 2018)**

- Smoking rates and smoking-related mortality, pre- and post-smoking ban/policy change: Low.



## Methodology of PIECES-EBPCPP Repository based on Interventions from PIECES Implementation sites

We ask to the implementing sites of the European PIECES project to send their studies on primary prevention programmes, which were not included in the Cochrane reviews of potential interest for the repository.

### *Selection procedure*

Two members of the working group blindly selected studies that meet all the inclusion criteria reported below, with an agreement in case of different selections (Figure 2).

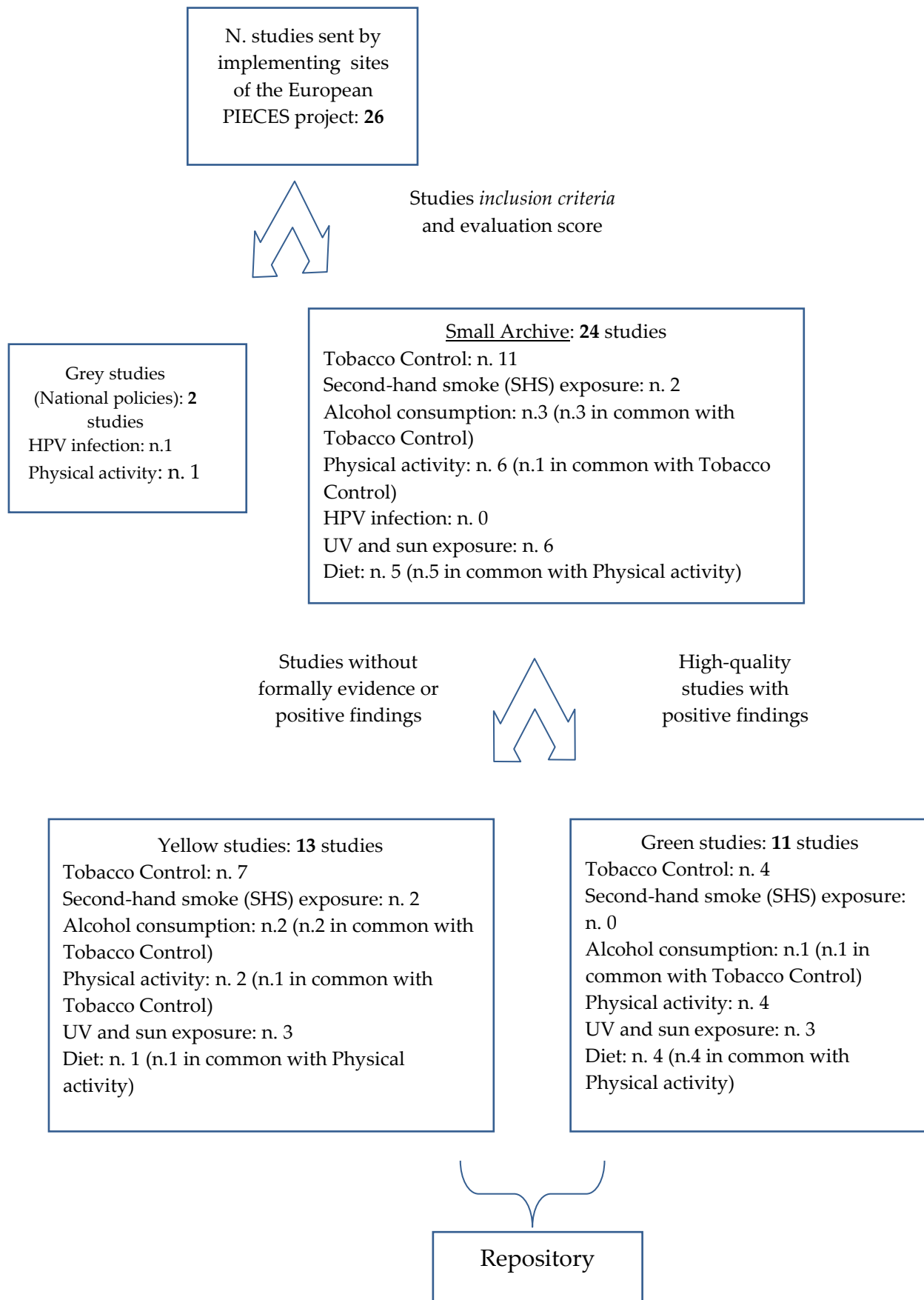
### *Inclusion criteria and evaluation score of studies*

Studies on programmes or interventions of interest must meet the following criteria to be eligible for the PIECES EBPCPP Repository review:

1. The programme must have been evaluated within the past 13 years (i.e., when the internet became available on mobile phones), from 2011 onwards (>2010).
2. Studies must regard the general population or large communities, but no specific sub-populations (i.e. we included pregnant women, obese people, subjects with diabetes; but not psychiatrics, homeless, subjects with HIV, etc.).
3. We included programmes or interventions in a separate dataset by adding an evaluation score since they might be of potential interest for the repository. Scores were defined in accord with the following criteria.
  - Green: Interventions for which evidence is demonstrated in an experimental or quasi-experimental study (random assignment, control group, and pre- and post-assessments).
  - Yellow: Interventions for which evidence was not formally demonstrated (e.g., single group, pre-/post-test designs, adaptation of interventions developed and evaluated in other contexts); for which an evaluation of implementation was reported, but not an effectiveness evaluation; for which no positive findings in terms of efficacy or effectiveness were found.
  - Grey: National policies implemented in the areas of the implementation sites.



Figure 2: Flow chart of the selection of the implementation sites studies.





## Results

### **First step: Selecting studies**

Regarding different programme areas:

1. *Tobacco Control: smoking cessation interventions and prevention of smoking initiation.*

We received 11 implementation site studies and we selected all the studies.

2. *Second-hand smoke (SHS) exposure.*

We received 2 implementation site studies and we selected both studies.

3. *Alcohol consumption.*

We received 3 implementation site studies, and we selected all the studies (all in common with the Small Archive of tobacco control).

4. *Physical activity.*

We received 7 implementation site studies, of which we selected 6 implementation site studies.

5. *HPV infection.*

We received 1 implementation site study, but we did not select any study.

6. *UV and sun exposure intervention.*

We received 6 implementation site studies and we selected all the studies.

7. *Diet.*

We received 5 implementation site studies and we selected all the studies (all in common with the Small Archive of physical activity).

## Alcohol

1. National medical check-up programme “Si je?” (Albania). Starting from December 2014, every citizen with permanent residence in the Republic of Albania, belonging to the age group of 40-65 years (later being 35-70 years old), has the right to a basic medical check-up. No formal evaluation of efficacy, general evaluation of the program on the difficulty of the implementation.
2. Jellinek Online Self-help (the Netherlands). The intervention aims to help individuals to work on changing their substance use through online self-management.
3. “Opgroeien in een Kansrijke Omgeving (OKO)” based on the principles of the Youth in Iceland-Intervention (Icelandic Model) (the Netherlands). The intervention aims to prevent substance abuse and promote healthy behaviours among young people. The key components include increased youth involvement in extracurricular activities, improved parent-teen communication, and community engagement. Only an implementation process evaluation.

## Physical activity

1. National medical check-up programme “Si je?” (Albania). Starting from December 2014, every citizen with permanent residence in the Republic of Albania, belonging to the age group of 40-65 years (later being 35-70 years old), has the right to a basic





- medical check-up. No formal evaluation of efficacy, general evaluation of the program on the difficulty of the implementation.
2. Increasing the number of Physical education in schools – Sport in School Program (Albania).
  3. European Fans in Training - EuroFIT (the Netherlands). The program was designed to support men aged 30–65 years with a self-reported body mass index > 27 kg/m<sup>2</sup> to become more physically active and less sedentary; improve their diets; and maintain these changes over the long term.
  4. The TANSNIP (Trans-Atlantic Network to Study Stepwise Noninvasive imaging as a Tool for Cardiovascular Prognosis & Prevention) Program (the Netherlands). The project consists of two parallel randomized controlled trials investigating the (cost-) effectiveness and process evaluation of a 30-month worksite-based lifestyle program aimed to promote cardiovascular health of employees of Banco Santander Headquarter (Madrid, Spain).
  5. Football Fans in Training (United Kingdom). Supporting weight management through sustainable increased physical activity and dietary changes. 12 week, group-based programme delivered by community coaching staff within professional football clubs in Scotland.
  6. The Daily Mile (United Kingdom). An initiative to improve the physical, social, emotional and mental health and wellbeing of children. Children are encouraged to engage in physical activity at their own pace for 15 minutes each day with the support of caregivers and educators. The focus is on the evaluation of implementation.
  7. Diet, physical Activity and MAMmography (DAMA) (Italy). The intervention involves healthy nonsmoking postmenopausal women not using hormone replacement therapy and having MBD >50%, to evaluate the ability of a 24-month intervention based on moderate-intensity PA and/or dietary modification to reduce the percent of mammographic breast density.

## Diet

1. National medical check-up programme “Si je?” (Albania). Starting from December 2014, every citizen with permanent residence in the Republic of Albania, belonging to the age group of 40-65 years (later being 35-70 years old), has the right to a basic medical check-up. No formal evaluation of efficacy, general evaluation of the program on the difficulty of the implementation.
2. The TANSNIP (Trans-Atlantic Network to Study Stepwise Noninvasive Imaging as a Tool for Cardiovascular Prognosis & Prevention) Program (the Netherlands). The project consists of two parallel randomized controlled trials investigating the (cost-) effectiveness and process evaluation of a 30-month worksite-based lifestyle program aimed to promote cardiovascular health of employees of Banco Santander Headquarter (Madrid, Spain).
3. Football Fans in Training (United Kingdom). Supporting weight management through sustainable increased physical activity and dietary changes. 12 week,





group-based programme delivered by community coaching staff within professional football clubs in Scotland.

4. **European Fans in Training - EuroFIT (the Netherlands)**. The program was designed to support men aged 30–65 years with a self-reported body mass index > 27 kg/m<sup>2</sup> to become more physically active and less sedentary; improve their diets; and maintain these changes over the long term.
5. **Diet, physical Activity and MAMmography (DAMA) (Italy)**. The intervention involves healthy nonsmoking postmenopausal women not using hormone replacement therapy and having MBD >50%, to evaluate the ability of a 24-month intervention based on moderate-intensity PA and/or dietary modification to reduce the percent of mammographic breast density.

### HPV

1. **Introduction of HPV vaccine in Albania (Albania)**.

### Tobacco use (smoking cessation and preventing smoking initiation)

1. **National medical check-up programme “Si je?” (Albania)**. Starting from December 2014, every citizen with permanent residence in the Republic of Albania, belonging to the age group of 40-65 years (later being 35-70 years old), has the right to a basic medical check-up. No formal evaluation of efficacy, general evaluation of the program on the difficulty of the implementation.
2. **Nurse-led smoking cessation clinic at a Comprehensive Cancer Center (Spain)**. The smoking cessation clinic is a nurse-led specialized service that offers support to quit across the cancer care continuum. Well established practice with no formal evaluation of efficacy.
3. **Smoke-free Class Competition (Spain)**. The prevention program is a competition based on the European school smoking prevention program. Well-established intervention already developed in other European countries with no formal evaluation of efficacy in this setting.
4. **Effect of financial voucher incentives provided with UK stop smoking services on the cessation of smoking in pregnant women (CPIT III): pragmatic, multicentre, single blinded, phase 3, randomised controlled trial (United Kingdom)**. The aim of the intervention is to encourage smoking cessation during pregnancy through the use of incentives.
5. **Jellinek Online Self-help (the Netherlands)**. The intervention aims to help individuals to work on changing their substance use through online self-management.
6. **“Opgroeien in een Kansrijke Omgeving (OKO)” based on the principles of the Youth in Iceland-Intervention (Icelandic Model) (the Netherlands)**. The intervention aims to prevent substance abuse and promote healthy behaviours among young people. The key components include increased youth involvement in extracurricular activities, improved parent-teen communication, and community engagement. The focus is on the evaluation of implementation.





7. **PROMISE (the Netherlands)**. Training that complements the existing V-MIS method (7 steps method used in the Netherlands to motivate pregnant women to stop smoking) by adding the use of a carbon monoxide meter, storyboard leaflets and more extensive referral options. The focus is on the evaluation of implementation.
8. **Smoke Free Parents (the Netherlands)**. Telephone tobacco smoking cessation counselling service specifically for parents (of children 0-18 years), future parents, pregnant women and their partners who want to quit smoking.
9. **StopCoach (the Netherlands)**. Mobile phone delivered self-help eHealth intervention (app) targeted at lower-SES smokers that provide 8 weeks of guidance on how to quit smoking. Qualitative evaluation with pre-post assessment.
10. **Stoptober (the Netherlands)**. Temporary nation-wide abstinence campaign that challenges smokers to engage in a collective quit attempt for 28 days. No formal evaluation in experimental context.
11. **Luoghi di Prevenzione (LdP) - Prevention Grounds school-based smoking prevention programme (Italy)**. The program consists in a multimodal intervention for the primary prevention of smoking targeted to students aged 14–15 years.

### Second-hand Smoke (SHS)

1. **Smoke-free Homes- Barcelona (Spain)**. Protection against second-hand smoke exposure in homes where children under 18 years old live. Well-established intervention based on the US program included in the National Cancer Institute Repository, with no formal evaluation of efficacy in this setting (ongoing intervention).
2. **First Steps 2 Smoke-Free (FS2SF) (United Kingdom)**. Reducing exposure to second-hand smoke in homes of pregnant women or with young children. The intervention has no positive finding in terms of efficacy or effectiveness.

### Sun exposure

1. **HealthyText. (Australia)**. Each participant received weekly SMS on sun protection.
2. **SunText (Australia)**. Each participant received SMS on sun protection with a different timing according to randomization.
3. **Handyscope (Australia)**. The intervention asks participants to perform mobile teledermoscopy at home. The intervention has no positive finding in terms of efficacy or effectiveness.
4. **SknTec (Australia)**. The participants wear a UVR dosimeter and receive feedback device set to their skin type or use the SunSmart app. The intervention has no positive finding in terms of efficacy or effectiveness.
5. **Outdoor worker (Australia)**. The intervention promotes sun safe strategies appropriate for each workplace. No formal evaluation in experimental context.





6. Skin awareness study (Australia). The participants receive video on skin self-examination and skin awareness and written informational materials.





## Methodology of PIECES-EBPCPP Repository based on selection of interventions from the NCI-EBCCP website

The National Cancer Institute (NCI) Evidence-Based Cancer Control Programs (EBCCP) website is a searchable database offering easy access to materials that public health practitioners and others can use to implement cancer control interventions in clinical settings or communities. Link to the website is here: <https://ebccp.cancercontrol.cancer.gov/index.do>

We considered the following interventions from NCI repository:

- Diet-nutrition: 46 interventions
- HPV vaccination: 6 interventions
- Obesity: 29 interventions
- Physical activity (PA): 41 interventions
- Sun safety: 19 interventions
- Tobacco control: 30 interventions

So 171 interventions totally. Removing 42 duplicates (for diet-nutrition/PA/obesity program areas), 129 interventions remained.

To check whether these interventions were already reported in the PIECES taxonomy structure, we compared "Name of intervention" vs "Program Title & Description". Only one intervention resulted in common: COPE (Creating Opportunities for Personal Empowerment) Healthy Lifestyles TEEN (Thinking, Emotions, Exercise and Nutrition)-Physical activity Program Area (<https://ebccp.cancercontrol.cancer.gov/programDetails.do?programId=22686590>).

Removing it, 128 interventions from the NCI Repository remained.

The inclusion criteria in the NCI site were in line with PIECES inclusion criteria for the other parts (Cochrane Reviews; implementation sites). Specifically, programs must meet the following criteria to be eligible for an EBCCP review on NCI site:

- Outcome finding(s) must be published in a peer-reviewed journal.
- The study must have produced one or more positive behavioral and/or psychosocial outcomes ( $p \leq .05$ ) among individuals, communities, or populations.
- Evidence of these outcomes must be demonstrated in at least one study using an experimental or quasi-experimental design. Experimental designs require random assignment, a control or comparison group, and pre- and post- assessments. Quasi-experimental designs do not require random assignment but do require a comparison or control group and pre- and post- assessments. Studies that are based on single-group, pre-/post-test designs do not meet this requirement.
- The program must have messages, materials, and/or other components in English that can be disseminated in a U.S. community or clinical setting.
- The program must have been evaluated within the past 10 years.

Following PIECES' inclusion criteria, we removed according to the item "Population focus" specific population groups such as Faith-based Groups, Adults with osteoarthritis,





Medically Underserved and Athletes, for which a population intervention could not be applied. Therefore, we removed 9 interventions and 119 interventions remained (see “Complete” paper in Excel for the whole list).

As regard qualitative evaluation of interventions, the programs and their materials were evaluated in four areas:

- Research Integrity

Research Integrity reflects the overall confidence reviewers can place in the findings of a program's evaluation based on its scientific rigor. The Research Integrity rating system comprises 16 criteria scored by independent experts. Scores on each criterion are given on a 5-point scale ranging from low quality to high quality. The overall integrity score is an average of the 16 criteria reflecting the merits of the science that went into the program evaluation.

- Intervention Impact

Intervention Impact describes whether, and to what degree, a program is usable and appropriate for widespread application and dissemination. This rating is determined by the RC. Population Reach and Effect Sizes are separately rated on a 5-point scale; these ratings are then combined using the EBCCP Intervention Impact rating table to determine the impact score.

- Dissemination Capability

Dissemination Capability refers to the readiness of program materials for use by others as well as a program's capability to offer services and resources to facilitate dissemination. The rating is given on a 5-point scale ranging from low quality (1.0) to high quality (5.0). Dissemination capability is measured through the assessment of three areas:

- o Quality of implementation materials
- o Training and technical assistance protocols
- o Availability of quality assurance materials to determine whether implementation was done with high fidelity to the original model

In addition, all the interventions were evaluated through the RE-AIM score, a five-step framework designed to enhance the quality, speed, and public health impact of efforts to translate research into practice. The RE-AIM scoring instrument consists of 22 items within 4 dimensions:

- Reach (5 items)

Reach refers to the absolute number, proportion, and representativeness of individuals who are willing to participate in a given initiative, intervention, or program.

- Effectiveness (3 items)

Effectiveness refers to the impact of an intervention on important outcomes, including potential negative effects, quality of life, and economic outcomes.

- Adoption (6 items)

Adoption refers to the absolute number, proportion, and representativeness of settings and intervention agents (people who deliver the program) who are willing to initiate a program.

- Implementation (8 items)



At the setting level, implementation refers to the intervention agents' fidelity to the various elements of an intervention's protocol, including consistency of delivery as intended and the time and cost of the intervention. At the individual level, implementation refers to clients' use of the intervention strategies.

Additional information about RE-AIM can be found at <http://re-aim.org>.

Since the RE-AIM score is not currently assessed by EBCCP but by a group of external experienced researchers through an integrated and structured framework, it was considered as more reliable in order to select the best interventions in terms of:

- Reaching your intended target population;
- Effectiveness or efficacy;
- Adoption by target staff, settings, or institutions;
- Implementation consistency, costs, and adaptations made during delivery;
- Maintenance of intervention effects in individuals and settings over time.

For this reason, from the complete list of interventions we selected those with the following cut-offs:

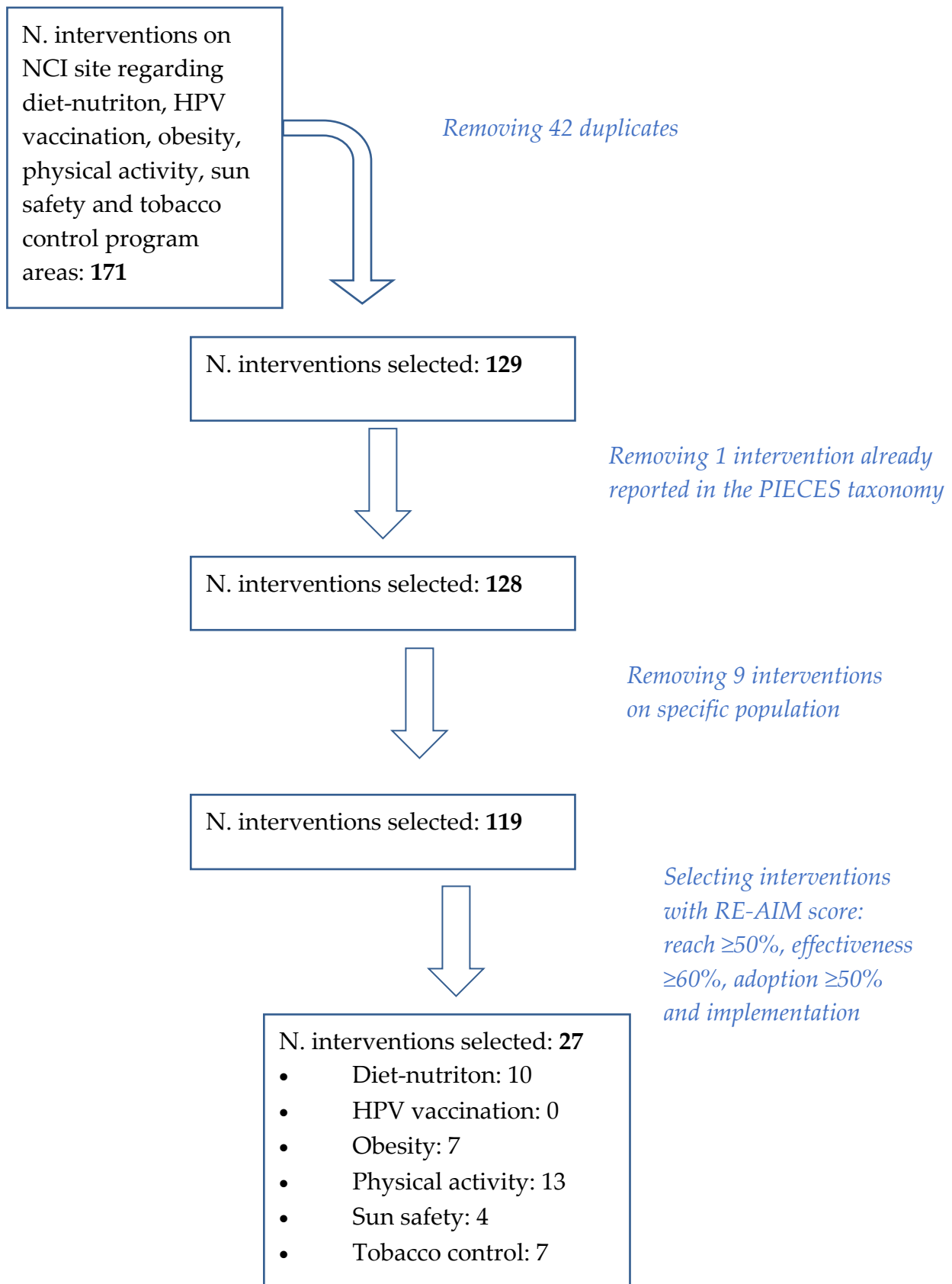
- Reach  $\geq 50\%$  and
- Effectiveness  $\geq 60\%$  and
- Adoption  $\geq 50\%$  and
- Implementation  $\geq 50\%$ .

The cut-offs were established following an agreement among all members of the PIECES Repository working group. The decision was also made on the basis of the scores given to the only study found to be in common with the PIECES taxonomy structure (COPE Healthy Lifestyles TEEN- Physical activity Program Area), which reported:

- Reach: 60%
- Effectiveness: 100%
- Adoption: 80%
- Implementation: 71,4%.

Interventions without an evaluation for all outcomes were removed. So, we selected 27 remained, 22,7% of the total (see "Selected" paper in Excel).

Here the flow chart of the selection of the interventions from the NCI EBCCP website.



| Review                 | Paper                     | Metadata   | Metadata   | Intervention  | Intervention   | Intervention   | Intervention  | Intervention   | Intervention   | Intervention  | Intervention  | Intervention                    | Intervention  | Intervention  | Evidence  | Evidence  | Evidence                | Evidence  | Evidence   | Evidence   | Intervention  | Intervention   | Implementation   |  |
|------------------------|---------------------------|--|--|---|--|--|---|--|--|---|---|---------------------------------|---|---|---|---|-------------------------|---|--|--|---|--|--|--|
|                        |                           | Name of the intervention   | Intervention program area  | Description of the intervention   | Geographic area  | Intervention delivery setting  | Recruitment   | Stakeholders involved in selecting and tailoring the intervention  | Professionals involved in delivering the intervention  | Intervention training   | Materials needed to deliver the intervention  | Intervention language           | Intervention target population  | Direct cost of the intervention   | Intervention website  | Outcomes  | Control group           | Strength of the evidence  | Effectiveness of the intervention                      | Types of research conducted on the intervention  | Scientific publications about the intervention  | Intervention developers  | Intervention development funder  | Scientific publications on implementation research                         |
|                        |                           | Full name(s) of the intervention   | Health topic focus of the intervention   | Short description of the intervention; GIVE SOME EXAMPLES OF WHAT SHOULD BE COVERED (E.G. FREQUENCY, DURATION, MODE ETC); include characteristics intervention target group (age, sex, ethnicity)   | Geographic area of the intervention, such as regions, cities, countries, practices; include community type (city/ rural etc)       | Intervention setting, such as hospital, primary care office, dental office, school, etc. |   | Description which stakeholders (including patients) are involved in selecting and tailoring the intervention to the local context  | Description which professionals deliver the intervention   | Description of the training in the intervention needed before intervention is implemented   | Materials needed to deliver the intervention  | Language of the intervention    | Short description of the intervention's target population(s)  | Direct cost of the intervention, if the intervention needs to be purchased or licensed. | Website of the intervention   |   |                         | Strength of the intervention's evidence base  | Effectiveness of the intervention                      | Types of research that has been conducted on the intervention, such as effectiveness trials, implementation  | List of articles published about the intervention, with links to each article   | Name of intervention developers and the name of their institutions   | Name of the funder who supported the development of the intervention   | List of articles published on implementation research on this intervention |
|                        |                           | This field should contain the complete name of the intervention and, if needed, an English-language translation of the name of the intervention. | Categorical: 7 lifestyles (Tobacco and second-hand smoke exposure, Alcohol consumption, Physical activity, HPV infection, UV and sun exposure, Diet) |   | All relevant geographic areas should be listed.  | All relevant settings should be listed.  | All involved stakeholders should be listed.   | All involved professionals, including non-clinical professionals, should be listed.  |  |   | All materials should be listed. Links to existing materials should be included if available.  | All languages should be listed. |   |   |   |   | Review GRADE            | WE DESCRIBE EVIDENCE IN TERMS OF ODDS RATIOS R OTHER MEASURES OF ASSOCIATION, ONLY EFFECTIVE INTERVENTIONS ARE INCLUDED, BUT THE EVIDENCE HAS TO BE DESCRIBED | All types should be listed.                            | All articles should be listed.   | Names and affiliations of 1-2 intervention developers. Contact information, such as an email address or phone number, is also needed from at least one member of the intervention team.   | This field should contain the complete name of the funding organization and, if needed, an English-language translation of the name.   | All articles should be listed (There might be none, or it might be difficult to draw a line between effectiveness studies and implementation studies)                      |  |
| Virgara et al., 2021   | Beets et al., 2015        | Strategies To Enhance Practice for Physical Activity (STEPS)   | Physical activity  | STEPS programme. Face-to-face training. Focused on professional development training targeting after school programme (ASP) directors and educators, to develop high-quality schedules. Consisted of 1-2 week rotating schedule total of 3 hours (workshop). This occurred prior to beginning of school year, then 4 booster sessions (walk throughs) occurred over an entire afternoon service (3 p.m. to 6 p.m.). At end of day, site leaders and research personnel met to discuss areas consistent and inconsistent with meeting PA standards and strategies to address this for the following day.   | Columbia, South Carolina, US. All services involved in the study were within a 1.5-hour drive of the University of South Carolina. | School settings, faith/church settings, community settings.                              | Children and educators in after-school services; after-school providers; research personnel.  |  | After-school programs providers, defined as child care programs operating immediately after the school day, every day of the school year for a minimum of 2 hours, serving a minimum of 30 elementary aged (6-12 years) children; operating in a school, community, or faith setting; and providing a snack, homework assistance/completion time, enrichment (e.g., arts and crafts), and opportunities for PA). | The unique characteristics of the STEPs intervention include a primary focus on the ASP leader, helping them develop high-quality schedules with daily physical activity opportunities and clear staff responsibilities. Additionally, STEPs' staff component, LET US Play, emphasizes skill development and modification of familiar games to maximize MVPA, departing from previous interventions. Technical assistance for STEPs 1-4 involved professional development training for ASP leaders to create schedules, incorporating PA and non-PA activities in | Descriptive information (time that activity occurs, indication of scheduled activity takes place, equipment/materials required to conduct activity, and staff responsible for delivering the activity)  | English                         | Children (age 6-12 y.o.)  |   |   | Proportion of care session spent in MVPA (% session spent in MVPA) follow up: range 1 years to 2 years (secondary outcome)          |                         | Moderate  | Cluster RCT  | 1) Weaver RG, Moore JB, Turner-McGrievy B, et al. Identifying Strategies Programs Adopt to Meet Healthy Eating and Physical Activity Standards in Afterschool Programs. Health Educ Behav. 2017;44(4):536-547. doi:10.1177/1090198116676252; 2) Beets MW, Weaver RG, Moore JB, et al. From policy to practice: strategies to meet physical activity standards in YMCA afterschool programs. Am J Prev Med. 2014;46(3):281-288. doi:10.1016/j.amepre.2013.10.012. | Beets. Department of Exercise Science. Electronic address: beets@mailbox.sc.edu.  | National Heart, Lung, and Blood Institute of the NIH   | O si riguardano gli articoli che citano lo studio in questione per trovare chi implementa l'intervento (65). O si cerca su PubMed in modo sistematico (1160). O non si fa. |  |
| Whittaker et al., 2019 | Cobos-Campos et al., 2017 | SMSalud  | Tobacco (smoking cessation interventions)  | Usual clinical practice (health advice provided by a doctor or nurse, protocol according to recommendations of Spanish Society of Family and Community Medicine) plus reinforcement text messages to their mobile phones (2 automatically generated text messages/day, 1 in the morning and 1 in the evening, for the first 5 weeks and 3 messages/week from weeks 6 to 26. Messages were motivational in intent, to encourage participants in their efforts to stop smoking, and also provided information about the health-related risks of smoking). Patients received a letter from their doctor inviting them to participate in the study, and   | Spain - Basque - City of Vitoria-Gasteiz   | Health centres   | Participants recruited from 2 health centres, identified through their electronic health record and sent a letter of invitation.  | Health centres' patients; doctors and research nurse.  | Doctors and research nurse.  | Health advice training according to recommendations of Spanish Society of Family and Community Medicine   | SMSalud   | Spanish                         | People >18 y.o., excluding patients who were on drug treatment for smoking cessation or had a history of mental or behavioral disorders or a diagnosis of depression, as well as women who were | SMSalud license   | <a href="https://twitter.com/smsalud2016">https://twitter.com/smsalud2016</a> | Smoking status at 6 months as determined by self-report and verified by CO levels   | Usual clinical practice | Moderate  | OR: 2.4 (1.3, 4.4)                                     | Parallel-group RCT   |   | Felipe Aizpuru, MD, MPH, BIDARABA, Health Research Institute, Jose Achotegui street wn, 01009, Vitoria-Gasteiz, Alava, Spain. Telephone: 34-945007413; Fax: 34-945007359; E-mail: Felipeesteban.Aizpuru@osakidetza.eus | Departamento de Industria del Gobierno Vasco of the Basque Country   |  |
| Wolfenden et al., 2020 | Alkon et al., 2014        | Nutrition And Physical Activity Self Assessment for Child Care (NAP SACC)  | Diet - Physical Activity   | Implementation strategies:<br>- Workshop: the childcare health consultants facilitated 5 x 1-hour NAPSACC workshops for childcare providers and other staff (e.g. cooks, administrators) at each of the intervention services on i) child hood obesity; ii) healthy eating for young children; iii) physical activity for young children; iv) personal health and wellness; and iv) working with families to promote healthy behaviours.<br>- Consultation: childcare health consultants provided at least monthly on-site consultations and additional phone or email consultations and materials and resources. The childcare health consultants conducted a mean of 11 on-site visits and 8 off-site consultations per service over the 7-month intervention, in addition to the provider and parent workshops.<br>- Policy support: childcare health consultants worked with the service managers to write or update the service nutrition and physical activity policies.<br>- Parent workshop: 7 of the intervention services also received the parent workshop "Raising Healthy Kids". | California, Connecticut and North Carolina, USA  | Childcare centres  | 42 childcare services were recruited, of which 24 services did not meet the inclusion criteria. Childcare health consultants from California and North Carolina recruited the convenience sample of services for their respective states while Connecticut services were recruited by the Connecticut principal investigator. | Children between the ages of 3 and 5 years; parents; childcare providers and other staff (e.g. cooks, administrators); Trained nurse childcare health consultants (CCHCs); research assistants; intervention center directors. | Trained nurse childcare health consultants (CCHCs)   | Previously trained nurse CCHCs in each of the three states were hired for the purposes of this study. All received additional training in the NAP SACC intervention from one of the co-investigators.   | Posters and information sheets on nutrition and physical activities; demographic questionnaires and multiple choice questionnaires for child care director, provider, other staff, and parent before and after the workshops; daily encounter form. A modified version of the Environmental Physical Activity Observation (EPAO). | English                         | Children between 3-5 years of age from racial/ethnically diverse backgrounds and primarily of low-income families; child care providers and parents.  |   |   | Implementation of policies, practices or programmes that promote child healthy eating, physical activity and/ or obesity prevention | No intervention         | Moderate  | Mean Difference: 1.18 (0.13,2.24) -0.26 (-0.46, -0.06) |  | 1) Kipping R, Pallan M, Hannam K, et al. Protocol to evaluate the effectiveness and cost-effectiveness of an environmental nutrition and physical activity intervention in nurseries (Nutrition and Physical Activity Self Assessment for Child Care - NAP SACC UK): a multicentre cluster randomised controlled trial. BMC Public Health. 2023;23(1):1475. Published 2023 Aug 2. doi:10.1186/s12889-023-16229-y 2) Battista RA, Oakley H, Weddell MS, Mudd LM, Greene JB, West | Jonathan B Kotch, Department of Maternal and Child Health, CBR 7445 Rosenau Hall, The University of North Carolina at Chapel Hill, Chapel Hill, North Carolina 27599-7445, USA.  | the U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Research Program.                                |  |

| Review                     | Paper                  | Metadata  | Metadata                  | Intervention  | Intervention   | Intervention   | Intervention   | Intervention  | Intervention  | Intervention   | Intervention   | Intervention          | Intervention   | Intervention                    | Evidence             | Evidence   | Evidence       | Evidence                 | Evidence                             | Evidence  | Intervention   | Intervention   | Implementation   |  |
|----------------------------|------------------------|---|---------------------------|---|--|--|--|---|---|--|--|-----------------------|--|---------------------------------|----------------------|--|----------------|--------------------------|--------------------------------------|---|--|--|--|--|
|                            |                        | Name of the intervention                        | Intervention program area | Description of the intervention   | Geographic area  | Intervention delivery setting  | Recruitment  | Stakeholders involved in selecting and tailoring the intervention   | Professionals involved in delivering the intervention   | Intervention training  | Materials needed to deliver the intervention   | Intervention language | Intervention target population   | Direct cost of the intervention | Intervention website | Outcomes   | Control group  | Strength of the evidence | Effectiveness of the intervention    | Types of research conducted on the intervention | Scientific publications about the intervention   | Intervention developers  | Intervention development funder  | Scientific publications on implementation research                         |
| Abdullahi et al., 2020     | Staras et al., 2015    | Protect Me from HPV                             | HPV                       | Short description of the intervention; GIVE SOME EXAMPLES OF WHAT SHOULD BE COVERED (E.G. FREQUENCY, DURATION, MODE ETC); include characteristics intervention target group (age, sex, ethnicity)<br><br>Multi-level intervention with 2 components: a system-level postcard campaign and an in-clinic health information technology (HIT) reminder system.<br>Description: the interventions were offered in 3 groups:<br>• postcard campaign;<br>• in-clinic HIT system<br>The postcard campaign contained healthcare information about vaccine benefits, costs, adverse effects, and safety and was designed to prompt parents and adolescents to discuss the vaccine with their doctor. The HIT system contained health risk questions for adolescents to verify vaccination history and indicate interest in learning about the vaccine. The HIT system summarised adolescent responses for providers in real time via colour-coded system.  | USA; North Central Florida defined as within Gainesville, Florida, or a surrounding Primary Care Service Area (Chiefland, Citra, Crescent City, Cross City, Interlachen, Keystone Heights, Lake Butler, Lake City, Live Oak, Mayo, Ocala, Palatka, Starke, Steinhatchee, and Williston). | Online: girls and boys in the Florida Medicaid or Children's Health Insurance Program encounters who attended or were assigned to primary care clinics in North Central Florida. | We used identifiable Florida Medicaid and CHIP claims and encounter data to select 11- to 17-year-old adolescents who met two criteria. First, adolescents could not have claims for the HPV vaccine before the sample draw (August 1, 2013). Second, to maximize the opportunity of adolescents visiting a provider in study's geographic area during the study period, we restricted our sample to adolescents with the following criteria: (1) those who were enrolled in Medicaid or CHIP in June 2013; (2) those who had a residential zip code in North Central Florida defined as within Gainesville, Florida, or a surrounding Primary Care Service Area; and (3) those who had at least one regular office visit. | Description which stakeholders (including patients) are involved in selecting and tailoring the intervention to the local context   | Description which professionals deliver the intervention<br><br>Doctors, nurse practitioners, and medical residents (clinic staff); providers and front office staff. | Description of the training in the intervention needed before intervention is implemented<br><br>Providers and front office staff were trained to use the HIT system during one-on-one meetings with study staff. Additionally, study staff guided clinic staff to use the HIT system with their first patient and routinely visited clinics to address questions. | Materials needed to deliver the intervention<br><br>Gender-specific postcard campaign; in-clinic health information technology (HIT) system; process evaluation survey; four-page follow-up survey sent via courier with \$5 cash and a hand-stamped return envelope (facultative)                     | English and Spanish   | Publicly insured Florida adolescent aged 11-17   | Protect Me from HPV             | -                    | Human papillomavirus vaccine uptake                | Usual care     | High                     | Risk ratio: 1.84 (1.34,2.54)         | Non-randomised trial (quasi-experimental trial) | -  | Stephanie A. S. Staras, Ph.D., Department of Health Outcomes and Policy, College of Medicine, University of Florida, 1329 SW 16th Street, Room 5241, Gainesville, FL 32610. E-mail address: sstaras@ufl.edu              | Society of Adolescent Health and Medicine under a grant received from Merck & Co and University of Florida.        | List of articles published on implementation research on this intervention |
| Belton et al., 2019        |                        | Youth-Physical Activity Towards Health (Y-PATH) | Physical activity         | A whole-school multi-component intervention programme, aimed at reducing the age-related decline of MVPA among adolescents. Key features include:<br>1. PE component: PE teachers received 4 hours of Y-PATH professional development including 6 targeted lesson plans focusing heavily on motivational climate, integrating health-related activity core knowledge through fun and engaging practical lessons, with an emphasis on functional movement skill proficiency. Resource cards were used to prompt teachers to enable them to integrate a health-related activity and fundamental movement skill focus within their core PE content areas. Students were given a PA journal to learn to track PA behaviours and identify ways to increase PA levels, and a PA directory containing information and contact details for local youth sport and PA clubs.<br>2. Whole-school teacher component: PA promotion workshops for teachers, and development and implementation of a school 'charter' for PA. Teachers were encouraged to be 'active role models'.<br>3. Parent component: information evening for parents and information leaflets distributed through the school newsletter to highlight key strategies for promoting PA beyond the physically active lessons (45 minutes) 2 to 3 days/week on days without PE. Lessons were held mainly outdoors and included games, relays, and quizzes with curricular questions from theoretical subjects. Physically active lessons included at least 15 minutes of MVPA, were easily organised and adapted, included competitive and non-competitive elements, and were enjoyable activities that included all children. Secondary components included physically active homework (10 minutes/d) and physically active recess (10 minutes/d). The intervention was intended to increase the amount of PA by 190 minutes/week, giving a total of 325 minutes/week of PA. To further improve the quality of the physically active lessons, a quality framework was stated at the back of the physically active lesson form and included tips of how differentiation, autonomy, collaboration, enjoyment, and high activity level could be ensured. To assist and support intervention teachers, 1 primary and 1 secondary contact person from the Active School project team was assigned to each intervention school. Contact persons attended meetings and regularly visited participating teachers and classes throughout the school year (1 to 4 visits/month, depending on requests from the schools). New physically active lessons were shared between schools. | Greater area of Dublin, Ireland  | Post primary schools   | All mixed-gender schools in the particular Irish geographical region (n = 104) were invited to express interest in participation in the study if they met the above inclusion criteria.  | First year post primary students (12 to 13 years old) attending post primary education; Physical education (PE) teachers; parents; Y-PATH-trained facilitator; trained research assistants. | Physical education (PE) teachers  | PE teachers in the intervention condition received four hours of Y-PATH Continuing Professional Development on the implementation of the Y-PATH-PE element, prior to the commencement of the academic school year.   | Principal consent, opt-in written parental consent, participant assent: set of resource cards; student 'PA journal'; local 'PA directory'; parents' PA information leaflet; SMS reminder text; Actigraph accelerometer; adjustable elasticated belt; portable stadiometer; portable calibrated scales. | English               | First year post primary students (12 to 13 years old) attending post primary education | €20 sports voucher (per class). | -                    | Moderate to vigorous physical activity (minutes/d) | Usual care     | Moderate                 | Mean difference: 9.66 (0.95, 18.36)  | Cluster-RCT                                     | 1. Belton S, O'Brien W, McGann J, Issartel J. Bright spots physical activity investments that work: Youth-Physical Activity Towards Health (Y-PATH). Br J Sports Med. 2019;53(4):208-212. doi:10.1136/bjsports-2018-099745 | Sarahjane Belton, School of Health and Human Performance, Dublin City University, Dublin, Ireland, sarahjane.belton@dcu.ie +353 (0)17007393  | Dublin Local Sports Partnerships, and the Dublin City University Career Start grant.                               |  |
| Neil-Sztramko et al., 2022 | Seljebotn et al., 2019 | The Active School                               | Physical activity         | Physically active lessons (45 minutes) 2 to 3 days/week on days without PE. Lessons were held mainly outdoors and included games, relays, and quizzes with curricular questions from theoretical subjects. Physically active lessons included at least 15 minutes of MVPA, were easily organised and adapted, included competitive and non-competitive elements, and were enjoyable activities that included all children. Secondary components included physically active homework (10 minutes/d) and physically active recess (10 minutes/d). The intervention was intended to increase the amount of PA by 190 minutes/week, giving a total of 325 minutes/week of PA. To further improve the quality of the physically active lessons, a quality framework was stated at the back of the physically active lesson form and included tips of how differentiation, autonomy, collaboration, enjoyment, and high activity level could be ensured. To assist and support intervention teachers, 1 primary and 1 secondary contact person from the Active School project team was assigned to each intervention school. Contact persons attended meetings and regularly visited participating teachers and classes throughout the school year (1 to 4 visits/month, depending on requests from the schools). New physically active lessons were shared between schools.  | Municipality of Stavanger, Norway  | All primary schools in the municipality  | All 29 primary schools in the municipality of Stavanger, Norway, were invited and nine schools agreed to participate.  | Children 5 - 9 to 10 years old ; teachers; Active School project team; parents.   | Teachers  | 1 pre-intervention seminar and 1 midway seminar were arranged for the teachers to give information about the programme and to provide support.   | Quality framework; accelerometer; Parental written informed consent  | English               | Children 5 - 9 to 10 years old   | -                               | -                    | Moderate to vigorous physical activity (minutes/d) | Normal routine | Moderate                 | Mean difference: 8.00 (1.90, 14.10)  | Cluster-RCT                                     | -  | Sindre M. Dyrstad, Department of Education and Sport Science, University of Stavanger, 4036 Stavanger, Norway and Department of Public Health, University of Stavanger, 4036 Stavanger, Norway, sindre.dyrstad@uis.no    | Rogaland County Council, Regional Research Funds in Norway, University of Stavanger and Municipality of Stavanger. |  |
| Neil-Sztramko et al., 2023 | Drummy et al., 2016    |   | Physical activity         | Teachers in the intervention group were asked to lead a 5-minute activity break 3 times/d for 12 weeks. The activity break began with gentle jogging on the spot as a warm-up for less than 1 minute, followed by moderate to vigorous intensity exercises such as hopping, jumping, and running on the spot, scissor kicks, etc. Teachers could select which exercises to include in each activity break. They were encouraged to vary activities each day. Children participated in the activity break in the classroom beside their desks  | Northern Ireland   | Primary school   | Seven primary schools in Northern Ireland were invited to participate in the study.  | Students aged 9 and 10; teachers; parents; researcher; principals   | Teachers  | The researcher met with teachers and principals prior to the beginning of the study to provide information packs on the activity breaks which included detailed instructions for approximately 40 exercises.   | Parental consent; freestanding stadiometer; skin callipers; Actigraph accelerometer; Information sheets.   | English               | Students aged 9 and 10   | -                               | -                    | Moderate to vigorous physical activity (minutes/d) | Normal routine | Moderate                 | Mean difference: 10.00 (4.34, 15.66) | Cluster-RCT                                     | -  | Dr Elaine Murtagh, Department of Arts Education and Physical Education, Mary Immaculate College, University of Limerick, South Circular Road, Limerick, Ireland. Fax: +353 (0)61 313632; email: elaine.murtagh@mic.ul.ie |  |  |



| Review                     | Paper                   | Metadata  | Metadata                               | Intervention  | Intervention   | Intervention  | Intervention   | Intervention  | Intervention   | Intervention  | Intervention  | Intervention                 | Intervention   | Intervention  | Evidence  | Evidence   | Evidence       | Evidence                                     | Evidence   | Evidence  | Intervention   | Intervention   | Implementation  |  |
|----------------------------|-------------------------|---|--|---|--|---|--|---|--|---|---|------------------------------|--|---|---|--|----------------|--|--|---|--|--|---|--|
|                            |                         | Name of the intervention  | Intervention program area              | Description of the intervention   | Geographic area  | Intervention delivery setting   | Recruitment  | Stakeholders involved in selecting and tailoring the intervention   | Professionals involved in delivering the intervention    | Intervention training   | Materials needed to deliver the intervention  | Intervention language        | Intervention target population                               | Direct cost of the intervention   | Intervention website  | Outcomes   | Control group  | Strength of the evidence                     | Effectiveness of the intervention  | Types of research conducted on the intervention   | Scientific publications about the intervention   | Intervention developers  | Intervention development funder   | Scientific publications on implementation research                         |
|                            |                         | Full name(s) of the intervention  | Health topic focus of the intervention | Short description of the intervention; GIVE SOME EXAMPLES OF WHAT SHOULD BE COVERED (E.G. FREQUENCY, DURATION, MODE ETC); include characteristics intervention target group (age, sex, ethnicity)   | Geographic area of the intervention, such as regions, cities, countries, practices; include community type (city/ rural etc) | Intervention setting, such as hospital, primary care office, dental office, school, etc.  |  | Description which stakeholders (including patients) are involved in selecting and tailoring the intervention to the local context             | Description which professionals deliver the intervention | Description of the training in the intervention needed before intervention is implemented   | Materials needed to deliver the intervention  | Language of the intervention | Short description of the intervention's target population(s) | Direct cost of the intervention, if the intervention needs to be purchased or licensed. | Website of the intervention   |  |                | Strength of the intervention's evidence base | Effectiveness of the intervention  | Types of research that has been conducted on the intervention, such as effectiveness trials, implementation | List of articles published about the intervention, with links to each article  | Name of intervention developers and the name of their institutions   | Name of the funder who supported the development of the intervention  | List of articles published on implementation research on this intervention |
| Neil-Sztramko et al., 2024 | Lau et al., 2016        | Active Videogame Intervention (AVG)   | Physical activity                      | Children participated in two 60-minute Xbox 260 Kinect gaming sessions/week after school for 12 school weeks. Children were free to choose games from the 12 offered sports in Season 1 or Season 2 within a play session. This approach was chosen to encourage children's autonomy and to enhance attractiveness and the challenge of game play. Children and their partners with consensus of opinion had their own choice on the order of games, what they wanted to play, and the duration of each game play. Participants could get awarded based on degree and speed of movement and level of difficulty.  | Hong Kong, China   | Local primary school  | All students in grade four and their parents were invited to the workshop.                       | Students in Grade 4; parents; investigator and assistants; trained postgraduate students.   | Investigator together with two assistants                | A prior PA promotion workshop was delivered in the primary school to introduce AVGs and their health benefits.  | Invitation letter, participant information sheet, and study consent; Kinect sensor for Microsoft Xbox 360; Xbox360; Xbox Sport Season Series 1 and 2; TV set; FISCO measuring tape; questionnaire scale.  | Chinese                      | Students in grade 4 aged 8-11 years (males and females)      | -   | -   | Moderate to vigorous physical activity (minutes/d) | Normal routine | Moderate                                     | Mean difference: 6.73 (1.70, 11.76)  | RCT   | 1. Lau PWC, Lau EY, Wang JJ, Choi CR, Kim CG. A Pilot Study of the Attractive Features of Active Videogames Among Chinese Primary School Children. Games Health J. 2017;6(2):87-96. doi:10.1089/g4h.2016.0021  | Jing Jing Wang, PhD Department of Physical Education Faculty of Social Sciences Hong Kong Baptist University Academic and Administration Building 15 Hong Kong Baptist University Road Kowloon Tong Hong Kong SAR China E-mail: wangjj@life.hkbu.edu | Research Grants Council of Hong Kong (project number: GRF 244913).  |  |
| Neil-Sztramko et al., 2025 | Sutherland et al., 2016 | Physical Activity 4 Everyone (PA4E1)  | Physical activity                      | Intervention involved implementation of 7 PA intervention strategies and 6 strategies to support implementation of the intervention. PA intervention strategies included: <ul style="list-style-type: none"> <li>teaching strategies to maximise students' PA in health and PE lessons;</li> <li>development and monitoring of student PA plans within PE lessons; <ul style="list-style-type: none"> <li>enhanced school sport program;</li> <li>development or modification of school policies;</li> </ul> </li> <li>PA programmes during school break;</li> <li>promotion of community PA providers; and <ul style="list-style-type: none"> <li>parent engagement</li> </ul> </li> </ul> The intervention implementation strategies included <ul style="list-style-type: none"> <li>in-school PA consultant (change agent)</li> <li>establishing leadership and support <ul style="list-style-type: none"> <li>teacher training</li> <li>school resources</li> <li>teacher prompts</li> </ul> </li> <li>intervention implementation performance feedback</li> </ul>  | Australia  | Government and Catholic schools in disadvantaged communities (schools with post codes ranked in the bottom 50% of New South Wales post codes based on the Socio-Economic Indexes for Australia) | Via face-to-face meetings with the school principal.   | Students; parents; in-school PA consultant; school principal; school-affiliated staff; Physical education (PE) teachers; research assistants. | PE teachers  | PE teachers received training and resources to assist in maximizing MVPA during class time, including the use of pedometer-based lessons  | Parental consent; WHO's Health Promoting Schools framework; information newsletters; physical activity equipment (e.g., pedometers, resistance devices); promotional materials for teachers (e.g., shirts/lanyards) and students (e.g., balls, water bottles); accelerometer. | English                      | Students in their first year of high school.                 | -   | <a href="https://www.growkudos.com/projects/pa4e1-physical-activity-4-everyone">https://www.growkudos.com/projects/pa4e1-physical-activity-4-everyone</a> | Moderate to vigorous physical activity (minutes/d) | Normal routine | Moderate                                     | Mean difference: 7.00 (2.60, 11.40)  | Cluster-RCT   | 1. Sutherland K, Campbell E, McLaughlin M, et al. Scale-up of the Physical Activity 4 Everyone (PA4E1) intervention in secondary schools: 12-month implementation outcomes from a cluster randomized controlled trial. Int J Behav Nutr Phys Act. 2020;17(1):100. Published 2020 Aug 8. doi:10.1186/s12966-020-01000-y 2. McLaughlin M, Duff J, McKenzie T, et al. Evaluating Digital Program Support for the Physical Activity 4 Everyone (PA4E1) School Program: Mixed Methods Study. JOR. 2021;13(1):1-10. doi:10.1186/s12966-020-01000-y | Rachel L. Sutherland, MPH, Hunter New England Population Health, Locked Bag No. 10, Wallsend, New South Wales 2287, Australia. E-mail: rachel.sutherland@hnehealth.nsw.gov.au  | Non-commercial funding (research funding body)  |  |
| Neil-Sztramko et al., 2026 | Cohen et al., 2015      | Supporting Children's Outcomes using Rewards, Exercise, and Skills (SCORES) | Physical activity                      | Implemented in 3 phases. Phase 1 focused on teacher professional learning, student leadership workshops, and PA promotion tasks to achieve awards. Examples of tasks included acting as equipment monitor, organising games during recess and lunch, and writing a PA promotion article for the school newsletter. Equipment was provided to the school during this phase, and the school committee was established. In phase 2, schools were encouraged to implement 6 PA policies to support the promotion of PA and fundamental movement skill competency within the school. A member of the research team met with the principal at the intervention schools to explain the policies. The member of the research team then conducted a meeting with all staff members to explain the policies and to provide strategies for implementation of the policies. In addition, the research team used a range of strategies targeting the home environment (newsletters, parent evening, and fundamental movement skill homework) to engage parents and encourage them to support their children's PA. Phase 3 addressed strategies to improve school-community links (e.g. inviting local sporting organisations to assist with school sport programmes) | Australia  | Government primary schools located within 30 minutes' drive from the University of Newcastle, in low-income communities (with a Socio-Economic Indexes for Areas ≤ 5 (lowest 50%))              | School were invited to participate in the study.   | Students; teachers; research team members; school principal; parents  | Research team  | -   | Written informed consent; newsletters; protocol manual; accelerometers; portable stadiometer; portable digital scale; questionnaires and checklists.  | English                      | Students in grades 3 and 4 (stage 2, age 7-10 yr).           | -   | -   | Moderate to vigorous physical activity (minutes/d) | Normal routine | Moderate                                     | Mean difference: 12.70 (4.90, 20.50)   | Cluster-RCT   | Morgan PJ, Weaver K, et al. Rationale and study protocol for the supporting children's outcomes using rewards, exercise and skills (SCORES) group randomized controlled trial: a physical activity and fundamental movement skills intervention for primary schools in low-income communities. BMC Public Health. 2012;12:427. Published 2012 Jun 12. doi:10.1186/1471-2458-12-427 2. Cohen KE, Morgan PJ, Plotnikoff RC, Barnett LM, Lubans DR. Improvements in fundamental   | David Lubans, Ph.D., School of Education, Faculty of Education and Arts, University of Newcastle, University Drive, Callaghan, New South Wales, Australia 2308; E-mail: David.Lubans@newcastle.edu.au.   | Non-commercial funding (research funding body)  |  |
| Neil-Sztramko et al., 2027 | Zhou et al., 2019       | The Childhood Health, Activity and Motor Performance Study (Chinese CHAMPS) | Physical activity                      | Intervention 1: school physical education - minimum of 3 PE classes/week and daily 15-minute recess, portable exercise equipment, redesign of PE curriculum, recess rhythmic aerobic routine, use of fitness and health handbook for knowledge and skills to be used on inclement weather days, bi-weekly text messages to students. Intervention 2: after school programme - bi-weekly 45-minute after school PA programme, portable exercise equipment, use of fitness and health handbook for knowledge and skills to be used on inclement weather days, bi-weekly text messages to students. Intervention 3: school physical education + after school programme   | Large, medium, and small metropolitan regions in China   | Middle schools from large, medium, and small metropolitan regions in China located at least 5 kilometres apart from other study schools.  | Students recruited with announcement posters at the schools at the beginning of the school year. | High school students; parents; PE teachers; graduate PE assistant; study team with research assistant.  | PE teachers and graduate PE assistant.                   | Using in-vivo observation and hands-on practice, the training was designed to increase the teacher's confidence and abilities in using the redesigned curriculum activities and modifying lesson plans to meet the student needs. The teachers completed a mandatory 2-day training for SPE and 1-day training for ASP. | Parental consent; mobile health-based (mHealth) campaign on WeChat; small PA portable equipment (e.g., ballgames); Adolescent Fitness and Health Handbook; bioelectrical impedance analyzer; surveys on nutrition and PA habits; accelerometers; chest heart rate monitors.   | Chinese                      | Junior high school healthy students, grade 7                 | -   | -   | Moderate to vigorous physical activity (minutes/d) | Normal routine | Moderate                                     | Mean difference: 11 - Biweekly after school program 1.99 (1.68, 2.30) 12 - Enhanced PE + after school program 4.98 (4.62, 5.34) 13 - Enhanced PE 3.12 (2.76, 3.48) | Cluster-RCT   | -  | Zhixiong Zhou, Institute for Sport Performance and Health Promotion, Capital University of Sports and Physical Education, Beijing 100191, China; yinjun@cupes.edu.cn (J.Y.); fuquan@cupes.edu.cn (Q.F.); lan13865352845@163.com (T.L.)               | Serving National Special Needs in Doctoral Talents Development Program—Performance Training and Health Promotion for Adolescents; the support program for High-level Teacher Team Development of BeijingMunicipal Institutions (IDHT20170515); Beijing Social Science Funding Project (No. 16YTB018); and the Scientific Research Project of Beijing Educational Committee (No. |  |

| Review                 | Paper                 | Metadata  | Metadata                               | Intervention  | Intervention   | Intervention   | Intervention  | Intervention   | Intervention   | Intervention   | Intervention   | Intervention                 | Intervention   | Intervention  | Evidence  | Evidence  | Evidence  | Evidence  | Evidence  | Evidence  | Intervention   | Intervention   | Implementation   |  |
|------------------------|-----------------------|---|--|---|--|--|---|--|--|--|--|------------------------------|--|---|---|---|---|---|---|---|--|--|--|--|
|                        |                       | Name of the intervention                          | Intervention program area              | Description of the intervention   | Geographic area  | Intervention delivery setting  | Recruitment   | Stakeholders involved in selecting and tailoring the intervention  | Professionals involved in delivering the intervention    | Intervention training  | Materials needed to deliver the intervention   | Intervention language        | Intervention target population   | Direct cost of the intervention   | Intervention website  | Outcomes  | Control group   | Strength of the evidence  | Effectiveness of the intervention                                 | Types of research conducted on the intervention   | Scientific publications about the intervention   | Intervention developers  | Intervention development funder  | Scientific publications on implementation research                         |
|                        |                       | Full name(s) of the intervention                  | Health topic focus of the intervention | Short description of the intervention; GIVE SOME EXAMPLES OF WHAT SHOULD BE COVERED (E.G. FREQUENCY, DURATION, MODE ETC); include characteristics intervention target group (age, sex, ethnicity)   | Geographic area of the intervention, such as regions, cities, countries, practices; include community type (city/ rural etc) | Intervention setting, such as hospital, primary care office, dental office, school, etc. |   | Description which stakeholders (including patients) are involved in selecting and tailoring the intervention to the local context    | Description which professionals deliver the intervention | Description of the training in the intervention needed before intervention is implemented  | Materials needed to deliver the intervention   | Language of the intervention | Short description of the intervention's target population(s)   | Direct cost of the intervention, if the intervention needs to be purchased or licensed. | Website of the intervention   |   |   | Strength of the intervention's evidence base  | Effectiveness of the intervention                                 | Types of research that has been conducted on the intervention, such as effectiveness trials, implementation | List of articles published about the intervention, with links to each article  | Name of intervention developers and the name of their institutions   | Name of the funder who supported the development of the intervention   | List of articles published on implementation research on this intervention |
| Wolfenden et al., 2020 | Esquivel et al., 2016 | -   | Physical activity - Diet               | HS interventions use collaborative approaches and provided training and technical assistance for new policy implementation and facilitate employee wellness activities to support childhood obesity prevention efforts. Seven-month multi-component intervention with <b>policy changes to food served and service style</b> , initiatives for employee wellness, classroom activities for preschoolers promoting physical activity (PA) and <b>healthy eating</b> , and training and technical assistance.   | Communities on O'ahu, Hawaii   | Head Start preschools in Hawaii, located within 2 previously randomized communities.     | After teachers completed informed consent, children from the 23 HS classrooms were recruited to participate at HS orientation meetings and in their classrooms by the researcher and/or HS teacher. Parents of children at HS provided consent for child participation.   | HS teachers; students; parents; Head Start staff   | HS staff   | -  | Classroom resources from the Healthy Habits for Life curriculum  | English                      | Teachers   | -   | -   | Implementation of policies, practices or programmes that promote child healthy eating, physical activity and/ or obesity prevention | Waiting-list control (delayed intervention)   | Moderate  | Mean difference: 0.96 (0.09, 1.84) <b>1.18 (0.13, 2.24)</b>       | Intervention trial within a larger RCT  | 1. Esquivel M, Nigg CR, Fialkowski MK, Braun KL, Li F, Novotny R. Head Start Wellness Policy Intervention in Hawaii: A Project of the Children's Healthy Living Program. Child Obes. 2016;12(1):26-32. doi:10.1089/chi.2015.0071 | Monica Kazlauskys Esquivel University of Hawai'i at Mānoa, Honolulu, Hawaii. Electronic address: monicake@hawaii.edu.                                | Agriculture and Food Research Initiative, Grant No. 2011-68001-30335 from the USA Department of Agriculture, National Institute of Food and Agricultural Science Enhancement Coordinated Agricultural Program. |  |
| Wolfenden et al., 2020 | Mazzucca, 2017        | Move, Play, Learn!                                | Physical activity - Diet               | A 10-week intervention was developed and tested in a group-randomized controlled trial with 26 ECE teachers. Intervention teachers attended professional development workshops and were asked to modify pre-specified classroom activities and their practices. Two weeks for training and four modules of two weeks each. Modules focused on specific segments of the child care day schedule. Workshops were held at the beginning and at the midpoint of the intervention period (5 weeks). Teachers were asked to implement intervention activities during pre-specified times of day and to focus on key teacher practices. Implementation was supported by weekly technical assistance (e.g., phone calls).   | Orange, Durham, Alamance and Guilford Counties, North Carolina, USA  | Childcare service with at least one preschool classroom                                  | Twenty-six early care and education centre teachers (1 teacher per centre) were randomised 1:1 into either the intervention or waiting-list control arms.   | Teachers, students, researchers.   | Researchers staff.                                       | -  | MPLI activity lesson plans, activity cards corresponding to each MPLI activity, and \$30 worth of portable play equipment.   | English                      | Teachers   | -   | Gift cards were offered to teachers for completing each measurement period: \$25 for baseline and \$35 for follow-up. \$30 worth of portable play MPLI equipment.                             | Implementation of policies, practices or programmes that promote child healthy eating, physical activity and/ or obesity prevention | Normal practices  | Moderate  | Mean difference: 0.89 (0.08, 1.7) <b>0.89 (0.08, 1.7)</b>         | Cluster-RCT   | -  | Stephanie Mazzucca, University of North Carolina, Chapel Hill  | -  |  |
| Wolfenden et al., 2020 | Stookey et al., 2017  | Child Care Health Program + Healthy Apple Program | Physical activity - Diet               | Bi-annual BMI screenings offered by public health nurses or health workers at child care centers; Individual child health referral; Nutrition education (circle time for children); Linkage of child care providers with HAP: Individualized technical assistance for providers; Free self-assessment materials, information; about over 80 best practices, and technical assistance resources for child care providers; Citywide coordination of quality improvement processes for child care providers; Tailored workshops and award incentives for child care providers to adopt nutrition and physical activity best practices.   | San Francisco, USA   | Childcare centres  | 43 childcare centres participated. In summer 2012, the SFDPH epidemiologist randomised childcare centres in two blocks, one block for each of two CCHP health workers responsible for BMI screenings. For each health worker, childcare centres had an equal chance of being assigned to CCHP + HAP or CCHP + HAP Delayed. Enrolment in the childcare centres ranged from 14 to 160 children. Recruitment rate: 96% | Teachers, students, researchers, CHP health workers.   | Childcare centre staff                                   | - The San Francisco Children's Council offered two workshops to address needs identified by the HAP participants. A nutrition workshop addressed ideas for seasonal menu planning, child nutrition education resources for parents, and policies for food for holidays or celebrations. A physical activity workshop addressed how to integrate age-appropriate physical activity and academic learning for preschoolers. - CCHP public health nurses or health workers introduced the HAP resources and process, in-person, to childcare centre staff. They delivered the HAP | English  | Children                     | HAP operation costs less than \$100,000 per year. A \$25 gift card was offered to one representative per child care center for participation in the HAP pilot. | <a href="https://healthvape.com/default.aspx">https://healthvape.com/default.aspx</a>   | Measures of child weight status (BMI and zBMI score)  | No intervention (delayed control arm)   | Moderate  | Mean BMI percentiles for children in the intervention group were 1.7 (SD 0.6) at baseline and -0.07 (SD 0.7) at follow-up, whilst BMI percentiles in the control group were 1.0 (SD 0.7) at baseline and -2.1 (SD 0.7) at two-year follow-up. Mean BMI z-scores in the intervention group decreased from 0.05 (SD 0.02) at baseline to -0.04 (SD 0.02), and in the control group decreased from 0 (SD 0.02) to -0.09 (SD 0.02) at two-year follow-up. The statistical significance of | Cluster-RCT   | -   | Jodi D. Stookey, * Correspondence: jodi.stookey@sfdph.org San Francisco Department of Public Health, Maternal, Child & Adolescent Health, 30 Van Ness, Suite 260, San Francisco, CA 94102, USA                                   | CDC Community Transformation Grant and Feeling Good Project, funded by USDA SNAP-Ed.   |  |  |
| Brown et al., 2020     | Zask et al., 2012     | Tooty Fruity Veggie in Preschools (TFV)           | Physical activity - Diet               | Aimed to decrease overweight and obesity prevalence among children by improving fundamental movement skills, increasing fruit and vegetable intake and decreasing unhealthy food consumption. PA interventions: - Structured twice-weekly fundamental movement skill development through prescribed games suitable for a wide age range - Playground environment review and alterations to encourage more active movement and better access to sports equipment during free play times. - Small grants for sports equipment. - Workshop for parents on limiting sedentary time, promoting PA and fundamental movement skills - A monthly 4-page newsletter containing <b>tips of healthy eating</b> and active playing ideas was provided to each parent. Healthy eating interventions: - Review and adjustment of food and nutrition policies to explicitly identify appropriate and inappropriate foods in lunch boxes. - Communication of new policy to parents along with lunchbox displays - Colourful posters on 'better foods' and 'foods better left out' on display all year | New South Wales North Coast area, Australia  | Pre-school   | Preschools in the New South Wales North Coast area (N = 40) were asked to submit an expression of interest to participate in the programme. 30 preschools volunteered and the team determined that it would have the capacity and resources to provide the intervention to 18 of them.  | Parents, research/project staff, preschool staff, children (boys and girls), Health professionals (including Health Promotion staff) | Health Promotion staff                                   | Trained staff without any specification  | Colourful posters; "Family food" DVD; Parents' workshop s; Test of Gross Motor Development-2; short games (usually three; Preschool staff received one day of training and were given a kit with program notes and 30 laminated cards for each of the games to run the program), written material on ideas for fun games; written informed consent | English                      | 50.5 ± 6.7 months girls; 58.8 ± 6.8 months boys  | -   | Preschools that acted as control schools in 1 year, were on a waiting list for an intervention and were offered the full programme in subsequent years (the programme continued beyond 2007). | Body-mass index z score (zBMI)  | Preschools that acted as control schools in 1 year, were on a waiting list for an intervention and were offered the full programme in subsequent years (the programme continued beyond 2007). | Moderate  | Mean difference: -0.15 (-0.29, -0.01) <b>-0.15 (-0.29, -0.01)</b> | Cluster-RCT   | -  | Lisa M Barnett, lisa.barnett@deakin.edu.au, School of Health and Social Development, Deakin University, Faculty of Health, Melbourne, VIC, Australia | Funding was received from New South Wales Ministry of Health.  |  |

| Review             | Paper                | Metadata                          | Metadata                               | Intervention  | Intervention   | Intervention  | Intervention   | Intervention  | Intervention   | Intervention  | Intervention   | Intervention                 | Intervention   | Intervention   | Evidence                    | Evidence                       | Evidence   | Evidence                                     | Evidence  | Evidence  | Intervention  | Intervention  | Implementation  |  |
|--------------------|----------------------|-----------------------------------|--|---|--|---|--|---|--|---|--|------------------------------|--|--|-----------------------------|--------------------------------|--|--|---|---|---|---|---|--|
|                    |                      | Name of the intervention          | Intervention program area              | Description of the intervention   | Geographic area  | Intervention delivery setting   | Recruitment  | Stakeholders involved in selecting and tailoring the intervention   | Professionals involved in delivering the intervention    | Intervention training   | Materials needed to deliver the intervention   | Intervention language        | Intervention target population                               | Direct cost of the intervention  | Intervention website        | Outcomes                       | Control group  | Strength of the evidence                     | Effectiveness of the intervention                                 | Types of research conducted on the intervention   | Scientific publications about the intervention  | Intervention developers   | Intervention development funder   | Scientific publications on implementation research                         |
|                    |                      | Full name(s) of the intervention  | Health topic focus of the intervention | Short description of the intervention; GIVE SOME EXAMPLES OF WHAT SHOULD BE COVERED (E.G. FREQUENCY, DURATION, MODE ETC); include characteristics intervention target group (age, sex, ethnicity)   | Geographic area of the intervention, such as regions, cities, countries, practices; include community type (city/ rural etc) | Intervention setting, such as hospital, primary care office, dental office, school, etc.  | Recruitment  | Description which stakeholders (including patients) are involved in selecting and tailoring the intervention to the local context | Description which professionals deliver the intervention | Description of the training in the intervention needed before intervention is implemented | Materials needed to deliver the intervention   | Language of the intervention | Short description of the intervention's target population(s) | Direct cost of the intervention, if the intervention needs to be purchased or licensed.  | Website of the intervention |                                |  | Strength of the intervention's evidence base | Effectiveness of the intervention                                 | Types of research that has been conducted on the intervention, such as effectiveness trials, implementation | List of articles published about the intervention, with links to each article   | Name of intervention developers and the name of their institutions  | Name of the funder who supported the development of the intervention  | List of articles published on implementation research on this intervention |
| Brown et al., 2021 | Slusser et al., 2012 | -                                 | Physical activity - Diet               | To examine the effectiveness of a multicomponent parent training programme on the prevention of overweight and obesity among Latino children aged 2-4. Parent training intervention to promote optimal nutrition and PA. Used a bilingual social worker as a facilitator for the classes. 7 x 90-min weekly modules and 2 booster sessions, 1/month after the end of the 7 weeks and final booster session a month later (specifically: 1) To increase caregiver's knowledge about yes and no foods based on the 2005 Dietary Guidelines.34 A list was compiled that included culturally relevant foods as well as common places where families might eat out. 2) To teach families how to practice behavior modification strategies such as self-monitoring. 3) To teach parents food strategies to increase vegetable and fruit food preferences for their children; 4) To identify barriers to healthy lifestyles and to review strategies to reduce these barriers). Included parent homework.  | Los Angeles, USA   | Healthcare clinic preschools including Head start, family centre and Children's Bureau serving low-income predominantly Latino families | At clinic visits or in classrooms of community sites (Latino with at least 1 child 2-4 years)  | Latino children 2-4 years; parents; parent-training educator; bilingual social worker   | Parent-training educator                                 | -   | Multicomponent parent training programme; written consent; nutrition and physical activity messages within existing field-tested parent training modules; Bright Futures in Practice: Physical Activity" and "Bright Futures in Practice: Nutrition" health supervision tools and the "Traffic Light" diet,30-32 the AAP expert work group's recommendations ,29 and the philosophy of internal regulation related to eating; a list with culturally | Spanish and English          | Parents and Latino preschool children 2-4 years              | -  | -                           | Body-mass index z score (zBMI) | No intervention  | Moderate                                     | Mean difference: -0.24 (-0.46, -0.02) <b>-0.24 (-0.46, -0.02)</b> | RCT   | 1. Prellip M, Kinsler J, Thai CL, Erasquin JT, Slusser W. Evaluation of a school-based multicomponent nutrition education program to improve young children's fruit and vegetable consumption. J Nutr Educ Behav. 2012;44(4):310-318. doi:10.1016/j.jneb.2011.10.005 2. Ad G, De G, Nj J, et al. A Hybrid Mobile Phone Feasibility Study Focusing on Latino Mothers, Fathers, and Grandmothers to Prevent Obesity in Preschoolers. Matern Child Health J. 2023;27(9):1621-1631.     | Wendy Slusser, MD, MS Associate Clinical Professor Departments of Pediatrics and Community Health Sciences Fit for Health Program Center for Healthier Children, Families, and Communities UCLA Schools of Medicine and Public Health 10990 Wilshire Boulevard, Suite 900 Los Angeles, CA 90024 Email: wslusser@mednet.ucla.edu | Study was funded by the generous gifts of: Joseph Drown Foundation, Simms/Mann Family Foundation, and Venice Family Clinic.     |  |
| Brown et al., 2022 | Haines et al., 2013  | Healthy Habits, Happy Homes       | Physical activity - Diet               | To examine the effectiveness of a home-based intervention to improve household routines known to be associated with childhood obesity among a sample of low-income, racial/ethnic minority families. The Healthy habits, happy homes intervention is a home-based intervention that uses individually tailored counselling by health educators to encourage behaviour change. The intervention was informed by findings from focus groups with 74 racial/ethnic minority parents of young children. Major components of the intervention included: • motivational coaching by a health educator during 4 home visits and health coaching telephone calls • mailed educational materials and incentives • weekly text messages on adoption of household routines 4 bilingual educators were trained to do the MI during the home visits and coaching calls. Each home visit included: • a check-in to review progress and setbacks to behaviour change • discussion of behaviour-change goals and collaborative goal setting • a concrete activity or tool the parent could use to support behaviour change. The monthly coaching calls were designed to assess participants' progression making | Boston, USA  | Home-based (family homes)   | Families were identified from patient records at 4 CHCs that served primarily low-income, and racial/ethnic minority families. Mailed out potential participants a letter introducing them to the study, inviting them to take part and an opt-out telephone number should the family choose not to participate. Participants were families with children aged 2 to 5 years who had a television (TV) in the room where the child slept. | Health educator (coach); bilingual educators; low-income families (parents and young children 2-5 years); research assistants     | Health educator (coach)                                  | -   | Invitation letter; educational materials; weekly text messages on adoption of household routines; mailed educational materials on reaching developmental milestones during early childhood and low-cost incentives (e.g. coloring books); parents satisfaction survey  | English and Spanish          | Young children of low income families aged 2-5 years         | Participants received USD 40 for completing the baseline visit and USD 50 for completing the 6-month follow-up visit. (economic evaluation NR) | -                           | Body-mass index (BMI)          | Families randomised to the control condition received 4 monthly mailed packages that included educational materials on reaching developmental milestones during early childhood and low-cost incentives (e.g. coloring books). | Moderate                                     | Mean difference: -0.4 (-0.79, -0.01) <b>-0.4 (-0.79, -0.01)</b>   | RCT   | Hughes A, Gibson AM, Haines J, Taveras E, Reilly JJ. Protocol for Healthy Habits Happy Homes (4H) Scotland: feasibility of a participatory approach to adaptation and implementation of a study aimed at early prevention of obesity. BMJ Open. 2019;9(6):e028038. Published 2019 Jun 7. doi:10.1136/bmjopen-2018-028038; 2. Taveras EM, McDonald J, O'Brien A, et al. Healthy Habits, Happy Homes: methods and baseline data of a randomized controlled trial to improve household | Elsie M. Taveras, MD, MPH, Division of General Pediatrics, Department of Pediatrics, Pediatric Population Health Management, Massachusetts General Hospital for Children, 100 Cambridge Street, 15th Fl, Mail Code M100C1570, Boston, MA 02114 (etaveras@partners.org).   | CDC and the National Center for Chronic Disease Prevention and Health Promotion (Prevention Research Centers grant 1U48DP00194) |  |
| Brown et al., 2023 | Wen et al., 2012     | The health beginnings trial (HBT) | Physical activity - Diet               | To assess the effectiveness of a home-based early intervention on children's BMI at age 2. 8 home visits (1-2 h per visit) from specially trained community nurses delivering a staged, home-based intervention, one in the antenatal period, and seven at 1, 3, 5, 9, 12, 18 and 24 months after birth. Timing of the visits was designed to coincide with early childhood developmental milestones. 4 community nurses were recruited and trained to ensure consistency of delivering the intervention. The key intervention messages included: • Breast is best • No solids for me until 6 months • I eat a variety of fruit and vegetables every day • Only water in my cup • I am part of an active family Families in both the control and intervention group received the usual childhood nursing service from community health service nurses. All new mothers in the state of New South Wales received at least 1 nurse visit for general support at home. Some vulnerable families are offered multiple home visits. To maximise the retention rate in this study, they posted home safety promotion materials to women in the control group at six and 12                            | Socially and economically disadvantaged areas of Sydney, Australia   | Home-based  | Research assistants gave pregnant women a letter of invitation and information about the study   | Research assistants (including nurses); pregnant women attending antenatal clinics; children (0-2 y.o.); trained community nurses | Trained community nurses                                 | Nurses were recruited and trained to ensure consistency of delivering the intervention.   | Home safety promotion materials; written consent; visit checklist  | English                      | Children 2 y.o.  | -  | -                           | Body-mass index (BMI)          | Usual care + home safety promotion materials   | Moderate                                     | Mean difference: -0.29 (-0.56, -0.02) <b>-0.29 (-0.56, -0.02)</b> | RCT   | 1. Wen LM, Baur LA, Rissel C, et al. Healthy Beginnings Trial Phase 2 study: follow-up and cost-effectiveness analysis. Contemp Clin Trials. 2012;33(2):396-401. doi:10.1016/j.cct.2011.11.008 2. Xu H, Wen LM, Hardy LL, Rissel C, Mothers' Perceived Neighbourhood Environment and Outdoor Play of 2- to 3.5-Year-Old Children: Findings from the Healthy Beginnings Trial. Int J Environ Res Public Health. 2017;14(9):1082. Published 2017 Sep 18. doi:10.3390/ijerph1          | L M Wen, Health Promotion Service, South Western Sydney and Sydney Local Health Districts, Level 9, King George V Building, Camperdown NSW 2050, Australia lmwen@email.cs.nsw.gov.au  | Australian National Health and Medical Research Council (ID No 393112)  |  |



| Review             | Paper               | Metadata                                    | Metadata                               | Intervention   | Intervention   | Intervention   | Intervention  | Intervention  | Intervention   | Intervention  | Intervention  | Intervention                 | Intervention   | Intervention  | Evidence                    | Evidence   | Evidence  | Evidence  | Evidence                                | Evidence  | Intervention   | Intervention  | Implementation  |  |
|--------------------|---------------------|---|--|--|--|--|---|---|--|---|---|------------------------------|--|---|-----------------------------|--|---|---|---|---|--|---|---|--|
|                    |                     | Name of the intervention                    | Intervention program area              | Description of the intervention  | Geographic area  | Intervention delivery setting  | Recruitment   | Stakeholders involved in selecting and tailoring the intervention   | Professionals involved in delivering the intervention                      | Intervention training   | Materials needed to deliver the intervention  | Intervention language        | Intervention target population                               | Direct cost of the intervention   | Intervention website        | Outcomes   | Control group   | Strength of the evidence  | Effectiveness of the intervention       | Types of research conducted on the intervention   | Scientific publications about the intervention   | Intervention developers   | Intervention development funder   | Scientific publications on implementation research                         |
|                    |                     | Full name(s) of the intervention            | Health topic focus of the intervention | Short description of the intervention; GIVE SOME EXAMPLES OF WHAT SHOULD BE COVERED (E.G. FREQUENCY, DURATION, MODE ETC); include characteristics intervention target group (age, sex, ethnicity)  | Geographic area of the intervention, such as regions, cities, countries, practices; include community type (city/ rural etc) | Intervention setting, such as hospital, primary care office, dental office, school, etc.   |   | Description which stakeholders (including patients) are involved in selecting and tailoring the intervention to the local context             | Description which professionals deliver the intervention                   | Description of the training in the intervention needed before intervention is implemented   | Materials needed to deliver the intervention  | Language of the intervention | Short description of the intervention's target population(s) | Direct cost of the intervention, if the intervention needs to be purchased or licensed.   | Website of the intervention |  |   | Strength of the intervention's evidence base                        | Effectiveness of the intervention       | Types of research that has been conducted on the intervention, such as effectiveness trials, implementation | List of articles published about the intervention, with links to each article  | Name of intervention developers and the name of their institutions  | Name of the funder who supported the development of the intervention  | List of articles published on implementation research on this intervention |
| Brown et al., 2024 | Barkin et al., 2012 | Salud con la familia                        | Physical activity - Diet               | To test the effect of a culturally tailored, family-centred, short-term behavioural intervention on BMI in Latino-American preschool-aged children. 12 weekly, 90-min group skills-building sessions for parents and children designed to improve nutritional family habits, increase weekly PA, and decrease media use (sedentary activity), conducted in Spanish by trained facilitator and set in the community centre. Participants were randomly assigned to small social groups at each session (6-8 parent-child dyads), and assigned small group activities (engaging both parents and children as the focus of the intervention) and specific group roles. The content was based on a best-practice culturally tailored programme for Latino-American families developed by the National Latino Children's Institute. Control group received a brief school readiness programme (3 times for 60 min each session during the 12 weeks) conducted in the same community centre, designed to improve school readiness in preschool-aged children through increased parental verbal engagement (e.g. daily reading, playing word games, how to talk to children). The programme was based on the Dialogic Reading Model-C.A.R. (Comment and Wait, Ask Questions and Wait, and Respond by Intervention has a nutrition and PA element. | Urban neighbourhood, Tennessee, USA  | Community recreation centre  |   | Bilingual research assistant; trained facilitator; parents; Latino-American preschool-aged children.  | Trained facilitators.  |   | Flyers; Dialogic Reading Model-C.A.R; written consent   | Spanish and English          | Latino-American preschool-aged children 2-6 years            | Participants received small incentives after each wave of data collection (e.g. cutting board, kitchen timer, gift card to local supermarket), a total value of USD 60 per parent-child dyad over the study period. |                             | Body-mass index (BMI)  | Control group received a brief school readiness programme (3 times for 60 min each session during the 12 weeks) conducted in the same community centre, designed to improve school readiness in preschool-aged children through increased parental verbal engagement (e.g. daily reading, playing word games, how to talk to children). | Moderate  | Mean difference: -0.59 (-0.94, -0.24)   | RCT   | 1. Karp SM, Barry KM, Gesell SB, Po'e EK, Dietrich MS, Barkin SL. Parental feeding patterns and child weight status for Latino preschoolers. Obes Res Clin Pract. 2014;8(1):e88-e97. doi:10.1016/j.orcp.2012.08.193  | Shari L. Barkin, MD, MSHS, Marian Wright Edelman Professor of Pediatrics, Director of Division of General Pediatrics, Director of Pediatric Obesity Research, Diabetes Research and Training Center, Vanderbilt University School of Medicine, 2200 Children's Way, Doctor's Office Tower 8232, Nashville, TN 37232-9225. E-mail: shari.barkin@vanderbilt.edu | Supported by a Project Diabetes Implementation grant from the State of Tennessee (GR-09-25517-00) awarded to Dr Barkin and funds awarded to Dr Barkin from the Vanderbilt Clinical and Translational Science Award (National Center for Research Resources/NIH) (1 UL1 RR024975). Dr Gesell was supported by the American Heart Association Clinical Research grant (09CRP2230246). |  |
| Brown et al., 2024 | Nemet et al., 2011  |   | Physical activity - Diet               | Intervention was designed mainly to improve nutritional knowledge and was based on the nutritional programme 'It Fits Me' (Tafur Alay) of the Israeli Ministry of Education (www.tafur-alay.co.il/). Briefly, the intervention consisted of teaching topics such as food groups, vitamins, healthy food choices, food preparation and cooking methods, and information on fast-food vs home cooking. The topics were taught through short lectures/talks, games, and story reading. Delivered by kindergarten staff. Topics included the following: what do popular Israeli foods contain, fruits and vegetables, what is calcium and why is it important, special dietary consideration during holidays, In addition, monthly flyers detailing nutritional information were sent home via the children. Children were asked to present the nutritional information to their parents, and parents were asked to discuss the information with their children. PA  | Low socioeconomic status communities, Sharon area, Israel  | Kindergarten classes   |   | Professional youth coach; preschool staff (teachers and assistant teacher); parents; Children completed a school-year (age 3.8 to 6.8 years). | Professional youth coach; preschool staff (teachers and assistant teacher) | Preschool teachers attended an all-day seminar in which they were acquainted with the programme and were trained by the study team so that preschool staff (i.e. teachers and assistant teachers) could perform all the nutritional aspects of the intervention and most exercise classes |   | Hebrew                       | Children completed a school-year (age 3.8 to 6.8 years).     |   | Body-mass index (BMI)       | Participants in the control group were informed that measurements are part of a survey on PA and nutrition in kindergarten children, and they continued their regular kindergarten schedule. | Moderate  | Mean difference (I2): -0.3 (-0.47, -0.13) (I2): -0.3 (-0.47, -0.13) | RCT                                     |   | Dan Nemet, MD, MHA, Child Health & Sports Center, Department of Pediatrics, Meir Medical Center, 59 Tchernichovski St., Kfar-Saba, Israel, 44281. E-mail: dnemet@gmail.com   | A grant from The Rosalinde and Arthur Gilbert Foundation, and the Israel Heart Fund.  |   |  |
| Brown et al., 2024 | Khan et al., 2014   | FITKids (Fitness improves thinking in kids) | Physical activity                      | Intervention on cardiorespiratory fitness and adiposity among prepubertal children. (Main aim of study was cognitive health) The intervention group received a 2-h intervention (5 days/week for 9 months) based on the 'child and adolescent trial for cardiovascular health (CATCH)' curriculum. This is an evidence-based PA programme that provides MVPA in a non-competitive environment. The sessions consisted of 70 min of intermittent MVPA. Each session began with 20-25 min at PA stations focused on a health-related fitness component (e.g. cardiorespiratory fitness, muscular strength). After the fitness activities, a healthful snack was provided during the 15-min educational component (topics included goal setting, self-management, and self-efficacy). After the educational component, participants engaged in 50-55 min of organisational games or sport-oriented activities (e.g. dribbling a basketball). The sessions concluded with a 15-min cool-down period. A target heart zone for each child was established as 55%-80% of the child's maximum heart rate, and time below, time in, and time above the target heart zone was recorded. Trained research staff members encouraged participants to  | Illinois, USA  | After school (Actual setting is unclear, presume schools/community setting, participants visited the University laboratory for measurement.) | Children (8-9 years old) were recruited from 7 schools in east-central Illinois to participate in a 9-month after-school physical activity research trial | Research staff members; prepubertal children (8-9 years); parents; dietitian  | Trained research staff members   |   | Child and adolescent trial for cardiovascular health (CATCH) curriculum; healthful snack; games or sport-oriented activities (e.g. dribbling a basketball); stadiometer; Parents detailed questionnaire; modified Tanner staging system questionnaire; 24-hour food recall; dual-energy radiograph absorptiometry | English                      | Prepubertal children (8-9 years)                             | A USD 100 incentive was provided at pretest and follow-up. No monetary incentive was provided for participation in the after-school intervention, which was provided at no cost.                                    |                             | Body-mass index z score (zBMI)   | No intervention   | Moderate  | Mean difference (I2): 0.2 (-0.36, 0.04) | RCT   | 1. Baym CL, Khan NA, Monti JM, et al. Dietary lipids are differentially associated with hippocampal-dependent relational memory in prepubescent children. Am J Clin Nutr. 2014;99(5):1026-1032. doi:10.3945/ajcn.113.079624; 2. Hillman CH, Pontifex MB, Castelli DM, et al. Effects of the FITKids randomized controlled trial on executive control and brain function. Pediatrics. 2014;134(4):e1063-e1071. doi:10.1542/peds.2013-3219; 3. D'Elia EA | Naiman A. Khan, PhD, RD, Department of Kinesiology and Community Health, University of Illinois at Urbana-Champaign, 313 Louise Freer Hall, 906 South Goodwin Avenue, Urbana, IL 61801. E-mail: nakhan2@illinois.edu  | All phases of this study were supported by NIH grant HD055352. Funded by the NIH  |  |

| Review                 | Paper                  | Metadata   | Metadata                  | Intervention  | Intervention    | Intervention                  | Intervention  | Intervention  | Intervention  | Intervention   | Intervention   | Intervention          | Intervention   | Intervention                    | Evidence                    | Evidence  | Evidence                                  | Evidence                 | Evidence  | Evidence  | Intervention   | Intervention   | Implementation  |   |
|------------------------|------------------------|--|---------------------------|---|-----------------|-------------------------------|---|---|---|--|--|-----------------------|--|---------------------------------|-----------------------------|---|---|--------------------------|---|---|--|--|---|---|
|                        |                        | Name of the intervention   | Intervention program area | Description of the intervention   | Geographic area | Intervention delivery setting | Recruitment   | Stakeholders involved in selecting and tailoring the intervention   | Professionals involved in delivering the intervention                   | Intervention training  | Materials needed to deliver the intervention   | Intervention language | Intervention target population   | Direct cost of the intervention | Intervention website        | Outcomes  | Control group                             | Strength of the evidence | Effectiveness of the intervention   | Types of research conducted on the intervention | Scientific publications about the intervention   | Intervention developers  | Intervention development funder   | Scientific publications on implementation research                            |
| MacArthur et al., 2018 | Melnik et al., 2013    | COPE (Creating Opportunities for Personal Empowerment) Healthy Lifestyles TEEN (Thinking, Emotions, Exercise, Nutrition) Program | Physical activity - Diet  | Short description of the intervention; GIVE SOME EXAMPLES OF WHAT SHOULD BE COVERED (E.G. FREQUENCY, DURATION, MODE ETC); include characteristics intervention target group (age, sex, ethnicity)<br><br>A 15-session educational and cognitive-behavioural skills building programme that incorporated 15 to 20 minutes of physical activity in each session. Areas covered included healthy lifestyles, self-esteem, goal-setting, and problem-solving; stress and coping; emotional regulation; effective communication; overcoming barriers to goal progression; <b>food and nutrition information (e.g. portion sizes, nutrients, food groups, snacks)</b> ; and physical activity. Homework activities were conducted to reinforce the content of the programme, and 4 parent newsletters were sent home for review.  | USA, South West | Secondary school              | Adolescents aged 14–16 years, primarily freshmen and sophomores, who were enrolled in required health education courses, were recruited during their classes in 11 high schools from two school districts in the Southwestern U.S. Teens of any gender, ethnicity, or SES and those who could read and speak English                                      | Adolescents, parents, teachers, Research team members   | Teachers  | A full-day training workshop on COPE to teachers   | 4 parent newsletters; post-evaluation questionnaire; consent/assent packets; pedometers; COPE manual   | English               | Adolescents aged 14 to 16 years who were enrolled in a health education course. Teens of any gender, ethnicity, or SES | -                               | Website of the intervention | Effectiveness of universal school-level multiple risk behaviour interventions compared to usual practice for outcomes up to 12 months post-intervention - healthy lifestyle behaviours, BMI | Healthy Teens attention control programme | Moderate                 | Odds Ratio: 1.53 (1.17, 2.00)<br><b>0.66 (0.49, 0.87)</b>                                     | Cluster RCT                                     | 1. Melnyk BM, Kelly S, Jacobson D, et al. The COPE healthy lifestyles TEEN randomized controlled trial with culturally diverse high school adolescents: baseline characteristics and methods. <i>Contemp Clin Trials</i> . 2013;36(1):41-53. doi:10.1016/j.cct.2013.05.013; 2. Melnyk BM, Jacobson D, Kelly SA, et al. Twelve-Month Effects of the COPE Healthy Lifestyles TEEN Program on Overweight and Depressive Symptoms in High School Adolescents. <i>J Sch Health</i> . 2015;85(12):963- | Bernadette Mazurek Melnyk, PhD, RN, CPNP/PMHNP, FNAP, FAAN, College of Nursing, The Ohio State University, 1585 Neal Avenue, Columbus OH 43210. Melnyk.15@osu.edu                                  | NIH/ National Institute of Nursing Research   | List of articles published about the intervention, with links to each article |
| Langford et al., 2014  | Eather et al., 2013    | Fit-4-Fun  | Physical activity         | A Health and Physical Education curriculum was implemented for 1 hour per week for 8 weeks. Teachers were provided with lesson plans, teacher and student work booklets, resource materials and information about how to integrate it into other subjects (such as science and maths); Daily breaktime and lunchtime activities were led by students for 8 weeks to encourage physical activity. Task cards and equipment were provided; The home activity programme comprised 20 minutes, 3 times a week for 8 weeks. Work booklets and information booklets were sent home to parents. Home-based fitness activities and challenges were set for children and their families.   | Australia       | Primary school                | Four Hunter primary schools were recruited in April, 2011 and randomized by school into treatment or control conditions.  | Children, School Principals, teachers, parents and study participants, research team  | Teachers  | The program was delivered by a member of the research team who is a trained physical educator  | Pedometers; Resource materials (i.e. laminated cards for circuit activities, sports equipment, music); Student certificates, prizes and reward system; Evaluation questionnaires   | English               | Children grades 5 and 6 (10 - 12 year-olds)  | -                               | -                           | 1. Body-mass index (BMI)<br>2. BMI<br>3. Physical fitness   | No intervention                           | Moderate                 | Mean Difference:<br>1. -0.96 (-1.41, -0.51)<br>2. -0.47 (-0.69, -0.25)<br>3. 0.64 (0.4, 0.88) | Cluster RCT                                     | Morgan PJ, Lubans DR. Social support from teachers mediates physical activity behavior change in children participating in the Fit-4-Fun intervention. <i>Int J Behav Nutr Phys Act</i> . 2013;10:68. Published 2013 May 28. doi:10.1186/1479-5868-10-68   | Narelle Eather, Priority Research Centre in Physical Activity and Nutrition, School of Education, University of Newcastle, Callaghan Campus, Newcastle, Australia. narelle.eather@newcastle.edu.au | Funded by The Physical Activity and Nutrition Research Centre (The University of Newcastle) and Sports Medicine Australia   |   |
| Langford et al., 2014  | Grydeland et al., 2013 | Health in Adolescents (HEIA)   | Physical activity - Diet  | 5 classroom sessions on <b>nutrition</b> and physical activity were delivered by teachers to students during the 6th grade; Short (10-minute) physical activity breaks were held once a week during lessons. <b>Fruit and vegetable breaks were also held once a week</b> . Sports equipment was provided to encourage physical activity during recess. Active commuting campaigns were held and pedometers were given out. PE teachers received a training course on how to deliver PE in an enjoyable way; Fact sheets were sent home to parents. In addition, students had to complete homework assignments with parents in the 7th grade; A computer-tailored programme targeting physical activity, sedentary behaviours and <b>nutrition</b> was implemented during the 7th grade   | Norway          | Primary school                | Eligible schools were those with more than 40 students in the sixth grade and located in the largest towns/municipalities in seven counties in south-eastern Norway. Twelve schools were randomly assigned by blind draw with all investigators present to the intervention group (n=784 children) and 25 schools to the control group (n=1381 children). | School principals (adolescents) and teachers, school-health services and parent committees; trained staff person  | Schoolteachers  | Teacher training for Physical Education teachers   | Posters for classrooms; pedometer; computer; Brochures/information sheets;   | -                     | Children grade 6 (11 - 12 year-olds)   | -                               | -                           | Body-mass index (BMI)   | No intervention                           | Moderate                 | Mean Difference:<br>-0.1 (-0.18, -0.02)<br><b>0.1 (-0.18, -0.02)</b>                          | Cluster RCT                                     | 1. Grydeland M, MK, Arah OA, Bergh IH, et al. Gender-specific mediators of the association between parental education and adiposity among adolescents: the HEIA study. <i>Sci Rep</i> . 2019;9(1):7282. Published 2019 May 13. doi:10.1038/s41598-019-43604-w; 2. Bjelkand M, Hausken SE, Bergh IH, et al. Changes in adolescents' and parents' intakes of sugar-sweetened beverages, fruit and vegetables after 20 months: results from the HEIA study - a comprehensive, multi-component       | May Grydeland, Department of Sports Medicine, Norwegian School of Sport Sciences, PB 4014 Ullevaal Stadion, NO-0806, Oslo 0806, Norway; may.grydeland@nih.no                                       | Funded by the Norwegian Research Council [grant number 155323/V50] with supplementary funds from the Throne Holst Nutrition Research Foundation, University of Oslo, and also from the Norwegian School of Sport Sciences |   |
| Langford et al., 2014  | Levy et al., 2012      | Nutrición en Movimiento - "Nutrition on the Go"  | Physical activity - Diet  | 6 <b>nutrition</b> and physical activity workshops were held for children in intervention schools (1 per week). Intervention students also developed and presented a puppet show to 1st - 3rd grade students focusing on intervention messages; Teachers attended a 2-day workshop about <b>healthy eating</b> and physical activity. <b>Training also provided to staff running the school store to encourage them to sell more fruit, vegetables, and water</b> . PA announcements were used to promote intervention messages. <b>Water bottles were delivered to children and teachers</b> . Physical activity before the start of lessons was conducted 2 - 5 times a week. Organised games during break times were held once a week. Posters and banners were displayed throughout the school; <b>Recipe calendars, including ideas for healthy school lunches, were sent to all parents</b> . | Mexico          | Elementary School             | Sixty schools were selected in the State of Mexico, of which 30 were randomly assigned to the intervention group (IG) and 30 to the control group (CG).   | Experts that included academic representatives from the Ministries of Education and Health, NGOs, and food industry representatives; children; elementary school teachers included; nutritionists and health professionals (nurses and social workers); | Forty-five promoters (teachers, nutritionists and health professionals) | Forty-five promoters were standardized and trained during 3 weeks in the activities that the schools would perform in order to implement the strategy; nutritionists and health professionals (nurses and social workers) were previously trained by nutritionists, psychologists and educators and physical trainers with bachelor degrees. | Recipe calendars; student booklets and a facilitator's guide; a school guide; a calendar for parents, as well as videos (or printed handouts for schools with no DVD players) and audio spots; questionnaires; written authorization for the school's participation in the study | Spanish               | Children grade 5 (10 - 11 year-olds)   | -                               | -                           | Body-mass index (BMI)   | Not stated                                | Moderate                 | Mean Difference:<br>-0.61 (-0.94, -0.28)<br><b>-0.61 (-0.94, -0.28)</b>                       | Cluster RCT                                     | 1. Morales-Ruán Mdel C, Shamah-Levy T, Amaya-Castellanos CI, et al. Effects of an intervention strategy for school children aimed at reducing overweight and obesity within the State of Mexico. <i>Salud Publica Mex</i> . 2014;56 Suppl 2:s113-s122. doi:10.21149/spm.v56s2.5175   | Teresa Shamah Levy, tshamah@insp.mx  | Funded by the State system for the comprehensive development of the family, State of Mexico   |   |

| Review                 | Paper                 | Metadata                              | Metadata                               | Intervention  | Intervention   | Intervention   | Intervention   | Intervention  | Intervention  | Intervention  | Intervention  | Intervention                 | Intervention   | Intervention  | Evidence                    | Evidence  | Evidence   | Evidence                                     | Evidence                              | Evidence  | Intervention   | Intervention  | Implementation  |  |
|------------------------|-----------------------|---------------------------------------|--|---|--|--|--|---|---|---|---|------------------------------|--|---|-----------------------------|---|--|--|---------------------------------------|---|--|---|---|--|
|                        |                       | Name of the intervention              | Intervention program area              | Description of the intervention   | Geographic area  | Intervention delivery setting  | Recruitment  | Stakeholders involved in selecting and tailoring the intervention   | Professionals involved in delivering the intervention   | Intervention training   | Materials needed to deliver the intervention  | Intervention language        | Intervention target population                               | Direct cost of the intervention   | Intervention website        | Outcomes  | Control group  | Strength of the evidence                     | Effectiveness of the intervention     | Types of research conducted on the intervention   | Scientific publications about the intervention   | Intervention developers   | Intervention development funder   | Scientific publications on implementation research                         |
|                        |                       | Full name(s) of the intervention      | Health topic focus of the intervention | Short description of the intervention; GIVE SOME EXAMPLES OF WHAT SHOULD BE COVERED (E.G. FREQUENCY, DURATION, MODE ETC); include characteristics intervention target group (age, sex, ethnicity)   | Geographic area of the intervention, such as regions, cities, countries, practices; include community type (city/ rural etc) | Intervention setting, such as hospital, primary care office, dental office, school, etc. |  | Description which stakeholders (including patients) are involved in selecting and tailoring the intervention to the local context | Description which professionals deliver the intervention  | Description of the training in the intervention needed before intervention is implemented   | Materials needed to deliver the intervention  | Language of the intervention | Short description of the intervention's target population(s) | Direct cost of the intervention, if the intervention needs to be purchased or licensed. | Website of the intervention |   |  | Strength of the intervention's evidence base | Effectiveness of the intervention     | Types of research that has been conducted on the intervention, such as effectiveness trials, implementation | List of articles published about the intervention, with links to each article  | Name of intervention developers and the name of their institutions  | Name of the funder who supported the development of the intervention  | List of articles published on implementation research on this intervention |
| Langford et al., 2014  | Llargues et al., 2011 | The AVall study                       | Physical activity - Diet               | <p>Input into curriculum: Schools were provided with <b>educational material on healthy eating</b> and ways to promote physical activity. 3 hours a week were spent in classrooms on developing activities relating to <b>nutrition</b> or physical activity. These activities were incorporated into regular classes such as maths, science, languages, etc.</p> <p>Changes to ethos or environment: Training sessions were offered to teachers. Teachers regularly met with the research team to plan activities and monitor their progress. Equipment was provided to schools to help facilitate physical activity during break times.</p> <p>Links with families or communities: <b>Healthy recipes were distributed each month for children to try out at home with their family.</b> Parents also received a guide of the local area and paths to exercise during the weekend. <b>Books about healthy eating were recommended.</b></p>  | Spain (Granollers)   | Primary school   | Granollers is a town of 59 000 inhabitants with 16 primary schools. The 16 schools of the city were randomly distributed to the intervention group or to the control group. All the children born in 2000 who attended any of the schools in Granollers were eligible to participate. The exclusion criteria were school children who need a special diet for a metabolic or digestive disorder, physical activity incapacity, no family acceptance or attendance to school. | Teachers, children, research team, parents, trained nurses.   | Teachers, parents   | Training sessions were offered to teachers. Teachers regularly met with the research team to plan activities and monitor their progress. At the beginning of the project, an information session with the parents of the school children in the intervention group was organised.   | Educational material; Healthy recipes; Quick test Krece Plus; Equipment for the games; portable digital scale; portable body measuring tape   | Spanish                      | Children 5-6 years old                                       | -   | -                           | Body-mass index (BMI)   | No intervention  | Moderate                                     | Mean difference: -0.96 (-1.33, -0.59) | Cluster RCT   | 1. Llargues E, Recasens A, Franco R, et al. Medium-term evaluation of an educational intervention on dietary and physical exercise habits in schoolchildren: the Avall 2 study. Endocrinol Nutr. 2012;59(5):288-295. doi:10.1016/j.endonu.2012.03.002<br>2. Recasens MA, Xicola-Coromina E, Manresa JM, et al. Impact of school-based nutrition and physical activity intervention on body mass index eight years after cessation of randomized controlled trial (AVall study). Clin | Esteve Llargues, Internal Medicine Department, Granollers General Hospital, Av Francesc Ribes s/n, 08402 Granollers, Spain; ellargues@fhag.es | Funded by Observatori de la Salut Carles Vallbona, Fundacio Hospital Asil de Granollers, Public Health Department, Granollers City Council, Primary Health Subdivision (PCS) GranollersMollet, Catalan Institute of Health, and by Health Department, Generalitat de Catalunya, Spain   |  |
| Foster et al., 2013    | Castro et al., 2011   | TEAM (Telephone Advice and Mentoring) | Physical activity                      | Telephone based advice to exercise delivered by trained professional staff or volunteer peer mentors. Telephone calls were delivered twice per month for the first 2 months and then monthly (up to 14 calls) until 12 months. This followed an initial face-to-face meeting with their staff or peer mentor.   | San Francisco Bay Area, USA  | Home   | Participants were recruited from mass mailings and advertisements in the San Francisco Bay Area.   | Older adults, professional staff, trained volunteer peer mentors, dietician   | Professional Staff and Peer Mentors   | These staff members had bachelor's degrees in science-related fields, and a minimum of 2 years of experience working with adults in health research settings. All staff underwent a standard full-day training in the implementation of Active Choices with the Intervention Director (Dr. Castro). Participants completed a written application and interviewed with the volunteer coordinator (Ms. French). If selected, they were invited to an orientation session and asked to commit to training. They underwent 8 hours of Active Choices training | CHAMPS Questionnaire, written informed consent, Stanford Active Choices Program, monthly newsletters by mail and tip sheets, actigraph, written application, educational materials from the American Heart Association, American Cancer Society, and American Dietetic Association. | English, Spanish             | Inactive adults ages 50 years and older                      | -   | -                           | Moderate-intensity or more vigorous physical activity (MVPA) (minutes per week) | Attention-control arm of telephone-based heart-healthy nutrition advice delivered by a trained professional staff member that was identical to the other arms in intervention format, staff time, and attention. | Moderate                                     | Mean difference: 0.47 (0.15, 0.78)    | Cluster RCT   |  | Cynthia Castro, 1070 Arastradero Road Suite 100, Palo Alto CA 94304-1334. cync@stanford.edu.  | Funded by Public Health Service Grant HL072489 from the National Heart Lung and Blood Institute   |  |
| Wolfenden et al., 2020 | Seward et al., 2017   |                                       | Diet                                   | <p>Policies, practices or programmes targeted by the intervention:</p> <ul style="list-style-type: none"> <li>- Full compliance with nutrition guidelines</li> <li>- Compliance with nutrition guidelines for individual food groups</li> </ul> <p>Implementation strategies:</p> <p>Opinion leaders: A memorandum of understanding outlining each party's responsibilities to implement the nutrition guidelines was signed by the implementation support officer, the service manager and the service cook.</p> <p>Educational meetings: A one-day face-to-face menu-planning workshop was provided to service managers and cooks aiming to improve their knowledge and skills in the application of nutrition guidelines to childcare food service.</p> <p>Audit and feedback: Intervention services had a dietician complete an audit of their two-week menus at two time points, with written and verbal menu feedback provided at each time point.</p> <p>Educational outreach or academic detailing: Support officer offered two face-to-face contacts with the service following the menu-planning workshop. In addition to the support visits, two newsletters were distributed to intervention services during the intervention period.</p> | Hunter New England region, New South Wales, Australia  | Centre-based childcare services.   | Service managers were mailed information about the study approximately one week prior to recruitment. Services were telephoned and consent was obtained through the service manager agreeing to provide the service's current two-week menu for baseline assessment.   | Service manager and personnel (long day care service managers and service cooks)  | Team of health promotion practitioners, implementation scientists, dietitians and behavioural scientists. |   | Two-week menu, Theoretical Domains Framework, Caring for Children resource, menu-planning checklists, recipe ideas and budgeting fact sheets.   | English                      | Long daycare service managers and service cooks              | -   | -                           | Implementation score  | Services randomised to the control group were posted a hard copy of the Caring for Children resource and received usual care from the local health district health promotion staff.                              | Moderate                                     | Mean difference: 1.27 (0.61, 1.92)    | Cluster RCT   | 1. Lee H, Hill A, Nathan N, et al. Mechanisms of implementing public health interventions: a pooled causal mediation analysis of randomised trials. Implement Sci. 2018;13(1):42. Published 2018 Mar 12. doi:10.1186/s13012-018-0734-9<br>2. Yoong SL, Grady A, Seward K, et al. The Impact of a Childcare Food Service Intervention on Child Dietary Intake in Care: An Exploratory Cluster Randomized Controlled Trial. Am J Health Promot. 2019;33(7):991-1001                    | Kirsty Seward, Hunter New England Population Health, Locked Bag 10, Wallsend, NSW 2287, Australia, kirsty.seward@hneh.health.nsw.gov.au       | Funded by the Priority Research Centre for Health Behaviour and received infrastructure funding from Hunter New England Population Health and the University of Newcastle. L.W. is supported by a National Health and Medical Research Council Career Development Fellowship and a HeartFoundation Future Leaders Fellowship. |  |

| Review                 | Paper                  | Metadata                         | Metadata                               | Intervention  | Intervention   | Intervention  | Intervention   | Intervention  | Intervention   | Intervention  | Intervention  | Intervention  | Intervention  | Intervention  | Evidence                    | Evidence                       | Evidence  | Evidence   | Evidence                              | Evidence  | Intervention   | Intervention   | Implementation  |  |
|------------------------|------------------------|----------------------------------|--|---|--|---|--|---|--|---|---|---|---|---|-----------------------------|--------------------------------|---|--|---------------------------------------|---|--|--|---|--|
|                        |                        | Name of the intervention         | Intervention program area              | Description of the intervention   | Geographic area  | Intervention delivery setting   | Recruitment  | Stakeholders involved in selecting and tailoring the intervention   | Professionals involved in delivering the intervention  | Intervention training   | Materials needed to deliver the intervention  | Intervention language   | Intervention target population  | Direct cost of the intervention   | Intervention website        | Outcomes                       | Control group   | Strength of the evidence                                     | Effectiveness of the intervention     | Types of research conducted on the intervention   | Scientific publications about the intervention   | Intervention developers  | Intervention development funder   | Scientific publications on implementation research                         |
|                        |                        | Full name(s) of the intervention | Health topic focus of the intervention | Short description of the intervention; GIVE SOME EXAMPLES OF WHAT SHOULD BE COVERED (E.G. FREQUENCY, DURATION, MODE ETC); Include characteristics intervention target group (age, sex, ethnicity)   | Geographic area of the intervention, such as regions, cities, countries, practices; include community type (city/ rural etc) | Intervention setting, such as hospital, primary care office, dental office, school, etc.  |  | Description which stakeholders (including patients) are involved in selecting and tailoring the intervention to the local context | Description which professionals deliver the intervention   | Description of the training in the intervention needed before intervention is implemented   | Materials needed to deliver the intervention  | Language of the intervention  | Short description of the intervention's target population(s)                          | Direct cost of the intervention, if the intervention needs to be purchased or licensed. | Website of the intervention |                                |   | Strength of the intervention's evidence base                 | Effectiveness of the intervention     | Types of research that has been conducted on the intervention, such as effectiveness trials, implementation   | List of articles published about the intervention, with links to each article  | Name of intervention developers and the name of their institutions   | Name of the funder who supported the development of the intervention  | List of articles published on implementation research on this intervention |
| Brown et al., 2019     | De Ruyter et al., 2012 | -                                | Diet                                   | Intervention participants received 250 mL (8 oz) per day of a sugar-free, artificially sweetened beverage (sugar-free group) and control participants received a similar sugar-containing beverage that provided 104 kcal (sugar group). Beverages were distributed through schools. Participating children received a box at school each week labelled with their name and containing 8 cans, 1 for each day of the week plus 1 extra to be used as a spare in case a can was misplaced.   | Zaanstreek, Purmerend and Haarlem - 3 suburbs in an urbanised area 16-33 km from Amsterdam                                   | Elementary schools  | -  | Primarily normal-weight children, parents, teachers, research staff   | Teachers   | -   | Questionnaire, written informed consent, beverages, tournaments, newsletters, birthday cards, and small gifts | Dutch   | Primarily normal-weight children from 4 years 10 months to 11 years 11 months of age. | -   | -                           | Body-mass index z score (zBMI) | Control participants received a similar sugar-containing beverage that provided 104 kcal (sugar group). | High   | Mean difference: -0.13 (-0.21, -0.05) | Cluster RCT   | 1. de Ruyter JC, Katan MB, Kuijper LD, Liem DG, Olthof MR. The effect of sugar-free versus sugar-sweetened beverages on satiety, liking and wanting: an 18 month randomized double-blind trial in children. PLoS One. 2013;8(10):e78039. Published 2013 Oct 22. doi:10.1371/journal.pone.0078039<br>2. Katan MB, de Ruyter JC, Kuijper LD, Chow CC, Hall KD, Olthof MR. Impact of Masked Replacement of Sugar-Sweetened with Sugar-Free Beverages on Body Weight Increases with Initial BMI. | Ms. de Ruyter at VU University, Faculty of Earth and Life Sciences, De Boelelaan 1085, 1081 HV Amsterdam, the Netherlands, or at j.c.de.ruyter@vu.nl.  | Funded by grants from the Netherlands Organization for Health Research and Development (120520010), the Netherlands Heart Foundation (2008B096), and the Royal Netherlands Academy of Arts and Sciences (ISK/741/PAH) |  |
| Abdullahi et al., 2020 | Grandahl et al., 2016  | -                                | HPV                                    | Face-to-face structured information about HPV, including cancer risks and HPV prevention, by propagating condom use and HPV vaccination.  | Sweden   | Upper secondary school  | According to Swedish law, all students should have access to school health. This intervention is optional, although usually all students do participate in it.   | 16-year old girls and boys, school nurses, school heads   | School nurses  | All participating school nurses received written and verbal instructions, and participated in educational sessions scheduled for about 2 h. The education comprised factual information about HPV and the HPV vaccine. The flipchart educational material was presented, and the nurses were encouraged to give comments if anything was unclear or if anything they considered as important was missing. Furthermore, each school nurse received a minimum of 1 h additional education at the time for the start of the intervention at the school where the | Swedish   | 16-year old girls and boys  | -   | -   | Uptake of HPV vaccine       | Usual practice                 | High  | Risk ratio: 1.44 (1.15, 1.79)                                | Cluster RCT                           |   | Dr Maria Grandahl, Department of Public Health and Caring Sciences, Uppsala University, Uppsala, Sweden; maria.grandahl@pubcare.uu.se  | Funded by the Swedish Cancer Society grant number 130744, Uppsala-Orebro Regional Research Council grant number(RFR-387561/476021) and (Uppsala County Council) grant number (LUL-347931), the Swedish Government Funds for Clinical Research grant number (19049/470102/44957) and the Medical Faculty at Uppsala University grant number (2012/278). In addition, MG and CS received a scholarship from the Gillbergiska Foundation. |   |  |
| Abdullahi et al., 2020 | Perkins et al., 2015   | -                                | HPV                                    | 6-8 education visits over 12 months by an HPV physician-educator; focused education sessions on HPV-related topics designed to change the way providers viewed the importance of HPV vaccination and responded to parents' hesitation toward HPV vaccines; individualised feedback where providers and practices received individual reports that showed their performance compared to other providers in their practice on HPV vaccination coverage. Those practices that showed initiatives to improve systems for HPV series completion were given support; quality improvement incentives where physicians were eligible to receive MOC credits, which fulfilled requirements for maintaining board certification in paediatrics. | USA  | Pediatric/Adolescent Departments of an urban academic medical center and seven affiliated federally qualified community health centers. | Two of eight community health centers within a single network of inner-city neighborhood health centers were recruited as intervention practices and the remainder served as controls. Selection of the practice for the intervention or control condition was random. | HPV physician-educator, administrative staff, parents, adolescents  | HPV physician-educator and administrative staff from the Boston University Continuing Medical Education. | Food, individual reports, clinical action plans.  | English   | Healthcare providers and their patients including boys and girls aged 11-21 years | -   | -   | Uptake of HPV vaccine       | Usual care                     | Moderate  | Odds ratio: Girls: 1.6 (1.1, 2.2) Boys: 25.00 (15.00, 40.00) | Cluster RCT                           | 1. Jessica Vercruyse, Nagasudha L. Chigurupati, Leslie Fung, Gauri Apte, Natalie Pierre-Joseph & Rebecca B. Perkins (2016) Parents' and providers' attitudes toward school-located provision and school-entry requirements for HPV vaccines, Human Vaccines & Immunotherapeutics, 12:6, 1606-1614, DOI: 10.1080/21645515.2016.1140289<br>2. Perkins, R. B., Chigurupati, N. L., Apte, G., Vercruyse, J., Wall-Haas, C., Rosenquist, A., ... & Pierre-Joseph, N. (2016). Why do we | Rebecca B. Perkins; Boston University School of Medicine; E-mail addresses: rbperkin@bu.edu, rebeccaperkins@gmail.com (R.B. Perkins).  | Funded by American Cancer Society Mentored Research Scholar Grant (MRS-G-09-151-01) and educational grant from Glaxo-Smith-Kline.  |   |  |
| Kaufman et al., 2018   | Saitoh et al., 2013    | -                                | HPV                                    | Format or delivery mode: one-on-one 10-minute interactive educational information session<br>Content of communication: Information on vaccine types, vaccine-preventable diseases (VPDs), the effectiveness and side effects of vaccines, and the procedure for scheduling infant immunisations. Arm 1 prenatal education delivered during weeks 34 to 36 of gestation, Arm 2 postnatal education delivered 3 to 6 days after delivery. Vaccine or vaccines delivered or described: focus on non-required vaccines (PCV7, Hib, HBV), but some information provided on all.  | Country and high income level, Tokyo, Japan  | Obstetrics hospitals (national hospital, private hospital, maternity home)  | Pregnant women ages 18 years or older were recruited by the investigators during gestational weeks 32-33 at antenatal classes at the national hospital and the private hospital in Tokyo and by the head midwife at the maternity home in Kanagawa.                    | Study investigator, infant, pregnant women  | Study investigator   | -   | Demographic information, baseline and follow-up survey, educational materials                                 | Japanese  | Pregnant women 18+ years, at gestational week 32 to 33                                | -   | -                           | Knowledge or understanding     | Usual care  | Moderate   | Mean Difference: 0.55 (0.14, 0.96)    | RCT   |  | Aya Saitoh, Division of Health Sciences and Nursing, Department of Community Health Nursing, Graduate School of Medicine, The University of Tokyo, 7-3-1 Hongo, Bunkyo-ku, Tokyo 113-0033, Japan. Fax: +81 3 5802 2043, aya-saitoh@umin.ac.jp  | Funded by Grant from the National Center for Child Health and Development (21A-2).  |  |



| Review                 | Paper                 | Metadata                          | Metadata                               | Intervention  | Intervention   | Intervention   | Intervention  | Intervention  | Intervention   | Intervention  | Intervention   | Intervention                 | Intervention  | Intervention   | Evidence  | Evidence  | Evidence   | Evidence  | Evidence                                | Evidence   | Intervention  | Intervention   | Implementation   |  |
|------------------------|-----------------------|-----------------------------------|--|---|--|--|---|---|--|---|--|------------------------------|---|--|---|---|--|---|---|--|---|--|--|--|
|                        |                       | Name of the intervention          | Intervention program area              | Description of the intervention   | Geographic area  | Intervention delivery setting  | Recruitment   | Stakeholders involved in selecting and tailoring the intervention   | Professionals involved in delivering the intervention  | Intervention training   | Materials needed to deliver the intervention   | Intervention language        | Intervention target population  | Direct cost of the intervention  | Intervention website  | Outcomes  | Control group  | Strength of the evidence                                      | Effectiveness of the intervention       | Types of research conducted on the intervention  | Scientific publications about the intervention  | Intervention developers  | Intervention development funder  | Scientific publications on implementation research                         |
| MacArthur et al., 2018 | O'Neill et al., 2011  | Michigan Model for Health (MMH)   | Alcohol - Tobacco control              | Short description of the intervention; GIVE SOME EXAMPLES OF WHAT SHOULD BE COVERED (E.G. FREQUENCY, DURATION, MODE ETC); include characteristics intervention target group (age, sex, ethnicity)   | Geographic area of the intervention, such as regions, cities, countries, practices; include community type (city/ rural etc) | Intervention setting, such as hospital, primary care office, dental office, school, etc. | Recruitment   | Description which stakeholders (including patients) are involved in selecting and tailoring the intervention to the local context | Description which professionals deliver the intervention   | Description of the training in the intervention needed before intervention is implemented   | Materials needed to deliver the intervention   | Language of the intervention | Short description of the intervention's target population(s)  | Direct cost of the intervention, if the intervention needs to be purchased or licensed.                            | Website of the intervention   |   |  | Moderate  | Effectiveness of the intervention       | Types of research that has been conducted on the intervention, such as effectiveness trials, implementation  | List of articles published about the intervention, with links to each article   | Name of intervention developers and the name of their institutions   | Name of the funder who supported the development of the intervention   | List of articles published on implementation research on this intervention |
|                        |                       | Full name(s) of the intervention  | Health topic focus of the intervention | The Michigan Model for Health was a health promotion intervention consisting of 52 lessons (20 to 50 minutes long) delivered over a 2-year period (grade 4 to 5). Lessons consisted of social and emotional health, alcohol, tobacco, other drugs, safety, nutrition, and physical activity. As well as mastery of techniques, skill development and practice are delivered. The fourth grade curriculum consisted of 25 lessons; in fifth grade, there were 28 lessons across the same health topics. The intervention was implemented in classrooms over a 12-week period in grade 4 and a 14-week period in grade 5 by the classroom or health teacher who received a 12-hour curriculum training with follow-up support provided as needed.   | USA  | Elementary schools   | Schools (N = 52) were randomly assigned to intervention and control conditions.   | Health teachers, children   | Health teachers  | 12-hour curriculum training with follow-up support provided as needed by the organization that publishes and distributes the MMH materials to health teachers. An additional 2-hour training on the purpose, objectives, and school-level activities of the evaluation study was provided to teachers in both the intervention and control schools. | Self-report questionnaire, standardized protocol, pre-test, post-test, free curriculum materials   | English                      | Children aged 9 to 11 years (mean 9.56)   | Schools and teachers groups received an incentive to participate in the study.                                     | Alcohol use<br>Tobacco use:<br>school universal                                       | Standard education  | Moderate   | Odds ratio: 0.58 (0.37, 0.89)<br>Odds Ratio: 0.32 (0.17, 0.6) | Cluster RCT                             | 1. O'Neill JM, Clark JK, Jones JA. Promoting Fitness and Safety in Elementary Students: A Randomized Control Study of the Michigan Model for Health. J Sch Health. 2016;86(7):516-525. doi:10.1111/josh.12407  | JAMES M. O'NEILL professor, (joneill@madonna.edu), Department of Psychology, Madonna University, 36600 Schoolcraft Road, Livonia, MI 48150. | Supported by grants from the Michigan Department of Education and the Michigan Department of Community Health  |  |  |
| Kaner et al., 2017     | Blankens et al., 2011 | Self-help alcohol online - SAO    | Alcohol                                | SAO intervention group received the SAO (Self-help Alcohol Online) web-based intervention that was available across multiple platforms. Participants were encouraged to engage on a daily basis over a period of 4 weeks for 20 minutes per session. The programme comprised '4 pillars': (1) monitored participants' alcohol consumption, helped them set drinking goals and identify risky situations that might lead to relapse; (2) provided feedback on current alcohol consumption and compared this to their drinking goal; (3) focused on building skills and knowledge around coping with craving, drinking lapses, peer pressure, and maintaining motivation in risky situations; (4) provided social support via a web-based forum.  | Netherlands  | Multiple web-based platforms.  | Participants were recruited from a substance abuse treatment centre website, aged 18 to 65 years; eligible if AUDIT > 8 or 14 + drinks/week. Website visitors who expressed an interest in internet-based interventions for problematic alcohol users were referred to the pages with information about the study. There they could complete a screening instrument to determine whether they | Adult problem drinkers  | No professionals involved (SAO is a stand-alone, internet-based, nontherapist involved, fully automated, self-guided treatment program that is based on a CBT/MI treatment protocol) |   | Self-help alcohol online - SAO; text-based chat-therapy; informed consent; screening questionnaire; CBT/MI treatment protocol  | Dutch                        | Adult problem drinkers (mean age 42 years).   |  | Website of Jellinek/Arkin, the collaborating substance abuse treatment center (SATC). | Quantity of drinking (g/week), based on longest follow-up (quantity)  | Wait-listed, assessed at 3 months and then received the digital intervention | Moderate  | Mean Difference: -85 (-166.09, -3.91)   | RCT  |   | Matthijs Blankers, Amsterdam Institute for Addiction Research, Department of Psychiatry, Room PA3.224, P.O. Box 22660, Academic Medical Center, University of Amsterdam, 1100 DD Amsterdam, The Netherlands. E-mail: m.blankers@amc.uva.nl/mblankers@gmail.com | The RCT reported in this article was funded by Grant 31160006 from the ZonMw Addiction II Program (Risk Behavior and Dependency) |  |
| Kaner et al., 2017     | Hester et al., 2012   | College Drinker's Check-up (CDCU) | Alcohol                                | Intervention group received the web-based CDCU (College Drinker's Check-Up) intervention via computer for 35 minutes. The program provided an overview and also consisted of: (1) screening for heavy drinking using the AUDIT scale as well as 2 questions regarding the individual's heaviest drinking in the last two weeks; (2) personalised feedback - those who screened positive for heavy drinking were invited to use the rest of the program following registration; (3) the Look at Your Drinking module which includes: (i) a decisional balance exercise, (ii) a comprehensive assessment of drinking and drug use, (iii) alcohol-related problems, and (iv) risk factors for future alcohol-related problems; (4) the Get Feedback module, which applies gender- and university-specific norms to provide feedback on (i) the quantity and frequency of their drinking compared to their same gender fellow students at their university, (ii) BAC feedback, and (iii) feedback on how their frequency of alcohol-related problems compares to other, same gender students at their school. (5) the Consider Your Options module which extends the initial decisional balance exercise, asking users to rate the level of importance of the "good things" and the "not so good things" about their drinking. Through this module, users | USA  | Computer-delivered intervention (CDI)  | Participants were students recruited via college newspaper advertisements and flyers posted around campus   | Heavy drinking college students   | No professionals involved (Computer delivered intervention)  |   | College newspaper advertisements, flyers   | English                      | College drinkers aged 18 to 24 years  | Participants were paid \$40 for their time and transportation costs to attend each baseline and follow-up session. |   | Alcohol use   | Delayed-assessment control group with follow-up at 1 month                   | Moderate  | Mean Difference: -56.2 (-107.93, -4.47) | RCT  |   | Reid K. Hester, Ph.D., Behavior Therapy Associates, LLP, 9426 Indian School Rd NE Ste 1, Albuquerque NM 87112. Telephone: 505.345.6100, Fax: 505.345.4531, reidhester@behaviortherapy.com.   | This project was supported by a SBIR grant from NIAAA, R44AA014766   |  |
| Kaner et al., 2017     | Brief et al., 2013    | VetChange                         | Alcohol                                | Intervention group received the web-based VetChange intervention involving 8 modules based motivational, cognitive-behavioural, and self-control training strategies; (1 to 3) Included personalised feedback on their drinking and post-traumatic stress disorder (PTSD) symptoms, evaluated the importance of and readiness to change, set drinking goals, developed a change plan, and reviewed moderation or abstinence strategies; (4) introduced participants to external high risk situations (i.e. social situations, environmental reminders of combat) and helped them to develop coping plans to manage these situations; (5 to 7) focused on helping veterans learn a combination of cognitive and behavioural strategies to manage a range of internal high-risk situations for drinking; (6 to 7) encouraged participants to select topics most relevant to their personal situation; and (8) focused on building a support system to assist with recovery efforts following completion of VetChange. VetChange was delivered over a period of 8 weeks, each session lasts 20 minutes.  | USA  | Web Intervention   | Participants were army veterans recruited via advertisements on Facebook  | Army veterans who may have post-traumatic stress disorder and eligible if AUDIT score was 8 to 25 (men) or 5 to 25 (women).       | No professionals involved (web intervention)   |   | 8 modules based motivational, cognitive-behavioural, and self-control training strategies; The Alcohol Use Disorders Identification Test (AUDIT; Babor et al., 1992); The Quick Drink Screen (QDS; Sobell et al., 2003); The Short Inventory of Problems (SIP-2R); The Combat Experiences Scale of the Deployment Risk and Resilience Inventory (CES-DRRI; King, King, & Vogt, 2003); The PTSD Checklist (PCL-5; Weathers et al., 2010). | English                      | Army veterans aged 18 to 65 years; may have post-traumatic stress disorder which the intervention was also designed to address; eligible if AUDIT score was 8 to 25 (men) or 5 to 25 (women). |  | Alcohol use   | Control group received a delayed intervention. This commenced at the 8-week post-intervention stage of the immediate intervention group; we used only 8 week data when the control group has received nothing | Moderate   | Mean Difference: -84 (-113.74, -54.26)                        | RCT                                     | 1. Engassger JL, Hermos JA, Rubin A, et al. Drinking goal choice and outcomes in a Web-based alcohol intervention: results from VetChange. Addict Behav. 2015;42:63-68. doi:10.1016/j.addbeh.2014.10.036; 2. Livingston NA, Mahoney CT, Ameral V, et al. Changes in alcohol use, PTSD hyperarousal symptoms, and intervention dropout following veterans' use of VetChange. Addict Behav. 2020;107:106401. doi:10.1016/j.addbeh.2020.106401; 3. Newberger NG, Yeager S | Terence M. Keane, Ph.D., VABHS 150 South Huntington Avenue (151) Boston, Massachusetts 02130. Terry.Keane@va.gov                            | This research was supported by National Institute on Alcohol Abuse and Alcoholism Grant RC1AA019248 (principal investigator: Terence M Keane)  |  |  |

| Review               | Paper                  | Metadata   | Metadata                               | Intervention  | Intervention   | Intervention   | Intervention  | Intervention  | Intervention   | Intervention  | Intervention  | Intervention  | Intervention   | Intervention  | Evidence  | Evidence   | Evidence  | Evidence                                     | Evidence                             | Evidence   | Intervention   | Intervention  | Implementation  |  |
|----------------------|------------------------|--|--|---|--|--|---|---|--|---|---|---|--|---|---|--|---|--|--------------------------------------|--|--|---|---|--|
|                      |                        | Name of the intervention   | Intervention program area              | Description of the intervention   | Geographic area  | Intervention delivery setting  | Recruitment   | Stakeholders involved in selecting and tailoring the intervention   | Professionals involved in delivering the intervention  | Intervention training   | Materials needed to deliver the intervention  | Intervention language   | Intervention target population   | Direct cost of the intervention   | Intervention website                            | Outcomes   | Control group   | Strength of the evidence                     | Effectiveness of the intervention    | Types of research conducted on the intervention  | Scientific publications about the intervention   | Intervention developers   | Intervention development funder   | Scientific publications on implementation research                         |
|                      |                        | Full name(s) of the intervention   | Health topic focus of the intervention | Short description of the intervention; GIVE SOME EXAMPLES OF WHAT SHOULD BE COVERED (E.G. FREQUENCY, DURATION, MODE ETC); include characteristics intervention target group (age, sex, ethnicity)   | Geographic area of the intervention, such as regions, cities, countries, practices; include community type (city/ rural etc) | Intervention setting, such as hospital, primary care office, dental office, school, etc. |   | Description which stakeholders (including patients) are involved in selecting and tailoring the intervention to the local context | Description which professionals deliver the intervention   | Description of the training in the intervention needed before intervention is implemented   | Materials needed to deliver the intervention  | Language of the intervention  | Short description of the intervention's target population(s)   | Direct cost of the intervention, if the intervention needs to be purchased or licensed. | Website of the intervention                     |  |   | Strength of the intervention's evidence base | Effectiveness of the intervention    | Types of research that has been conducted on the intervention, such as effectiveness trials, implementation  | List of articles published about the intervention, with links to each article  | Name of intervention developers and the name of their institutions  | Name of the funder who supported the development of the intervention  | List of articles published on implementation research on this intervention |
| Kaner et al., 2017   | Kypri et al., 2013     | -  | Alcohol                                | Intervention group received eSBI web-based assessment and personalised feedback on drinking via computer. (1) Participants' drinking habits were assessed using the AUDIT scale and the Leeds Dependency Questionnaire (LDQ). (2) Participants then received personalised feedback consisting of: (i) AUDIT score; (ii) LDQ score; (iii) explanation of associated health risk; (iv) information on how to reduce risk; (v) estimated BAC for respondents' heaviest drinking episode in the past 4-weeks; (vi) information on behavioural and psychological sequelae of various BACs; (vii) traffic crash relative risks; (viii) estimates of monetary expenditure in past month; (ix) bar graphs comparing episodic and weekly consumption with that of other students and members of general public (of same age and gender); (x) hyperlinks for help with drinking problems; and, (xi) web pages with general information. | New Zealand  | Web Intervention   | Maori students recruited via email, aged 17 to 24 years; eligible if AUDIT = 4+.  | Students  | No professionals involved (web intervention)   | -   | AUDIT scale and the Leeds Dependency Questionnaire (LDQ); e-mail invitations; web questionnaire including the Alcohol Use Disorders Identification Test (AUDIT)-C | English   | Maori students aged 17 to 24 years; eligible if AUDIT = 4+.  | -   | -   | Alcohol use  | Control group received no intervention but were screened using the AUDIT-C tool; they subsequently filled in a brief questionnaire at the final 5-month follow-up | Moderate                                     | Mean Difference: -10 (-17.73, -2.27) | RCT  | -  | Kypros Kypri, Centre for Clinical Epidemiology and Biostatistics, School of Medicine and Public Health, University of Newcastle, Callaghan, NSW 2308, Australia. E-mail: kypri.kypri@newcastle.edu.au | The study was funded by New Zealand's Alcohol Advisory Council  |  |
| Kaner et al., 2017   | Kypri et al., 2014     | -  | Alcohol                                | Intervention group received eSBI web-based assessment and personalised feedback on drinking via computer. (1) Participants' drinking habits were assessed using the AUDIT scale and the Leeds Dependency Questionnaire (LDQ). (2) Participants then received personalised feedback consisting of: (i) AUDIT score; (ii) LDQ score; (iii) explanation of associated health risk; (iv) information on how to reduce risk; (v) estimated BAC for respondents' heaviest drinking episode in the past 4-weeks; (vi) information on behavioural and psychological sequelae of various BACs; (vii) traffic crash relative risks; (viii) estimates of monetary expenditure in past month; (ix) bar graphs comparing episodic and weekly consumption with that of other students and members of general public (of same age and gender); (x) hyperlinks for help with drinking problems; and, (xi) web pages with general information. | New Zealand  | Web Intervention   | Participants were recruited via email, aged 17 to 24 years; eligible if AUDIT = 4+.   | Students  | No professionals involved (web intervention)   | -   | Alcohol Use Disorders Identification Test-Consumption (AUDIT-C), screening test, e-mail, web questionnaire, 10-item Leeds Dependence Questionnaire (LDQ)          | English   | Students aged 17 to 24 years; eligible if AUDIT = 4+.  | -   | -   | Alcohol use  | Control group received no intervention but were screened using the AUDIT-C tool   | Moderate                                     | Mean Difference: -10 (-14.35, -5.65) | RCT  | -  | Kypros Kypri, PhD, Room 4104, HMRI Bldg, University of Newcastle, Kookaburra Circuit, New Lambton Heights, NSW 2305 Australia (kypri.kypri@newcastle.edu.au)  | The research was funded by the Alcohol Advisory Council (now the Health Promotion Agency), a statutory body of the New Zealand government. Dr Kypri's involvement in the research was partly funded by an Australian National Health and Medical Research Council Senior Research Fellowship (APP1041867) |  |
| Lindson et al., 2021 | Leppänen et al., 2019  | Tobacco Cessation on Prescription (TCP)  | Tobacco control (SC)                   | Tobacco Cessation on Prescription (TCP) consisting of 1) person-centered tobacco cessation counseling from a qualified healthcare professional for at least 10 minutes; 2) an individualized prescription of tobacco cessation treatment; 3) follow-up on at least 1 occasion; 4) providers received 3 hours of training. Healthcare providers could use the prescription form as a basis for tobacco cessation counseling with the patient, discussing available treatment options and deciding together what option(s) would suit the participant best  | Sweden, socioeconomically disadvantaged areas in Stockholm   | Primary healthcare centres   | Eligibility was assessed using a short screening questionnaire before patients were invited to participate. The patients were recruited by one to three appointed PHC providers at each PHC centre that were responsible for the treatment of patients in the study | Qualified healthcare professional/providers   | Providers received 3 hours of training; Providers also received a written manual and 3 hours of training in tobacco cessation treatment. | Prescriptions of tobacco cessation treatment; written manual; short screening questionnaire | Swedish and Arabic  | Daily tobacco users over 18 years of age.                                       | -  | -   | Smoking abstinence at 6-month follow-up or more | Participants received standard treatment (brief advice consisting of < 5 minutes of tobacco cessation counseling, but providers were free to offer whatever treatment they wanted as long as this was documented). Providers also received a written manual and 3 hours of training in tobacco cessation treatment | Moderate  | Risk Ratio: 3.13 (1.16, 8.43)                | Cluster RCT                          | 1. Leppänen A, Sundberg CI, Tomson T. Perceived feasibility of a primary care intervention for Tobacco Cessation on Prescription targeting disadvantaged groups in Sweden: a qualitative study. BMC Research Notes 2016;9(1):151. 2. Leppänen A, Lindgren P, Sundberg CI, Petzold M, Tomson T (2022) Motivation 2 Quit (M2Q): A cluster randomized controlled trial evaluating the effectiveness of Tobacco Cessation on Prescription in Primary Care. doi:10.1155/2021/638872 | Anne Leppänen, MSc Karolinska Institutet Department of Learning, Informatics, Management and Ethics Tomtebodavägen 18A Stockholm, 17177 Sweden Phone: 46 8 524 836 12 Fax: 46 8 34 51 28 Email: anne.leppanen@ki.se                              | Stockholm County Council (grant no: HSN 1309-1029), The Public Health Agency of Sweden (grant no: 03074-2015-6-2) and Livförsäkringsbolaget Skandia.  |   |  |
| Lindson et al., 2021 | Carpenter et al., 2020 | Tobacco Intervention in Primary Care Treatment Opportunities for Providers (TIP TOP) | Tobacco control (SC)                   | Cessation advice and brochure with information on quitline, plus a 2-week supply of both nicotine patch and lozenge, with minimal instructions on use Control: cessation advice and brochure with information on quitline.  | South Carolina, USA  | 22 primary care clinics  | Patients identified at routine visits   | Providers, adults smokers, clinic staff   | Providers  | Training given to providers was based on study procedures and standard care                 | English   | Adult smokers at least 5 cigarettes per day on ≥25 days out of the last 30 days | Participants were compensated up to \$80 in gift cards across the baseline and three follow-up contacts (+1, +3, +6 months). | -   | Smoking abstinence at 6-month follow-up or more | Standard care  | Moderate  | Risk Ratio: 1.48 (1.05, 2.08)                | Cluster RCT                          | doi:10.1155/2021/638872 2. Dahne J, Wahlquist AE, Toll B, Boatright AS, et al. Nicotine replacement therapy sampling via primary care: Methods from a pragmatic cluster randomized clinical trial. Contemp Clin Trials. 2018;72:1-7. doi:10.1016/j.cct.2018.07.001   | Matthew J Carpenter, Dept of Psychiatry & Behavioral Sciences, Hollings Cancer Center, 67 President Street, Bioengineering Bldg, Room 103Q / MSC 955, Medical University of South Carolina, Charleston SC 29425, 843.876.2436, carpente@musc.edu | National Institute on Drug Abuse (R01 DA 021619), NIH UL1 TR001450 and K23 DA 045766.   |   |  |

| Review   | Paper                      | Metadata                         | Metadata                               | Intervention  | Intervention   | Intervention   | Intervention  | Intervention  | Intervention   | Intervention   | Intervention                                 | Intervention  | Intervention   | Intervention  | Evidence   | Evidence  | Evidence      | Evidence                                     | Evidence                          | Evidence   | Intervention   | Intervention  | Implementation   |  |
|--|----------------------------|----------------------------------|--|---|--|--|---|---|--|--|--|---|--|---|--|---|---------------|--|-----------------------------------|--|--|---|--|--|
|  |                            | Name of the intervention         | Intervention program area              | Description of the intervention   | Geographic area  | Intervention delivery setting  | Recruitment   | Stakeholders involved in selecting and tailoring the intervention   | Professionals involved in delivering the intervention    | Intervention training  | Materials needed to deliver the intervention | Intervention language   | Intervention target population   | Direct cost of the intervention   | Intervention website   | Outcomes  | Control group | Strength of the evidence                     | Effectiveness of the intervention | Types of research conducted on the intervention  | Scientific publications about the intervention   | Intervention developers   | Intervention development funder  | Scientific publications on implementation research                         |
|  |                            | Full name(s) of the intervention | Health topic focus of the intervention | Short description of the intervention; GIVE SOME EXAMPLES OF WHAT SHOULD BE COVERED (E.G. FREQUENCY, DURATION, MODE ETC); include characteristics intervention target group (age, sex, ethnicity)   | Geographic area of the intervention, such as regions, cities, countries, practices; include community type (city/ rural etc) | Intervention setting, such as hospital, primary care office, dental office, school, etc. |   | Description which stakeholders (including patients) are involved in selecting and tailoring the intervention to the local context | Description which professionals deliver the intervention | Description of the training in the intervention needed before intervention is implemented  | Materials needed to deliver the intervention | Language of the intervention  | Short description of the intervention's target population(s)   | Direct cost of the intervention, if the intervention needs to be purchased or licensed.   | Website of the intervention  |   |               | Strength of the intervention's evidence base | Effectiveness of the intervention | Types of research that has been conducted on the intervention, such as effectiveness trials, implementation  | List of articles published about the intervention, with links to each article  | Name of intervention developers and the name of their institutions  | Name of the funder who supported the development of the intervention       | List of articles published on implementation research on this intervention |
| Lindson et al., 2021   | Minué-Lorenzo et al., 2019 | -                                | Tobacco control (SC)                   | Participants received first-line quit-smoking medication (varenicline, bupropion or NRT) free of cost. Type of pharmacotherapy was chosen by the physician in accordance with participant preference. NRT provided for 8 weeks and dose based on CPD; Varenicline or bupropion standard doses for 12 weeks. Participants also received usual care described as behavioral treatment and recommendation for using pharmacological treatment in accordance with standard health services offered in primary care (prescribed pharmacological treatment but had to purchase it). | Madrid, Spain  | Primary care practice in the Health System of the Community of Madrid                    | Patients who attended the healthcare centre for any reason were approached by a general practitioner or a nurse                 | General practitioners; nurses; adults smokers   | General practitioners and nurses                         | All the health professionals from the intervention group were offered to undergo the training program. The training program was based on active learning methods, 6-hr duration, with objectives based on the stage of change of the smoking patient, and according to clinical practice guideline recommendations. The 6-hr training was split into four sessions of 90min, which suited best to professional's timetable and their continuing education schedule. During the first session, the conceptual basis of addiction and its behavioral treatment were taught by                            | Spanish                                      | People aged >18 years smoking ≥10 cigarettes/day, at any stage of the smoking cessation process | -  | -   | Smoking abstinence at 6-month follow-up or more                    | Usual care, described as behavioral treatment and recommendation for using pharmacological treatment in accordance with standard health services offered in primary care (prescribed pharmacological treatment but had to purchase it). | Moderate      | Risk Ratio: 2.06 (1.11, 3.83)                | Cluster RCT                       | -  | César Minué-Lorenzo. Perales del Río Health Center, Dirección Asistencial Centro, Servicio Madrileño de Salud, Juan de Mairena s/n. 28909 Getafe, Madrid, Spain. E-mail: esaraugusto.minue@salud.madrid.org.                     | Fondo de Investigaciones Sanitarias (FIS) del Instituto de Salud Carlos III (ISCIII), the European Regional Development Fund (ERDF)   | List of articles published on implementation research on this intervention |  |
| Lindson et al., 2021   | Gilbert et al., 2017       | Start2quit                       | Tobacco control (SC)                   | Participants received a brief personalized and tailored letter sent from the GP that included information specific to the participant and a personal invitation to attend a "come and try it" taster session for cessation services   | England, UK  | General practices and National Health Service Stop Smoking Services (SSSS)               | People who were currently smoking were identified from medical records in participating practices and sent an invitation letter | General practitioners; smokers; practice staff, SSS advisers  | General practitioners                                    | Tailored letter for smokers and invitation letter; screening questionnaire; the consent forms; saliva sample kits; Salimetrics.  | English                                      | Adult smokers   | The mean total intervention cost was £777 (SD £2176) in the intervention group and £679 (£1860) in the control group.                                      | -   | Smoking abstinence at 6-month follow-up or more                    | Participants received a standard generic letter from the GP practice, which advertised the local SSS and asked the participant to contact the service to make an appointment to see an adviser  | Moderate      | Risk Ratio: 1.66 (1.24, 2.22)                | RCT                               | 1. Gilbert H, Sutton S, Morris R, et al. Start2quit: a randomised clinical controlled trial to evaluate the effectiveness and cost-effectiveness of using personal tailored risk information and taster sessions to increase the uptake of the NHS Stop Smoking Services. Health Technol Assess. 2017;21(3):1-206. doi:10.3310/hta21030<br>2. Kale D, Gilbert H, Sutton S. An exploration of the barriers to attendance at the English Stop Smoking Services. Addict Behav Rep. 2018;9:005-5. Published 2018 | Hazel Gilbert, Research Department of Primary Care and Population Health, University College London, Royal Free and University College Medical School, London NW3 2PF, UK. hazel.gilbert@ucl.ac.uk                               | This study was funded by the National Institute for Health Research Health Technology Assessment Programme (project number 08/58/02). |  |  |
| Livingstone-Banks et al., 2019 (Print-based self-help interventions for smoking cessation) | Meyer et al., 2012         | -                                | Tobacco control (SC)                   | Brief advice from practitioner (10 minutes) plus stage of change-specific self-help manuals Two individually tailored computer-generated letters based on stage of change, plus self-help manuals as per first bullet above 1 plus 2  | North-eastern Germany  | 151 general practices  | Smoking patients attending practice   | Practitioners; research team; adults smokers  | Practitioners  | For all practices, the implementation protocol consisted of a maximum of two training sessions carried out by a member of our research team. Both sessions were held in the practice, preferably with the complete practice staff. The first session consisted of a brief introduction focused on epidemiology, nicotine dependence, available treatments, and a portion specific to one of the three interventions. Approximately four weeks after the initial training, an additional training session was offered. It consisted of individual repetition of the correct use of the intervention and | German                                       | Adult smokers patients who reported any tobacco smoking within the last six months.             | General practitioners were reimbursed with 5 Euro for each intervention based on signed confirmations from patients regarding receipt of the intervention. | <a href="http://www.medizin.uni-greifswald.de/epidem/forschung/health/ProGP/">http://www.medizin.uni-greifswald.de/epidem/forschung/health/ProGP/</a> | Abstinence - individually tailored self-help. Follow-up: 6+ months | No control group  | Moderate      | Risk Ratio: 1.55 (1.05, 2.28)                | RCT                               | 1. Ulrich JU, Ulbricht S, Goeze C, Meyer C. Brief interventio to motivate smokers to quit in primary medical care. European Journal of Cardiovascular Prevention and Rehabilitation 2011;18(1 Suppl 1):S40. [CENTRAL: 835566; CRS:9400123000011714]  | C. Meyer, Institute of Epidemiology and Social Medicine, University of Greifswald, Walter-Rathenau-Str. 48, D-17487 Greifswald, Germany. Tel.: +49 3834 867723; fax: +49 3834 867701. E-mail address: chmeyer@uni-greifswald.de. | National Institute for Health Research Health Technology Assessment Programme (project number 08/58/02).                              |  |  |

| Review              | Paper                 | Metadata   | Metadata                               | Intervention  | Intervention   | Intervention   | Intervention   | Intervention  | Intervention   | Intervention  | Intervention   | Intervention                            | Intervention   | Intervention   | Evidence  | Evidence  | Evidence  | Evidence                                     | Evidence                          | Evidence  | Intervention  | Intervention   | Implementation   |  |
|---------------------|-----------------------|--|--|---|--|--|--|---|--|---|--|---|--|--|---|---|---|--|-----------------------------------|---|---|--|--|--|
|                     |                       | Name of the intervention                           | Intervention program area              | Description of the intervention   | Geographic area  | Intervention delivery setting  | Recruitment  | Stakeholders involved in selecting and tailoring the intervention   | Professionals involved in delivering the intervention  | Intervention training   | Materials needed to deliver the intervention   | Intervention language                   | Intervention target population   | Direct cost of the intervention  | Intervention website                                    | Outcomes  | Control group   | Strength of the evidence                     | Effectiveness of the intervention | Types of research conducted on the intervention   | Scientific publications about the intervention  | Intervention developers  | Intervention development funder  | Scientific publications on implementation research                         |
|                     |                       | Full name(s) of the intervention                   | Health topic focus of the intervention | Short description of the intervention; GIVE SOME EXAMPLES OF WHAT SHOULD BE COVERED (E.G. FREQUENCY, DURATION, MODE ETC); include characteristics intervention target group (age, sex, ethnicity)   | Geographic area of the intervention, such as regions, cities, countries, practices; include community type (city/ rural etc) | Intervention setting, such as hospital, primary care office, dental office, school, etc. |  | Description which stakeholders (including patients) are involved in selecting and tailoring the intervention to the local context   | Description which professionals deliver the intervention   | Description of the training in the intervention needed before intervention is implemented   | Materials needed to deliver the intervention   | Language of the intervention            | Short description of the intervention's target population(s)                   | Direct cost of the intervention, if the intervention needs to be purchased or licensed.  | Website of the intervention                             |   |   | Strength of the intervention's evidence base | Effectiveness of the intervention | Types of research that has been conducted on the intervention, such as effectiveness trials, implementation | List of articles published about the intervention, with links to each article   | Name of intervention developers and the name of their institutions   | Name of the funder who supported the development of the intervention   | List of articles published on implementation research on this intervention |
| Matkin et al., 2019 | Cummins et al., 2016b | -  | Tobacco control (SC)                   | 1. Self-help American Cancer Society's Make Yours a Fresh Start Family fact sheets, and additional tips for quitting while pregnant<br>2. As 1, plus proactive TC specifically developed for pregnant smokers, including 9 x 30 - 45-min sessions on days 0, 1, 3, 7, 14, and 30 after quit date, at 32 weeks of gestation, and 2 and 4 weeks after delivery  | California USA   | Telephone intervention on Pregnant women   | Callers to University of California San Diego California Smokers' Helpline. During the intake process, women aged 18-45 years were asked if they were pregnant, assessed for eligibility, and invited to participate if they met study criteria. | Pregnant smokers; Counselors and twenty-one veteran staff members; clinical psychologists   | Counselors   | Prior to working with clients, they received instruction on fetal development and the physical and mental changes experienced by women during pregnancy and training on the pregnancy-specific protocol. Counseling utilized a semi-structured protocol that provided the minimal acceptable content for each call. Counselors met for weekly group supervision facilitated by onsite clinical psychologists to discuss the counseling protocol and individual cases. <sup>27</sup> | The American Cancer Society's Make Yours a Fresh Start Family, fact sheets on secondhand smoke, additional tips for quitting while pregnant; the salivary collection kit (included an explanation of the test and confidentiality assurance, an instruction sheet, a small plastic vial, gum to generate saliva, and a padded, stamped return envelope); a consent document; a congratulatory card was sent after the birth; brochure on | English, Spanish                        | Pregnant (< 27 weeks) women, willing to quit within 1 month or recent quitters | Subjects received a \$5 check for returning the saliva sample.   | -   | Smoking cessation. Self-reported abstinence (majority). Follow-up: 6+ months. | The self-help materials served as the comparison condition to the intervention. | Moderate                                     | Risk Ratio: 1.74 (1.25, 2.44)     | RCT   | 1. Zhu SH, Cummins S, Anderson C, Tedeschi G, Rosbrook B, Gutierrez-Terrell E. Telephone intervention for pregnant smokers: a randomized trial (abstract). Nicotine & Tobacco Research 2004;6(4):740-1.   | Shu-Hong Zhu, PhD, Department of Family Medicine and Public Health, University of California, San Diego, 9500 Gilman Drive, MC 0905, La Jolla CA 92093-0905I. E-mail: szhu@ucsd.edu.   | This research was supported by the Tobacco-Related Disease Research Program (Grant8RT-0103) and First 5 California (Contract CFCF-6810) and by funds received from the California Department of Health Services Tobacco Control Section (Contract 00-90605)  |  |
| Matkin et al., 2019 | Zhu et al., 2012      | -  | Tobacco control (SC)                   | 1. S-H pack, culturally-tailored, translated into Chinese, Korean and Vietnamese<br>2. S-H pack + proactive TC. Social Learning Theory; MI; CBT techniques: 30 - 40 mins, pre-quit, up to 5relapse prevention calls (10 - 15 min) 0, 3, 7, 14, 30 days  | California Smokers' Helpline, which has been operated by the University of California, San Diego, USA                        | Quitline   | Callers to a quitline  | Quitline staff (including bilingual and bicultural Chinese-, Korean-, and Vietnamese-speaking paraprofessional counselors); smokers | Quitline staff (including bilingual and bicultural Chinese-, Korean-, and Vietnamese-speaking paraprofessional counselors) | -   | Self-help manual, saliva collection kit.   | English, Chinese, Korean and Vietnamese | Asian immigrant populations who smoked (daily smokers aged 18-75 years)        | For each completed evaluation call, subjects received a five dollar grocery store coupon. All subjects received a saliva collection kit and asked to return it. They were told that if they sent the sample back, they would receive another five dollar grocery coupon. | <a href="http://www.tecc.org/">http://www.tecc.org/</a> | Smoking cessation. Self-reported abstinence (majority). Follow-up: 6+ months. | Self-help materials only  | Moderate                                     | Risk Ratio: 2.05 (1.62, 2.6)      | RCT   | 1. Tedeschi GJ, Zhu S-H, Cummins SE, Shin H, Nguyen MH. Counseling Asian smokers: key considerations for a telephone intervention. Journal of Smoking Cessation 2013;8(1):2-10.   | Shu-Hong Zhu, PhD, Department of Family and Preventive Medicine, University of California, San Diego, 9500 Gilman Drive, MC 0905, La Jolla, CA 92093-0905 (e-mail: szhu@ucsd.edu).   | This trial was supported by a grant from the National Cancer Institute at the National Institutes of Health (R01CA104573 to S.H.Z.). The recruitment of smokers for the study was facilitated by the California Smokers' Helpline, which was funded by the California Department of Public Health (contract numbers 00-90605 and 05-45834 to S.H.Z.) |  |
| Matkin et al., 2019 | Graham et al., 2011   | Quit Using Internet and Telephone Treatment (QUIT) | Tobacco control (SC)                   | 1. Free 6 m access to www.quitnet.com (interactive commercial cessation website)<br>2. As 1, + up to 5 sessions of proactive TC for 3 m; counselors had access to www.quitnet.com info and encouraged participants' use of it; counselors sent individual emails after counselling sessions to rein-force key points<br>3. Control: access to static, info-only (non-interactive) version of the content on QuitNet (not used in this review) | USA  | Web intervention   | US residents searching for stop-smoking advice on a major internet search engine who clicked on a link to www.quitnet.com, assumed to be motivated   | Research assistants; adult smokers; Counselors  | Counselors   | Counselors who participated in this project were part of a larger call center quit-line operation at National Jewish Health and followed the same counseling and quality monitoring protocols.  | The study consent form; instructions regarding telephone counseling; commercial cessation Web site   | English                                 | Adult smokers of 5 or more cigs/day.   | Participants completed follow-up assessments of smoking abstinence and psychosocial measures at 3, 6, 12, and 18 months after randomization and were paid \$15 to \$25 for completing each assessment.   | <a href="https://quitnet.com/">https://quitnet.com/</a> | Smoking cessation. Self-reported abstinence (majority). Follow-up: 6+ months. | Access to static, info-only (non-interactive) version of the content on QuitNet | Moderate                                     | Risk Ratio: 1.73 (1.11, 2.69)     | RCT   | 1. Cobb CO, Niaura RS, Donaldson EA, Graham AL. Quit now? Quit soon? Quit when you're ready? Insights about target quit dates for smoking cessation from an online quit date tool. Journal of Medical Internet Research 2014;16(2):e55.<br>2. Cobb CO, Graham AL. Use of non-assigned interventions in a randomized trial of internet and telephone treatment for smoking cessation. Nicotine & Tobacco Research 2014;16(10):1289-97.<br>3. Graham AL. A randomized trial of internet and | Amanda L. Graham, PhD, Schroeder Institute for Tobacco Research and Policy Studies, American Legacy Foundation 1724 Massachusetts Avenue, NW Washington, DC 20036, Tel: 202/454.5938; Fax: 202/454.5785, agraham@americanlegacy.org. | This research was funded by grant R01 CA104836 from the National Cancer Institute of the National Institutes of Health.  |  |



| Review              | Paper               | Metadata                 | Metadata                  | Intervention   | Intervention           | Intervention  | Intervention   | Intervention   | Intervention  | Intervention   | Intervention  | Intervention          | Intervention   | Intervention  | Evidence  | Evidence  | Evidence  | Evidence                      | Evidence                          | Evidence  | Intervention   | Intervention  | Implementation   |  |
|---------------------|---------------------|--------------------------|---------------------------|--|------------------------|---|--|--|---|--|---|-----------------------|--|---|---|---|---|-------------------------------|-----------------------------------|---|--|---|--|--|
|                     |                     | Name of the intervention | Intervention program area | Description of the intervention  | Geographic area        | Intervention delivery setting   | Recruitment  | Stakeholders involved in selecting and tailoring the intervention  | Professionals involved in delivering the intervention | Intervention training  | Materials needed to deliver the intervention  | Intervention language | Intervention target population   | Direct cost of the intervention   | Intervention website  | Outcomes  | Control group   | Strength of the evidence      | Effectiveness of the intervention | Types of research conducted on the intervention | Scientific publications about the intervention   | Intervention developers   | Intervention development funder  | Scientific publications on implementation research                         |
| Matkin et al., 2020 | Schuck et al., 2014 | -                        | Tobacco control (SC)      | Short description of the intervention; GIVE SOME EXAMPLES OF WHAT SHOULD BE COVERED (E.G. FREQUENCY, DURATION, MODE ETC); include characteristics intervention target group (age, sex, ethnicity)<br><br>1. "Standard Self-Help Brochure: Participants received a 40-page, colour-printed self-help brochure including didactic information on nicotine dependence and the health benefits of quitting smoking, tips and advice on how to initiate and maintain abstinence, instruction in the use of cognitive and behavioural skills to avoid triggers to smoke and cope with urges to smoke, and strategies for managing relapse or relapse to smoking<br>2. Intensive Proactive Quitline Counselling + supplementary materials tailored to smoking parents; mean number of calls completed was 5.5 and these were scheduled for 10 days before quit day, 3 days, 1, 2, 4 weeks, 2, and 3 months after quit day.<br>"In addition, all participants received three accompanying booklets entitled Smoke-free parents which were designed for this study as tailored supplementary materials. Each booklet (four pages, colour-print) contained didactic information, tips and advice, motivational messages, as well as 'parent-relevant information'; e.g. effects of second-hand smoke (SHS) on children, strategies to manage parent-specific stressors." | Netherlands            | School-based  | "Smoking parents were recruited through their children's primary schools across the Netherlands. Primary schools were contacted by research assistants and asked to distribute study invitation letters to parents through children." [...] "Parents registered to take part by mail, e-mail, telephone or via a website." | Smoking parents; children's primary schools; Research assistants; Dutch national quitline staff.   | Dutch national quitline staff                         | All counsellors received extensive training and had several years of experience in the delivery of telephone counselling.  | Study invitation letters; Standard Self-Help Brochure; supplementary materials tailored to smoking parents; accompanying booklets; written informed consent; baseline questionnaires                    | Dutch                 | Daily or weekly smokers and parents or caretakers of a child aged between 9 and 12 years | Each parent-child dyad received €100 for participation in all three assessments.  | -   | Smoking cessation. Self-reported abstinence (majority). Follow-up: 6+ months. | Self-help materials only  | Moderate                      | Risk Ratio: 4 (2.33, 6.85)        | RCT   | 1. Schuck K, Otten R, Kleinjan M, Bricker JB, Engels RC. Effectiveness of proactive telephone counselling for smoking cessation in parents: study protocol of a randomized controlled trial. BMC Public Health 2011;11:732.  | Kathrin Schuck, Radboud University Nijmegen, Montessorilaan 3, Postbus 9104, 6500 HE Nijmegen, The Netherlands. E-mail: k.schuck@bsi.ru.nl  | This work was supported by ZonMW, the Netherlands Organization for Health Care Research and Development (grant number: 50-50110-96-639). | List of articles published on implementation research on this intervention |
| Matkin et al., 2020 | Blebil et al., 2014 | -                        | Tobacco control (SC)      | 1. Usual care, which included a combination of nicotine gum and CBT (4 counselling sessions during the 1st month, 2 counselling sessions during the 2nd month + 2 phone calls (av. duration 20-30 mins), and 1 counselling session during the 3rd month plus 2 phone calls (av. duration 20-30 mins))<br>2. As above, + 1 extra weekly proactive call (av. duration 10-15 mins) during the first month of the quit attempt   | Penang State, Malaysia | Outpatient Quit Smoking Clinic based at 2 hospitals   | All individuals who attended the clinics during the period under review were invited to participate in the research  | Expert counsellors; smokers  | Expert counsellors                                    | The expert counsellors at quit smoking clinic of both hospitals were specialists in delivering smoking cessation services and they were in charge to provide counselling support as a part of the  | Nicotine gums; signed consents; Smokerlyzer MicroCO* meter; self-help materials in the form of brochures and booklets on stopping smoking   | Malay, Chinese        | Outpatient smokers   | -   | Smoking cessation. Self-reported abstinence (majority). Follow-up: 6+ months. | Usual care which is recommended by the Ministry of Health, Malaysia.          | Moderate  | Risk Ratio: 1.47 (1.18, 1.84) | RCT                               | -   | All Qais Blebil, Discipline of Clinical Pharmacy, School of Pharmaceutical Sciences, Universiti Sains Malaysia, 11800 Penang, Malaysia, aliblebil@yahoo.com  | -   | -  | -  |
| Notley et al., 2019 | Fraser et al., 2017 | -                        | Tobacco control (SC)      | Participants were offered live quitline cessation calls and were encouraged to obtain cessation medication (covered by Medicaid). Only incentive condition participants received compensation for taking counseling calls (\$30 per call) and for biochemically-verified abstinence at the 6-month visit (\$40). All participants received additional payment for completing a baseline assessment and a 6-month smoking test. Quit line coaching included a pre-quit call that typically occurred at study enrolment and 4 additional proactive calls. Participants could also initiate calls to the WTQL for additional assistance. WTQL quit coaches made 3 attempts (per protocol) on different days to reach a participant for each proactive call, leaving messages at least twice if possible. Those callers not reached on the first 2 proactive calls were sent a letter urging them to call. Study participants also received a mailed quit guide, access to recorded medication information (by phone), and access to Web Coach*, an online cessation programme.  | USA                    | Recruited from Wisconsin Tobacco Quit Line (WTQL), primary care clinics, and community advertisements; Center for Tobacco Research and Intervention (UW-CTRI), State of Wisconsin Department of Health Services (DHS), Wisconsin Tobacco Quitline (WTQL). | Quit line coaching included a pre-quit call that typically occurred at study enrolment and 4 additional proactive calls.   | Community-dwelling smokers (low income population); WTQL quit coaches; Center for Tobacco Research and Intervention; clinic staff  | WTQL staff; UW-CTRI research staff                    | -  | Mailed quit guide, Web Coach*, an online cessation programme maintained by the quit line, Medicaid-approved smoking cessation medication, Biochemical test; baseline survey; carbon monoxide (CO) test. | English, Spanish      | Medicaid smokers   | Participants in the control condition could receive a total incentive of USD 80. Participants in the incentive condition could receive a total payment of USD 270: USD 30/call for up to 5 WTQL calls, USD 40/visit for attending the baseline and 6-month follow-up assessment visit, and USD 40 for producing biochemical evidence of abstinence at the 6-month follow-up visit   | Web Coach*  | Smoking cessation in mixed populations - Longest follow-up                    | Same intervention. Participants in the control condition could receive a total incentive of USD 80: USD 40 each for attendance at the baseline and 6-month follow-up biochemical assessment visits. | High                          | Risk Ratio: 1.57 (1.29, 1.92)     | RCT   | Mundt MP, Baker TB, Piper ME, Smith SS, Fraser DL, Fiore MC. Financial incentives to Medicaid smokers for engaging tobacco quit line treatment: maximising return on investment. Tob Control. 2020;29(3):320-325. doi:10.1136/tobaccocontrol-2018-054811   | Michael C. Fiore, MD, MPH, MBA, University of Wisconsin Hilldale Professor of Medicine, Director, UW-Center for Tobacco Research and Intervention, University of Wisconsin School of Medicine and Public Health, 1930 Monroe St Suite 200, Madison, WI 53711, Phone: 608-262-7539, Mcf@ctrl.wisc.edu. | This research was supported by Funding Opportunity Number 181CMS330876 from the Centers for Medicare & Medicaid Services.                | -  |
| Notley et al., 2019 | Lasser et al., 2017 | -                        | Tobacco control (SC)      | Experimental Group(s): up to 4 hours of participant navigation delivered over 6 months, and financial incentives for biochemically-confirmed smoking cessation at 6 and 12 months following enrolment. USD 250 for smoking cessation 6 months after study enrolment, as confirmed by a salivary cotinine, and an additional \$500 for an additional 6 months after the initial cessation (12-month time point), confirmed by a salivary cotinine. Participants who did not quit smoking at 6 months and who had been unaware of the exact dollar amount of the incentive were given a 'second chance' to quit smoking and earn USD 250 at 12 months, having been notified of the exact amount of the incentive   | USA                    | Boston Medical Center   | Patients enrolled by general practitioners at the General Internal Medicine Section or the Family Medicine Department.   | Low-SES and minority daily smokers, smoking 10 or more CPD in the past week; in contemplation or preparation stage of readiness to quit smoking; having a primary care clinician in the Section of General Internal Medicine or Department of Family Medicine. | Navigators  | Navigators had specific different trainings: college, experience in previous trials, served as community health workers, had a bachelor's degree in human services, had previously worked as a community health advocate or as an outreach coordinator for Boston's Mayor's Health Line. | Low-literacy smoking cessation brochure and a list of hospital and community resources for smoking cessation; Biochemical test; interviews  | English               | Low-SES and minority daily smokers, Age of 18+   | USD 250 for smoking cessation 6 months after study enrolment, as confirmed by a salivary cotinine, and an additional \$500 for an additional 6 months after the initial cessation (12-month time point), confirmed by a salivary cotinine. Participants who did not quit smoking at 6 months and who had been unaware of the exact dollar amount of the incentive were given a 'second chance' to quit smoking and earn USD 250 at 12 months, having been notified of the exact amount of the incentive | -   | Smoking cessation in mixed populations - Longest follow-up                    | Enhanced traditional care control participants received a low-literacy smoking cessation brochure and a list of hospital and community resources for smoking cessation                              | High                          | Risk Ratio: 5.19 (1.82, 14.81)    | Unblinded RCT                                   | 1- Quintiliani LM, Truong V, Ulrich ME, et al. Process evaluation of counseling delivered by a patient navigator in an efficacious smoking cessation intervention among low-income primary care patients. Addict Behav Rep. 2019;9:100176. Published 2019 Mar 8. doi:10.1016/j.abrep.2019.100176<br>2- Quintiliani LM, Kathuria H, Truong V, et al. Patient navigation among recently hospitalized smokers to promote tobacco treatment: Results from a randomized exploratory pilot | Karen E. Lasser, MD, MPH, Section of General Internal Medicine, 801 Massachusetts Ave, Room 2094, Boston, MA 02118 (karen.lasser@bmc.org).  | This study was supported by American Cancer Society (grant No. 125785-RSG-14-034-01CPP-B).   | -  |

| Review              | Paper                      | Metadata                         | Metadata                               | Intervention   | Intervention   | Intervention   | Intervention   | Intervention  | Intervention  | Intervention   | Intervention                                 | Intervention   | Intervention   | Intervention  | Evidence   | Evidence  | Evidence      | Evidence                                     | Evidence                          | Evidence  | Intervention  | Intervention  | Implementation   |  |
|---------------------|----------------------------|----------------------------------|--|--|--|--|--|---|---|--|--|--|--|---|--|---|---------------|--|-----------------------------------|---|---|---|--|--|
|                     |                            | Name of the intervention         | Intervention program area              | Description of the intervention  | Geographic area  | Intervention delivery setting  | Recruitment  | Stakeholders involved in selecting and tailoring the intervention   | Professionals involved in delivering the intervention   | Intervention training  | Materials needed to deliver the intervention | Intervention language  | Intervention target population   | Direct cost of the intervention   | Intervention website                                       | Outcomes  | Control group | Strength of the evidence                     | Effectiveness of the intervention | Types of research conducted on the intervention   | Scientific publications about the intervention  | Intervention developers   | Intervention development funder                                      | Scientific publications on implementation research                         |
|                     |                            | Full name(s) of the intervention | Health topic focus of the intervention | Short description of the intervention; GIVE SOME EXAMPLES OF WHAT SHOULD BE COVERED (E.G. FREQUENCY, DURATION, MODE ETC); include characteristics intervention target group (age, sex, ethnicity)  | Geographic area of the intervention, such as regions, cities, countries, practices; include community type (city/ rural etc) | Intervention setting, such as hospital, primary care office, dental office, school, etc. |  | Description which stakeholders (including patients) are involved in selecting and tailoring the intervention to the local context | Description which professionals deliver the intervention  | Description of the training in the intervention needed before intervention is implemented  | Materials needed to deliver the intervention | Language of the intervention   | Short description of the intervention's target population(s)   | Direct cost of the intervention, if the intervention needs to be purchased or licensed. | Website of the intervention                                |   |               | Strength of the intervention's evidence base | Effectiveness of the intervention | Types of research that has been conducted on the intervention, such as effectiveness trials, implementation   | List of articles published about the intervention, with links to each article   | Name of intervention developers and the name of their institutions  | Name of the funder who supported the development of the intervention | List of articles published on implementation research on this intervention |
| Notley et al., 2019 | Van den Brand et al., 2018 | -                                | Tobacco control (SC)                   | A smoking cessation group training programme was organised at each of the participating companies. The training programme consisted of a 90-min session per week for 7 weeks. Experimental Group(s): Participants could earn 4 vouchers with a total worth of EUR 350. The first EUR 50 voucher was received on the condition of biochemically validated smoking abstinence at the end of the smoking cessation training programme. The second and third EUR 50 vouchers could be earned when participants were abstinent 3 and 6 months after finishing the cessation programme. At the end of the study (12 months after completion of the cessation programme), participants could earn an additional EUR 200 voucher. The vouchers were sent by email in the form of a digital code that could be exchanged in a web shop for a large range of products or activities.   | The Netherlands  | Companies of varying size and from different industry types                              | Employees within participating companies were recruited by the company management using flyers, posters, email, and intranet messages, and spouses could also participate.   | Employed smokers  | The training sessions were given by professional coaches from the Dutch company SineFuma, which is experienced in giving smoking cessation group training in a workplace setting. | Different values of vouchers (sent by email in the form of a digital code that could be exchanged in a web shop for a large range of products or activities), biochemical test (CO measurement); flyers, posters, email, and intranet messages; baseline questionnaire | Dutch  | Employed smokers, aged 18+, had smoked tobacco for at least 1 pack year. Mean age 45   | Participants could earn 4 vouchers with a total worth of EUR 350. The first EUR 50 voucher was received on the condition of biochemically validated smoking abstinence at the end of the smoking cessation training programme. The second and third EUR 50 vouchers could be earned when participants were abstinent 3 and 6 months after finishing the cessation programme. At the end of the study (12 months after completion of the cessation programme), participants could earn an additional EUR 200 voucher. | -   | Smoking cessation in mixed populations - Longest follow-up | Control Group: A smoking cessation group training programme consisting of a 90-minute session each week for 7 weeks. The pre-existing training programme was designed to help participants to initiate a quit attempt and guide them through the first few difficult weeks of quitting smoking, with an important role for group dynamics and peer support. Participants quit together at the start of the third session and had quit | High          | Risk Ratio: 1.55 (1.22, 1.99)                | RCT                               | 1- van den Brand FA, Candel MJM, Nagehouh GE, Winkens B, van Schayck CP. How Financial Incentives Increase Smoking Cessation: A Two-Level Path Analysis. Nicotine Tob Res. 2021;23(1):99-106. doi:10.1093/ntr/nta024<br>2- van den Brand FA, Magnée T, de Haan-Bouma L, et al. Implementation of Financial Incentives for Successful Smoking Cessation in Real-Life Company Settings: A Qualitative Needs Assessment among Employers. Int J Environ Res Public Health. 2019;16(24):5125 | Ms Floor A van den Brand, Department of Family Medicine, Care and Public Health Research Institute, Maastricht University, Maastricht 6200 MD, Netherlands f.vandenbrand@maastrichtuniversity.nl  | This study is funded by the Dutch Cancer Society (grant number: UM 2015-7943)   |  |  |
| Notley et al., 2019 | Etter et al., 2016         | -                                | Tobacco control (SC)                   | Participants receive either booklets plus access to a smoking cessation website (control group), or the same intervention plus financial incentives (intervention group) Experimental Group(s): financial rewards of up to CHF 1,500 (USD 1650 in 2013) were paid to those participants biochemically verified as abstinent. Incentives given 6 times during 6 months: CHF 100, 150, 200, 300, 350, and 400 at 1, 2, and 3 weeks, and 1, 3, and 6 months, respectively (USD 110, USD 165, USD 220, USD 330, USD 385, and USD 440, respectively). If participants smoked or missed an assessment, the value of the next reward was reset to the value of the previous reward they had received  | Switzerland  | Web intervention   | The financial incentives study was advertised via the press; on the Internet; in workplaces, hospitals, pharmacies, and medical and dental clinics; and by email. After answering the baseline questionnaire online, participants visited research unit, where eligibility was assessed.   | Low-income smokers regular smokers Research team unit   | No professionals involved (web intervention)  | -  | French                                       | Regular smokers, smoking at least 5 CPD for at least 1 year.   | Incremental financial rewards, to a maximum of U.S. \$1,650, were offered for biochemically verified abstinence at 1, 2, and 3 weeks, and 1, 3, and 6 months.  | Stop-tabac.ch smoking cessation website   | Smoking cessation in mixed populations - Longest follow-up | Internet-based support  | High          | Risk Ratio: 2.07 (1.22, 3.52)                | RCT                               | -   | Dr. Jean-François Etter, Institute of Global Health, University of Geneva, Geneva, Switzerland. The study was funded by the Swiss Tobacco Prevention Fund (Swiss Federal Office of Public Health), grant 11.001733. Dr. Etter's salary was paid by the University of  |   |  |  |
| Notley et al., 2019 | Halpern et al., 2015       | -                                | Tobacco control (SC)                   | All participants were paid for completing questionnaires and submitting samples, and all used the Way to Health web-based portal for communicating, and accounting A random sample of 5% of enrolled participants were invited for cotinine screening and offered USD 100 for completing the cotinine assay, to discourage non-smokers from signing up Control Group (N = 468): Usual care, i.e. information about local SC services, ACS cessation guides, and for the 41% on health benefits free access to behavioural support and NRT 1. Individual rewards (N = 498): usual care, plus participants received USD 200 for sustained abstinence at each of 14 days, 30 days and 6 months, + a 6-month USD 200 bonus for sustained abstinence at that point 2. Collaborative rewards (N = 519): usual care, plus participants grouped into teams of 6, linked by proximal TQDs. Rewards for sustained abstinence were given at 14 days, 30 days and 6 months, calculated at USD 100 per successful quitter in the group, i.e. up to USD 600 per person at each | USA  | Web-based and worksite-based   | We used a multifaceted recruitment scheme to enroll CVS Caremark employees or their relatives and friends across the United States. Eligible participants were at least 18 years of age, reported smoking at least 5 cigarettes per day, had Internet access, and indicated an interest in learning about ways to stop smoking. Recruitment occurred from February 2012 through October 2012. Using the Way to Health Web-based research portal created for this and other studies, 22 participants opened an account, electronically signed the informed-consent document, and completed a baseline questionnaire. Participants were told that they would be paid for | Employees of CVS/Caremark and their families and friends.   | No professionals involved (web intervention)  | -  | English                                      | Employees of CVS/Caremark (retail pharmacy outlets) and their families and friends. Aged 18+, smoking at least 5 cpd, with internet access, and interested in learning about ways to quit. | USD 100 for completing the cotinine assay; 1. Individual rewards (N = 498): participants received USD 200 for sustained abstinence at each of 14 days, 30 days and 6 months, + a 6-month USD 200 bonus for sustained abstinence at that point 2. Collaborative rewards: plus participants grouped into teams of 6, linked by proximal TQDs. Rewards for sustained abstinence were given at 14 days, 30 days and 6 months, calculated at USD 100 per successful quitter   | Way to Health web-based portal  | Smoking cessation in mixed populations - Longest follow-up | Usual care, i.e. information about local SC services, ACS cessation guides, and for the 41% on health benefits free access to behavioural support and NRT   | High          | Risk Ratio: 12: 2.36 (1.16, 4.81)            | RCT                               | 1- Russell LB, Volpp KG, Kwong PL, et al. Cost-Effectiveness of Four Financial Incentive Programs for Smoking Cessation. Ann Am Thorac Soc. 2021;18(12):1997-2006. doi:10.1513/AnnalsATS.202012-14730C<br>2- Halpern SD, French B, Small DS, et al. Heterogeneity in the Effects of Reward- and Deposit-based Financial Incentives on Smoking Cessation. Am J Respir Crit Care Med. 2016;194(8):981-988. doi:10.1164/rccm.201601-0108OC   | Scott D Halpern, From the Departments of Medicine (S.D.H., D.A.A., K.G.V.), Biostatistics and Epidemiology (S.D.H., B.F., K.S., M.O.H.), Medical Ethics and Health Policy (S.D.H., K.G.V.), and Psychiatry (J.A.-M.) and the Center for Health Incentives and Behavioral Economics at the Leonard Davis Institute of Health Economics (S.D.H., B.F., D.S.S., K.S., J.A.-M., G.L., D.A.A., K.G.V.), Perelman School of Medicine at the University of Pennsylvania, the Departments of Statistics (D.S.S.) and Health Care Management | Funding was from National Cancer Institute grant R01 CA159932 (SDH) and National Institute of Aging grant RC2 AG036592 (DAA and KGV), and through in-kind support from the host company |  |  |

| Review              | Paper                | Metadata  | Metadata                               | Intervention  | Intervention   | Intervention   | Intervention  | Intervention  | Intervention   | Intervention  | Intervention  | Intervention                 | Intervention  | Intervention  | Evidence   | Evidence  | Evidence   | Evidence                                     | Evidence                          | Evidence   | Intervention   | Intervention  | Implementation  |  |
|---------------------|----------------------|---|--|---|--|--|---|---|--|---|---|------------------------------|---|---|--|---|--|--|-----------------------------------|--|--|---|---|--|
|                     |                      | Name of the intervention  | Intervention program area              | Description of the intervention   | Geographic area  | Intervention delivery setting  | Recruitment   | Stakeholders involved in selecting and tailoring the intervention   | Professionals involved in delivering the intervention    | Intervention training   | Materials needed to deliver the intervention  | Intervention language        | Intervention target population  | Direct cost of the intervention   | Intervention website                                       | Outcomes  | Control group  | Strength of the evidence                     | Effectiveness of the intervention | Types of research conducted on the intervention  | Scientific publications about the intervention   | Intervention developers   | Intervention development funder   | Scientific publications on implementation research                         |
|                     |                      | Full name(s) of the intervention  | Health topic focus of the intervention | Short description of the intervention; GIVE SOME EXAMPLES OF WHAT SHOULD BE COVERED (E.G. FREQUENCY, DURATION, MODE ETC); include characteristics intervention target group (age, sex, ethnicity)   | Geographic area of the intervention, such as regions, cities, countries, practices; include community type (city/ rural etc) | Intervention setting, such as hospital, primary care office, dental office, school, etc. |   | Description which stakeholders (including patients) are involved in selecting and tailoring the intervention to the local context | Description which professionals deliver the intervention | Description of the training in the intervention needed before intervention is implemented | Materials needed to deliver the intervention  | Language of the intervention | Short description of the intervention's target population(s)                        | Direct cost of the intervention, if the intervention needs to be purchased or licensed.   | Website of the intervention                                |   |  | Strength of the intervention's evidence base | Effectiveness of the intervention | Types of research that has been conducted on the intervention, such as effectiveness trials, implementation  | List of articles published about the intervention, with links to each article  | Name of intervention developers and the name of their institutions  | Name of the funder who supported the development of the intervention  | List of articles published on implementation research on this intervention |
| Notley et al., 2019 | Halpern et al., 2018 | -   | Tobacco control (SC)                   | Usual care consisted of access to information regarding the benefits of smoking cessation and to a motivational text-messaging service. The four interventions consisted of usual care plus one of the following: free cessation aids (nicotine-replacement therapy or pharmacotherapy, with e-cigarettes if standard therapies failed); free e-cigarettes, without a requirement that standard therapies had been tried; free cessation aids plus \$600 in rewards for sustained abstinence; or free cessation aids plus \$600 in redeemable funds, deposited in a separate account for each participant, with money removed from the account if cessation milestones were not met. Control Group: access to information about benefits of smoking cessation and motivational text message service plus free cessation aids (NRT, bupropion or varenicline with NJOY EC if standard therapies tried and did not work) Experimental Groups: REWARD Group: as control, plus USD 600 in rewards for sustained abstinence. eligible to earn USD 100, USD 200, and USD 300 if at 1, 3, and 6 months after the quit date, respectively, they submitted blood or urine samples for testing and the samples were negative for nicotine metabolites | USA  | Companies using wellness programme   | Eligible participants were identified from more than 50 companies. Potential participants were notified by email on at least four occasions that they had been selected to participate. If participants didn't opt out, they were enrolled and randomly assigned to usual care or to an intervention. All participants were informed of usual care resources (information and access to a free motivational text-messaging program); those randomized to intervention groups were also offered one of four additional programs. | Employees and spouses of company wellness programmes, trial staff.  | No professionals involved (web intervention)             | -   | Motivational text message service, NRT, bupropion or varenicline, NJOY E-Cigarettes, biochemical tests, wellness websites of the companies, | English                      | Employees of companies using wellness programme                                     | REWARD Group: as control, plus USD 600 in rewards for sustained abstinence. eligible to earn USD 100, USD 200, and USD 300 if at 1, 3, and 6 months after the quit date, respectively, they submitted blood or urine samples for testing and the samples were negative for nicotine metabolites REDEEMABLE DEPOSITS group: as control, plus USD 600 in redeemable funds deposited in separate account for each participant with money removed from account if cessation | Way to Health Web-based research portal                    | Smoking cessation in mixed populations - Longest follow-up  | Access to information about benefits of smoking cessation and motivational text message service plus free cessation aids (NRT, bupropion or varenicline with NJOY EC if standard therapies tried and did not work) | High   | Risk Ratio: 3.83 (1.48, 9.87)     | RCT  | 1- Russell LB, Volpp KG, Kwong PL, et al. Cost-Effectiveness of Four Financial Incentive Programs for Smoking Cessation. Ann Am Thorac Soc. 2021;18(12):1997-2006. doi:10.1513/AnnalsATS.202012-1473OC 2- Halpern SD, French B, Small DS, et al. Heterogeneity in the Effects of Reward- and Deposit-based Financial Incentives on Smoking Cessation. Am J Respir Crit Care Med. 2016;194(8):981-988. doi:10.1164/rccm.201601-0108OC | Scott D Halpern, From the Departments of Medicine (S.D.H., D.A.A., K.G.V.), Biostatistics and Epidemiology (S.D.H., B.F., K.S., M.O.H.), Medical Ethics and Health Policy (S.D.H., K.G.V.), and Psychiatry (J.A.-M.) and the Center for Health Incentives and Behavioral Economics at the Leonard Davis Institute of Health Economics (S.D.H., B.F., D.S.S., K.S., J.A.-M., G.L., D.A.A., K.G.V.), Perelman School of Medicine at the University of Pennsylvania, the Departments of Statistics (D.S.S.) and Health Care Management | Supported by a grant from the Vitality Institute to the University of Pennsylvania Center for Health Incentives and Behavioral Economics. |  |
| Notley et al., 2019 | White et al., 2013   | -   | Tobacco control (SC)                   | All participants received an initial group counselling session, and a further session at 3-month follow-up Intervention Grp: signed a 'team commitment' contract: a) Opened a savings account, with a minimum deposit of THB 50 (USD 1.67), and a starter bonus of THB 150 (USD 5), with an extra bonus of THB 150 if the account balance reached THB 150 over the 10-week deposit period. Community Health Workers visited weekly for the 10-week duration, to try to elicit additional voluntary contributions b) Cash bonus of THB 1200 (USD 40) to each partner if both were abstinent at 3 months c) Weekly supportive text messages Intervention group received deposits back if verified quit at 3 months  | Thailand   | Rural villages   | Participants grouped in 2-person teams, either choosing their own partner or being randomly assigned based on village and gender. Controls also paired up   | Smokers, Community Health Workers (field staff, research staff)   | Trained smoking cessation counsellor                     | Not require technical training  | Weekly supportive text messages, biochemical urine test, nicotine gum, varenicline, a screening questionnaire.                              | Thai                         | Smokers, mean age 51  | A minimum deposit of THB 50 (USD 1.67), and a starter bonus of THB 150 (USD 5), with an extra bonus of THB 150 if the account balance reached THB 150 over the 10-week deposit period. Cash bonus of THB 1200 (USD 40) to each partner if both were abstinent at 3 months   | Smoking cessation in mixed populations - Longest follow-up | Smoking cessation counseling  | High   | Risk Ratio: 2.35 (1.39, 3.98)                | RCT                               | White JS, Toussaert S, Thurl J, Bontemps-Jones J, Abroms L, Westmaas JL. Peer Mentoring and Automated Text Messages for Smoking Cessation: A Randomized Pilot Trial. Nicotine Tob Res. 2020;22(3):371-380. doi:10.1093/ntr/ntz047; White JS, Lowenstein C, Srivirojana N, Jampaklay A, Dow WH. Incentive programmes for smoking cessation: cluster randomized trial in workplaces in Thailand. BMJ. 2020;371:m3797. Published 2020 Oct 14. doi:10.1136/bmj.m3797 | Justin S. White, University of California, Berkeley, School of Public Health, 247C University Hall, Berkeley CA 94720, jwhite@berkeley.edu   | Funded by grants from the US National Institute on Aging and the US National Institute for Child Health and Development   |   |  |
| Notley et al., 2019 | White et al., 2018   | SMILE (Social and Monetary Incentives for Smoking Cessation at Large Employers) | Tobacco control (SC)                   | Experimental group(s): 9 randomisation groups (8 experimental) consisting of a combination of 4 intervention components: usual care, refundable deposits, a teammate, and a cash bonus: 2) USD 20 individual bonus, 3) USD 40 individual bonus, 4) team bonus, 5) deposits, 6) deposits plus teammate (no bonus), 7) deposits plus USD 20 individual bonus, 8) deposits plus USD 40 individual bonus, 9) deposits plus team bonus. Participants in deposit programmes (groups 5 to 9) were asked to provide refundable deposits contingent on smoking abstinence. These participants made a minimum initial contribution of USD 3 (THB (Thai baht)100) at the enrolment meeting, which was kept under the care of an appointed company representative. Participants then received a personal deposit box, made out of metal and designed to be tamper-proof. Participants were free to make additional voluntary contributions in the box until the 3-month follow-up assessment. Study personnel encouraged participants to contribute at least as much as they had typically spent on tobacco. Participants gave the project an additional USD 5 as collateral for the safe   | Bangkok metropolitan area, Thailand  | Large workplaces in the Bangkok metropolitan area  | Healthy volunteers, motivated to quit smoking. Study staff invited companies to participate at workplace health consortium, contacted companies located in Bangkok area industrial zones, and asked participating companies for referrals.  | Trained smoking cessation counsellor, Adult smokers, Study personnel  | Trained smoking cessation counsellor                     | -   | Personal deposit box; self-administered screening questionnaire; Informed consent;  | Thai                         | Adult smoker of 100+ cigarettes during lifetime and at least 10+ cigarettes a week. | USD 40 and USD 20 (€15; €17) for individual bonus; voluntary contributions in the deposit box   | Smoking cessation in mixed populations - Longest follow-up | Participants in the control group (1) received usual care only, consisting of 2 elements: in-person group counselling on smoking cessation and text messaging support with quitting. The group counselling consisted of 90 minutes of counselling delivered at each worksite by a trained smoking cessation counsellor. The text messaging programme, developed by the Thai Health Professional Alliance against Tobacco, provided 1 to 2 | High   | Risk Ratio: 1.65 (1.15, 2.36)                | Cluster RCT                       | J S White, justin.white@ucsf.edu, @justinwhite on Twitter, ORCID 0000-0002-3388-9569   | Sponsors and collaborators: University of California, Berkeley, National Institutes of Health (NIH), National Institute on Drug Abuse (NIDA), Mahidol University   |   |   |  |

| Review                 | Paper               | Metadata   | Metadata                               | Intervention  | Intervention   | Intervention  | Intervention  | Intervention  | Intervention   | Intervention   | Intervention   | Intervention                 | Intervention  | Intervention  | Evidence                    | Evidence  | Evidence      | Evidence                                     | Evidence                          | Evidence  | Intervention  | Intervention  | Implementation   |  |
|------------------------|---------------------|--|--|---|--|---|---|---|--|--|--|------------------------------|---|---|-----------------------------|---|---------------|--|-----------------------------------|---|---|---|--|--|
|                        |                     | Name of the intervention                           | Intervention program area              | Description of the intervention   | Geographic area  | Intervention delivery setting   | Recruitment   | Stakeholders involved in selecting and tailoring the intervention   | Professionals involved in delivering the intervention    | Intervention training  | Materials needed to deliver the intervention   | Intervention language        | Intervention target population                                      | Direct cost of the intervention   | Intervention website        | Outcomes  | Control group | Strength of the evidence                     | Effectiveness of the intervention | Types of research conducted on the intervention   | Scientific publications about the intervention  | Intervention developers   | Intervention development funder  | Scientific publications on implementation research                         |
|                        |                     | Full name(s) of the intervention                   | Health topic focus of the intervention | Short description of the intervention; GIVE SOME EXAMPLES OF WHAT SHOULD BE COVERED (E.G. FREQUENCY, DURATION, MODE ETC); include characteristics intervention target group (age, sex, ethnicity)   | Geographic area of the intervention, such as regions, cities, countries, practices; include community type (city/ rural etc) | Intervention setting, such as hospital, primary care office, dental office, school, etc.                                  |   | Description which stakeholders (including patients) are involved in selecting and tailoring the intervention to the local context | Description which professionals deliver the intervention | Description of the training in the intervention needed before intervention is implemented  | Materials needed to deliver the intervention   | Language of the intervention | Short description of the intervention's target population(s)        | Direct cost of the intervention, if the intervention needs to be purchased or licensed. | Website of the intervention |   |               | Strength of the intervention's evidence base | Effectiveness of the intervention | Types of research that has been conducted on the intervention, such as effectiveness trials, implementation | List of articles published about the intervention, with links to each article   | Name of intervention developers and the name of their institutions  | Name of the funder who supported the development of the intervention   | List of articles published on implementation research on this intervention |
| Notley et al., 2019    | Baker et al., 2018  | -  | Tobacco control (SC)                   | Incentive condition participants received a further USD 25/visit for any of the 6 pre-birth visits they completed, USD 25/visit for attendance at post-birth visits 2 and 3, USD 20/call for completion of 5 post-birth calls, and USD 40/visit for biochemically-confirmed abstinence at post-birth visits 1 and 4. Thus, incentive condition participants could receive up to USD 500 for meeting all payment criteria.   | Wisconsin, USA   | Private and community health clinics providing perinatal healthcare services across Wisconsin as part of the FB programme | Potential participants were identified by FB (First Breath) providers at participating FB sites, which all serve pregnant women, and the providers encouraged participation in the study. | Adult pregnant women smoking daily; FB providers (nurses, medical assistants and health educators),                               | FB and WWHF providers                                    | Counseling rigor was supported by initial training, quarterly file reviews, and supervised home visits done by Wisconsin Women's Health Foundation (WWHF) supervisors. WWHF providers received ongoing training involving monthly group refresher meetings (2 hours/month), quarterly supervised visit and file review (4 hours/quarter), annual in-service training (8 hours/year), and ad hoc one-on-one and group training as needed. For FB-only providers, required training included 2 hours of initial training and 1 hour of refresher training annually while | Manual based on the USPHS Guideline  | English                      | Adult pregnant women smoking daily                                  | Up to USD 120 for control group; up to USD 500 for intervention group.                  | -                           | Smoking cessation in pregnancy at longest follow-up |               | Moderate                                     | Risk Ratio: 1.59 (1.12, 2.24)     | RCT   | -   | Michael C. Fiore, Center for Tobacco Research and Intervention and Department of Medicine University of Wisconsin Madison, 1930 Monroe Street, Madison, WI 53711. E-mail: mc@cctri.wisc.edu | Centers for Medicare and Medicaid Services (CMS) of the U.S. Department of Health and Human Services as part of the Affordable Care Act's Medicaid Incentives for Prevention of Chronic Disease Demonstration Project  |  |
| Notley et al., 2019    | Tappin et al., 2015 | The Cessation in Pregnancy Incentives Trial (CPIT) | Tobacco control (SC)                   | As control, plus: up to GBP 400 of shopping vouchers (Love2shop), for engagement or for quitting, or both: GBP 50 for attending the 1-hour face-to-face and setting a TQD (engagement). At 4-week phone check-up, if self-reported no smoking for past 2 weeks had a researcher visit and CO breath test < 10 ppm; if OK, another GBP 50 voucher. Routine phone call at 12 weeks (for those quit at 4) + CO test, GBP 100 voucher if validated. Some time between 34 and 38 weeks gestation, all participants contacted by helpline staff. Researchers visited self-reported quitters for CO and cotinine, and gave GBP 200 for confirmed intervention quitters. To minimise losses to follow-up, all participants (intervention and control) reporting smoking status and with saliva or urine sample at final follow-up given a GBP 25 shopping voucher (engagement)  | Inner city, Greater Glasgow and Clyde (Scotland), UK   | Large health board area, inner city, Greater Glasgow and Clyde (Scotland)   | All smokers identified at maternity booking referred to the stop-smoking services (SSS), who attempted to contact them.   | Pregnant smokers aged 16+; Stop smoking services staff  | Stop smoking services staff                              | -  | Saliva or urine sample; carbon monoxide breath test  | English                      | Pregnant smokers, aged 16+, gestation 24+ weeks                     | Up to GBP 400 of shopping vouchers  | -                           | Smoking cessation in pregnancy at longest follow-up |               | Moderate                                     | Risk Ratio: 3.88 (2.1, 7.16)      | Single-blind RCT  | 1. Boyd KA, Briggs AH, Bauld L, Sinclair L, Tappin D. Are financial incentives cost-effective to support smoking cessation during pregnancy? Addiction 0126;111(2):360-70. 2. Tappin D, Bauld L, Purves D, Boyd K, Sinclair L, MacAskil S, et al. Financial incentives for smoking cessation during pregnancy: randomised controlled trial. Lancet in press www.thelancet.com/pdfs/journals/lanet/PIIS0140-6736%2814%2962130-9.pdf). 3. Tappin DM, Boyd L, Tappin D, Douglas W, Free C. "Someone battling in my corner": experiences of smoking-cessation support via text message. British Journal of General Practice 2013;63(616):e768-76. [CENTRAL: 1000333; CRS: 940012900002807; PUBMED: 24267860] 2. Free C, Holle E, Robertson S, Knight R. Three controlled trials of interventions to increase recruitment to a randomized controlled trial of mobile phone based smoking cessation support. Clinical Trials 2010;7(2):265-72 | D Tappin david.tappin@glasgow.ac.uk   | The primary funder was the Chief Scientist Office, Scottish Government. Two additional main funders were the Glasgow Centre for Population Health and the Education and Research Endowment Fund of the Director of Public Health Greater Glasgow and Clyde health board. Additional funders were the Yorkhill Children's Charity and the Royal Samaritan Endowment Fund. |  |
| Whittaker et al., 2019 | Free et al., 2011   | txt2stop   | Tobacco control (SC)                   | All participants were free to participate in any other SC service or support that they wished to use, and were offered the QUIT and National Health Service (NHS) SC help line numbers. Intervention: delivered solely over mobile phone based on programme in Rodgers 2005. Participants asked to set a QD within 2 weeks of randomisation. They received 5 text messages/day for the first 5 weeks and then 3/week for the next 26 weeks. Intervention included motivational messages and behaviour-change techniques. The programme was also personalised with an algorithm based on demographic and other information gathered at baseline, such as smoker's concerns about weight gain after quitting. The core programme consisted of 186 messages and the personalised messages were selected from a database of 713 messages. For instance, by texting the word "lapse", participants received a series of 3 text messages that encouraged them to continue with their quit attempt. Participants could also request the mobile phone number of another trial participant so that they could text each other for support. Participants in the intervention group using pay-as-you-go mobile phone schemes were given a £20 top-up voucher to provide sufficient credit to | UK   | Text message intervention   | Advertisements on radio, bus billboards, websites, newspapers, primary care centres, pharmacies, SC services. Participants registered their interest by text message or online.           | Study staff; smokers; smoking cessation counsellors   | No professionals involved (telephone intervention)       | -  | Advertisements on radio, bus billboards, websites, newspapers, primary care centres, pharmacies, SC services, Postal salivary-cotinine testing | English                      | Smokers aged ≥ 16 years, willing to make an attempt to quit smoking | £20 top-up voucher  | -                           | Long-term abstinence                                |               | Moderate                                     | Risk Ratio: 2.18 (1.8, 2.65)      | RCT   | -   | Dr Caroline Free, Clinical Trials Research Unit, London School of Hygiene and Tropical Medicine, Keppel Street, London WC1E 7HT, UK caroline.free@lshtm.ac.uk                               | The UK Medical Research Council, Cancer Research UK, and The Primary Care Research Networks funded the trial.  |  |



| Review                      | Paper                 | Metadata  | Metadata                               | Intervention  | Intervention   | Intervention   | Intervention  | Intervention   | Intervention  | Intervention  | Intervention                                 | Intervention  | Intervention   | Intervention  | Evidence  | Evidence   | Evidence      | Evidence   | Evidence                          | Evidence   | Intervention   | Intervention  | Implementation   |  |
|-----------------------------|-----------------------|---|--|---|--|--|---|--|---|---|--|---|--|---|---|--|---------------|--|-----------------------------------|--|--|---|--|--|
|                             |                       | Name of the intervention                          | Intervention program area              | Description of the intervention   | Geographic area  | Intervention delivery setting  | Recruitment   | Stakeholders involved in selecting and tailoring the intervention  | Professionals involved in delivering the intervention   | Intervention training   | Materials needed to deliver the intervention | Intervention language   | Intervention target population   | Direct cost of the intervention   | Intervention website  | Outcomes   | Control group | Strength of the evidence                                   | Effectiveness of the intervention | Types of research conducted on the intervention  | Scientific publications about the intervention   | Intervention developers   | Intervention development funder                                      | Scientific publications on implementation research                         |
|                             |                       | Full name(s) of the intervention                  | Health topic focus of the intervention | Short description of the intervention; GIVE SOME EXAMPLES OF WHAT SHOULD BE COVERED (E.G. FREQUENCY, DURATION, MODE ETC); include characteristics intervention target group (age, sex, ethnicity)   | Geographic area of the intervention, such as regions, cities, countries, practices; include community type (city/ rural etc) | Intervention setting, such as hospital, primary care office, dental office, school, etc. |   | Description which stakeholders (including patients) are involved in selecting and tailoring the intervention to the local context  | Description which professionals deliver the intervention  | Description of the training in the intervention needed before intervention is implemented | Materials needed to deliver the intervention | Language of the intervention  | Short description of the intervention's target population(s)   | Direct cost of the intervention, if the intervention needs to be purchased or licensed. | Website of the intervention                                   |  |               | Strength of the intervention's evidence base               | Effectiveness of the intervention | Types of research that has been conducted on the intervention, such as effectiveness trials, implementation  | List of articles published about the intervention, with links to each article  | Name of intervention developers and the name of their institutions  | Name of the funder who supported the development of the intervention | List of articles published on implementation research on this intervention |
| Whittaker et al., 2019      | Liao et al., 2018     | Happy Quit  | Tobacco control (SC)                   | High-frequency text messaging (HFM): "Happy Quit" mobile phone-based HFM for 12 weeks (3-5 messages/day)<br>Low-frequency text messaging (LFM): "Happy Quit" mobile phone-based LFM for 12 weeks (3-5 messages/week)  | China  | Text message intervention  |   | Study staff; smokers; smoking cessation professionals  | No professionals involved (telephone intervention)  | -   | Chinese                                      | Daily Chinese cigarette smokers ≥ 18 years.                                   | Participants were rewarded with a 40 Chinese yuan (CNY) mobile-phone-based payment (whether they quit or not) each month. The participants who self-reported continuous abstinence at 24 weeks were invited to provide a urine sample for biochemical verification. After 24 weeks, cotinine (nicotine metabolite) urine dipsticks and 20 CNY in cash was mailed to each participant who self-reported 24 weeks of continuous abstinence, for determination of smoking status. | -   | Long-term abstinence  | 1 text message every week, thanking them for being in the study  | Moderate      | Risk Ratio: 11: 3.08 (1.35, 7.03)<br>12: 3.35 (1.59, 7.05) | RCT                               | 1. Liao Y, Wu Q, Tang J, Zhang F, Wang X, Qi C, et al. The efficacy of mobile phone-based text message interventions ("Happy Quit") for smoking cessation in China. BMC Public Health 2016;16(1):833. [DOI: 10.1186/s12889-016-3528-5]                             | Jinsong Tang, Department of Psychiatry, The Second Xiangya Hospital, Central South University, Changsha, China, tangjinsong@csu.edu.cn   | China Medical Board (CMB) Open Competition Program (Grant Number 15-226)  |  |  |
| Whittaker et al., 2019      | Yu et al., 2017       | The Smoke-free Homes mHealth Intervention Project | Tobacco control (SC)                   | Intervention IA: in-person health counselling and materials on establishing a smoke-free home<br>Intervention IB: as above, plus a text message intervention targeted at both parents. The text message intervention included messages to the mother and her husband on the harms of SHS to the mother and the infant. The husband received additional cessation text messages to encourage him to quit smoking.<br>A total of 9500 messages were sent to participants.   | China  | Local maternal-child health centres and home   | Trained health workers in local maternal-child health centres asked all mothers attending their initial post-delivery visit (1 month after birth) to complete a short health questionnaire with questions related to tobacco use and household SHS exposure.  | Trained health workers; nonsmoking mothers and their newborns were currently exposed to SHS in the home; fathers currently smoked cigarettes in the home.  | Trained health care workers   | -   | Chinese                                      | Fathers currently smoked cigarettes in the home                               |  | -   | Long-term abstinence  | Standard postnatal care, which did not include any tobacco control and cessation counselling service   | Moderate      | Risk Ratio: 2.44 (1.18, 5.08)                              | RCT                               |  | Shaohua Yu, Department of Criminal Justice and Criminology, Georgia State University, Atlanta, GA, 30303, USA, pkuteach@yahoo.com  | National Cancer Institute and the Bill and Melinda Gates Foundation   |  |  |
| Whittaker et al., 2019      | Naughton et al., 2014 | iQuit in Practice                                 | Tobacco control (SC)                   | Usual care as control group, plus a tailored advice report and a 90-day programme of tailored text messages generated by the iQuit system (number of messages sent each day varied from 0 to 2, mean/day over 90 days 1.2). The messages were designed to advise smokers on their quit attempt, provide information about the consequences of smoking and expectations for quitting, provide encouragement, boost self-efficacy, maintain motivation to quit and remind smokers how to cope with difficult situations.                                | East of England, UK  | Primary care practices and home based  | Participants were recruited from 32 participating primary care practices opportunistically, through self-referral or referred by a health professional.   | Current smokers; study staff; general practices with at least one SCA (primary care nurse or healthcare assistant, a nursing auxiliary under the guidance of a qualified healthcare professional). | SCA (primary care nurse or healthcare assistant, a nursing auxiliary under the guidance of a qualified healthcare professional) | -   | UK   | Current smokers aged 18-75 years  |  | -   | Long-term abstinence  | Usual care' consisting of routine 'level 2' SC advice delivered by SC adviser. This included a brief discussion about smoking habits and history, measurement of expired-air CO, brief advice to quit, setting a QD within the next 14 days, options for pharmacotherapy, a prescription and arranging a follow-up visit. Usually the opportunity for multiple follow-up visits was offered. | Moderate      | Risk Ratio: 1.81 (1.06, 3.11)                              | RCT                               | 1. Faulkner K, Sutton S, Jamison J, Sloan M, Boase S, Naughton F. Are nurses and auxiliary healthcare workers equally effective in delivering smoking cessation support in primary care? Nicotine & Tobacco Research 2016;18(5):1054-60. [DOI: 10.1093/ntr/ntv206] | Felix Naughton, Institute of Public Health, University of Cambridge, Forvie Site, Cambridge CB2 0SR, UK. E-mail: fmen2@medschl.cam.ac.uk   | National Institute for Health Research School for Primary Care Research. GP practice costs (NHS Service Support Costs) were provided by the Comprehensive Local Research Network. ATP was supported by the NIHR Biomedical Research Centre at Guy's and St Thomas's NHS Foundation Trust and King's College London. |  |  |
| Hartmann-Boyce et al., 2019 | Bailey et al., 2013   |   | Tobacco control (SC)                   | Open-label smoking cessation treatment consisted of 10 weeks of school-based, cognitive-behavioural group counseling along with 9 weeks of nicotine replacement (nicotine patch).<br>Pharmacotherapy: NRT (nicotine patch); 9 weeks (dosage and titration schedule determined by number of cigarettes smoked per day)<br>1. Group based cognitive behavioural therapy and skills training (10 weeks)<br>2. Group based cognitive behavioural therapy and skills training (10 weeks) + extended face-to-face group sessions (9 sessions over 14 weeks) | USA  | High schools   | Adolescent smokers were recruited over a period of 3 years on a non-rolling basis, with a new cohort participating each academic school year. Selected for motivation to quit. Students were recruited through brief classroom presentations and informational tables set up during the school day. | Adolescent smokers; Therapists: research intervention staC with Bachelor's degree or higher; Supervised by the project director (clinical psychologist)  | Therapists: research intervention staC with Bachelor's degree or higher.  | Therapists were supervised by the project director (clinical psychologist)                | English                                      | Adolescent smokers, average age 16.9; average cigarettes smoked per week 97.1 |  | -   | Smoking cessation at longest follow-up Follow-up: 6-24 months | Group based cognitive behavioural therapy and skills training (10 weeks)   | High          | Risk Ratio: 2.96 (1.14, 7.71)                              | RCT                               |  | Steffani R. Bailey, PhD, Department of Family Medicine, Oregon Health & Science University, 3181 SW Sam Jackson Park Road, Mailcode FM, Portland, OR 97239, USA. Telephone: 503-418-9805; Fax: 503-494-2746; E-mail: baalstef@ohsu.edu | National Cancer Institute at the National Institutes of Health (R01 CA 118035 to JJK). No declarations of interest  |  |  |

| Review                      | Paper                   | Metadata                         | Metadata                               | Intervention   | Intervention   | Intervention   | Intervention   | Intervention   | Intervention   | Intervention   | Intervention  | Intervention                       | Intervention  | Intervention  | Evidence   | Evidence  | Evidence   | Evidence                                     | Evidence                          | Evidence  | Intervention  | Intervention   | Implementation   |  |
|-----------------------------|-------------------------|----------------------------------|--|--|--|--|--|--|--|--|---|------------------------------------|---|---|--|---|--|--|-----------------------------------|---|---|--|--|--|
|                             |                         | Name of the intervention         | Intervention program area              | Description of the intervention  | Geographic area  | Intervention delivery setting  | Recruitment  | Stakeholders involved in selecting and tailoring the intervention  | Professionals involved in delivering the intervention                                  | Intervention training  | Materials needed to deliver the intervention  | Intervention language              | Intervention target population  | Direct cost of the intervention   | Intervention website   | Outcomes  | Control group  | Strength of the evidence                     | Effectiveness of the intervention | Types of research conducted on the intervention   | Scientific publications about the intervention  | Intervention developers  | Intervention development funder                                      | Scientific publications on implementation research                         |
|                             |                         | Full name(s) of the intervention | Health topic focus of the intervention | Short description of the intervention; GIVE SOME EXAMPLES OF WHAT SHOULD BE COVERED (E.G. FREQUENCY, DURATION, MODE ETC); include characteristics intervention target group (age, sex, ethnicity)  | Geographic area of the intervention, such as regions, cities, countries, practices; include community type (city/ rural etc) | Intervention setting, such as hospital, primary care office, dental office, school, etc. |  | Description which stakeholders (including patients) are involved in selecting and tailoring the intervention to the local context            | Description which professionals deliver the intervention                               | Description of the training in the intervention needed before intervention is implemented  | Materials needed to deliver the intervention  | Language of the intervention       | Short description of the intervention's target population(s)  | Direct cost of the intervention, if the intervention needs to be purchased or licensed. | Website of the intervention                                      |   |  | Strength of the intervention's evidence base | Effectiveness of the intervention | Types of research that has been conducted on the intervention, such as effectiveness trials, implementation   | List of articles published about the intervention, with links to each article   | Name of intervention developers and the name of their institutions   | Name of the funder who supported the development of the intervention | List of articles published on implementation research on this intervention |
| Hartmann-Boyce et al., 2020 | Calabro et al., 2012    | Project SUCCESS                  | Tobacco control (SC)                   | Participants in the enhanced intervention condition received in-person motivational counseling with health feedback, a tailored internet-based program, and nicotine patch. Participants in the control group received a smoking cessation self-help manual and nicotine patch. Pharmacotherapy: NRT; patch offered to participants smoking ≥ 5 cpd<br>1. Self-help written material, ≤ 5 mins minimal counselling, and no persuasive communication or assistance to participants<br>2. In-person motivational counselling with health feedback, 2 x 60 to 120 mins over 3 months, and access to 5 web-based booster sessions<br>In the EI group, physical measurements, exhaled carbon monoxide, and lung function assessed by spirometry were tested and results immediately reviewed among participants. The Micro CO respiratory monitor (Micro Direct, Lewiston, ME) was used to measure the parts per million CO to air and percentage of carboxyhemoglobin.   | USA  | University student body  | Advertised through flyers in campus halls, newsletters, email, and during presentations in classes. Smoking cessation counsellors enrolled participants. College students were recruited at a state funded university that was not a tobacco-free campus.  | University students; Therapists (smoking cessation counsellors)  | Therapists: counsellors trained specifically in behaviour change/cigarette counselling | The two EI (enhanced interventions) counsellors attended a 2-day motivational interviewing workshop at the Baylor College of Medicine. The counselor training was designed to teach and enhance skills for encouraging smokers to achieve behavior changes. Additionally, counsellors were trained to provide personalized feedback about the adverse consequences of smoking. Also, counsellors were trained to measure both salivary cotinine and carbon monoxide. Counsellors practiced with volunteers and | English   | College students                   | -   | SUCCESS website.  | Smoking cessation at longest follow-up<br>Follow-up: 6 24 months | Standard care: Self-help written material for this group, ≤ 5 mins minimal counselling, and no persuasive communication or assistance to participants | High   | Risk Ratio: 1.9 (1.22, 2.98)                 | RCT                               | 1. McIntosh S, Johnson T, Wall AF, et al. Recruitment of Community College Students Into a Web-Assisted Tobacco Intervention Study. JMIR Res Protoc. 2017;6(5):e79. Published 2017 May 8. doi:10.2196/resprot.6485; 2. Khalil GE, Wang H, Kalabro KS, Mitra N, Shegog R, Prokhorov AV. From the Experience of Interactivity and Entertainment to Lower Intention to Smoke: A Randomized Controlled Trial and Path Analysis of a Web-Based Smoking Prevention          | Alexander V. Prokhorov, aprokhor@mdanderson.org. 10Department of Behavioral Science, Division of Cancer Prevention and Population Sciences, The University of Texas MD Anderson Cancer Center, 1515 Holcombe Boulevard, Unit 1330, Houston, TX 77030, USA | National Cancer Institute. Authors declared no conflicts of interest.  |  |  |
| Hartmann-Boyce et al., 2021 | Yalcin et al., 2014     | -                                | Tobacco control (SC)                   | An individualized therapy cessation technique was selected for each participant (combination of behavioral counseling, nicotine replacement therapy, and/or pharmacotherapy). The participants in the control group attended a standard quit program, whereas the study group also received an additional 5-session (90 minutes each) cognitive behavioral therapy-oriented program aimed at improving their anger and stress coping skills. At the beginning of the study, both groups were asked to complete the Trait Anger Scale (TAS) of the State and Trait Anger Scale and the Self-Confident (SCS) and Hopeless (HS) subscales of the Stress Coping Styles Inventory; pretest smoking status of both groups and their coping skills were compared with each other as soon as the program ended (post-test results) and after 3 and 6 months (first and second follow-up tests).<br>Pharmacotherapy: NRT (gum or patch), bupropion, or varenicline for 3 m or as long as necessary<br>1. Control; 8 visits & 1 call; baseline, day 8, 20, 23, 30, 45, 60, 120, 210, 150 mins<br>2. Same as control plus CBT-oriented anger management and stress control programme. | Turkey   | General practice smoking cessation clinic  | -  | Smokers; Therapists: smoking cessation clinic specialists;   | Therapists: smoking cessation clinic specialists                                       | -  | NRT (gum or patch), bupropion, or varenicline, Fagerstrom Test for Nicotine Dependence (FNDT), the State Trait Anger Inventory, and the Styles of Coping with Stress Inventory (pretests); assessment of carbon monoxide with an inhaler; Ways of Coping Styles questionnaire | Turkish                            | Smokers motivated to quit within 6 months   | -   | -  | Smoking cessation at longest follow-up<br>Follow-up: 6 24 months  | 8 visits & 1 call; baseline, day 8, 20, 23, 30, 45, 60, 120, 210, 150 mins | High   | Risk Ratio: 1.6 (1.2, 2.15)       | RCT   | -   | B. M. Yalcin, MD, Department of Family Medicine, Faculty of Medicine, Ondokuz Mayıs University, University Hospital, Kurupelit/SAMSUN 55132, Turkey (E-mail: myalcin@omu.edu.tr).  | No funding.  |  |
| Hartmann-Boyce et al., 2019 | Cunningham et al., 2016 | -                                | Tobacco control (SC)                   | Individuals who smoked more than 10 cigarettes per day were interviewed at baseline and asked if they would be hypothetically interested in receiving nicotine patches by mail to quit smoking. Those who were interested and deemed eligible to participate (no contraindications to NRT) were randomized to the experimental group to be mailed a 5-week supply of nicotine patches or to a control group. Telephone follow-ups were conducted at 8 weeks and 6 months. Participants in the experimental group were sent a 5-week course of nicotine patches by expedited postal mail (3 weeks of step 1 [21 mg of nicotine], 1 week of step 2 [14 mg of nicotine], 1 week of step 3 [7 mg of nicotine], no behavioral support provided). Participants randomized to the control group were not offered the nicotine patches or any other intervention.<br>1. Nicotine patches. 5 weeks total, tapered: 3 weeks 21 mg, 1 week 14 mg, 1 week 7 mg (unclear if 16 or 24 h)<br>2. No intervention<br>Level of support: low; no support provided (patches mailed to intervention participants)   | Canada   | Home and cell telephone intervention   | Participants were recruited using a general population telephone survey of Canadian households. With the use of random-digit dialing of home and cell telephone numbers, an initial screening interview identified adult (aged ≥18 years) smokers who smoked 10 or more cigarettes per day. Individuals who smoked more than 10 cigarettes per day were interviewed at baseline and asked if they would be hypothetically interested in receiving nicotine patches by mail to quit smoking. Those who were interested and deemed eligible to participate (no contraindications to NRT) were randomized to the experimental group to be mailed a 5-week supply of nicotine patches or to a control group. | Smokers, Trained interviewers at the Survey Research Centre, University of Waterloo, using computer-assisted telephone interview technology. | Interviewers   | Trained interviewers   | English   | Smokers (≥ 10 cpd), average age 49 | The Salivette saliva sample collection kit (Sarstedt AG & Co) was mailed with the \$20 payment after the baseline interview. One week before the 8-week and 6-month follow-ups, participants were sent the \$20 payment for the respective telephone survey and the saliva sample kit. As an added incentive for the return of saliva samples, participants were also informed that they would receive an additional \$10 on the submission of each sample. | -   | Smoking cessation at 6+ months follow-up                         | No intervention   | High   | Risk Ratio: 2.79 (1.01, 7.7)                 | RCT                               | 1. Kushnir V, Sproule BA, Cunningham JA. Mailed distribution of free nicotine patches without behavioral support: Predictors of use and cessation. Addict Behav. 2017;67:73-78. doi:10.1016/j.addbeh.2016.12.008; 2. Cunningham JA, Kushnir V, Selby P, et al. Five-Year Follow-up of a Randomized Clinical Trial Testing Mailed Nicotine Patches to Promote Tobacco Cessation. JAMA Intern Med. 2020;180(5):792-793. doi:10.1001/jamainternmed.2020.00013. Kushnir V | John A. Cunningham, PhD, Centre for Addiction and Mental Health, 33 Russell St, Toronto, ON, M5S 2S1, Canada (john.cunningham@camh.ca).   | Canadian Institutes of Health Research, Centre for Addiction and Mental Health, Canada Foundation for Innovation, Ontario Ministry of Research and Innovation  |  |  |
| Hartmann-Boyce et al., 2020 | Heydari et al., 2012    | -                                | Tobacco control (SC)                   | 1. NRT: 8 weeks of 15 mg/24 h NRT patches<br>2. 8 weeks of 1 mg x 2/day varenicline (titrated 1st week)<br>3. Control group: no pharmacotherapy<br>Level of support: high (all received brief (5 mins) education and counselling at 4 x weekly sessions.)  | Tehran, Iran   | Smoking cessation clinics  | Participants were smokers willing to quit who were visiting a smoking cessation clinic for the first time  | Smokers, physicians  | Physicians   | -  | Exhaled carbon monoxide measurement, written informed consent, Fagerström test, NRT patches, varenicline.   | Iranian                            | Smokers   | -   | -  | Smoking cessation at 6+ months follow-up  | No pharmacotherapy   | High   | Risk Ratio: 3.79 (1.62, 8.88)     | RCT   | -   | Saeid Fallah Tafti, National Research Institute of Tuberculosis and Lung Diseases, Shahid Beheshti University of Medical Sciences, Tehran, Iran. Tel: (+98) 21 2010 9502. Fax: (+98) 21 2010 9502. e-mail: sfallahtafti@nritid.ac.ir | Masih Daneshvari Hospital Research Institute, Tehran.                |  |

| Review                      | Paper                        | Metadata                         | Metadata                               | Intervention   | Intervention   | Intervention   | Intervention  | Intervention  | Intervention  | Intervention  | Intervention  | Intervention                 | Intervention   | Intervention  | Evidence                                 | Evidence  | Evidence                 | Evidence  | Evidence   | Evidence   | Intervention   | Intervention  | Implementation   |  |
|-----------------------------|------------------------------|----------------------------------|--|--|--|--|---|---|---|---|---|------------------------------|--|---|--|---|--------------------------|---|--|--|--|---|--|--|
|                             |                              | Name of the intervention         | Intervention program area              | Description of the intervention  | Geographic area  | Intervention delivery setting  | Recruitment   | Stakeholders involved in selecting and tailoring the intervention   | Professionals involved in delivering the intervention   | Intervention training   | Materials needed to deliver the intervention  | Intervention language        | Intervention target population                               | Direct cost of the intervention   | Intervention website                     | Outcomes  | Control group            | Strength of the evidence  | Effectiveness of the intervention  | Types of research conducted on the intervention  | Scientific publications about the intervention   | Intervention developers   | Intervention development funder                                      | Scientific publications on implementation research                         |
|                             |                              | Full name(s) of the intervention | Health topic focus of the intervention | Short description of the intervention; GIVE SOME EXAMPLES OF WHAT SHOULD BE COVERED (E.G. FREQUENCY, DURATION, MODE ETC); include characteristics intervention target group (age, sex, ethnicity)  | Geographic area of the intervention, such as regions, cities, countries, practices; include community type (city/ rural etc) | Intervention setting, such as hospital, primary care office, dental office, school, etc. |   | Description which stakeholders (including patients) are involved in selecting and tailoring the intervention to the local context                     | Description which professionals deliver the intervention  | Description of the training in the intervention needed before intervention is implemented   | Materials needed to deliver the intervention  | Language of the intervention | Short description of the intervention's target population(s) | Direct cost of the intervention, if the intervention needs to be purchased or licensed. | Website of the intervention              |   |                          | Strength of the intervention's evidence base  | Effectiveness of the intervention  | Types of research that has been conducted on the intervention, such as effectiveness trials, implementation  | List of articles published about the intervention, with links to each article  | Name of intervention developers and the name of their institutions  | Name of the funder who supported the development of the intervention | List of articles published on implementation research on this intervention |
| Hartmann-Boyce et al., 2021 | Tønnesen et al., 2012        | -                                | Tobacco control (SC)                   | 1. Active: weeks 1 to 6: 1 to 2 sprays when participants would normally have smoked a cigarette or experienced a craving, up to 4 sprays/hour and 64 sprays/day. Tapered down weeks 7 to 12 (end of week 9 instructed to be using half as much as in weeks 1 to 6, reducing to max 4 sprays/day by week 12). Occasional use (max 4 sprays/day) permitted weeks 13 to 24. 1 mg/spray oral nicotine spray (in development, name not provided)<br>2. Control: placebo on same schedule<br><br>Level of support: high. General written and oral advice (< 10 mins) at study start and < 3 mins at subsequent visits up to and including week 24 (9 visits total) | Germany (2 sites) and Denmark (1 site)   | Smoking cessation clinics  | Community volunteers (Daily cigarette smokers were recruited through advertisements in local newspapers)  | Daily cigarette smokers, smoking cessation counsellors  | Smoking cessation counsellors   | -   | General written on smoking cessation advice; written informed consent, NMS (1 mg of nicotine per spray after priming) and placebo spray, CO monitor, portable electronic diary (eDiary), saliva samples for cotinine analysis, Pregnancy tests                            | German, danish               | Daily cigarette smokers                                      | -   | -  | Smoking cessation at 6+ months follow-up  | Placebo on same schedule | High  | Risk ratio: 2.48 (1.24, 4.94)  | RCT  | -  | Philip Tønnesen<br>Dept of Pulmonary Medicine<br>Genotofte University Hospital<br>DK-2900 Hellerup<br>Denmark<br>E-mail: philippt@dadlnet.dk  | McNeil AB, Sweden  | -  |
| Hartmann-Boyce et al., 2022 | Graham et al., 2017          | -                                | Tobacco control (SC)                   | 1. 4 weeks of NRT patch, gum or lozenge depending on participant preference, mailed to participants. Standard dosing protocol as per labelling instructions<br>2. No NRT<br>Level of support: low (use of interactive website. Some participants also received web-based social network intervention. 2 x 2 factorial design. No evidence of interaction between NRT and web-based social network intervention, therefore results collapsed for our analysis)  | USA  | Web-based  | Smoking cessation website   | Smokers, three established members of BecomeAnEX ("Integrators")  | Integrators   | Integrators did not receive any formal training in cessation treatment and were instructed not to address questions or comments specifically about cessation other than to encourage participants' efforts and direct them to relevant content and tools on the Web site. | NRT patch, gum or lozenge. Web-based baseline survey  | English                      | Smokers  | -   | BecomeAnEX.org                           | Smoking cessation at 6+ months follow-up  | No NRT                   | High  | Risk ratio: 1.19 (1.03, 1.37)  | RCT  | 1. Kahler CW, Cohn AM, Costantino C, Toll BA, Spillane NS, Graham AL. A Digital Smoking Cessation Program for Heavy Drinkers: Pilot Randomized Controlled Trial. JMIR Form Res. 2020;4(6):e7570. Published 2020 Jun 8. doi:10.2196/formative.7570<br>2. Graham AL, Zhao K, Papandonatos GD, et al. A prospective examination of online social network dynamics and smoking cessation. PLoS One. 2017;12(8):e0183655. Published 2017 Aug 23. doi:10.1371/journal.pone.0183655 | Amanda L. Graham, PhD, Schroeder Institute for Tobacco Research and Policy Studies, Truth Initiative, 900 G Street NW, Fourth Floor, Washington, DC 20001, USA. Telephone: 202-454-5938; Fax: 202-454-5785; E-mail: agraham@truthinitiative.org | National Cancer Institute  | -  |
| Rice et al., 2017           | Pardavila-Bello et al., 2015 | -                                | Tobacco control (SC)                   | 1. Intervention arm received a 50-minute motivational interview conducted by a nurse with online self-help material. The follow-up included a reinforcing email and group therapy  | Spain  | Face-to-face meeting   | Recruitment was over 2 campuses and 14 college schools. Methods used to recruit participants included announcements on university signboards, newspapers, website and emails inviting all undergraduate and masters students to participate | College student smokers, nurses.  | Nurses  | All sessions, in both settings and groups, were conducted by the same clinical nurse specialist who had 9 years of experience and training in smoking cessation.  | Announcements on university signboards, newspapers, website and emails. The self-help material available in their college moodle platform. Online self-help material focused on: (1) decisions; (2) moods; (3) social life; (4) smoking health effects; and (5) quitting. | Spanish                      | Smokers age 18 - 24 years, mean = 20.1                       | -   | Smoking cessation at 6+ months follow-up | The control group received brief advice (5 - 10 minutes) and a self-help pamphlet, Stop Smoking | Moderate                 | Risk ratio: 3.21 (1.52, 6.77)   | RCT  | 1. Pardavila-Bello MI, Canga-Armayor A, Dusco MI, Pueyo-Garrigues S, Pueyo-Garrigues M, Canga-Armayor N. Understanding how a smoking cessation intervention changes beliefs, self-efficacy, and intention to quit: a secondary analysis of a pragmatic randomized controlled trial. Transl Behav Med. 2019;9(1):58-66. 2. Pardavila-Bello MI, Ruiz-Canela M, Canga-Armayor N. Predictors of Smoking Cessation Among College Students in a Pragmatic Randomized Controlled Trial. Prev Sci. 2017;18(2):143-150. doi:10.1007/s11285-016-9736-1 | Navidad Canga Armayor, School of Nursing, University of Navarra, C/ Iruñlarrea, 1. Pamplona, Navarra C.P.: 31008, Spain. E-mail: ncanga@unav.es  | Funded by the María Egea Foundation, University of Navarra (Spain)  | -  |  |
| Rice et al., 2017           | Zwar et al., 2015            | -                                | Tobacco control (SC)                   | 1. GP encouraged all smokers to see Practice Nurse – face-to-face visit and then flexible package of ongoing support, incl. 3 further face-to-face visits and telephone support for participants who preferred that mode<br>2. Referral to quitline<br>3. GP usual care<br>Participants in all 3 groups encouraged to use pharmacotherapy  | Australia  | Face-to-face meeting, phone  | Recruited from general practices  | GP, practice nurse (PN), College student smokers, general nurses, trained research assistants, study staff, experienced smoking cessation counsellor. | GP, practice nurse (PN), trained research assistants, experienced smoking cessation counsellor. | Nurses had attended a 1-day training program where they were educated in the 5As approach to smoking cessation counselling  | Checklists for use by the nurses at each patient visit were provided as well as 'Quit kits' (a printed resource used by Quitlines nationally) for distribution to patients. Pharmacotherapy   | English                      | Smokers aged 18+   | -   | Smoking cessation at 6+ months follow-up | Usual care; Quitline  | Moderate                 | Risk ratio: 1.82 (1.09, 3.05); 4. Kim SS, Sitthisongkram S, Bernstein K, Fang H, Choi WS, Ziedonis D. A randomized controlled trial of a cluster randomised controlled trial of a videoconferencing smoking cessation intervention for Korean American women: preliminary findings. Int J Womens Health. 2016;8:453-462. Published 2016 Sep 7. doi:10.2147/IJWH.S109819 | Nicholas A Zwar, School of Public Health and Community Medicine, UNSW Australia, UNSW Sydney New South Wales 2052, Australia. E-mail: n.zwar@unsw.edu.au | Funding: Australian National Health and Medical Research Council Project Grant (568617).   | -  |   |  |  |

| Review                 | Paper                   | Metadata                           | Metadata                               | Intervention   | Intervention   | Intervention   | Intervention  | Intervention  | Intervention   | Intervention   | Intervention   | Intervention                 | Intervention   | Intervention   | Evidence                    | Evidence   | Evidence  | Evidence                                     | Evidence                          | Evidence  | Intervention  | Intervention  | Implementation  |  |
|------------------------|-------------------------|------------------------------------|--|--|--|--|---|---|--|--|--|------------------------------|--|--|-----------------------------|--|---|--|-----------------------------------|---|---|---|---|--|
|                        |                         | Name of the intervention           | Intervention program area              | Description of the intervention  | Geographic area  | Intervention delivery setting  | Recruitment   | Stakeholders involved in selecting and tailoring the intervention   | Professionals involved in delivering the intervention    | Intervention training  | Materials needed to deliver the intervention   | Intervention language        | Intervention target population                               | Direct cost of the intervention  | Intervention website        | Outcomes   | Control group   | Strength of the evidence                     | Effectiveness of the intervention | Types of research conducted on the intervention   | Scientific publications about the intervention  | Intervention developers   | Intervention development funder   | Scientific publications on implementation research                         |
|                        |                         | Full name(s) of the intervention   | Health topic focus of the intervention | Short description of the intervention; GIVE SOME EXAMPLES OF WHAT SHOULD BE COVERED (E.G. FREQUENCY, DURATION, MODE ETC); Include characteristics intervention target group (age, sex, ethnicity)  | Geographic area of the intervention, such as regions, cities, countries, practices; include community type (city/ rural etc) | Intervention setting, such as hospital, primary care office, dental office, school, etc. |   | Description which stakeholders (including patients) are involved in selecting and tailoring the intervention to the local context | Description which professionals deliver the intervention | Description of the training in the intervention needed before intervention is implemented  | Materials needed to deliver the intervention   | Language of the intervention | Short description of the intervention's target population(s) | Direct cost of the intervention, if the intervention needs to be purchased or licensed.  | Website of the intervention |  |   | Strength of the intervention's evidence base | Effectiveness of the intervention | Types of research that has been conducted on the intervention, such as effectiveness trials, implementation | List of articles published about the intervention, with links to each article   | Name of intervention developers and the name of their institutions  | Name of the funder who supported the development of the intervention  | List of articles published on implementation research on this intervention |
| Lancaster et al., 2017 | Chen et al., 2014       | -                                  | Tobacco control (SC)                   | Therapist: "Interventions provided by 2 doctors with experience of professional smoking cessation treatment."<br>1. Cognitive counselling, 20 mins at baseline and 9 calls > 10 mins at 1 - 4 wks, 6 wks, 8 wks, 3 - 5 m. Self help materials<br>2. Brief advice   | China  | Face-to-face meeting - Hospital  | Community volunteers and referrals from outpatient clinics  | Smokers with COPD and asymptomatic smokers with normal lung function., doctors  | Doctors  | Doctors with experience of professional smoking cessation treatment  | Self-help materials, St. George's Respiratory Questionnaire (SGRQ), Nicotine dependence assessed using the Fagerström Test for Nicotine Dependence (FTND).   | Chinese                      | Smokers av. age 50   | -  | -                           | Smoking cessation at 6+ months follow-up           | Brief advice  | High   | Risk ratio: 2.25 (1.13, 4.49)     | RCT   | 1. Zhou Z, Zhou A, Zhao Y, Chen P. Evaluating the Clinical COPD Questionnaire: A systematic review. <i>Respirology</i> . 2017;22(2):251-262. doi:10.1111/resp.12970<br>2. Liu C, Cheng W, Zeng Y, et al. Different Characteristics of Ex-Smokers and Current Smokers with COPD: A Cross-Sectional Study in China. <i>Int J Chron Obstruct Pulmon Dis</i> . 2020;15:1613-1619. Published 2020 Jul 7. doi:10.2147/COPD.S255028<br>3. Chen Z, Wasti B, Shang Y, et al. Different clinical characteristics of | Dr Ping Chen, Department of Internal Medicine, Division of Respiratory Disease, The Second Xiangya Hospital, Central South University, No. 139 Renming Road, Changsha, Hunan 410011, P.R. China E-mail: pingchen0731@sina.com | This study was supported by grants from the Chinese National Natural Science Foundation (nos. 81070039 and 81270100) and the Chronic Respiratory Diseases Research Fund of the Chinese Medical Association (no. 08020520130). |  |
| Lancaster et al., 2017 | Thankappan et al., 2013 | Quit Tobacco International Project | Tobacco control (SC)                   | 1. Physician advice<br>2. As 1, and counselling at each visit for 6 m; 4 x 30-min, baseline, 1, 3, 6 m, based on 5 As/5Rs<br>The intervention-2 group received an additional three diabetic specific tobacco counseling sessions (at first contact, at one month and at three months) lasting about 30 minutes session using the 5As (Ask, Advise, Assess, Assist and Arrange), and 5 Rs (Relevance, Risks, Rewards, Roadblocks and Repetition) from a non-doctor health professional.   | India  | Face-to-face meeting - Diabetes clinics  | Diabetic smokers attending clinic, not selected for readiness to quit. Using a computer generated random sequence with block size four, the patients were randomized equally into intervention-1 and intervention-2 groups. | Diabetic smokers, Therapist: trained non-physician counsellor   | Therapist: trained non-physician counsellor              | The doctors and diabetes educators selected to counsel patients in the study sites were initially given training on the harm of tobacco for diabetes patients including: 1) a review of epidemiological data on smoking as a diabetes risk factor, 2) complications strongly associated with smoking among those afflicted with diabetes, and 3) the mechanisms through which smoking contributes to vascular constriction and obstructed blood flow. Doctors and the counselors were also trained in basic brief intervention cessation skills. Doctors were instructed to ask all patients about their | Samples collected for cotinine, diabetes specific education materials, written consent, visual images of common diabetes complications exacerbated by smoking, educational materials on tobacco and diabetes developed by the QTI. | Hindi                        | Male diabetic smokers, av. age 53                            | -  | -                           | Smoking cessation at 6+ months follow-up           | Physician advice  | High   | Risk ratio: 4.14 (2.46, 6.98)     | RCT   | 1. Mini G, Nichter M, Thankappan K. Does increased knowledge of risk and complication of smoking on diabetes affect quit rate? Findings from a randomized controlled trial in Kerala, India. <i>Tob Use Insights</i> . 2014;7:27-30. Published 2014 Jul 31. doi:10.4137/TUI.S15583; 2. Thankappan KR, Mini GK, Hariharan M, Vijayakumar G, Sarma PS, Nichter M. Smoking cessation among diabetic patients in Kerala, India: 1-year follow-up results from a pilot randomized controlled trial.            | KR Thankappan kavumpurathu@yahoo.com 1 Achutha Menon Centre for Health Science Studies, Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum, Kerala, 695 011, India                                 | Grant from the Fogarty International Centre of the US National Institutes of Health (R01TW005969-01).   |  |
| Lancaster et al., 2017 | Kim et al., 2015        | -                                  | Tobacco control (SC)                   | 1. Culturally-tailored counselling: 8 x 40-min weekly sessions, TQD between 2nd and 4th<br>2. Minimal counselling: 8 x 10-min weekly sessions focusing on medication management<br>Pharmacotherapy: all participants received 8-week supply of nicotine patch  | USA  | Face-to-face Korean community  | Korean smokers wanting to quit. Participants were recruited by advertising the study in local Korean newspapers, on local Korean television and radio stations, and on online Korean websites.                              | Smokers, therapists   | Therapist: 1 of 2 Korean bilingual clinicians            | Tobacco treatment specialist training.   | Pharmacotherapy: all participants received 8-week supply of nicotine patch, written consent  | English                      | Korean smokers, av. age 50                                   | Irrespective of smoking status, participants were paid a \$20 gift certificate at baseline and 1-month follow-up and a \$40 gift certificate at each of the three follow-ups (post-quit 3, 6, and 12 months).                              | -                           | Smoking cessation at longest follow-up (12 months) | Minimal counselling: 8 x 10-min weekly sessions focusing on medication management   | High   | Risk ratio: 3.44 (1.5, 7.85)      | RCT   | 1. Kim SS, Fang H, Bernstein K, et al. Acculturation, Depression, and Smoking Cessation: a trajectory pattern recognition approach. <i>Tob Induc Dis</i> . 2017;15:33. Published 2017 Jul 24. doi:10.1186/s12971-017-0135-x<br>2. Kim SS. A Culturally Adapted Smoking Cessation Intervention for Korean Americans: Preliminary Findings. <i>J Transcult Nurs</i> . 2017;28(1):24-31. doi:10.1177/1043659615600765<br>3. Kim SS, Kim S, Gona PN. Determining Optimal Cutoffs for                          | Sun S Kim, Department of Psychiatry, University of Massachusetts Medical School, Worcester, MA, USA, sun.kim@umassmed.edu.  | This work was supported by the National Institute on Drug Abuse (NIDA), 5K23DA021243-02 to Dr. Kim) and partially by the NIDA (R01DA033323-01A1 to Dr. Fang).   |  |
| Taylor et al., 2017    | Burford et al., 2013    | -                                  | Tobacco control (SC)                   | The face simulation software intervention was a tailored and interactive Internet-based intervention as an adjunct to behavioural intervention, and was delivered over 1 brief session. In the intervention arm an Internet-based 3-dimensional age progression software package created a stream of aged images of faces from a standard digital photograph; the resulting aged image was adjusted to compare how the participant aged as a smoker versus as a non-smoker. Participants also received standard 2-minute smoking cessation advice from the pharmacist. | Australia  | Pharmacy   | Participants were recruited from 8 metropolitan community pharmacies around Perth city centre, Western Australia, when presenting to collect prescribed medications or over-the-counter medications.                        | Smokers, researcher, pharmacist   | Pharmacist, researcher                                   | -  | Internet-based APRIL Face Aging software, cotinine, nicotine dependence assessed via the Fagerström scale, questionnaire about smokers' willingness to pay (WTP) for the digital aging service.                                    | English                      | Smokers (18-30 y.o.)   | Cost of implementing the intervention was AUD 463, or the equivalent of AUD 5.79 per participant. The incremental cost-effectiveness ratio was AUD 46 per additional quitter, or the equivalent of AUD 74 per additional lifetime quitter. | -                           | Smoking cessation at 6 - 12 months                 | The control arm was a brief face-to-face non-internet-based, non-active control arm in which participants received standard 2-minute smoking cessation advice from the pharmacist | Moderate                                     | Risk ratio: 11 (1.45, 83.21)      | RCT   | 1. Burford O, Jiwa M, Carter O, Parsons R, Hendrie D. Internet-based photoaging within Australian pharmacies to promote smoking cessation: randomized controlled trial. <i>J Med Internet Res</i> . 2013;15(3):e64. Published 2013 Mar 26. doi:10.2196/jmir.2337  | Oksana Burford, BPharm Curtin Health Innovation Research Institute School of Pharmacy Curtin University GPO Box U1987 Perth, 6845 Australia Phone: 61 8 9266 7201 Fax: 61 8 9266 2769 Email: O.Burford@curtin.edu.au          | No information provided   |  |



| Review                   | Paper                            | Metadata                         | Metadata                               | Intervention   | Intervention   | Intervention   | Intervention   | Intervention  | Intervention  | Intervention   | Intervention                                 | Intervention                      | Intervention   | Intervention  | Evidence                    | Evidence                       | Evidence  | Evidence                                     | Evidence  | Evidence  | Intervention   | Intervention   | Implementation   |  |
|--------------------------|----------------------------------|----------------------------------|--|--|--|--|--|---|---|--|--|-----------------------------------|--|---|-----------------------------|--------------------------------|---|--|---|---|--|--|--|--|
|                          |                                  | Name of the intervention         | Intervention program area              | Description of the intervention  | Geographic area  | Intervention delivery setting  | Recruitment  | Stakeholders involved in selecting and tailoring the intervention   | Professionals involved in delivering the intervention                 | Intervention training  | Materials needed to deliver the intervention | Intervention language             | Intervention target population   | Direct cost of the intervention   | Intervention website        | Outcomes                       | Control group   | Strength of the evidence                     | Effectiveness of the intervention   | Types of research conducted on the intervention   | Scientific publications about the intervention   | Intervention developers  | Intervention development funder  | Scientific publications on implementation research                         |
|                          |                                  | Full name(s) of the intervention | Health topic focus of the intervention | Short description of the intervention; GIVE SOME EXAMPLES OF WHAT SHOULD BE COVERED (E.G. FREQUENCY, DURATION, MODE ETC); include characteristics intervention target group (age, sex, ethnicity)  | Geographic area of the intervention, such as regions, cities, countries, practices; include community type (city/ rural etc) | Intervention setting, such as hospital, primary care office, dental office, school, etc. |  | Description which stakeholders (including patients) are involved in selecting and tailoring the intervention to the local context | Description which professionals deliver the intervention              | Description of the training in the intervention needed before intervention is implemented                          | Materials needed to deliver the intervention | Language of the intervention      | Short description of the intervention's target population(s)   | Direct cost of the intervention, if the intervention needs to be purchased or licensed. | Website of the intervention |                                |   | Strength of the intervention's evidence base | Effectiveness of the intervention   | Types of research that has been conducted on the intervention, such as effectiveness trials, implementation | List of articles published about the intervention, with links to each article  | Name of intervention developers and the name of their institutions   | Name of the funder who supported the development of the intervention   | List of articles published on implementation research on this intervention |
| Chamberlain et al., 2017 | Tappin et al., 2015              | -                                | Tobacco control (SC)                   | The incentives group was offered the same routine support plus up to £400 of shopping vouchers (Love2shop) for engaging with stop smoking services or for quitting during pregnancy, or both. Intervention participants received £50 of vouchers if they attended their face-to-face appointment and set a quit date. Confirmed quitters were sent a further £50 voucher. 12 weeks after stopping smoking, women in the incentives group who were quitters at 4 weeks were contacted by stop smoking services (routine practice) and, if confirmed to be abstinent CO breath test result < 10 ppm), were sent a £100 voucher. A research nurse visited self-reported quitters to collect a CO level, and saliva and urine for cotinine estimation. Women in the incentives group who were confirmed as abstinent by the CO breath test (< 10 ppm) were sent a final £200 voucher.  | UK   | NHS stop smoking services  | Women were eligible if they were smokers with an exhaled CO level of at least 7 ppm, aged 16 years or more, less than 24 weeks pregnant, resident in NHS Greater Glasgow and Clyde, and able to understand and speak English for telephone consent. Women were recruited through NHS stop smoking services.  | Pregnant women, research nurse, pharmacist, stop smoking service's advisor  | Research nurse, pharmacist, stop smoking service's advisor            | Fagerstrom score, cotinine test, free NRT,   | English                                      | Pregnant women smokers            | The incentives group was offered the same routine support plus up to £400 of shopping vouchers plus up to £50 of shopping support and set a quit date. Confirmed quitters were sent a further £50 voucher. If confirmed to be abstinent CO breath test result < 10 ppm), were sent a £100 voucher. Women in the incentives group who were confirmed as abstinent by the CO breath test (< 10 ppm) were sent a final £200 voucher.  | -   | -                           | Abstinence in late pregnancy   | The control group was offered routine specialist pregnancy support by the stop smoking services, which included the offer of a face-to-face appointment to discuss smoking cessation and, for those who attended and set a quit date, the offer of free NRT for 10 weeks provided by pharmacy services, and 4 weekly support phone calls. | Moderate                                     | Risk ratio: 2.63 (1.72, 4.01)   | RCT   | 1. Sinclair L, McFadden M, Tilbrook H, et al. The smoking cessation in pregnancy incentives trial (CPIT): study protocol for a phase III randomised controlled trial. <i>Trials</i> . 2020;21(1):183. Published 2020 Feb 14. doi:10.1186/s13063-019-4042-8; 2. Tappin D, Sinclair L, Kee F, et al. Effect of financial voucher incentives provided with UK stop smoking services on the cessation of smoking in pregnant women (CPIT III): systematic                          | D Tappin david.tappin@glasgow.ac.uk  | The primary funder was the Chief Scientist Office, Scottish Government. Two additional main funders were the Glasgow Centre for Population Health and the Education and Research Endowment Fund of the Director of Public Health Greater Glasgow and Clyde health board. Additional funders were the Yorkhill Children's Charity and the Royal Samaritan Endowment Fund. |  |
| Chamberlain et al., 2017 | Higgins et al., 2014 (AvB & AvC) | -                                | Tobacco control (SC)                   | Intervention 1: Usual contingent voucher condition (CV)—Vouchers redeemable for retail items were earned contingent on submitting breath CO specimens ≤ 6 ppm during the initial 5 days of the cessation effort. Beginning in Week 2, vouchers were delivered contingent on urine-cotinine levels ≤ 80 ng/mL, a criterion that required a longer duration of smoking abstinence than breath CO Voucher delivery was independent of self-reported smoking status and based exclusively on meeting the biochemical-verification criterion. Unauthorised failure to complete a scheduled assessment was treated as a positive test result consistent with an ITT approach. Vouchers began at \$6.25, and escalated by \$1.25 per consecutive negative specimen to a maximum of \$45.00, where they remained barring positive test results or missed abstinence monitoring visits. Positive test results or missed visits reset the voucher value back to the original low value, but 2 consecutive negative tests restored the value to the pre-reset level. Intervention 2: Revised contingent voucher condition (RCV)—The same voucher schedule as outlined above was followed in this RCV condition except that potential earnings were rescheduled moving \$206.25 forward as | USA  | Women, Infants, and Children (WIC) office  | Women were eligible if they smoke in the past 7 days and have a gestational age ≤ 25 weeks. They must reside within the county in which clinic is located, plan to remain in the geographical area for ≥ 6 months following delivery, and English speaking. Women were recruited from obstetric practices and the Women, Infants, and Children (WIC) office. | Pregnant women  | Healthcare staff members  | Questionnaires examining sociodemographic smoking, and psychiatric characteristics, and breath and urine specimens | English                                      | Pregnant women smokers            | Control group (A): Vouchers were delivered independent of smoking status. Voucher values were \$15.00 per visit antepartum and \$20.00 per visit postpartum, values that resulted in payment amounts comparable to average earnings in the CV condition in prior trials. Intervention 1 (B): Usual contingent voucher condition (CV)—Vouchers redeemable for retail items. Beginning in Week 2, vouchers were delivered contingent on urine-cotinine levels ≤ 80 ng/mL, a criterion that | -   | -                           | Abstinence in late pregnancy   | Vouchers were delivered independent of smoking status. Voucher values were \$15.00 per visit antepartum and \$20.00 per visit postpartum, values that resulted in payment amounts comparable to average earnings in the CV condition in prior trials (Heil et al., 2008). All else was the same as in the CV and RCV conditions.          | High   | AvB Risk ratio : 160.2 (101.87, 218.53); AvC Risk ratio: 96.3 (37.01, 155.59) | RCT   | 1. Lopez AA, Higgins ST, Skelly JM. EMects of smoking cessation on postpartum depression. <i>Drug and Alcohol Dependence</i> 2015;146:184-5. 2. Lopez AA, Skelly JM, Higgins ST. Financial incentives for smoking cessation among depression-prone pregnant and newly postpartum women: EMects on smoking abstinence and depression ratings. <i>Nicotine and Tobacco Research</i> 2014;17(4):455-62. 3. Lopez AA, Skelly JM, White TJ, Higgins ST. Does impulsiveness moderate | Stephen T. Higgins, Department of Psychiatry, UHC Campus, Rm 3100B Old Hall, University of Vermont, Burlington, VT 05401, Phone #: 802-656-9615, Fax#: 802-656-9628, Stephen.Higgins@uvm.edu.          | This research was supported by National Institute of Health (NIH) Research Awards R01DA014028 & R01HD075669, Institutional Training Grant T32DA007242.   |  |
| Stead et al., 2016       | Lee et al., 2015                 | -                                | Tobacco control (SC)                   | Brief counselling (<5 mins) by the preadmission nurse, 6 weeks nicotine patch, S-H materials, referral to quitline, at least 4 quitline calls offered (est duration 31-90).  | Canada   | Hospital preadmission clinic   | Elective surgery patients screened at pre-admission clinic appointment then contacted via written letter inviting them to participate.   | Elective surgery patients   | Preadmission nurse brief counselling, specialist helpline counsellors | Nicotine patch, S-H materials  | English                                      | Elective surgery patients smokers | -  | -   | -                           | Abstinence: 7 day PP at 1 year | Usual care  | High   | Risk ratio: 3.4 (1.31, 8.79)  | RCT   | 1. Lee SM, Landry J, Jones PM, Buhrmann O, Morley-Forster P. The effectiveness of a perioperative smoking cessation program: A randomized clinical trial. <i>Anesthesia and Analgesia</i> 2013;117(3):605-13. [CENTRAL: 876186; CRS:940012600000174; EMBASE: 2013565919; PUBMED: 23868890]   | Susan M. Lee, MD, FRCP, Department of Anesthesia and Perioperative Care, University of California, San Francisco, 521 Parnassus Ave., San Francisco, CA 94143. Address e-mail to suze.lee@utoronto.ca. | Department of Anesthesia and Perioperative Medicine, University of Western Ontario—internal research funds.  |  |

| Review             | Paper                      | Metadata   | Metadata                               | Intervention   | Intervention   | Intervention   | Intervention  | Intervention  | Intervention   | Intervention   | Intervention                                 | Intervention                 | Intervention   | Intervention  | Evidence  | Evidence                         | Evidence  | Evidence                                     | Evidence                          | Evidence  | Intervention   | Intervention   | Implementation  |  |
|--------------------|----------------------------|--|--|--|--|--|---|---|--|--|--|------------------------------|--|---|---|----------------------------------|---|--|-----------------------------------|---|--|--|---|--|
|                    |                            | Name of the intervention   | Intervention program area              | Description of the intervention  | Geographic area  | Intervention delivery setting  | Recruitment   | Stakeholders involved in selecting and tailoring the intervention   | Professionals involved in delivering the intervention    | Intervention training  | Materials needed to deliver the intervention | Intervention language        | Intervention target population                                   | Direct cost of the intervention   | Intervention website  | Outcomes                         | Control group   | Strength of the evidence                     | Effectiveness of the intervention | Types of research conducted on the intervention   | Scientific publications about the intervention   | Intervention developers  | Intervention development funder   | Scientific publications on implementation research                         |
|                    |                            | Full name(s) of the intervention   | Health topic focus of the intervention | Short description of the intervention; GIVE SOME EXAMPLES OF WHAT SHOULD BE COVERED (E.G. FREQUENCY, DURATION, MODE ETC); include characteristics intervention target group (age, sex, ethnicity)  | Geographic area of the intervention, such as regions, cities, countries, practices; include community type (city/ rural etc) | Intervention setting, such as hospital, primary care office, dental office, school, etc. |   | Description which stakeholders (including patients) are involved in selecting and tailoring the intervention to the local context | Description which professionals deliver the intervention | Description of the training in the intervention needed before intervention is implemented  | Materials needed to deliver the intervention | Language of the intervention | Short description of the intervention's target population(s)     | Direct cost of the intervention, if the intervention needs to be purchased or licensed.   | Website of the intervention                                 |                                  |   | Strength of the intervention's evidence base | Effectiveness of the intervention | Types of research that has been conducted on the intervention, such as effectiveness trials, implementation   | List of articles published about the intervention, with links to each article  | Name of intervention developers and the name of their institutions   | Name of the funder who supported the development of the intervention  | List of articles published on implementation research on this intervention |
| Stead et al., 2016 | Rigotti et al., 2014       | The Helping HAND (Hospital-initiated Assistance for Nicotine Dependence) | Tobacco control (SC)                   | Choice of free medication for up to 90 days. 30 day supply at discharge. Interactive voice response calls at 2, 14, 30, 60, & 90 days, encouraged to request counsellor call back.   | USA  | Hospital   | Inpatients planning to quit smoking after discharge and willing to use medication   | Smokers, Specialist counsellors   | Specialist counsellors, preadmission nurse,              | -  | Cotinine test, smoking cessation brochures,  | English                      | Hospitalized daily smokers                                       | The cost-per-patient would be \$354 (Year 1) and \$108 (subsequent years).  | -   | Abstinence at 6 months (PP)      | Advice on post discharge medication and recommendation to call quitline. Physicians advised to prescribe medication | High   | Risk ratio: 2.56 (1.59, 4.13)     | RCT   | 1. Japuntich SJ, Regan S, Viana J, Tymoszcuk J, Reyem M, Levy DE, et al. Comparative effectiveness of post-discharge interventions for hospitalized smokers: study protocol for a randomized controlled trial. <i>Trials</i> 2012;13:124. [CENTRAL:863876; CRS: 9400107000000040 ; PUBMED: 22852832] 2. Rigotti NA, Japuntich S, Regan S, Kelley JH, Chang Y, Reyem M, et al. Promoting smoking cessation after hospital discharge: The Helping Hand randomized controlled | Nancy A. Rigotti, MD, Tobacco Research and Treatment Center, Massachusetts General Hospital, 50 Staniford St., #914, Boston, MA 02114, Phone: 617 724 3548, Fax: 617 724 6774, rigotti@partners.org        | NIH/NHLBI grants #RC1 HL099668 and #K24 HL004440.   |  |
| Stead et al., 2016 | Haas et al., 2015          | Project CLIQ (Community Link to Quit)                                    | Tobacco control (SC)                   | Intervention: telephone-based motivational counselling (up to 4 calls, total 75-100 minutes over 8-10 weeks), access to free nicotine patches 6 weeks, referrals to community resources to address socio-contextual mediators of tobacco use, coordination with primary care clinician | USA  | Primary care practices   | Electronic health records used to identify low SES smokers who had visited a clinic in previous month, recruited via IVR system, not explicitly selected for motivation but 77% planning to quit in 30 days | Smokers, Specialists  | Specialists  | -  | Electronic health records, nicotine patches  | English                      | Low-SES smokers  | Participants in both the intervention and the control group who completed the outcome assessment were eligible for a monthly drawing for one of two \$100 gift cards. | <a href="https://helpsteps.com/">https://helpsteps.com/</a> | Abstinence: 7 day PP at 9 months | Usual care  | High   | Risk ratio: 2.19 (1.42, 3.37)     | RCT   | Levy DE, Klinger EV, Linder JA, et al. Cost-Effectiveness of a Health System-Based Smoking Cessation Program. <i>Nicotine Tob Res.</i> 2017;19(12):1508-1515. doi:10.1093/ntr/ntw243   | Jennifer S. Haas, MD, MSc, Division of General Medicine and Primary Care, Brigham and Women's Hospital 1620 Tremont Street, Boston, MA 02120, Tel (617) 525-6652 / Fax (617) 732-7072, jhaas@partners.org. | This work was conducted with support from The Lung Cancer Disparities Center at the Harvard School of Public Health (National Cancer Institute Award # P50 CA148596) and the Harvard Catalyst   The Harvard Clinical and Translational Science Center (NIH Grant #1 UL1 RR 025758-01 and financial contributions from participating |  |
| Stead et al., 2016 | Perez-Tortosa et al., 2015 | Intensive advice in diabetic patients in primary care (ITADI)            | Tobacco control (SC)                   | Intensive, individualized intervention using motivational interview, therapies and medications based on stage of change. Up to 8 visits over 12 months for those in preparation/action stages. Median visits 4 (2-6), contact time 100 mins  | Spain  | Primary care setting   | Diabetic patients during visits, or were selected by simple random sampling from a list of diabetic smokers. Not selected for motivation  | Primary care teams  | Provider: primary care teams,                            | The professionals in the intervention group received a full day specific training program that consisted of a motivational interview workshop and a pharmacological treatment workshop to quit smoking. Both workshops were focused on diabetic smokers and were taught by trained experts. They also were trained in the dynamics of the follow-up visits according to the Prochaska and DiClemente TIM and in how to use the electronic data collection systems. Professionals in the control group attended a practical training session that | Medication                                   | Spanish                      | Diabetic patients smokers, aged over 14 but predominantly adults | -   | Abstinence: continued abstinence at 1 year                  | Usual care                       | High  | 1.45 (1.09, 1.94)                            | RCT                               | 1. Roig L, Perez S, Prieto G, Martin C, Advani M, Armengol A, et al. Cluster randomized trial in smoking cessation with intensive advice in diabetic patients in primary care. <i>ITADI Study.</i> <i>BMC Public Health</i> 2010;10:58. | Institut Catala de la Salut (ICS), Centre d'Atencio Prima'ria La Llagosta, Carrer Vic s/n, E-08120 La Llagosta, 08120 Barcelona, Spain. Tel.: +34 93 5749810; fax: +34 93 5749811.   | The project received the financial support of Instituto de Salud Carlos III, Madrid, Spain (grant ETS, 2008).  |   |  |

| Source              | Paper                     | Metadata   | Metadata   | Intervention   | Intervention  | Intervention  | Intervention   | Intervention  | Intervention  | Intervention   | Intervention  | Intervention                    | Intervention  | Intervention   | Evidence  | Evidence  | Evidence   | Evidence   | Evidence  | Evidence  | Intervention   | Intervention   | Implementation   |  |
|---------------------|---------------------------|--|--|--|---|---|--|---|---|--|---|---------------------------------|---|--|---|---|--|--|---|---|--|--|--|--|
|                     |                           | Name of the intervention   | Intervention program area  | Description of the intervention  | Geographic area   | Intervention delivery setting   | Recruitment  | Stakeholders involved in selecting and tailoring the intervention   | Professionals involved in delivering the intervention                               | Intervention training  | Materials needed to deliver the intervention  | Intervention language           | Intervention target population  | Direct cost of the intervention  | Intervention website  | Outcomes  | Control group  | Strength of the evidence   | Effectiveness of the intervention   | Types of research conducted on the intervention   | Scientific publications about the intervention   | Intervention developers  | Intervention development funder  | Scientific publications on implementation research                         |
|                     |                           | Full name(s) of the intervention   | Health topic focus of the intervention   | Short description of the intervention; GIVE SOME EXAMPLES OF WHAT SHOULD BE COVERED (E.G. FREQUENCY, DURATION, MODE ETC); Include characteristics intervention target group (age, sex, ethnicity)  | Geographic area of the intervention, such as regions, cities, countries, practices.; include community type (city/ rural etc) | Intervention setting, such as hospital, primary care office, school, etc. |  | Description which stakeholders (including patients) are involved in selecting and tailoring the intervention to the local context | Description which professionals deliver the intervention                            | Description of the training in the intervention needed before intervention is implemented            | Materials needed to deliver the intervention  | Language of the intervention    | Short description of the intervention's target population(s)  | Direct cost of the intervention, if the intervention needs to be purchased or licensed.              | Website of the intervention   |   |  | Strength of the intervention's evidence base   | Effectiveness of the intervention   | Types of research that has been conducted on the intervention, such as effectiveness trials, implementation studies, etc.   | List of articles published about the intervention, with links to each article  | Name of intervention developers and the name of their institutions   | Name of the funder who supported the development of the intervention   | List of articles published on implementation research on this intervention |
|                     |                           | This field should contain the complete name of the intervention and, if needed, an English-language translation of the name of the intervention. | Categorical: 7 lifestyles (Tobacco and second-hand smoke exposure, Alcohol consumption, Physical activity, HPV infection, UV and sun exposure, Diet) |  | All relevant geographic areas should be listed.   | All relevant settings should be listed.                                   |  | All involved stakeholders should be listed.   | All involved professionals, including non-clinical professionals, should be listed. |  | All materials should be listed. Links to existing materials should be included if available.  | All languages should be listed. |   |  |   |   | Review GRADE   | WE DESCRIBE EVIDENCE IN TERMS OF ODDS RATIOS R OTHER MEASURES OF ASSOCIATION, ONLY EFFECTIVE INTERVENTIONS ARE INCLUDED, BUT THE EVIDENCE HAS TO BE DESCRIBED  | All types should be listed.   | All articles should be listed.  | Names and affiliations of 1-2 intervention developers. Contact information, such as an email address or phone number, is also needed from at least one member of the intervention team.  | This field should contain the complete name of the funding organization and, if needed, an English-language translation of the name.   | All articles should be listed (There might be none, or it might be difficult to draw a line between effectiveness studies and implementation studies)  |  |
| Implementation site | Wyke et al., 2019         | European Fans in Training (EuroFIT)  | Physical activity - Diet   | The EuroFIT program was designed to support men aged 30–65 years with a self-reported body mass index (BMI) > 27 kg/m <sup>2</sup> to become more physically active and less sedentary; improve their diets; and maintain these changes over the long term. Professional football club community coaches deliver 12 weekly, face-to-face 90-min sessions to groups of 15–20 men. One reunion session is held 6–9 months after baseline. The sessions are held in club stadia and/or the clubs training facilities to foster an "insider" view, increased physical and symbolic proximity to the club, and hence an enhanced sense of relatedness to the club.  | The Netherlands, Norway, Portugal and the UK  | Professional football club  | Football clubs were selected by contacting clubs known by the study team to be likely to be interested in taking part. Football clubs led recruitment of participants using emailed invitations to fans, the club website, social media posts, features in local press, and match-day recruitment.   | Coaches, football fans  | Professional football club community coaches  | Trained club coaches over 2 days to deliver programme content in an appropriate and accessible style | Coach delivery manuals. Participants receive a manual including information and self-monitoring forms; a novel device, the SitFIT to allow self-monitoring of daily steps and non-sedentary behaviours (time spent upright/walking); and access to a new app-based game (MatchFIT) to promote social support and interaction around physical activity outside EuroFIT sessions. | Multiple languages              | Men aged 30–65 years with a self-reported body mass index (BMI) > 27 kg/m <sup>2</sup>  | Club store voucher for the equivalent of €25 at post-programme and €75 at the 12-month measurements. | -   | Step counts at 12 months                          | No control group   | -  | 678 steps/day (97.5% CI, 309–1.048; p < 0.001) in favor of the intervention   | RCT   | 1. Wyke S, Bunn C, Andersen E, Silva MN, van Nassau F, McSkimming P, et al. (2019) The effect of a programme to improve men's sedentary time and physical activity: The European Fans in Training (EuroFIT) randomised controlled trial. PLoS Med 16(2): e1002736<br>2. Bunn, C., Palmer, V., Chng, N. R., Andersen, E., Gray, C. M., Hunt, K., ... & Wyke, S. (2023). How European Fans in Training (EuroFIT), a lifestyle change program for men delivered in football clubs, achieved its effect. | Sally Wyke Department of Nursing, Glasgow Caledonian University, Glasgow, United Kingdom * sally.wyke@glasgow.ac.uk  | This project has received funding from the European Union's Seventh Framework Program for research, technological development, and demonstration under grant agreement number 602170. The Health Services Research Unit, University of Aberdeen, receives core funding from the Chief Scientist Office of the Scottish Government Health Directorates. |  |
| Implementation site | Garcia-Lunar et al., 2022 | The TANSNIP (Trans-Atlantic Network to Study Stepwise Noninvasive imaging as a Tool for Cardiovascular Prognosis & Prevention) Program.          | Physical activity - Diet   | The TANSNIP project consists of two parallel randomized controlled trials (RCTs) investigating the (cost-) effectiveness and process evaluation of a 30-month worksite-based lifestyle program aimed to promote cardiovascular health of employees (N>1000 participants) of Banco Santander Headquarter (Madrid, Spain) Employees in the workplace-based lifestyle intervention program will receive 12 personalized lifestyle counseling sessions spread over the three-year period, a Fitbit personal fitness monitor to self-monitor physical activity, and an Ergotron sit-stand station. Data will be collected at baseline, at year one, at year two, and at year three. The primary outcome measure is the FUSTER-BEWAT score, a newly developed score, which consists of blood pressure, physical activity, sedentary behavior, body mass index, fruit and vegetable consumption and smoking. The researchers will also measure secondary outcomes such as changes in lifestyle, smoking, body weight, diet, vitality and quality of life, and risk factor profiles, as well as changes in blood biomarkers, and work-related outcomes such as work productivity and absenteeism. The researchers hypothesize that the level of compliance with the lifestyle intervention will be higher in the group with high imaging-defined CV risk, compared to those with low imaging-defined CV risk. They will also review the cost-effectiveness of the intervention, compared | Spain   | Banco Santander Headquarter (Madrid, Spain)                               | The population for the TANSNIP-PESA consists of people 40 to 60 years old and who are employees from a Spanish corporation. Employees will be divided into two groups. One group will comprise employees with high imaging-defined CV risk and a second group will comprise those with low imaging-defined CV risk. In both groups, participants will be randomized to either receive the comprehensive three-year worksite lifestyle intervention or standard occupational health care. | Employees, researchers, psychologists   | Psychologist  |  | Psychal activity tracker, sit-stand workstation   | Spanish                         | People 40 to 60 years old and who are employees from a Spanish corporation.   | -  | Fuster-BEWAT score (Blood pressure, Exercise, Weight, Alimentation, and Tobacco) follow-up Years 1–3. | Standard occupational health care                 | -  | At Year 1, the score improved significantly in intervention participants compared with controls [estimate 0.83 (95% CI 0.52–1.15) points]. Over the 3-year period, the intervention was effective in participants having low baseline SA [0.61 (95% CI 0.30–0.93) points] but not in those with high baseline SA [0.19 (95% CI –0.26 to 0.64) points]. | RCT   | 1. Garcia-Lunar, I., van der Ploeg, H. P., Fernández Alvira, J. M., van Nassau, F., Castellano Vázquez, J. M., van der Beek, A. J., ... & Fuster, V. (2022). Effects of a comprehensive lifestyle intervention on cardiovascular health: the TANSNIP-PESA trial. European heart journal, 43(38), 3732-3745. | Valentin Fuster, 1Centro Nacional de Investigaciones Cardiovasculares (CNIC), Madrid, Spain, Tel: +34 91 4531200, Fax: +34 91 4531240, Email: vfuster@cnic.es  | TANSNIP-PESA is funded by Fundación Centro Nacional de Investigaciones Cardiovasculares (CNIC) Carlos III through an Investigator-initiated Study grant to Icahn School of Medicine from AstraZeneca. The PESA study is co funded by the CNIC and Banco Santander. The study also received funding from the Instituto de Salud Carlos III (PI15/02019) and the European Regional Development Fund (ERDF) 'A way to make Europe'. The CNIC is supported by the Instituto de Salud |  |  |
| Implementation site | Tappin et al., 2022       | CPIT III (Cessation in Pregnancy Incentives Trial phase 3)   | Tobacco control (SC)   | Participants in the intervention group were offered support from standard stop smoking services, in addition to a financial voucher up to the value of £400 as an incentive for engaging with the stop smoking services and/or stopping smoking during pregnancy.  | UK  | Smoking services  | Pregnant women were recruited from seven UK stop smoking services serving maternity hospitals in Scotland, Northern Ireland, and England.  | Pregnant smokers, Stop-smoking staff (trial staff and call centre staff)  | Stop-smoking staff (trial staff and call centre staff)                              |  | Free nicotine replacement therapy (NRT), carbon monoxide test, saliva for biochemical verification, poster and information sheet  | English                         | Pregnant women (age ≥16 years) who self-reported as being smokers (at least one cigarette in the past week), less than 24 weeks' gestation. | Financial voucher up to the value of £400.   | -   | Self-reported smoking cessation in late pregnancy | Participants in the control group were offered standard stop smoking services including counselling, and the offer of free nicotine replacement therapy (NRT). | -  | 126 (27%) of 471 participants stopped smoking from the intervention group and 58 (12%) of 470 from the control group (adjusted odds ratio 2.78 (1.94 to 3.97) P<0.001). | RCT   | 1. Tappin D, Sinclair L, Kee F, McFadden M, Robinson-Smith L, Mitchell A et al. Effect of financial voucher incentives provided with UK stop smoking services on the cessation of smoking in pregnant women (CPIT III): pragmatic, multicentre, single blinded, phase 3, randomised controlled trial BMJ 2022; 379 :e071522 doi:10.1136/bmj-   | D Tappin, david.tappin@glasgow.ac.uk, (ORCID 0000-0001-8914-055X)  | Funded by Cancer Research UK (C48006_A20863); Chief Scientist Office, Scottish Government (HIPS_16_1); HSC Public Health Agency Northern Ireland (NI; SM/R/22); Health and Social Care R&D Division NI Opportunity-Led Research Award (COM/5352/17); Chest Heart and Stroke Northern Ireland 2017_09; Scottish Cot Death Trust; Lullaby Trust 272.     |  |

| Source              | Paper                 | Metadata   | Metadata   | Intervention  | Intervention  | Intervention   | Intervention  | Intervention  | Intervention  | Intervention   | Intervention   | Intervention                    | Intervention   | Intervention   | Evidence                    | Evidence  | Evidence                                  | Evidence  | Evidence   | Evidence  | Intervention  | Intervention  | Implementation  |  |
|---------------------|-----------------------|--|--|---|---|--|---|---|---|--|--|---------------------------------|--|--|-----------------------------|---|---|---|--|---|---|---|---|--|
|                     |                       | Name of the intervention   | Intervention program area  | Description of the intervention   | Geographic area   | Intervention delivery setting  | Recruitment   | Stakeholders involved in selecting and tailoring the intervention   | Professionals involved in delivering the intervention                               | Intervention training  | Materials needed to deliver the intervention   | Intervention language           | Intervention target population   | Direct cost of the intervention  | Intervention website        | Outcomes  | Control group                             | Strength of the evidence  | Effectiveness of the intervention  | Types of research conducted on the intervention   | Scientific publications about the intervention  | Intervention developers   | Intervention development funder   | Scientific publications on implementation research                         |
|                     |                       | Full name(s) of the intervention   | Health topic focus of the intervention   | Short description of the intervention; GIVE SOME EXAMPLES OF WHAT SHOULD BE COVERED (E.G. FREQUENCY, DURATION, MODE ETC); Include characteristics intervention target group (age, sex, ethnicity)   | Geographic area of the intervention, such as regions, cities, countries, practices.; include community type (city/ rural etc) | Intervention setting, such as hospital, primary care office, dental office, school, etc. |   | Description which stakeholders (including patients) are involved in selecting and tailoring the intervention to the local context | Description which professionals deliver the intervention                            | Description of the training in the intervention needed before intervention is implemented  | Materials needed to deliver the intervention   | Language of the intervention    | Short description of the intervention's target population(s)   | Direct cost of the intervention, if the intervention needs to be purchased or licensed.  | Website of the intervention |   |   | Strength of the intervention's evidence base  | Effectiveness of the intervention  | Types of research that has been conducted on the intervention, such as effectiveness trials, implementation studies, etc. | List of articles published about the intervention, with links to each article   | Name of intervention developers and the name of their institutions  | Name of the funder who supported the development of the intervention  | List of articles published on implementation research on this intervention |
|                     |                       | This field should contain the complete name of the intervention and, if needed, an English-language translation of the name of the intervention. | Categorical: 7 lifestyles (Tobacco and second-hand smoke exposure, Alcohol consumption, Physical activity, HPV infection, UV and sun exposure, Diet) |   | All relevant geographic areas should be listed.   | All relevant settings should be listed.  |   | All involved stakeholders should be listed.   | All involved professionals, including non-clinical professionals, should be listed. |  | All materials should be listed. Links to existing materials should be included if available. | All languages should be listed. |  |  |                             |   | Review GRADE                              | WE DESCRIBE EVIDENCE IN TERMS OF ODDS RATIOS R OTHER MEASURES OF ASSOCIATION, ONLY EFFECTIVE INTERVENTIONS ARE INCLUDED, BUT THE EVIDENCE HAS TO BE DESCRIBED | All types should be listed.  | All articles should be listed.  | Names and affiliations of 1-2 intervention developers. Contact information, such as an email address or phone number, is also needed from at least one member of the intervention team.   | This field should contain the complete name of the funding organization and, if needed, an English-language translation of the name.  | All articles should be listed (There might be none, or it might be difficult to draw a line between effectiveness studies and implementation studies)   |  |
| Implementation site | Hunt et al., 2014     | Football Fans in Training (FFIT and FFIT for Women)  | Physical activity - Diet   | 12 week, group-based programme delivered by community coaching staff within professional football clubs in Scotland. Either men only groups or women only groups.   | Scotland  | Professional football clubs in Scotland  | The recruitment strategy consisted of club-based recruitment (eg, club websites, in-stadiums advertising, and FFIT recruitment staff approaching potentially eligible men on match days), media coverage (eg, local and national newspapers, BBC Scotland, and independent radio), and other strategies (eg, staff emails through employers and word-of-mouth). Men were invited to contact the research team by SMS text, email, or telephone to register interest and self-report weight, height, and date of birth | Football fans, coaching staff   | Coaching staff  | Community coaching staff employed by clubs, trained over 2 days by the research team   | -  | English                         | Men/women with overweight/obesity aged 35-64 years   | 20/40€ club shop voucher and travel expenses   | -                           | Weight loss at 12 months  | No control group                          | -   | The mean difference in weight loss between groups, adjusted for baseline weight and club, was 4.94 kg (95% CI 3.95-5.94) and percentage weight loss, similarly adjusted, was 4.36% (3.64-5.08), both in favour of the intervention (p<0.0001).   | RCT   | 1. Hunt, Kate, et al. "A gender-sensitised weight loss and healthy living programme for overweight and obese men delivered by Scottish Premier League football clubs (FFIT): a pragmatic randomised controlled trial." The Lancet 383.9924 (2014): 1211-1221.<br>2. Hunt, K., Gray, C.M., Maclean, A. et al. Do weight management programmes delivered at professional football clubs attract and engage high risk men? A mixed-methods study. BMC Public Health 14: 50       | Prof Sally Wyke, Institute of Health Research Public Health Research (NIHR PHR) Programme (project number 09/3010/06). KH and AM are funded by the Medical Research Council (5TK50 / 25605200-68094).   | This project was funded by the National Institute for Health Research Public Health Research (NIHR PHR) Programme (project number 09/3010/06). KH and AM are funded by the Medical Research Council (5TK50 / 25605200-68094).   |  |
| Implementation site | Blankers et al., 2011 | Jellinek Online Self-help  | Alcohol - Tobacco control  | With Jellinek Online Self-help, individuals can work on changing their substance use through online self-management. The program is free, anonymous, and suitable for those engaging in risky alcohol, tobacco, cannabis or cocaine use, as well as gambling. The self-help focuses on modifiable psychological and behavioural determinants such as knowledge, attitude, social influence and skills. Participants register their daily substance use and receive exercises and reading assignments based on behavioural therapeutic principles, motivational techniques, and self-control methods. The components emphasize psycho-education, creating awareness, setting goals, taking action, acquiring more useful thought and behavior patterns, and preventing relapse. To enhance user-friendliness, daily substance use registration can be done through a mobile app. Additionally, the self-help program includes a reward system, a diary function, a participant forum, and educational animations. The program's duration is a minimum of 25 days, but participants can choose to remain active for a longer period if desired. | Netherlands   | Web-based  | Participants were recruited through the website of Jellinek/ Arkin, the collaborating substance abuse treatment center (SATC). Eligible participants who provided informed consent were randomly allocated in a 1/1/1 ratio to one of the three trial arms: Internet-based therapy (therapy alcohol online; TAO), internet-based self-help (self-help alcohol online; SAO) and an untreated waiting-list control group (WL).  | Adult problem drinkers  | -   | -  | -  | Dutch                           | Adults aged 18 years or older who use alcohol, tobacco, cannabis or cocaine or gamble and wish to reduce or stop on their own time and under their own conditions. | To encourage participants to feel that the project was worth while and to reward them for their time and effort, we sent them €15 in gift coupons (worth about \$20) after they had completed the follow-up questionnaire. | Website of Jellinek/Arkin   | Alcohol consumption at 3- and 6- months   | Untreated waiting list control group (WL) | -   | significant effects for TAO versus WL (p = .002) and for SAO versus WL (p = .03) on alcohol consumption at 3 months postrandomization. Differences between TAO and SAO were not significant at 3 months postrandomization (p = .11) but were significant at 6 months postrandomization (p = .03), with larger effects obtained for TAO.  | RCT   | 1. Blankers M, Koeter MW, Schippers GM. Internet therapy versus internet self-help versus no treatment for problematic alcohol use: A randomized controlled trial. J Consult Clin Psychol. 2011 Jun;79(3):330-41. doi: 10.1037/a0023498. PMID: 21534652.  | Matthijs Blankers: Correspondence concerning this article should be addressed to Matthijs Blankers, Amsterdam Institute for Addiction Research, Department of Psychiatry, Room PA3.224, P.O. Box 22660, Academic Medical Center, University of Amsterdam, 1100 DD Amsterdam, The Netherlands. E-mail: m.blankers@amc.uva.nl/mblankers@gmail.com | This trial was funded by Grant 31160006 from the ZonMW Addiction II Program (Risk Behavior and Dependency). The study was conducted in collaboration with the Jellinek Clinic, which is a division of Arkin, an Amsterdam-based public mental health and addiction treatment center. Arkin supported the trial and facilitated its development. |  |
| Implementation site | Schuck et al., 2014   | Smoke Free Parents   | Tobacco  | Smoke-free parents is a telephone tobacco smoking cessation counselling service specifically for parents (of children 0-18 years), future parents, pregnant women and their partners who want to quit smoking. This parent-tailored telephone counselling is based on motivational interviewing/coaching and consists of a minimum of 6 calls (+/- 20 minutes) with a stop coach. The coach gives tips on how to quit smoking. Multiple topics are discussed including smoking history, withdrawal symptoms, cravings, and relapse prevention. Healthcare professionals can refer and/or register (future) parent(s) for this telephone smoking cessation counselling. A professional coach reaches out to the (future) parent(s) for an informal introduction conversation.  | Netherlands   | Telephone counselling service  | Smoking parents were recruited through their children's primary schools across the Netherlands.   | Parents, stop coaches, independent member of the research group   | Stop coaches  | Calls were conducted by counsellors of the Dutch national quitline. All counsellors received extensive training and had several years of experience in the delivery of telephone counselling | Supplementary materials tailored to smoking parents, standard self-help brochure.            | Dutch                           | Parents (of children aged 0-18), prospective parents and pregnant women and their partners who want to quit smoking.   | Each parent-child dyad received €100 (as of December 2013, approximately US\$135) for participation in all three assessments.  | -                           | The primary outcome was 7-day point-prevalence abstinence at 12-month follow-up. Also measured were baseline characteristics, use of and adherence to nicotine replacement therapy and pharmacotherapy, and implementation of a home smoking ban. | Usual care (only self help materials)     | -   | Parents who received quitline counselling were more likely to report 7-day point-prevalence abstinence at 12-month assessment [34.0 versus 18.0%, odds ratio (OR) = 2.35, confidence interval (CI) = 1.56-3.54] than those who received a standard self-help brochure. Parents who received quitline counselling were more likely to use nicotine replacement therapy (P < 0.001) than those who received a standard self-help brochure. Among parents who did | RCT   | 1. Schuck, K., Bricker, J. B., Otten, R., Kleinjan, M., Brandon, T. H., & Engels, R. C. (2014). Effectiveness of proactive quitline counselling for smoking parents recruited through primary schools: results of a randomized controlled trial. Addiction, 109(5), 830-841. https://doi.org/10.1111/add.12485<br>2. Scheffers-van Schayck T, Otten R, Engels RCME, Kleinjan M. Proactive Telephone Smoking Cessation Counseling Tailored to Parents: Results of a Randomized | Kathrin Schuck, Radboud University Nijmegen, Montessorilaan 3, Postbus 9104, 6500 HE Nijmegen, The Netherlands. E-mail: k.schuck@bsi.ru.nl  | This work was supported by ZonMW, the Netherlands Organization for Health Care Research and Development (grant number: 50-50110-96-639).  |  |



| Source               | Paper                | Metadata   | Metadata   | Intervention   | Intervention  | Intervention   | Intervention  | Intervention  | Intervention  | Intervention  | Intervention  | Intervention                    | Intervention  | Intervention  | Evidence                    | Evidence  | Evidence  | Evidence  | Evidence   | Evidence  | Intervention  | Intervention  | Implementation  |  |
|----------------------|----------------------|--|--|--|---|--|---|---|---|---|---|---------------------------------|---|---|-----------------------------|---|---|---|--|---|---|---|---|--|
|                      |                      | Name of the intervention   | Intervention program area  | Description of the intervention  | Geographic area   | Intervention delivery setting  | Recruitment   | Stakeholders involved in selecting and tailoring the intervention   | Professionals involved in delivering the intervention                               | Intervention training   | Materials needed to deliver the intervention  | Intervention language           | Intervention target population                                | Direct cost of the intervention   | Intervention website        | Outcomes  | Control group   | Strength of the evidence  | Effectiveness of the intervention  | Types of research conducted on the intervention   | Scientific publications about the intervention  | Intervention developers   | Intervention development funder   | Scientific publications on implementation research                         |
|                      |                      | Full name(s) of the intervention   | Health topic focus of the intervention   | Short description of the intervention; GIVE SOME EXAMPLES OF WHAT SHOULD BE COVERED (E.G. FREQUENCY, DURATION, MODE ETC); Include characteristics intervention target group (age, sex, ethnicity)  | Geographic area of the intervention, such as regions, cities, countries, practices.; include community type (city/ rural etc) | Intervention setting, such as hospital, primary care office, dental office, school, etc. |   | Description which stakeholders (including patients) are involved in selecting and tailoring the intervention to the local context | Description which professionals deliver the intervention                            | Description of the training in the intervention needed before intervention is implemented   | Materials needed to deliver the intervention  | Language of the intervention    | Short description of the intervention's target population(s)  | Direct cost of the intervention, if the intervention needs to be purchased or licensed. | Website of the intervention |   |   | Strength of the evidence base   | Effectiveness of the intervention  | Types of research that has been conducted on the intervention, such as effectiveness trials, implementation studies, etc. | List of articles published about the intervention, with links to each article   | Name of intervention developers and the name of their institutions  | Name of the funder who supported the development of the intervention  | List of articles published on implementation research on this intervention |
|                      |                      | This field should contain the complete name of the intervention and, if needed, an English-language translation of the name of the intervention. | Categorical: 7 lifestyles (Tobacco and second-hand smoke exposure, Alcohol consumption, Physical activity, HPV infection, UV and sun exposure, Diet) |  | All relevant geographic areas should be listed.   | All relevant settings should be listed.  |   | All involved stakeholders should be listed.   | All involved professionals, including non-clinical professionals, should be listed. |   | All materials should be listed. Links to existing materials should be included if available.    | All languages should be listed. |   |   |                             |   | Review GRADE  | WE DESCRIBE EVIDENCE IN TERMS OF ODDS RATIOS R OTHER MEASURES OF ASSOCIATION, ONLY EFFECTIVE INTERVENTIONS ARE INCLUDED, BUT THE EVIDENCE HAS TO BE DESCRIBED | All types should be listed.  | All articles should be listed.  | Names and affiliations of 1-2 intervention developers. Contact information, such as an email address or phone number, is also needed from at least one member of the intervention team.   | This field should contain the complete name of the funding organization and, if needed, an English-language translation of the name.  | All articles should be listed (There might be none, or it might be difficult to draw a line between effectiveness studies and implementation studies)   |  |
| Implementati on site | Gorini et al., 2014  | Luoghi di Prevenzione (LdP) - Prevention Grounds school-based smoking prevention programme   | Tobacco control (SC)   | The LdP programme is based on 4 components: 1. The "Smoking Prevention Path" (SPP), a four-hour educational path delivered by trained educators (Lega contro i Tumori, 2008), in the context of a community Health Promotion centre. SPP delivered a set of education activities aimed at developing resistance life skills, and knowledge on the harmful effects of smoking. It is divided into four 40-minute sessions: a) a lab session: laboratory trials were carried out to separate different smoking substances using lab procedures; measuring particulate matter in tobacco smoking using a portable laser-operated aerosol analyzer; b) a computer session: every student filled in several tests (on physical and psychological wellness and on stress levels, on curiosity level about smoking; for smokers: the Fagerstrom Tolerance Questionnaire, test on motivation to quit and on motivation to be a sustained non-smokers); c) a creative writing session: after a reading on smoking, students wrote two structured papers following specific headings, such as emotions and feelings, thoughts, experiences, key-words, and beliefs; and d) an imaginative session: an educator read a novel on smoking during a Saturday night in a disco-club. Students were invited to identify themselves with the character, compare this situation with that of | Italy   | Community Health Promotion centre, School  | 13 secondary schools located in Reggio Emilia, Italy (7 control arm, 6 intervention arm)  | Trained educator, School, Teacher, Peers  | Trained educator, School, Teacher, Peers  | Teachers were previously trained in two 2-hour meetings. A life-skills peer-led intervention: a group of self-selected 16-17-year-old peers were trained in three 2-hour sessions at school plus one meeting. They organized two 2-hour meetings in every intervention class, conducting a brainstorming on smoking, a discussion on positive and negative aspects of smoking, a creative writing session, and administered a questionnaire on health risks of smoking. | Fagerstrom Tolerance Questionnaire, no smoking sign in school area, survey on smoking behaviour | Italian                         | Students aged 14-15 years                                     |   |                             | Self-reported past 30-day smoking of ≥20 or 1-19 days of cigarette smoking (daily or frequent smoking, respectively) at 18 months | No intervention   |   | Past 30-day smoking and daily cigarette use at eighteen months follow-up were 31% and 46% lower, respectively, for intervention students compared to control students. Taking into account non-smokers at baseline only, daily smoking at eighteen months follow-up was 59% lower in intervention students than in controls. Past 30-day smoking in school areas was 62% lower in intervention students compared to  | RCT   | Gorini G, Carreras G, Bosi S, et al. Effectiveness of a school-based multi-component smoking prevention intervention: the LdP cluster randomized controlled trial. Prev Med. 2014;61:6-13. doi:10.1016/j.ypmed.2014.01.004                              | Giuseppe Gorini, Oncologic Network, Prevention and Research Institute (ISPRO), via Cosimo il Vecchio 2, 50139, Florence, Italy. E-mail address: g.gorini@ispro.toscana.it   | This study was supported by Lega contro i Tumori (LILT), Reggio Emilia, Italy, by Public Health Service, Emilia-Romagna Region, and by Mental Health and Drug Addiction Service, Emilia-Romagna Region.   |  |
| Implementati on site | Youl et al., 2015    | HealthyTexts   | Sun exposure   | Participants were randomly assigned to one of three groups: attention control – SMS messages encouraging physical activity; intervention group one – equal number of messages encouraging SSE; or intervention group two – sun protection messages. Each participant completed baseline questionnaires before randomisation, received weekly SMS over the next 12 weeks (3-month assessment), then monthly SMS for a further nine months prior to competing a 12-month follow-up questionnaire. Message content was designed according to social cognitive theory. Text messages were personalised with participants' first name, baseline skin cancer risk profile, sun protection, SSE, or physical activity characteristics.  | Queensland, Australia   | Telephone based  | A random sample of 15,000 men and women 18-42 years of age (the upper age range was determined by the groupings in the recruitment source database) from the Queensland electoral roll or Medicare register (the population-wide free health insurance for Australian residents) were invited to participate via mailed invitation. | telephone survey company  |   |   | text messages   | English                         | 18-42 years from the Queensland electoral and medicare rolls. |   |                             | Sun protection habits (SPH) index<br>Skin self-examination  | attention control –SMS messages encouraging physical activity |   | One year after baseline, the sun protection (mean change 0.12; P = 0.030) and skin self-examination groups (mean change 0.12; P = 0.035) had significantly greater improvement in their sun protection habits (SPH) index compared to the attention control group (reference mean change 0.02). The increase in the proportion of participants who reported any skin self-examination from baseline to 12 months was significantly greater in the skin self-examination  | RCT   | Youl PH, Soyer HP, Baade PD, Marshall AL, Finch L, Janda M. Can skin cancer prevention and early detection be improved via mobile phone text messaging? A randomised, attention control trial. Prev Med. 2015;71:50-56. doi:10.1016/j.ypmed.2014.12.009 | Monika Janda, Corresponding author at: Queensland University of Technology, School of Public Health and Social Work, Institute of Health and Biomedical Innovation, Victoria Park Road, Kelvin Grove, Queensland, Australia, 4059. Tel.: +61 7 3138 3018. E-mail address: m.janda@qut.edu.au (M. Janda) | The study was funded by research grant Cancer Australia (1011999).  |  |
| Implementati on site | Horsham et al., 2021 | SunText  | Sun exposure   | Four different text message schedules using a Latin square crossover design. Participants randomly assigned into one of four groups (groups 1, 2, 3, 4), and based on that group, rotated through four intervention types (A, B, C, D) in different order over 5 months. Each intervention lasted 4 weeks, followed by a one-week wash-out period in between. Intervention A was personalised messages three times a week for 4 weeks. Intervention B was interactive messages three times a week for 4 weeks. Intervention C was personalised and interactive daily messages for the first 2 weeks, then three times a week messaging for another 2 weeks (decreasing frequency). Intervention D was personalised and interactive three times a week for 2 weeks at start, then daily messaging for the last 2 weeks (increasing frequency).  | Queensland, Australia   | Telephone based  | Participants recruited through either the population-based Australian Medicare system, TV news, or sponsored Facebook social media posts by the university.   | Australian Medicare system, TV, university.   |   |   | text messages   | English                         | Men and women 18-40 years living in Queensland, Australia     |   |                             | Self-reported sun protection habits index and sunburns  |   |   | The sun protection habits index was significantly higher in all the 4 text messaging interventions (p<0.01 for each intervention) than at baseline, with similar sun protection habits improvements among all interventions (p=0.27). Sunburn rates decreased significantly over time (p<0.01 each intervention), with all the 4 interventions achieving reductions in sunburn rates during the intervention periods (p=0.78). Overall, the sunburn rates decreased from | RCT   | Horsham C, Baade P, Kou K, et al. Optimizing Texting Interventions for Melanoma Prevention and Early Detection: A Latin Square Crossover RCT. Am J Prev Med. 2021;61(3):348-356. doi:10.1016/j.amepre.2021.03.024                                       | Monika Janda, PhD, Centre for Health Services Research, Faculty of Medicine, The University of Queensland, 199 Ipswich Road, Woolloongabba, Brisbane 4102, Australia. E-mail: m.janda@uq.edu.au.  | The study was funded by a research grant from the Harry J. Lloyd Charitable Trust. MJ is funded by a National Health and Medical Research Council Translating Research into Practice Fellowship (APP1151021). HPS holds a National Health and Medical Research Council Medical Research Future Fund Next Generation Clinical Researchers Program Practitioner Fellow ship (APP1137127). |  |

| Source                 | Paper               | Metadata   | Metadata   | Intervention  | Intervention  | Intervention  | Intervention  | Intervention  | Intervention  | Intervention  | Intervention   | Intervention                    | Intervention  | Intervention  | Evidence                    | Evidence   | Evidence  | Evidence  | Evidence   | Evidence  | Intervention  | Intervention   | Implementation  |  |
|------------------------|---------------------|--|--|---|---|---|---|---|---|---|--|---------------------------------|---|---|-----------------------------|--|---|---|--|---|---|--|---|--|
|                        |                     | Name of the intervention   | Intervention program area  | Description of the intervention   | Geographic area   | Intervention delivery setting   | Recruitment   | Stakeholders involved in selecting and tailoring the intervention   | Professionals involved in delivering the intervention                               | Intervention training   | Materials needed to deliver the intervention   | Intervention language           | Intervention target population  | Direct cost of the intervention   | Intervention website        | Outcomes   | Control group   | Strength of the evidence  | Effectiveness of the intervention  | Types of research conducted on the intervention   | Scientific publications about the intervention  | Intervention developers  | Intervention development funder   | Scientific publications on implementation research                         |
|                        |                     | Full name(s) of the intervention   | Health topic focus of the intervention   | Short description of the intervention; GIVE SOME EXAMPLES OF WHAT SHOULD BE COVERED (E.G. FREQUENCY, DURATION, MODE ETC); Include characteristics intervention target group (age, sex, ethnicity)   | Geographic area of the intervention, such as regions, cities, countries, practices.; include community type (city/ rural etc) | Intervention setting, such as hospital, primary care office, school, etc. |   | Description which stakeholders (including patients) are involved in selecting and tailoring the intervention to the local context | Description which professionals deliver the intervention                            | Description of the training in the intervention needed before intervention is implemented | Materials needed to deliver the intervention   | Language of the intervention    | Short description of the intervention's target population(s)  | Direct cost of the intervention, if the intervention needs to be purchased or licensed. | Website of the intervention |  |   | Strength of the intervention's evidence base  | Effectiveness of the intervention  | Types of research that has been conducted on the intervention, such as effectiveness trials, implementation studies, etc. | List of articles published about the intervention, with links to each article   | Name of intervention developers and the name of their institutions   | Name of the funder who supported the development of the intervention  | List of articles published on implementation research on this intervention |
|                        |                     | This field should contain the complete name of the intervention and, if needed, an English-language translation of the name of the intervention. | Categorical: 7 lifestyles (Tobacco and second-hand smoke exposure, Alcohol consumption, Physical activity, HPV infection, UV and sun exposure, Diet) |   | All relevant geographic areas should be listed.   | All relevant settings should be listed.                                   |   | All involved stakeholders should be listed.   | All involved professionals, including non-clinical professionals, should be listed. |   | All materials should be listed. Links to existing materials should be included if available.   | All languages should be listed. |   |   |                             |  | Review GRADE  | WE DESCRIBE EVIDENCE IN TERMS OF ODDS RATIOS R OTHER MEASURES OF ASSOCIATION, ONLY EFFECTIVE INTERVENTIONS ARE INCLUDED, BUT THE EVIDENCE HAS TO BE DESCRIBED | All types should be listed.  | All articles should be listed.  | Names and affiliations of 1-2 intervention developers. Contact information, such as an email address or phone number, is also needed from at least one member of the intervention team.   | This field should contain the complete name of the funding organization and, if needed, an English-language translation of the name.   | All articles should be listed (There might be none, or it might be difficult to draw a line between effectiveness studies and implementation studies)   |  |
| Implementation on site | Janda et al., 2014  | Skin awareness study   | Sun exposure   | Video on skin self-examination and skin awareness and written informational materials. The control group received written materials only.   | Queensland, Australia   | Video-based   | Participants recruited through random selection from the Queensland electoral roll.   | Men, professional telephone survey company  | -   | -   | Video, written brochure  | English                         | Men aged at least 50 years.   | -   | -                           | Self-reported clinical skin examinations (CSEs)<br>Proportion of malignant lesions | Only written materials  | -   | Men in the intervention group were more likely to self-report a whole-body CSE (154 of 436 [35.3%] vs 118 of 434 [27.2%] for control group; P = .01). Two melanomas, 29 squamous cell carcinomas, and 38 basal cell carcinomas were diagnosed, with a higher proportion of malignant lesions in the intervention group (60.0% vs 40.0% for | RCT   | Janda, Monika, et al. "Clinical skin examination outcomes after a video-based behavioral intervention: analysis from a randomized clinical trial." JAMA dermatology 150.4 (2014): 372-379.  | Monika Janda, PhD, School of Public Health and Institute of Health and Biomedical Innovation, Queensland University of Technology, Kelvin Grove, Brisbane, Queensland 4059, Australia (m.janda@qut.edu.au)             | This trial was funded by the Australian National Health and Medical Research Committee (project grant 497200; career development fellowships 1045247 to Dr Janda, 552404 to Dr Neale, and 1005334 to Dr Baade; principal research fellowship to Dr Whiteman; and public health early career fellowship 496714 to Dr Gordon) |  |
| Implementation on site | Masala et al., 2014 | DAMA (Diet, physical Activity and Mammography)   | Diet - physical activity   | The DAMA trial is aimed at evaluating the ability of a 24-month intervention based on moderate-intensity PA and/or dietary modification focused on plant foods with a low glycemic load, low in saturated fats and alcohol, and rich in antioxidants and fiber, to reduce the percent MBD. Participants have been randomized to 1 of 4 study arms (diet, PA, diet + PA, control). Dietary and PA habits and anthropometry are collected at baseline and at the end of the intervention phase together with repeated blood and urine samples. The primary outcome of the study is the absolute change in percent MBD as assessed on baseline and follow-up digital mammograms performed in the framework of the local screening program. | Italy   |   | Study participants were selected among women who had undergone a digital mammogram as part of the local screening program in the Florence municipality, a long-standing program well known by women in the area. Women were selected who were aged between 50 and 69 years at the time of mammography and whose screening mammogram showed a breast density of 50% or more as assessed routinely in the screening program applying the quantitative Breast Imaging Reporting and Data System (BI-RADS) criteria | Study dieticians, women, professional cook, exercise scientist  | Study dieticians, professional cook, exercise scientist                             | -   | Dietaries, photographic atlas containing colored pictures of different portion sizes of foods commonly eaten in Italy. The computerized 24-hour diet recall interview software, EPIC-SOFT (developed by IARC, Lyon in collaboration with all EPIC study centers and adapted for each participating country in terms of foods and recipes included, a food frequency questionnaire and a lifestyle questionnaire, blood and urine sample, photographic atlas containing | Italian                         | Healthy nonsmoking postmenopausal women not using hormone replacement therapy and having high mammographic breast density (MBD >50%) aged between 50 and 69 years | -   | -                           | Mammographic breast density  | Women randomized to the control group were given general advice on healthy dietary and PA patterns according to the WCRF 2007 recommendations 1. One group meeting (approximately 50 women/group) was organized within the first 6 months of the study to discuss healthy diet and PA and distribute printed material specifically developed for this arm of the trial. | -   | A decrease in volumetric percent density emerged for women in the dietary intervention (ratio 0.91; 95% CI, 0.86-0.97; P= 0.002) and in the PA intervention arm (0.93; 95% CI, 0.87-0.98; P= 0.01) in comparison with controls.  | Randomized intervention trial   | 1. Masala G, Assedi M, Calini S, et al. The DAMA trial: a diet and physical activity intervention trial to reduce mammographic breast density in postmenopausal women in Tuscany, Italy. Study protocol and baseline characteristics. Tumori. 2014;100(4):377-385. doi:10.1700/1636.17890<br>2. Masala G, Assedi M, Sera F, et al. Can Dietary and Physical Activity Modifications Reduce Breast Density in Postmenopausal Women? The DAMA Study: a | Giovanna Masala, MD, MPH, Cancer Research and Prevention Institute (ISPO), Molecular and Nutritional Epidemiology Unit, Via delle Oblate 4, 50141 Florence, Italy. Tel +39-055-7972546; email g.masala@ispo.toscana.it | The DAMA trial was funded by the Cancer Institute of Tuscany (ITT) and the Italian Ministry of Health (Programma Integrato Oncologia 2006).   |  |

| Program Title & Description                                       | Program Area  | Population Focus                | Delivery Location                  | Community Type                    | Age  | Sex          | Race/Ethnicity  | Measurables                        | Program  | Program URL   | ESCP Status - Research Integrity - out of 5 | ESCP Status - Intervention Impact - out of 5 | ESCP Status - Dissemination Capability - out of 5 | ESCP Status - Equity - out of 5 | ESCP Status - Program Quality - out of 5 | ESCP Status - Program Reach - out of 5 | ESCP Status - Program Sustainability - out of 5 |
|---|---|---------------------------------|------------------------------------|-----------------------------------|--|--------------|---|------------------------------------|--|---|---|--|---|---------------------------------|--|--|---|
| 5-a Day Power Plus  | Out/Nutrition, Obesity                              | School Children                 | School (K-College)                 |                                   | 0-10 years (Children)  | Female, Male | American Indian, Asian, Black - not of Hispanic or Latino origin, Hispanic or Latino, White - not of Hispanic or Latino origin                                  | Available on the website           | School based program designed to increase fruit and vegetable consumption.   | <a href="#">https://www.ncepi.org/nc-escp/programs/5-a-day-power-plus-2018-19</a>   | 4.1   | 3.9  | 4.5   | 80.0%                           | 65.0%                                    | 100.0%                                 | 75.4%   |
| Active Project Promoting Active Living and Healthy Eating (APLHE) | Physical Activity, Out/Nutrition                    | School Children                 | School (K-College)                 |                                   | 0-10 years (Children)  | Female, Male | American Indian, Asian, Black - not of Hispanic or Latino origin, Hispanic or Latino, White - not of Hispanic or Latino origin                                  | Available from third party only    | Designed to increase physical activity and promote healthy dietary habits.   | <a href="#">https://www.ncepi.org/nc-escp/programs/active-project-promoting-active-living-and-healthy-eating-2018-19</a>        | 4.1   | 3.0  | 4.0   | 80.0%                           | 65.0%                                    | 85.0%                                  | 57.1%   |
| AKSET   | Out/Nutrition, Physical Activity                    | Employees                       | Home, Workplace                    | Suburban, Urban/Inner City        | 19-20 years (Young Adults), 40-45 years (Adults)                             | Female, Male | Asian, Black - not of Hispanic or Latino origin, Hispanic or Latino, White - not of Hispanic or Latino origin   | Available from third party only    | Designed to promote healthy dietary habits and increase physical activity.   | <a href="#">https://www.ncepi.org/nc-escp/programs/akset-2018-19</a>  | 4.3   | 3.3  | 3.0   | 100.0%                          | 65.0%                                    | 50.0%                                  | 80.0%   |
| Healthy Habits in a SNAP Resource Nutrition & Activity Program    | Physical Activity, Out/Nutrition                    | School Children                 | Home, Other Settings               |                                   | 0-10 years (Children), 11-18 years (Adolescents)                             | Female       | Alaska Native, American Indian, Asian, Black - not of Hispanic or Latino origin, Hispanic or Latino, Pacific Islander, White - not of Hispanic or Latino origin | Available from third party only    | Designed to increase physical activity and promote healthy dietary habits to reduce obesity.   | <a href="#">https://www.ncepi.org/nc-escp/programs/healthy-habits-in-a-snap-resource-nutrition-and-activity-program-2018-19</a> | 4.3   | 3.0  | 3.0   | 100.0%                          | 65.0%                                    | 85.0%                                  | 71.4%   |
| High 5 Fruit and Vegetable Intervention for 4th Graders           | Out/Nutrition, Obesity                              | School Children                 | School (K-College)                 |                                   | 0-10 years (Children)  | Female, Male | Black - not of Hispanic or Latino origin, White - not of Hispanic or Latino origin  | Available from third party only    | School based program designed to increase fruit and vegetable consumption.   | <a href="#">https://www.ncepi.org/nc-escp/programs/high-5-fruit-and-vegetable-intervention-for-4th-graders-2018-19</a>          | 4.1   | 3.5  | 4.0   | 100.0%                          | 65.0%                                    | 100.0%                                 | 71.4%   |
| Healthy Lifestyle Physical Activity and Nutrition (HPLAN)         | Physical Activity, Out/Nutrition                    | School Children                 | School (K-College)                 |                                   | 11-18 years (Adolescents)  | Female, Male | American Indian, Asian, Black - not of Hispanic or Latino origin, Hispanic or Latino, White - not of Hispanic or Latino origin                                  | Available from third party only    | Designed to increase physical activity and promote healthy dietary habits among middle school students.  | <a href="#">https://www.ncepi.org/nc-escp/programs/healthy-lifestyle-physical-activity-and-nutrition-2018-19</a>                | 4.3   | 3.0  | 3.0   | 100.0%                          | 65.0%                                    | 85.0%                                  | 71.4%   |
| New Moves   | Physical Activity, Out/Nutrition, Physical Activity | Overweight/Obese Individuals    | School (K-College)                 |                                   | 11-18 years (Adolescents)  | Female       | American Indian, Asian, Black - not of Hispanic or Latino origin, Hispanic or Latino, White - not of Hispanic or Latino origin                                  | Available from third party only    | Designed to promote healthy dietary habits and increase physical activity to reduce obesity.   | <a href="#">https://www.ncepi.org/nc-escp/programs/new-moves-2018-19</a>  | 4.3   | 3.0  | 3.0   | 100.0%                          | 65.0%                                    | 100.0%                                 | 62.5%   |
| Out of School Nutrition and Physical Activity (OSNPA) Project     | Physical Activity, Obesity, Out/Nutrition           | School Children                 | Other Settings, School (K-College) | Urban/Inner City                  | 0-10 years (Children), 11-18 years (Adolescents)                             | Female, Male | Alaska Native, American Indian, Asian, Black - not of Hispanic or Latino origin, Hispanic or Latino, Pacific Islander, White - not of Hispanic or Latino origin | Partially available on the website | The program is designed to increase physical activity and promote healthy dietary habits among children aged 1 to 12 years.                              | <a href="#">https://www.ncepi.org/nc-escp/programs/out-of-school-nutrition-and-physical-activity-2018-19</a>                    | 4.0   | 3.0  | 3.0   | 100.0%                          | 65.0%                                    | 50.0%                                  | 57.1%   |
| Parent Health   | Obesity, Out/Nutrition, Physical Activity           | School Children                 | School (K-College)                 | Suburban, Urban/Inner City        | 11-18 years (Adolescents)  | Female, Male | American Indian, Asian, Black - not of Hispanic or Latino origin, Hispanic or Latino, White - not of Hispanic or Latino origin                                  | Available from third party only    | School-based program designed to increase physical activity and promote healthy dietary habits to reduce obesity among 6th, 7th, and 8th grade students. | <a href="#">https://www.ncepi.org/nc-escp/programs/parent-health-2018-19</a>  | 4.0   | 3.0  | 3.0   | 100.0%                          | 65.0%                                    | 100.0%                                 | 57.1%   |
| Preventing Obesity Among Young Adults (POYA)                      | Physical Activity, Physical Activity                | Employees                       | Workplace                          |                                   | 19-20 years (Young Adults), 40-45 years (Adults)                             | Female, Male | White - not of Hispanic or Latino origin  | Available from third party only    | Designed to increase physical activity and promote healthy dietary habits to reduce obesity.   | <a href="#">https://www.ncepi.org/nc-escp/programs/preventing-obesity-among-young-adults-2018-19</a>                            | 3.0   | 3.0  | 4.0   | 80.0%                           | 65.0%                                    | 100.0%                                 | 85.7%   |
| Increasing Park-Based Physical Activity Through Community Engage  | Physical Activity                                   | Non-park users, Park users      | Other Settings                     | Urban/Inner City                  | 0-10 years (Children), 11-18 years (Adolescents), 19-20 years (Young Adults) | Female, Male | American Indian, Asian, Black - not of Hispanic or Latino origin, Hispanic or Latino, White - not of Hispanic or Latino origin                                  | Available on the website           | Designed to increase the level of physical activity and number of people using parks.  | <a href="#">https://www.ncepi.org/nc-escp/programs/increasing-park-based-physical-activity-through-community-engage-2018-19</a> | 3.0   | 3.0  | 3.0   | 80.0%                           | 65.0%                                    | 100.0%                                 | 85.7%   |
| Healthy Habits for Life (HFL)                                     | Physical Activity                                   | School Children                 | School (K-College)                 |                                   | 0-10 years (Children)  | Female, Male | White - not of Hispanic or Latino origin  | Partially available on the website | Designed to increase physical activity among adults aged 10 years and older.   | <a href="#">https://www.ncepi.org/nc-escp/programs/healthy-habits-for-life-2018-19</a>  | 3.0   | 2.0  | 3.0   | 80.0%                           | 100.0%                                   | 85.0%                                  | 57.1%   |
| Walking for Wellbeing in the West (WWiW)                          | Physical Activity                                   | School Children                 | School (K-College)                 |                                   | 0-10 years (Children)  | Female, Male | Asian, Black - not of Hispanic or Latino origin, Hispanic or Latino, White - not of Hispanic or Latino origin   | Available from third party only    | Designed to increase physical activity among 6th and 7th grade students.   | <a href="#">https://www.ncepi.org/nc-escp/programs/walking-for-wellbeing-in-the-west-2018-19</a>                                | 4.1   | 4.0  | 4.0   | 80.0%                           | 65.0%                                    | 85.0%                                  | 57.1%   |
| Stop Ahead Intervention School Workers Weight Gain Prevention     | Obesity   | Employees                       | Workplace                          | Rural, Suburban, Urban/Inner City | 19-20 years (Young Adults), 40-45 years (Adults), 45+ years (Older)          | Female, Male | American Indian, Asian, Black - not of Hispanic or Latino origin, Hispanic or Latino, Pacific Islander, White - not of Hispanic or Latino origin                | Available on the website           | Designed to promote healthy dietary habits and physical activity to reduce obesity.  | <a href="#">https://www.ncepi.org/nc-escp/programs/stop-ahead-intervention-school-workers-weight-gain-prevention-2018-19</a>    | 4.1   | 3.5  | 3.0   | 100.0%                          | 65.0%                                    | 50.0%                                  | 71.4%   |
| Adaptation Research Site: Cancer Prevention Intervention          | Sun Safety  | Individuals serving individuals | Other Settings                     |                                   | 19-20 years (Young Adults)   | Female, Male | Alaska Native, American Indian, Asian, Black - not of Hispanic or Latino origin, Hispanic or Latino, Pacific Islander, White - not of Hispanic or Latino origin | Available from third party only    | Designed to reduce indoor tanning through the awareness of the harmful effects of exposure to UV radiation.  | <a href="#">https://www.ncepi.org/nc-escp/programs/adaptation-research-site-cancer-prevention-intervention-2018-19</a>          | 4.1   | 3.5  | 3.0   | 80.0%                           | 65.0%                                    | 85.0%                                  | 85.7%   |
| Fast Coat   | Sun Safety  | Sun exposed individuals         | Other Settings                     |                                   | 0-10 years (Children), 11-18 years (Adolescents), 19-20 years (Young Adults) | Female, Male | Asian, Pacific Islander, White - not of Hispanic or Latino origin   | Available from third party only    | Designed to increase awareness and promote sun protection behavior and practices.  | <a href="#">https://www.ncepi.org/nc-escp/programs/fast-coat-2018-19</a>  | 3.0   | 3.0  | 4.0   | 80.0%                           | 65.0%                                    | 85.0%                                  | 57.1%   |
| Sun Protection for Florida's Children                             | Sun Safety  | School Children                 | Home, School (K-College)           |                                   | 0-10 years (Children)  | Female, Male | American Indian, Asian, Black - not of Hispanic or Latino origin, Hispanic or Latino, Pacific Islander, White - not of Hispanic or Latino origin                | Available on the website           | Designed to increase awareness and promote sun protection behavior and practices among elementary school students.                                       | <a href="#">https://www.ncepi.org/nc-escp/programs/sun-protection-for-floridas-children-2018-19</a>                             | 3.0   | 3.0  | 3.0   | 100.0%                          | 65.0%                                    | 100.0%                                 | 57.1%   |
| Sun Safety Answer U.S. Postal Service Letter Carriers (PROMISE)   | Sun Safety  | Employees                       | Workplace                          | Suburban, Urban/Inner City        | 19-20 years (Young Adults), 40-45 years (Adults)                             | Female, Male | American Indian, Asian, Black - not of Hispanic or Latino origin, Hispanic or Latino, Pacific Islander, White - not of Hispanic or Latino origin                | Available on the website           | Designed to promote sun safety practices to postal service letter carrier employees.   | <a href="#">https://www.ncepi.org/nc-escp/programs/sun-safety-answer-u-s-postal-service-letter-carriers-2018-19</a>             | 3.7   | 3.0  | 3.0   | 80.0%                           | 65.0%                                    | 85.0%                                  | 57.1%   |
| Anti-Sun  | Current Smokers, Non-smokers                        | Current Smokers, Non-smokers    | Other Settings                     | Suburban, Urban/Inner City        | 11-18 years (Adolescents)  | Female, Male | American Indian, Asian, Black - not of Hispanic or Latino origin, Hispanic or Latino, White - not of Hispanic or Latino origin                                  | Available on the website           | Designed to increase awareness and promote sun protection behavior and practices among elementary school students.                                       | <a href="#">https://www.ncepi.org/nc-escp/programs/anti-sun-2018-19</a>   | 4.1   | 4.0  | 3.0   | 100.0%                          | 65.0%                                    | 100.0%                                 | 57.1%   |
| Clinical Effort Agency Secondhand Smoke Exposure (SEASE)          | Tobacco Control                                     | Children                        | Other Settings, School (K-College) | Rural, Suburban                   | 19-20 years (Young Adults), 40-45 years (Adults)                             | Female, Male | Asian, Black - not of Hispanic or Latino origin, Hispanic or Latino, White - not of Hispanic or Latino origin   | Partially available on the website | Designed to promote secondary tobacco control evidence to pediatric practices to reduce second-hand smoke exposure in the home.                          | <a href="#">https://www.ncepi.org/nc-escp/programs/clinical-effort-agency-secondhand-smoke-exposure-2018-19</a>                 | 4.0   | 3.5  | 3.0   | 80.0%                           | 65.0%                                    | 65.0%                                  | 71.4%   |
| Mid-Ohio Tobacco Program 16-21                                    | Tobacco Control                                     | Current Smokers                 | Other Settings                     | Suburban, Urban/Inner City        | 11-18 years (Adolescents)  | Female, Male | American Indian, Asian, Black - not of Hispanic or Latino origin, Hispanic or Latino, Pacific Islander, White - not of Hispanic or Latino origin                | Available from third party only    | Designed to promote cessation and reduce tobacco use among adolescent smokers.   | <a href="#">https://www.ncepi.org/nc-escp/programs/mid-ohio-tobacco-program-16-21-2018-19</a>                                   | 4.0   | 4.0  | 3.0   | 80.0%                           | 65.0%                                    | 100.0%                                 | 57.1%   |
| Project SHOUT! (Students Helping Others Understand Tobacco)       | Tobacco Control                                     | School Children                 | Home, School (K-College)           |                                   | 11-18 years (Adolescents)  | Female, Male | American Indian, Asian, Black - not of Hispanic or Latino origin, Hispanic or Latino, Pacific Islander, White - not of Hispanic or Latino origin                | Available from third party only    | Designed to prevent tobacco use among middle/junior high school students.  | <a href="#">https://www.ncepi.org/nc-escp/programs/project-shout-students-helping-others-understand-tobacco-2018-19</a>         | 3.0   | 3.0  | 3.0   | 100.0%                          | 65.0%                                    | 85.0%                                  | 57.1%   |
| Project Teenage No Tobacco Use (TNT)                              | Tobacco Control                                     | Non-smokers                     | School (K-College)                 |                                   | 11-18 years (Adolescents)  | Female, Male | Asian, Black - not of Hispanic or Latino origin, Hispanic or Latino, White - not of Hispanic or Latino origin   | Available from third party only    | School-based prevention program designed to delay the initiation and reduce the use of tobacco by middle-school children.                                | <a href="#">https://www.ncepi.org/nc-escp/programs/project-teenage-no-tobacco-use-2018-19</a>                                   | 4.0   | 4.0  | 3.0   | 100.0%                          | 65.0%                                    | 100.0%                                 | 57.1%   |
| Project HOPE  | Tobacco Control                                     | Current Tobacco Users           | Other Settings                     |                                   | 19-20 years (Young Adults), 40-45 years (Adults), 45+ years (Older)          | Female, Male | Alaska Native, American Indian, Asian, Black - not of Hispanic or Latino origin, Hispanic or Latino, Pacific Islander, White - not of Hispanic or Latino origin | Available on the website           | Designed to promote smoking cessation among women smokers.   | <a href="#">https://www.ncepi.org/nc-escp/programs/project-hope-2018-19</a>   | 4.1   | 3.0  | 4.0   | 80.0%                           | 65.0%                                    | 50.0%                                  | 57.1%   |
| Smoke-Free Homes: Some Things are Better Outside                  | Tobacco Control                                     | Home, Other Settings            | Other Settings                     | Rural, Suburban, Urban/Inner City | 19-20 years (Young Adults), 40-45 years (Adults), 45+ years (Older)          | Female, Male | Alaska Native, American Indian, Asian, Black - not of Hispanic or Latino origin, Hispanic or Latino, Pacific Islander, White - not of Hispanic or Latino origin | Available from third party only    | The program is designed to promote home smoking bans to reduce second-hand smoke exposure in the home.   | <a href="#">https://www.ncepi.org/nc-escp/programs/smoke-free-homes-some-things-are-better-outside-2018-19</a>                  | 4.7   | 3.0  | 3.0   | 80.0%                           | 65.0%                                    | 100.0%                                 | 57.1%   |