

Prioritising person-centred care

Promoting prevention



Summarising evidence from systematic reviews



National Voices

People shaping health and social care

Key themes

We compiled information from 308 systematic reviews and found that the top things that managers and clinicians can do to enhance health promotion and prevention are:

1. Reminding people why prevention is important:

- Opportunistic advice from health professionals
- Reminders to attend screening
- Educational programmes
- Mass media campaigns
- Routine health checks
- Parenting programmes

2. Providing support targeted towards the needs of specific groups:

- Targeted education interventions
- Proactive telephone counselling
- Motivational techniques
- Self-help programmes
- Online education
- Exercise programmes
- Smoking cessation
- Dietary support
- Peer support

3. Raising awareness within the wider population:

- Workplace-based interventions
- School-based interventions
- Mass media campaigns
- Targeted health promotion
- Social marketing campaigns
- Advice given by health professionals
- Banning tobacco advertising
- Smoke-free policies

The table overleaf signposts to evidence about what works best to enhance patient experience. Initiatives in bold have the most evidence to support them. The quantity of reviews is large, so only a selection of citations is provided.

Focus	Improves knowledge	Improves experience	Improves service use and costs	Improves health outcomes
Targets patients	<ul style="list-style-type: none"> • Educational packages^{1,2,3} • Computer, internet and text initiatives^{4,5} • Sports-based initiatives⁶ 	<ul style="list-style-type: none"> • Targeted education^{7,8,9,10} • Collaborative care¹¹ • Social media¹² 	<ul style="list-style-type: none"> • Reminders^{13,14} 15,16,17,18,19,20,21,22,23,24 • Lay advice / peer support^{25,26,27} • Work-based health promotion^{28,29,30} • Educational packages³¹ • Relapse prevention initiatives³² • Lifestyle programmes³³ • Home-based health promotion³⁴ • Self-help materials³⁵ 	<ul style="list-style-type: none"> • Smoking cessation, diet and physical activity programmes^{36,37,38,39,40,41} • Work-based programmes^{42,43,44,45,46} • School-based programmes^{47,48,49,50,51,52} • School policies^{53,54,55} • Social marketing⁵⁶ • Parental support and education^{57,58,59} • Motivational initiatives^{60,61,62} • Health coaching⁶³ • Proactive telephone support^{64,65,66,67,68} • Computer-based programmes^{69,70,71,72,73} • Text messages^{74,75} • Video games⁷⁶ • Printed materials⁷⁷ • Exercise prescriptions^{78,79,80,81,82} • Risk scores⁸³ • Volunteering⁸⁴ • Financial incentives for patients⁸⁵
Targets professionals	<ul style="list-style-type: none"> • Screening tools to identify disease and risks⁸⁶ 	<ul style="list-style-type: none"> • Workforce development^{87,88,89,90} 	<ul style="list-style-type: none"> • Audit and feedback⁹¹ 	<ul style="list-style-type: none"> • Contracts between patients and professionals⁹² • Cultural competence training^{93,94} • Financial incentives⁹⁵
Targets systems / organisations	<ul style="list-style-type: none"> • Media campaigns⁹⁶ 			<ul style="list-style-type: none"> • Media campaigns^{97,98,99,100} • Taxes^{101,102} • Smoke-free policies¹⁰³

Promoting prevention

Person-centred care involves placing people at the forefront of their health and care. This ensures people retain control, helps them make informed decisions and supports a partnership between people, families and health and social services.

Some of the core facets of person-centred care involve:

- supporting self-management
- supporting shared decision-making
- enhancing experience
- improving information and understanding
- and promoting prevention

We have a series of booklets for healthcare commissioners and health professionals summarising the best research evidence about what works in each of these areas. This booklet focuses on prevention and health promotion.

What is prevention and health promotion?

There is much that individuals can do to increase their chances of a healthy life. This includes exercising, eating well, avoiding health risks, not smoking and limiting the consumption of alcohol. Community initiatives and health promotion activities also complement individual efforts.

Health promotion involves enabling people to increase control over their health and its determinants, and thereby improve their health status. This may involve preventive activities such as screening for conditions such as cancer.¹⁰⁴

Responsibility for promoting public health lies within many sectors of public and commercial life and spans the responsibilities of many government departments. The NHS and all who work within it have a clear and important role to play.

Why is this important?

1. *There are inequalities in health status and outcomes in the UK*

The greatest [public health challenges](#) in the UK include health inequalities, preventable deaths, mental illness, and high rates of smoking, obesity, teenage pregnancy and substance misuse.

There are still wide inequalities in health between social groups.¹⁰⁵ People in non-manual occupational groups can expect to live about three years longer than those in manual groups on average. Inequalities in life expectancy have increased over the last 30 years.

2. *Many conditions or adverse outcomes are preventable*

Cancer and circulatory disease are the most common causes of death. Many premature deaths from these conditions are preventable. Coronary heart disease is the leading single cause of death in the UK. It claims the lives of one in five men and one in six women and can cause years of disability and ill health. Heart disease may cost the UK economy £29 billion a year. Britain spends more of its health budget on [heart disease](#) than any other EU country.

There are many other things that can be targeted for prevention and health promotion activities. For example, [smoking](#) is the single greatest cause of preventable illness and early death from a wide range of illnesses, including cancer, respiratory disease and heart disease. In 2007, 22% of adults were smokers, a decrease from 1974 when 45% of adults smoked.

In 2008, around 83,900 (18%) of deaths in England among adults aged 35 and over were estimated to be caused by smoking. This includes, in this age group, 35% of all deaths due to respiratory diseases, 29% of all cancer deaths and 14% of deaths due to circulatory diseases. A larger proportion of men (23%) are estimated to die than women (14%) from smoking-related diseases.

The UK also has the highest prevalence of [obesity](#) among adults in Western Europe. Obesity is related to a number of conditions, including coronary heart disease, stroke and diabetes. In 2007, 24% of adults (aged 16 or over) in England were classified as obese (a 15% increase from 1993). Almost a third (30.4%) of children aged 2 to 15 were classed as either overweight or obese. In 2007, only 27% of men and 31% of women consumed five or more portions of fruit and vegetables a day.

UK Government recommendations are that adult men should not regularly drink more than 3–4 units of alcohol a day and adult women should not regularly drink more than 2–3 units a day. 'Heavy' or 'binge' drinking is defined drinking more than 8 units (men) or 6 units (women) on the heaviest drinking day in a week. Statistics for England suggest that around two fifths of men and one third of women report drinking more than the recommended limit at least one day per week. There are more than 200,000 hospital admissions every year for diseases or injuries that are wholly attributable to alcohol consumption and alcohol misuse and related harm are estimated to cost the NHS in England [£2.7 billion](#).

In England and Wales, [suicide](#) is the second most common cause of death of men aged 15 to 34 years, and the third most common cause of death among women in the same age group. In 2008, there were 5,706 suicides among adults aged 15 and over in the UK. Suicide rates were 17.7 per 100,000 for men and 5.4 per 100,000 for women. Both UK rates are higher than in 2007, reversing a downward trend over the previous decade. England's national suicide prevention strategy aims to reduce the death rate from intentional self-harm and injury/poisoning of undetermined intent in England by 20%, from a baseline of 9.2 deaths per 100,000 in the three years 1995-7 to 7.3 deaths per 100,000 in 2009-11. Data for 2005-7 show a rate of 7.9 deaths per 100,000 in England, a 13.9% reduction from baseline. Suicide in [young men](#), which more than doubled between the 1970s and the 1990s, remains higher than for other demographic groups, but fell steadily to 2006. In 2008, suicide rates in England were 15.9 per 100,000 for men and 4.7 per 100,000 for women. Both rates are higher than in 2007. The 2008 suicide rate for males aged 15 to 44 was 24.0 per 100,000. The suicide rate per 100,000 mental health service users in England in 2006 was 141.6. There were 141 suicides among [mental health](#) service in-patients in 2006, compared to 219 in 1997.

Forty per cent of older people attending GP surgeries, and 60% of those living in residential institutions are reported to have '[poor mental health](#)'. People with severe mental illness are 1.5 times more likely to die prematurely than those without; partly due to suicide, but also due to death from respiratory and other diseases. Depression has consistently been linked to mortality following a myocardial infarction. It increases the risk of heart disease fourfold, even when other risk factors like smoking are controlled for. People with severe mental illnesses are also more likely to have a poor diet, be obese, smoke more, attend routine health checks less frequently and get less health promotion input than the general population.

[Sexual health](#) is recognised as an important component of individual physical and mental health and wellbeing. Rates of sexually transmitted infection and of unintended and unwanted pregnancy are also a public health priority, with health promotion initiatives focused on reducing sexually transmitted infection (STI) rates, especially among young people, countering stigma and discrimination associated with STIs, reducing rates of unintended and unwanted pregnancy, minimising the risks of exclusion and disadvantage associated with pregnancy and parenthood for women aged under 18 and reducing inequalities - in sexual health, and in access to sexual health information, advice and high quality services.

[Substance misuse](#) is associated with significant health risks including anxiety, memory or cognitive loss, accidental injury, hepatitis, HIV infection, coma and death. It may also lead to an increased risk of sexually transmitted infections. In England and Wales class A drug use is estimated to cost more than £15 billion in economic and social terms. In 2007/8, a third of people (35.8%) surveyed reported ever using illicit drugs, one in ten reported using in the last year (9.3%) and one in 20 in the last month (5.3%). Among 16 to 59 year olds, reported use of illicit drugs fell from 10.0% to 9.3% between 2006/07 and 2007/08, and it fell from 24.1% to 21.3% among 16 to 24 year olds. Class A drug use was much less commonly reported, with 13.9% reporting having used a Class A drug at least once, 3.0% in the previous year and 1.3% in the previous month. Reported use of Class A drugs among 16 to 24 year olds in 2007/8 was the lowest reported use since 1995.

3. Policy suggests there is potential for significant improvements

NHS staff can make an impact by providing advice on health-related behaviours. However, findings from recent national surveys of people using primary care suggest that many opportunities to provide such advice are being missed. Thus there is much room for improvement.

The [Department of Health](#) has set out a strategy for improving public health and this is supported by the [NHS Operating Framework](#) and the [NHS Constitution](#).

Regulators and other bodies also expect health professionals to play a part in promoting health. The General Medical Council (GMC) and the Nursing and Midwifery Council both emphasise the increasing importance of population health.

What works?

308 systematic reviews published between 1998 and 2013 have summarised the best research evidence about prevention and health promotion. This section outlines key findings about what works so commissioners and health professionals know the most useful and cost-effective interventions to invest in.

The appendix describes how we identified and analysed the research evidence.

What has been tested?

Systematic reviews have compiled evidence about the following interventions:

Community education and adult learning

- Group education
- One-to-one education
- Videos and interactive multimedia programmes
- Cultural competence training
- School and home-based programmes

Targeted health promotion and social marketing

- Tracking/reminder systems
- Leaflets and hand-outs
- Advice from hospital staff
- Exercise and fitness programmes
- Invitations and reminders
- Individual counselling
- Telephone counselling
- Financial incentives
- Self-help packages
- Home visits
- Risk assessment
- Advice in primary care
- Contracts
- Workplace initiatives

Mass media campaigns

- Television and radio
- Newspapers and journals
- Point-of-sales measures
- Advertising

What are the impacts?

Improving knowledge

Education

There is evidence that **educational packages**, videos/dvds and multi-media programmes can help to improve knowledge among low literacy populations.¹⁰⁶ However, short-term group-based didactic teaching is of limited value for these groups.^{107,108,109,110}

There is evidence that occupation- and activity-based mental health promotion interventions for young people can increase knowledge, including programmes that focus on social-emotional learning; school-wide bullying prevention; and after-school, performing arts, suicide prevention and stress management activities.^{111,112}

Preventive or disease specific education has also been found to improve knowledge in people with many types of conditions.^{113,114}

Using technology

A review of text messages, the internet and social media found that these technologies could be used to increase knowledge about sexual health issues among young people.¹¹⁵ Other reviews suggested that computerised interventions improved knowledge and sexual health outcomes more than face-to-face interventions.^{116,117}

Initiatives with professionals

A number of tools are available to help professionals screen, support decisions and measure the extent to which people are receiving the help they need.¹¹⁸ These tools may increase practitioners' knowledge about which individuals to target for further support.

Media campaigns

Media campaigns have been found to improve knowledge and awareness.¹¹⁹

Other initiatives

Sports-based initiatives have been found to improve knowledge of issues such as sexual health.¹²⁰

A review of studies investigating people's attitudes towards the content, source, tailoring and comprehension of dietary guidelines found that people thought that guidelines were confusing.¹²¹

Another review found that providing information about 'ultraviolet index' did not improve people's knowledge or attitudes about sun protection.¹²²

Improving experience

Education

People's demographic characteristics can influence their attitudes and behaviours, so targeted programmes may be worthwhile.^{123,124} **Targeted interventions** for people from minority ethnic groups and cultural competence training can improve patient satisfaction.^{125,126,127,128} Specific health promotion activities for people with intellectual disabilities have also been found to heighten people's experience.¹²⁹

Programmes to increase physical activity in older people that contain cognitive behavioural elements have been found to improve self-efficacy,^{130,131,132} as have educational interventions for people with heart failure¹³³ and the general population.¹³⁴

Educational and supportive programmes for youth have also been found to improve experience, skills, confidence and leadership.^{135,136,137}

Support

Collaborative care has been found to improve experience and engagement in healthcare, particularly amongst minority ethnic groups.¹³⁸

Social media

A review of using social media for health communication found benefits including increased interactions with others, increased accessibility to health information, more readily available tailored information and social / peer / emotional support.¹³⁹

Initiatives for professionals

Workforce development may need to go hand in hand with interventions targeting patients.^{140,141,142} Health promotion education targeting professionals has the potential to improve people's experience, as patients report being influenced by professionals' advice regarding screening, vaccinations and behaviour change.^{143,144,145} Reviews have found that the attitudes of professionals regarding things like alcohol use, smoking and sexual health influence the extent of their health promotion behaviours.^{146,147,148,149}

A review found that medical students can learn behaviour change counselling through active, realistic practice, plus reminder and feedback systems within clinical practice settings.¹⁵⁰

One review suggested that models which incorporate community support and empowerment can help to improve people's experience and health literacy. This may include working in partnership with community groups.¹⁵¹

Improving service use and costs

Reminders

Various types of reminders, such as postcards, **letters**, telephone or automated phone calls, educational interventions, mass media campaigns and periodic health evaluations have been found to improve the uptake of screening, immunisations, blood donations and other preventive procedures.^{152,153,154,155,156,157,158,159,160,161,162,163,164} However, not all evidence is positive. One review found little impact for targeted screening reminders in minority ethnic groups¹⁶⁵ and another found little evidence that breast screening reminders influenced uptake rates.¹⁶⁶

One review found no difference between email reminders and standard reminders for increasing the rate of screening uptake or health status and wellbeing.¹⁶⁷

Education

One review found that patient education about the management of heart disease can reduce hospital admissions, leading to reduced healthcare costs.¹⁶⁸

Education initiatives have not been found to increase immunisation for seasonal influenza amongst health professionals.¹⁶⁹

Targeted programmes

There are also findings relating to specific conditions. For example, **motivational** communications and support from trained **lay volunteers** may be a cost-effective way of providing cardiac rehabilitation programmes.¹⁷⁰ Some cardiovascular risk prevention programmes have been found to be cost-effective.¹⁷¹ A review of diabetes prevention interventions found the following to be cost-effective: medication to reduce risk factors, multicomponent lifestyle programmes to reduce risk, universal screening over a certain age and smoking cessation programmes.¹⁷²

Relapse prevention initiatives have been found to be cost-effective in smoking cessation services.¹⁷³

There is emerging evidence that **home-based nurse-led health promotion** for older people may reduce health and social care costs.¹⁷⁴

Most programmes to increase **physical activity** have been found to be cost-effective, especially when they do not require direct supervision.¹⁷⁵

Some reviews report good return on investment, reduced costs, reduced absenteeism and increased productivity from **work-based health promotion** programmes,^{176,177,178} However not all evidence is positive.¹⁷⁹

Materials

Self-help materials may be more cost-effective than advice from a specialist dietician in reducing blood cholesterol as they produce similar outcomes at lower cost.¹⁸⁰

Providing smoke alarms, home inspection and education combined may be the best way to increase uptake of using smoke alarms.¹⁸¹

Support from peers

Reviews suggest that advice from lay health workers can increase immunisation rates in children¹⁸² and screening for HIV and cancer^{183,184} as well as treatment adherence.¹⁸⁵ However, another review of the cost-effectiveness of health-related advice provided by peer or lay workers found limited evidence of cost-effectiveness in terms of changing health-related knowledge, behaviours or health outcomes. Lay advisors may only be cost-effective when they target behaviours likely to have a large impact on overall health-related quality of life, such as diabetes.¹⁸⁶

One review found that involving churches, housing projects and centres for older people may help to increase the uptake of cancer screening.¹⁸⁷

Interventions for professionals

Audit and feedback interventions for professionals have been found to improve the uptake of cancer screening.¹⁸⁸

Other initiatives

Having mobile dental units on school premises has been found to increase the use of dental services among young people.¹⁸⁹

Improving health behaviour and outcomes

Targeted programmes

Targeted health promotion programmes and social marketing can reduce health risks in certain groups, but there is little evidence about the extent to which they reduce health inequalities between

groups.^{190,191,192,193,194,195,196,197,198;199;200;201,202,203,204,205,206,207,208,209,210,211,212,213,214,215,216,217,218,219,220,221,222,223,224,225,226,227}

Reviews have focused on a wide range of public health issues. For example:

- A number of reviews have focused on **smoking cessation**.^{228,229,230,231,232} There is evidence that counselling, including telephone calls, and pharmacotherapy through, for example, nicotine patches, either alone or in combination, can encourage smokers to quit.^{233,234,235,236,237,238,239,240,241} Smoking cessation interventions may more effectively reach disadvantaged groups when integrated into other health services and settings, including pharmacies and the workplace.²⁴² Advice from health professionals in hospital, primary care and the workplace can also encourage smoking cessation.^{243,244,245,246,247,248,249} A review found that doctors may be more effective in promoting attempts to stop smoking by offering assistance to all smokers than by advising smokers to quit and offering assistance only to those who express an interest in doing so.²⁵⁰ Individualised self-help interventions, including internet programmes, have a small effect on reducing smoking.^{251,252,253,254} However, not all interventions have been found to reduce smoking.²⁵⁵
- **Dietary education** and motivational interventions such as individual counselling, group nutrition classes and social support can be effective in increasing fruit and vegetable intake and dairy consumption and reducing fat consumption.^{256,257,258,259,260} Targeted programmes have been found to be effective for minority ethnic groups,^{261,262,263,264,265} young people^{266,267,268,269} and others.^{270,271,272,273} Programmes that combine physical activity and healthy eating may be beneficial,^{274,275} as may those that supply samples of food for people to taste²⁷⁶ and use component such as training of health professionals prior to delivery, behaviour change principles, counselling, education, written resources and tailoring the intensity to the individual.²⁷⁷ Commercial weight loss programmes have been found to be effective.²⁷⁸
- **Exercise programmes** can help to enhance older people's mental wellbeing and reduce falls.^{279,280,281} Reviews have found that programmes to improve physical activity in older people might include cognitive behavioural-based components, personalised coaching, goal setting, peer support groups, technology, physical activity monitors and follow-up support to most effectively increase the level of physical activity.^{282,283,284,285}

Drawing on community resources, family members and other social networks may help to make exercise seem 'normal'.²⁸⁶ Targeted support for minority ethnic groups has shown promise.^{287,288,289,290} Programmes specifically for women or men, young people or those from disadvantaged social groups have also been tested, though not always successfully.^{291,292,293,294,295,296,297} Amongst the general population, interventions to increase physical activity have been found to work well,²⁹⁸ especially when they prompt self-monitoring of the behaviour, include group support, such as walking in groups, and last for a longer period.^{299,300,301,302} These programmes can be offered in primary care.³⁰³ Reminder signs to use stairs may also impact on behaviour. These are known as 'point of decision prompts'.^{304,305}

- **Parental support** and educational programmes for parents can help to reduce health risks among children, including preventing and treating obesity, though not all evidence is positive.^{306,307,308,309,310,311,312} They can also help to reduce substance misuse among adolescents.³¹³ Peer and professional support and structured educational programmes and community initiatives can encourage breastfeeding in some circumstances.^{314,315,316,317,318,319}
- Reviews have examined programmes aiming to prevent specific types of conditions too. For example, diabetes prevention programmes have been found to reduce risk factors such as weight.³²⁰
- There is no evidence that breast self-examination has a beneficial effect on mortality from breast cancer.³²¹

Targeted interventions have been tested in a wide range of contexts. For instance, prevention and health promotion programmes run at people's **place of work** have been found to improve health behaviours and outcomes, including physical activity.^{322,323,324,325,326,327,328,329,330,331} Not all workplace-based interventions have been found to improve health behaviours and outcomes.^{332,333,334} Workplace interventions may be most effective when they include weekly contacts and multicomponent interventions.^{335,336,337} Other useful components include individualised risk assessment and reduction,^{338,339} providing practical resources such as pedometers³⁴⁰ and social activities.³⁴¹

School-based programmes can improve children's social and emotional wellbeing³⁴² as well as potentially diet, physical activity and other behaviour, usually to a small extent.^{343,344,345,346,347,348,349,350,351,352,353,354} There is some evidence that classroom-based education may help to reduce alcohol and cigarette consumption among young people.^{355,356,357} School-based life skills and resilience programmes have been found to have positive effects on young people's self-esteem, motivation and self-efficacy. Community-based interventions, including those linked to schools, may impact on youth mental health, activity and social wellbeing, though the evidence is equivocal.^{358,359,360,361} Some reviews suggest that physical activity interventions for young people, whether at school or in the community, have small or negligible results.^{362,363,364} Programmes that include schools as one component of broader interventions may be more effective for preventing substance abuse and risky sexual behaviour.³⁶⁵

Community prevention programmes have been found to reduce cardiovascular risk and may be effective for diabetes prevention.^{366,367}

Many other reviews of specific targeted health promotion and prevention initiatives are available.^{368,369,370,371,372,373,374,375,376}

Motivational initiatives

Initiatives using approaches such as **motivational interviewing**, cognitive dissonance, cognitive behavioural therapy and other psychosocial approaches have been found to support behaviour change,^{377,378,379} including increased physical activity.^{380,381,382} However one review concluded that achieving and sustaining changes such as fruit and vegetable intake cannot be achieved through motivational behaviour techniques alone.³⁸³

One-to-one counselling can help to reduce sexually transmitted infections and teenage pregnancies.³⁸⁴ When provided by health professionals, it has also been found to improve physical activity in older people.³⁸⁵ In general, face-to-face provision of tailored messaging has been found to improve health behaviours.³⁸⁶ In fact, one review of reviews found that the most effective behaviour change interventions were advice from doctors or one-to-one counselling, and workplace or school based initiatives.³⁸⁷

A review of **health coaching** found significant improvements in nutrition behaviours, physical activity, weight management and medication adherence, though findings were mixed. Common features of effective programmes included goal setting, motivational interviewing and collaboration with health professionals.³⁸⁸

There is no clear evidence that peer support improves health outcomes universally,³⁸⁹ though some reviews indicate positive findings.³⁹⁰ In some instances, peer-based interventions have been found to facilitate important changes in health-related behaviours, including physical activity, smoking, and condom use, with a small to medium-sized effect.³⁹¹

Telephones and technology

Proactive telephone support can be an effective way of improving health behaviour among disadvantaged groups.^{392,393,394,395,396} Women who are pregnant may also benefit from proactive telephone support with things like nutrition, smoking relapse and breastfeeding.³⁹⁷ There is a smaller amount of evidence that telephone and internet interventions for the secondary prevention of coronary heart disease may improve levels of physical activity and mental wellbeing.³⁹⁸

A review of delivering dietary and exercise interventions by telephone found improved health behaviours.³⁹⁹

A review of **text message-based interventions** for health promotion found improvements in health behaviours, particularly smoking cessation and increased physical activity. The most effective interventions used personalised and tailored messages, and decreased the frequency of messages over the course of the intervention.⁴⁰⁰ Other reviews have also suggested positive findings,⁴⁰¹ though the evidence for mobile phone technologies is only just emerging, so it is not possible to draw firm conclusions.⁴⁰²

Computer-based health promotion and risk reduction interventions can have a positive impact on diet and eating behaviours, smoking and drug use, safer sex and general health attitudes and behaviours,^{403,404,405,406,407} particularly among young people.^{408,409,410,411} Often the effects are short term or small.^{412,413,414} One review found that online programmes could impact on weight control.⁴¹⁵ However not all reviews have positive findings.⁴¹⁶ The most effective initiatives may include opportunities for peer support, contact with health professionals, regular updates and tracking and simultaneous use of other initiatives such as text messages.^{417,418}

Video games can increase physical activity in laboratory settings, but gains may not last in the longer-term.⁴¹⁹

Documents and tools

Tailored print interventions have been found to promote physical activity in adults.⁴²⁰

Risk scores have been found to be a useful mechanism for targeting people to take part in prevention programmes. For example, cardiovascular risk scores can help select people for inclusion in multifactorial interventions that lower cardiovascular risk and mortality.⁴²¹

Contracts between patients and professionals may help to improve adherence to preventive measures, but the evidence is limited.⁴²²

Exercise prescriptions and advice from primary care practitioners may help to increase levels of physical activity.^{423,424,425,426,427}

Media campaigns

Media campaigns can take a variety of forms including combinations of television, radio, newspapers, billboards, posters, leaflets, booklets and online. **Mass media campaigns** can encourage people to do things such as eat healthy or take part in disease screening. For example, media campaign have been found to increase screening for conditions such as cancer and HIV.^{428,429,430,431}

Well-designed mass media campaigns can also encourage people to stop unhealthy behaviours.⁴³² For instance there is evidence that campaigns can help to reduce smoking rates among adults and young people.^{433,434,435,436,437,438,439} Culturally targeted campaigns have been found useful for minority ethnic groups.⁴⁴⁰ However, media campaigns have generally not been found to be effective for reducing illicit drug use.⁴⁴¹

Some reviews suggest that standalone media campaigns are less likely to be effective than campaigns combined with other initiatives.^{442,443} The most effective campaigns and health promotion materials may use 'scare tactics' and emphasise the things people will lose,^{444,445} though some reviews suggest focusing on what people gain is more useful.⁴⁴⁶

Social marketing uses marketing techniques to achieve a social or health-related goal. This includes customer orientation, insight, segmentation, behavioural goals, exchange, competition, methods mix, and theory base.⁴⁴⁷ A review found that social marketing can change attitudes and behaviours related to alcohol.⁴⁴⁸

Interventions with professionals

Cultural competence training for professionals may help to promote engagement in health-promoting behaviours among people from minority ethnic groups, but the evidence is limited.^{449,450}

Evidence about the benefits of **financial incentives for professionals**, such as through the Quality and Outcomes Framework, is limited. One review found mixed results of financial incentives for professionals on patient quit rates and longer-term abstinence.⁴⁵¹

Other initiatives

Volunteering may help to improve physical and mental health. A review found that volunteers had better wellbeing and higher survival rates than people who did not volunteer. The reviewers suggested that volunteering could be promoted as a public health intervention.⁴⁵²

Reviews have also examined interventions targeting system or policy levels.^{453,454,455,456} It is estimated that **taxes** on carbonated drinks and saturated fat, higher fast food prices and subsidies on fruits and vegetables would be associated with beneficial dietary change, with the potential for improved health.^{457,458} Financial incentives for patients may also have a role in increasing physical activity.⁴⁵⁹

Smoke-free policies at workplaces or in the community have been found to reduce tobacco use.⁴⁶⁰

There is also evidence that establishing specific **physical activity policies for schools** and making sure that equipment and time is available can influence behaviour and health outcomes.^{461,462,463}

Policies to promote establishing **home gardens** may influence food consumption, but the effect on health outcomes remains uncertain.⁴⁶⁴

What should we invest in?

Taking all of the evidence together, commissioners and providers wanting to enhance experience should consider investing in the initiatives listed below.

Improvement initiatives	Expected return on investment
Opportunistic advice from health professionals in hospital, primary care and workplace	<ul style="list-style-type: none"> • Reduced smoking • More physical exercise • Better diets • Reduced alcohol consumption • Increased uptake of preventive procedures
Targeted health promotion / social marketing programmes	<ul style="list-style-type: none"> • Reduced risk factors • Increased uptake of screening, immunisation and other preventive procedures • <i>May</i> reduce risk factors among disadvantaged groups
Proactive telephone counselling using motivational techniques	<ul style="list-style-type: none"> • Increased uptake of screening, immunisation and other preventive procedures • <i>May</i> reduce risk factors among disadvantaged groups
Self-help programmes and websites	<ul style="list-style-type: none"> • <i>May</i> reduce smoking rates • <i>May</i> improve diets • <i>May</i> reduce other risk factors
Mass media campaigns	<ul style="list-style-type: none"> • Reduced smoking rates • Increased uptake of screening
Parenting programmes and home visits	<ul style="list-style-type: none"> • Reduced health risks among children • Reduced substance misuse among adolescents
Health education in schools including attention to social and emotional wellbeing	<ul style="list-style-type: none"> • <i>May</i> reduce smoking rates • <i>May</i> reduce alcohol consumption • <i>May</i> improve social and emotional wellbeing
Coordinated sexual health strategies including one-to-one counselling	<ul style="list-style-type: none"> • <i>May</i> reduce incidence of sexually transmitted infections • <i>May</i> reduce teenage pregnancies
Physical activity programmes for older people	<ul style="list-style-type: none"> • <i>May</i> enhance mental wellbeing

Although the range of interventions studied is very wide, the evidence suggests that the top three things to focus on include:

1. Reminding people why prevention is important

There is good evidence that opportunistic advice from health professionals (in primary care, hospital and the workplace) can help to reduce risk factors (smoking, exercise, diet, alcohol). A variety of methods - reminders, educational programmes, mass media campaigns and routine health checks - can help to increase uptake of screening, immunisation and other preventive procedures. There is good evidence that parenting programmes and home visits can help to reduce health risks among children. They can also help to reduce substance misuse among adolescents. Coordinated sexual health strategies including one-to-one counselling can help to reduce sexually transmitted infections and teenage pregnancies.

2. Providing support targeted towards the needs of specific groups

There is good evidence that well-designed, carefully targeted interventions can reduce health risks among disadvantaged groups. The extent to which they reduce inequalities *between* socio-economic groups has not been well studied. There is some evidence that proactive telephone counselling using motivational techniques can reduce health risks among disadvantaged groups. There is some evidence that self-help programmes, including those that are internet-based, can help some smokers to quit. Exercise programmes can help to enhance older people's mental wellbeing.

3. Raising awareness within the wider population

Mass media campaigns, targeted health promotion and social marketing campaigns and advice given during contact with health professionals have all been found to be beneficial for raising awareness and potentially changing behaviour. There is reasonably good evidence that well-designed mass media campaigns and banning tobacco advertising can help to reduce smoking rates.

Learn more

You can access the abstracts of all the systematic reviews of evidence by clicking on the hyperlinks in the references section of this document.

There are a number of other resources available, such as:

- Public Health England produces information, data and intelligence on people's health and healthcare for practitioners, policy makers and the wider community. Their [health profiles](#) provide a summary of key health indicators for each local council in England. They are designed to help local councils and the NHS decide where to target resources to tackle health inequalities in their local area.
- The [Health Poverty Index](#) provides summaries for every local authority area across a range of factors underpinning health inequalities. The HPI tool allows groups, differentiated by geography and cultural identity, to be contrasted in terms of their 'health poverty'. A group's 'health poverty' is a combination of both its present state of health and its future health potential or lack of it.
- The [National Social Marketing Centre](#) aims to increase the impact and effectiveness of health promotion programmes and campaigns at national and local levels, by ensuring that social marketing principles are adopted and systematically applied.
- The [Public Health Outcomes Framework](#) includes a number of indicators on health promotion that can be used to track progress over time.
- A number of [NICE](#) public health guidance documents relate to the issue of health promotion, including PH2: Four commonly used methods to increase physical activity; PH7: School based interventions on alcohol; PH9: Community engagement; PH12: Social and emotional wellbeing in primary education; PH13: Promoting physical activity in the workplace; PH16: Mental wellbeing and older people; PH17: Promoting physical activity for children and young people; PH20: Social and emotional wellbeing in secondary education; PH22: Promoting mental wellbeing at work; PH23: School-based interventions to prevent smoking; PH35: Preventing type 2 diabetes – population and community interventions.
- The World Health Organisation (WHO) aims to encourage [consumer behaviours](#) that optimise health (physical and psychosocial) through providing health information, preventive programmes, and access to medical care. It has a wide range of resources online.
- The [Mental Health Foundation](#) provides information, carries out research, campaigns and works to improve services for anyone affected by mental health problems. It examines what makes and keeps people mentally well, communicates its findings, and turns research into practical solutions that make a difference to people's lives.

Appendix: identifying evidence

Commissioners and professionals need accessible and accurate information upon which to make decisions. High quality research is one of the things that might be used to help guide decisions. This appendix describes how we compiled the highest quality research to support decision-making.

What type of evidence is included?

To find out what works best to prioritise person-centred care, we drew on systematic reviews. 'Systematic reviews' have traditionally been regarded as the best standard of evidence because they bring together the results of all relevant studies that meet specific quality criteria. A systematic review starts with a specific question or set of clearly defined questions and then identifies, appraises, selects and synthesises all high quality research evidence relevant to that question. Tried and tested methods are used to perform a thorough search of the literature and critical appraisal of individual studies to identify valid and applicable evidence.

Some groups, such as the Cochrane Collaboration have agreed a set of [standards](#) for gathering, analysing and reporting evidence, though not all reviews conform to these standards.

By drawing together the findings of systematic reviews, we compiled the highest quality evidence to support healthcare planners and practitioners. We focused on the extent to which interventions impacted on people's knowledge, people's experience, service use and costs and health outcomes and behaviours.

Identifying research

Two reviewers independently searched bibliographic databases to identify relevant systematic reviews and other high level narrative reviews. The databases were Medline / Pubmed, Embase, CINAHL, the Cochrane Library and Google Scholar. Specialist websites and the reference lists of identified articles were also searched. The databases were searched for systematic reviews published in English language journals between January 1998 and December 2013.

Reviews were eligible for inclusion if they focused on interventions designed to enhance the active role of patients and lay people. Reviews where patients were solely the 'objects' of an intervention that targeted professionals were excluded. Two reviewers independently assessed the relevance and quality of each review, first based on the abstracts and titles of identified studies and then based on full-text. Any review which focused on a relevant topic and outcome was included.

More than 40,000 studies were screened and a total of 779 systematic reviews were identified for inclusion, broken down into the following categories:

- supporting self-management (228 reviews)
- supporting shared decision-making (48 reviews)
- enhancing experience (110 reviews)
- improving information and understanding (85 reviews)
- and promoting prevention (308 reviews)

Things to remember when interpreting the findings

The evidence base is substantial and significant, but it is not perfect. It will not help to answer all questions about how best to prioritise person-centred care. Some interventions, such as education for self-management, have been very well studied. Others initiatives have been less well investigated, and few studies have examined the longer-term effects of interventions.

Much of the research is from North America, so commissioners and health professionals need to think about whether the findings translate easily to the local context.

Although there is good evidence that some things make a difference to how people feel and what people do, analysis of cost-effectiveness is sometimes lacking.

Acknowledgements

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Exploring the evidence

You can click on the hyperlinks to explore the evidence further.

- 1 Barry MM, D'Eath M, Sixsmith J. [Interventions for improving population health literacy: insights from a rapid review of the evidence.](#) *J Health Commun* 2013;18(12):1507-1522.
- 2 Millard T, Elliott J, Girdler S. [Self-management education programs for people living with HIV/AIDS: a systematic review.](#) *AIDS Patient Care STDS* 2013;27(2):103-113.
- 3 Kerr S, Lawrence M, Darbyshire C, Middleton AR, Fitzsimmons L. [Tobacco and alcohol-related interventions for people with mild/moderate intellectual disabilities: a systematic review of the literature.](#) *J Intellect Disabil Res* 2013;57(5):393-408.
- 4 Bailey JV, Murray E, Rait G, Mercer CH, Morris RW, Peacock R, Cassell J, Nazareth I. [Computer-based interventions for sexual health promotion: systematic review and meta-analyses.](#) *Int J STD AIDS* 2012;23(6):408-413.
- 5 Bailey JV, Murray E, Rait G, Mercer CH, Morris RW, Peacock R, Cassell J, Nazareth I. [Interactive computer-based interventions for sexual health promotion.](#) *Cochrane Database Syst Rev* 2010;(9):CD006483.
- 6 Kaufman ZA, Spencer TS, Ross DA. [Effectiveness of sport-based HIV prevention interventions: a systematic review of the evidence.](#) *AIDS Behav* 2013;17(3):987-1001.
- 7 Beach MC, Cooper LA, Robinson KA, Price EG, Gary TL, Jenckes MW, Gozu A, Smarth C, Palacio A, Feuerstein CJ, Bass EB, Powe NR. [Strategies for improving minority healthcare quality.](#) *Evid Rep Technol Assess (Summ)* 2004;(90):1-8.
- 8 Beach MC, Gary TL, Price EG, Robinson K, Gozu A, Palacio A, Smarth C, Jenckes M, Feuerstein C, Bass EB, Powe NR, Cooper LA. [Improving health care quality for racial/ethnic minorities: a systematic review of the best evidence regarding provider and organization interventions.](#) *BMC Public Health* 2006;6:104.
- 9 Pearson A, Srivastava R, Craig D, Tucker D, Grinspun D, Bajnok I, Griffin P, Long L, Porritt K, Han T, Gi AA. [Systematic review on embracing cultural diversity for developing and sustaining a healthy work environment in healthcare.](#) *International Journal of Evidence-Based Healthcare* 2007;5(1):54-91.
- 10 Ashford S, Edmunds J, French DP. [What is the best way to change self-efficacy to promote lifestyle and recreational physical activity? A systematic review with meta-analysis.](#) *Br J Health Psychol* 2010;15(Pt 2):265-288.
- 11 Interian A, Lewis-Fernández R, Dixon LB. [Improving treatment engagement of underserved U.S. racial-ethnic groups: a review of recent interventions.](#) *Psychiatr Serv* 2013;64(3):212-222.
- 12 Moorhead SA, Hazlett DE, Harrison L, Carroll JK, Irwin A, Hoving C. [A new dimension of health care: systematic review of the uses, benefits, and limitations of social media for health communication.](#) *J Med Internet Res* 2013;15(4):e85.
- 13 Beach MC, Cooper LA, Robinson KA, Price EG, Gary TL, Jenckes MW, Gozu A, Smarth C, Palacio A, Feuerstein CJ, Bass EB, Powe NR. [Strategies for improving minority healthcare quality.](#) *Evid Rep Technol Assess (Summ)* 2004;(90):1-8.
- 14 Holden DJ, Jonas DE, Porterfield DS, Reuland D, Harris R. [Systematic review: enhancing the use and quality of colorectal cancer screening.](#) *Ann Intern Med* 2010;152(10):668-676.
- 15 Beach MC, Gary TL, Price EG, Robinson K, Gozu A, Palacio A, Smarth C, Jenckes M, Feuerstein C, Bass EB, Powe NR, Cooper LA. [Improving health care quality for racial/ethnic minorities: a systematic review of the best evidence regarding provider and organization interventions.](#) *BMC Public Health* 2006;6:104.
- 16 Sabatino SA, Lawrence B, Elder R, Mercer SL, Wilson KM, DeVinney B, Melillo S, Carvalho M, Taplin S, Bastani R, Rimer BK, Vernon SW, Melvin CL, Taylor V, Fernandez M, Glanz K. [Effectiveness of interventions to increase screening for breast, cervical, and colorectal cancers: nine updated systematic reviews for the guide to community preventive services.](#) *Am J Prev Med* 2012;43(1):97-118.
- 17 Camilloni L, Ferroni E, Cendales BJ, Pezzarossi A, Furnari G, Borgia P, Guasticchi G, Giorgi Rossi P. [Methods to increase participation in organised screening programs: a systematic review.](#) *BMC Public Health* 2013;13:464.
- 18 Boulware LE, Barnes GJ, Wilson RF, Phillips K, Maynor K, Hwang C, Marinopoulos S, Merenstein D, Richardson-McKenzie P, Bass EB, Powe NR, Daumit GL. [Value of the periodic health evaluation.](#) *Evid Rep Technol Assess (Full Rep)* 2006;(136):1-134.
- 19 Forbes C, Jepson R, Martin-Hirsch P. [Interventions targeted at women to encourage the uptake of cervical screening.](#) *Cochrane Database Syst Rev* 2002;(3):CD002834.
- 20 Grilli R, Freemantle N, Minozzi S, Domenighetti G, Finer D. [Mass media interventions: effects on health services utilisation.](#) *Cochrane Database Syst Rev.* 2000;(2):CD000389.
- 21 Jacobson VJC, Szilagyi P. [Patient reminder and patient recall systems to improve immunization rates.](#) *Cochrane Database Syst Rev* 2005;(3):CD003941.
- 22 Stone EG, Morton SC, Hulscher ME, Maglione MA, Roth EA, Grimshaw JM, Mittman BS, Rubenstein LV, Rubenstein LZ, Shekelle PG. [Interventions that increase use of adult immunization and cancer screening services: a meta-analysis.](#) *Ann Intern Med* 2002;136(9):641-651.
- 23 Ferroni E, Camilloni L, Jimenez B, Furnari G, Borgia P, Guasticchi G, Giorgi Rossi P. [How to increase uptake in oncologic screening: a systematic review of studies comparing population-based screening programs and spontaneous access.](#) *Prev Med* 2012;55(6):587-596.
- 24 Lu M, Moritz S, Lorenzetti D, Sykes L, Straus S, Quan H. [A systematic review of interventions to increase breast and cervical cancer screening uptake among Asian women.](#) *BMC Public Health* 2012;12:413.
- 25 Glenton C, Scheel IB, Lewin S, Swingler GH. [Can lay health workers increase the uptake of childhood immunisation? Systematic review and typology.](#) *Trop Med Int Health* 2011;16(9):1044-1053.

- 26 Lorenc T, Marrero-Guillamón I, Aggleton P, Cooper C, Llewellyn A, Lehmann A, Lindsay C. [Promoting the uptake of HIV testing among men who have sex with men: systematic review of effectiveness and cost-effectiveness](#). *Sex Transm Infect* 2011;87(4):272-278.
- 27 Hou SI, Sealy DA, Kabiru CW. [Closing the disparity gap: cancer screening interventions among Asians—a systematic literature review](#). *Asian Pac J Cancer Prev* 2011;12(11):3133-3139.
- 28 Kaspin LC, Gorman KM, Miller RM. [Systematic review of employer-sponsored wellness strategies and their economic and health-related outcomes](#). *Popul Health Manag* 2013;16(1):14-21.
- 29 Pelletier KR. [A review and analysis of the clinical and cost-effectiveness studies of comprehensive health promotion and disease management programs at the worksite: update VIII 2008 to 2010](#). *J Occup Environ Med* 2011;53(11):1310-1331.
- 30 van Dongen JM, Proper KI, van Wier MF, van der Beek AJ, Bongers PM, van Mechelen W, van Tulder MW. [Systematic review on the financial return of worksite health promotion programmes aimed at improving nutrition and/or increasing physical activity](#). *Obes Rev* 2011;12(12):1031-1049.
- 31 Brown JP, Clark AM, Dalal H, Welch K, Taylor RS. [Effect of patient education in the management of coronary heart disease: a systematic review and meta-analysis of randomized controlled trials](#). *Eur J Prev Cardiol* 2013;20(4):701-714.
- 32 Coleman T, Agboola S, Leonardi-Bee J, Taylor M, McEwen A, McNeill A. [Relapse prevention in UK Stop Smoking Services: current practice, systematic reviews of effectiveness and cost-effectiveness analysis](#). *Health Technol Assess* 2010;14(49):1-152, iii-iv.
- 33 Li R, Zhang P, Barker LE, Chowdhury FM, Zhang X. [Cost-effectiveness of interventions to prevent and control diabetes mellitus: a systematic review](#). *Diabetes Care* 2010;33(8):1872-1894.
- 34 Tappenden P, Campbell F, Rawdin A, Wong R, Kalita N. [The clinical effectiveness and cost-effectiveness of home-based, nurse-led health promotion for older people: a systematic review](#). *Health Technol Assess* 2012;16(20):1-72.
- 35 Thompson RL, Summerbell CD, Hooper L, Higgins JP, Little PS, Talbot D, Ebrahim S. [Dietary advice given by a dietitian versus other health professional or self-help resources to reduce blood cholesterol](#). *Cochrane Database Syst Rev* 2003;(3):CD001366.
- 36 Sorensen JB, Skovgaard T, Puggaard L. [Exercise on prescription in general practice: a systematic review](#). *Scand J Prim Health Care* 2006;24(2):69-74.
- 37 Stead LF, Hartmann-Boyce J, Perera R, Lancaster T. [Telephone counselling for smoking cessation](#). *Cochrane Database Syst Rev* 2013;8:CD002850.
- 38 Stead LF, Perera R, Lancaster T. [A systematic review of interventions for smokers who contact quitlines](#). *Tob Control* 2007;16 Suppl 1:i3-i8.
- 39 Thompson RL, Summerbell CD, Hooper L, Higgins JP, Little PS, Talbot D, Ebrahim S. [Dietary advice given by a dietitian versus other health professional or self-help resources to reduce blood cholesterol](#). *Cochrane Database Syst Rev* 2003;(3):CD001366.
- 40 Walters ST, Wright JA, Shegog R. [A review of computer and Internet-based interventions for smoking behavior](#). *Addict Behav* 2006;31(2):264-277.
- 41 Chan CW, Pery L. [Lifestyle health promotion interventions for the nursing workforce: a systematic review](#). *J Clin Nurs* 2012;21(15-16):2247-2261.
- 42 Wierenga D, Engbers LH, Van Empelen P, Duijts S, Hildebrandt VH, Van Mechelen W. [What is actually measured in process evaluations for worksite health promotion programs: a systematic review](#). *BMC Public Health* 2013;13(1):1190.
- 43 Malik SH, Blake H, Suggs LS. [A systematic review of workplace health promotion interventions for increasing physical activity](#). *Br J Health Psychol* (published online July 2013).
- 44 Vuillemin A, Rostami C, Maes L, Van Cauwenberghe E, Van Lenthe FJ, Brug J, De Bourdeaudhuij I, Oppert JM. [Worksite physical activity interventions and obesity: a review of European studies \(the HOPE project\)](#). *Obes Facts* 2011;4(6):479-488.
- 45 Buchberger B, Heymann R, Huppertz H, Friepörtner K, Pomorin N, Wasem J. [The effectiveness of interventions in workplace health promotion as to maintain the working capacity of health care personal](#). *GMS Health Technol Assess* 2011;7:Doc06.
- 46 Hutchinson AD, Wilson C. [Improving nutrition and physical activity in the workplace: a meta-analysis of intervention studies](#). *Health Promot Int* 2012;27(2):238-249.
- 47 National Institute for Clinical Excellence. [Promoting children's social and emotional wellbeing in primary education](#). London: NICE, 2008.
- 48 Bonell C, Wells H, Harden A, Jamal F, Fletcher A, Thomas J, Campbell R, Petticrew M, Whitehead M, Murphy S, Moore L. [The effects on student health of interventions modifying the school environment: systematic review](#). *J Epidemiol Community Health* 2013;67(8):677-681.
- 49 Lonsdale C, Rosenkranz RR, Peralta LR, Bennie A, Fahey P, Lubans DR. [A systematic review and meta-analysis of interventions designed to increase moderate-to-vigorous physical activity in school physical education lessons](#). *Prev Med* 2013;56(2):152-161.
- 50 Evans CE, Christian MS, Cleghorn CL, Greenwood DC, Cade JE. [Systematic review and meta-analysis of school-based interventions to improve daily fruit and vegetable intake in children aged 5 to 12 y](#). *Am J Clin Nutr* 2012;96(4):889-901.
- 51 Ganann R, Fitzpatrick-Lewis D, Ciliska D, Peirson L. [Community-based interventions for enhancing access to or consumption of fruit and vegetables among five to 18-year olds: a scoping review](#). *BMC Public Health* 2012;12:711.
- 52 Wang D, Stewart D. [The implementation and effectiveness of school-based nutrition promotion programmes using a health-promoting schools approach: a systematic review](#). *Public Health Nutr* 2013;16(6):1082-1100.
- 53 Robertson-Wilson JE, Dargavel MD, Bryden PJ, Giles-Corti B. [Physical activity policies and legislation in schools: a systematic review](#). *Am J Prev Med* 2012;43(6):643-649.
- 54 Ickes MJ, Erwin H, Beighle A. [Systematic review of recess interventions to increase physical activity](#). *J Phys Act Health* 2013;10(6):910-926.
- 55 Ridgers ND, Salmon J, Parrish AM, Stanley RM, Okely AD. [Physical activity during school recess: a systematic review](#). *Am J Prev Med* 2012;43(3):320-328.
- 56 Janssen MM, Mathijssen JJ, van Bon-Martens MJ, van Oers HA, Garretsen HF. [Effectiveness of alcohol prevention interventions based on the principles of social marketing: a systematic review](#). *Subst Abuse Treat Prev Policy* 2013;8:18.
- 57 van der Kruk JJ, Kortekaas F, Lucas C, Jager-Wittenaar H. [Obesity: a systematic review on parental involvement in long-term European childhood weight control interventions with a nutritional focus](#). *Obes Rev* (published online June 2013).

- 58 Barr-Anderson DJ, Adams-Wynn AW, DiSantis KI, Kumanyika S. [Family-focused physical activity, diet and obesity interventions in African-American girls: a systematic review](#). *Obes Rev* 2013;14(1):29-51.
- 59 Niemeier BS, Hektner JM, Enger KB. [Parent participation in weight-related health interventions for children and adolescents: a systematic review and meta-analysis](#). *Prev Med* 2012;55(1):3-13.
- 60 Freijy T, Kothe EJ. [Dissonance-based interventions for health behaviour change: a systematic review](#). *Br J Health Psychol* 2013;18(2):310-337.
- 61 Noordman J, van der Weijden T, van Dulmen S. [Communication-related behavior change techniques used in face-to-face lifestyle interventions in primary care: a systematic review of the literature](#). *Patient Educ Couns* 2012;89(2):227-244.
- 62 Bonfioli E, Berti L, Goss C, Muraro F, Burti L. [Health promotion lifestyle interventions for weight management in psychosis: a systematic review and meta-analysis of randomised controlled trials](#). *BMC Psychiatry* 2012;12:78.
- 63 Olsen JM, Nesbitt BJ. [Health coaching to improve healthy lifestyle behaviors: an integrative review](#). *Am J Health Promot* 2010;25(1):e1-e12.
- 64 Beach MC, Cooper LA, Robinson KA, Price EG, Gary TL, Jenckes MW, Gozu A, Smarth C, Palacio A, Feuerstein CJ, Bass EB, Powe NR. [Strategies for improving minority healthcare quality](#). *Evid Rep Technol Assess (Summ)* 2004;(90):1-8.
- 65 Jacobson VJC, Szilagyi P. [Patient reminder and patient recall systems to improve immunization rates](#). *Cochrane Database Syst Rev* 2005;(3):CD003941.
- 66 Sarkisian CA, Brown AF, Norris KC, Wintz RL, Mangione CM. [A systematic review of diabetes self-care interventions for older, African American, or Latino adults](#). *Diabetes Educ* 2003;29(3):467-479.
- 67 Stead LF, Hartmann-Boyce J, Perera R, Lancaster T. [Telephone counselling for smoking cessation](#). *Cochrane Database Syst Rev* 2006;8:CD002850.
- 68 Thompson RL, Summerbell CD, Hooper L, Higgins JP, Little PS, Talbot D, Ebrahim S. [Dietary advice given by a dietitian versus other health professional or self-help resources to reduce blood cholesterol](#). *Cochrane Database Syst Rev* 2003;(3):CD001366.
- 69 Lustria ML, Noar SM, Cortese J, Van Stee SK, Glueckauf RL, Lee J. [A meta-analysis of web-delivered tailored health behavior change interventions](#). *J Health Commun* 2013;18(9):1039-1069.
- 70 Chou WY, Prestin A, Lyons C, Wen KY. [Web 2.0 for health promotion: reviewing the current evidence](#). *Am J Public Health* 2013;103(1):e9-18.
- 71 Bailey JV, Murray E, Rait G, Mercer CH, Morris RW, Peacock R, Cassell J, Nazareth I. [Computer-based interventions for sexual health promotion: systematic review and meta-analyses](#). *Int J STD AIDS* 2012;23(6):408-413.
- 72 Nguyen B, Kornman KP, Baur LA. [A review of electronic interventions for prevention and treatment of overweight and obesity in young people](#). *Obes Rev* 2011;12(5):e298-314.
- 73 Krebs P, Prochaska JO, Rossi JS. [A meta-analysis of computer-tailored interventions for health behavior change](#). *Prev Med* 2010;51(3-4):214-221.
- 74 Militello LK, Kelly SA, Melnyk BM. [Systematic review of text-messaging interventions to promote healthy behaviors in pediatric and adolescent populations: implications for clinical practice and research](#). *Worldviews Evid Based Nurs* 2012;9(2):66-77.
- 75 Head KJ, Noar SM, Iannarino NT, Grant Harrington N. [Efficacy of text messaging-based interventions for health promotion: a meta-analysis](#). *Soc Sci Med* 2013;97:41-48.
- 76 Peng W, Crouse JC, Lin JH. [Using active video games for physical activity promotion: a systematic review of the current state of research](#). *Health Educ Behav* 2013;40(2):171-192.
- 77 Short CE, James EL, Plotnikoff RC, Girgis A. [Efficacy of tailored-print interventions to promote physical activity: a systematic review of randomised trials](#). *Int J Behav Nutr Phys Act* 2011;8:113.
- 78 Bravata DM, Smith-Spangler C, Sundaram V, Gienger AL, Lin N, Lewis R, Stave CD, Olkin I, Sirard JR. [Using pedometers to increase physical activity and improve health - a systematic review](#). *JAMA* 2007;298(19):2296-2304.
- 79 Eakin EG, Bull SS, Glasgow RE, Mason M. [Reaching those most in need: a review of diabetes self-management interventions in disadvantaged populations](#). *Diabetes Metab Res Rev* 2002;18(1):26-35.
- 80 National Institute for Clinical Excellence. [Four commonly used methods to increase physical activity: brief interventions in primary care, exercise referral schemes, pedometers and community-based exercise programmes for walking and cycling](#). London: NICE, 2006.
- 81 Nicholson SO. [The effect of cardiovascular health promotion on health behaviors in elementary school children: an integrative review](#). *J Pediatr Nurs* 2000;15(6):343-355.
- 82 Sorensen JB, Skovgaard T, Puggaard L. [Exercise on prescription in general practice: a systematic review](#). *Scand J Prim Health Care* 2006;24(2):69-74.
- 83 Willis A, Davies M, Yates T, Khunti K. [Primary prevention of cardiovascular disease using validated risk scores: a systematic review](#). *J R Soc Med* 2012;105(8):348-356.
- 84 Jenkinson CE, Dickens AP, Jones K, Thompson-Coon J, Taylor RS, Rogers M, Bamba CL, Lang I, Richards SH. [Is volunteering a public health intervention? A systematic review and meta-analysis of the health and survival of volunteers](#). *BMC Public Health* 2013;13:773.
- 85 Martin A, Suhrcke M, Ogilvie D. [Financial incentives to promote active travel: an evidence review and economic framework](#). *Am J Prev Med* 2012;43(6):e45-57.
- 86 Tawalbeh LI, Ahmad MM. [Personal resource questionnaire: a systematic review](#). *J Nurs Res* 2013;21(3):170-177.
- 87 Bakhshi S, While AE. [Health professionals' alcohol-related professional practices and the relationship between their personal alcohol attitudes and behavior and professional practices: a systematic review](#). *Int J Environ Res Public Health* 2013;11(1):218-248.
- 88 Holman DM, Benard V, Roland KB, Watson M, Liddon N, Stokley S. [Barriers to human papillomavirus vaccination among us adolescents: a systematic review of the literature](#). *JAMA Pediatr* (published online November 2013).
- 89 Taukobong NP, Myezwa H, Pengpid S, Van Geertruyden JP. [The degree to which physiotherapy literature includes physical activity as a component of health promotion in practice and entry level education: a scoping systematic review](#). *Physiother Theory Pract* 2014;30(1):12-19.
- 90 Hébert ET, Caughy MO, Shuval K. [Primary care providers' perceptions of physical activity counselling in a clinical setting: a systematic review](#). *Br J Sports Med* 2012;46(9):625-631.
- 91 Brouwers MC, De Vito C, Bahirathan L, Carol A, Carroll JC, Cotterchio M, Dobbins M, Lent B, Levitt C, Lewis N, McGregor SE, Paszat L, Rand C, Wathen N. [What implementation interventions increase cancer screening rates? a systematic review](#). *Implement Sci* 2011;6:111.

- 92 Bosch-Capblanch X, Abba K, Prictor M, Garner P. [Contracts between patients and healthcare practitioners for improving patients' adherence to treatment, prevention and health promotion activities](#). *Cochrane Database Syst Rev* 2007;(2):CD004808.
- 93 Beach MC, Gary TL, Price EG, Robinson K, Gozu A, Palacio A, Smarth C, Jenckes M, Feuerstein C, Bass EB, Powe NR, Cooper LA. [Improving health care quality for racial/ethnic minorities: a systematic review of the best evidence regarding provider and organization interventions](#). *BMC Public Health* 2006;6:104.
- 94 Pearson A, Srivastava R, Craig D, Tucker D, Grinspun D, Bajnok I, Griffin P, Long L, Porritt K, Han T, Gi AA. [Systematic review on embracing cultural diversity for developing and sustaining a healthy work environment in healthcare](#). *International Journal of Evidence-Based Healthcare* 2007;5(1):54-91.
- 95 Hamilton FL, Greaves F, Majeed A, Millett C. [Effectiveness of providing financial incentives to healthcare professionals for smoking cessation activities: systematic review](#). *Tob Control* 2013;22(1):3-8.
- 96 Leavy JE, Bull FC, Rosenberg M, Bauman A. [Physical activity mass media campaigns and their evaluation: a systematic review of the literature 2003-2010](#). *Health Educ Res* 2011;26(6):1060-1085.
- 97 Black ME, Yamada J, Mann V. [A systematic literature review of the effectiveness of community-based strategies to increase cervical cancer screening](#). *Can J Public Health* 2002;93(5):386-393.
- 98 Grilli R, Freemantle N, Minozzi S, Domenighetti G, Finer D. [Mass media interventions: effects on health services utilisation](#). *Cochrane Database Syst Rev* 2000;(2):CD000389.
- 99 Marcus AC, Crane LA. [A review of cervical cancer screening intervention research: implications for public health programs and future research](#). *Prev Med* 1998;27(1):13-31.
- 100 Vidanapathirana J, Abramson MJ, Forbes A, Fairley C. [Mass media interventions for promoting HIV testing](#). *Cochrane Database Syst Rev* 2005;(3):CD004775.
- 101 Eyles H, Ni Mhurchu C, Nghiem N, Blakely T. [Food pricing strategies, population diets, and non-communicable disease: a systematic review of simulation studies](#). *PLoS Med* 2012;9(12):e1001353.
- 102 Powell LM, Chiqui JF, Khan T, Wada R, Chaloupka FJ. [Assessing the potential effectiveness of food and beverage taxes and subsidies for improving public health: a systematic review of prices, demand and body weight outcomes](#). *Obes Rev* 2013;14(2):110-128.
- 103 Hopkins DP, Razi S, Leeks KD, Priya Kalra G, Chattopadhyay SK, Soler RE. [Smokefree policies to reduce tobacco use. A systematic review](#). *Am J Prev Med* 2010;38(2 Suppl):S275-289.
- 104 Sørensen K, Van den Broucke S, Fullam J, Doyle G, Pelikan J, Slonska Z, Brand H. [Health literacy and public health: a systematic review and integration of definitions and models](#). *BMC Public Health* 2012;12:80.
- 105 El-Sayed AM, Scarborough P, Galea S. [Unevenly distributed: a systematic review of the health literature about socioeconomic inequalities in adult obesity in the United Kingdom](#). *BMC Public Health* 2012;12:18.
- 106 Barry MM, D'Eath M, Sixsmith J. [Interventions for improving population health literacy: insights from a rapid review of the evidence](#). *J Health Commun* 2013;18(12):1507-1522.
- 107 Dewalt DA, Berkman ND, Sheridan S, Lohr KN, Pignone MP. [Literacy and health outcomes - A systematic review of the literature](#). *J Gen Intern Med* 2004;19(12):1228-1239.
- 108 Eakin EG, Bull SS, Glasgow RE, Mason M. [Reaching those most in need: a review of diabetes self-management interventions in disadvantaged populations](#). *Diabetes Metab Res Rev* 2002;18(1):26-35.
- 109 Glazier RH, Bajcar J, Kennie NR, Willson K. [A systematic review of interventions to improve diabetes care in socially disadvantaged populations](#). *Diabetes Care* 2006;29(7):1675-1688.
- 110 Marcus AC, Crane LA. [A review of cervical cancer screening intervention research: implications for public health programs and future research](#). *Prev Med* 1998;27(1):13-31.
- 111 Arbesman M, Bazyk S, Nochajski SM. [Systematic review of occupational therapy and mental health promotion, prevention, and intervention for children and youth](#). *Am J Occup Ther* 2013;67(6):e120-130.
- 112 Katz C, Bolton SL, Katz LY, Isaak C, Tilston-Jones T, Sareen J. [A systematic review of school-based suicide prevention programs](#). *Depress Anxiety* 2013;30(10):1030-1045.
- 113 Millard T, Elliott J, Girdler S. [Self-management education programs for people living with HIV/AIDS: a systematic review](#). *AIDS Patient Care STDS* 2013;27(2):103-113.
- 114 Kerr S, Lawrence M, Darbyshire C, Middleton AR, Fitzsimmons L. [Tobacco and alcohol-related interventions for people with mild/moderate intellectual disabilities: a systematic review of the literature](#). *J Intellect Disabil Res* 2013;57(5):393-408.
- 115 Guse K, Levine D, Martins S, Lira A, Gaarde J, Westmorland W, Gilliam M. [Interventions using new digital media to improve adolescent sexual health: a systematic review](#). *J Adolesc Health* 2012;51(6):535-543.
- 116 Bailey JV, Murray E, Rait G, Mercer CH, Morris RW, Peacock R, Cassell J, Nazareth I. [Computer-based interventions for sexual health promotion: systematic review and meta-analyses](#). *Int J STD AIDS* 2012;23(6):408-413.
- 117 Bailey JV, Murray E, Rait G, Mercer CH, Morris RW, Peacock R, Cassell J, Nazareth I. [Interactive computer-based interventions for sexual health promotion](#). *Cochrane Database Syst Rev* 2010;(9):CD006483.
- 118 Tawalbeh LI, Ahmad MM. [Personal resource questionnaire: a systematic review](#). *J Nurs Res* 2013;21(3):170-177.
- 119 Leavy JE, Bull FC, Rosenberg M, Bauman A. [Physical activity mass media campaigns and their evaluation: a systematic review of the literature 2003-2010](#). *Health Educ Res* 2011;26(6):1060-1085.
- 120 Kaufman ZA, Spencer TS, Ross DA. [Effectiveness of sport-based HIV prevention interventions: a systematic review of the evidence](#). *AIDS Behav* 2013;17(3):987-1001.
- 121 Boylan S, Louie JC, Gill TP. [Consumer response to healthy eating, physical activity and weight-related recommendations: a systematic review](#). *Obes Rev* 2012;13(7):606-617.
- 122 Italia N, Rehfuss EA. [Is the Global Solar UV Index an effective instrument for promoting sun protection? A systematic review](#). *Health Educ Res* 2012;27(2):200-213.
- 123 Uijtendewilligen L, Nauta J, Singh AS, van Mechelen W, Twisk JW, van der Horst K, Chinapaw MJ. [Determinants of physical activity and sedentary behaviour in young people: a review and quality synthesis of prospective studies](#). *Br J Sports Med* 2011;45(11):896-905.
- 124 Craggs C, Corder K, van Sluijs EM, Griffin SJ. [Determinants of change in physical activity in children and adolescents: a systematic review](#). *Am J Prev Med* 2011;40(6):645-658.
- 125 Beach MC, Cooper LA, Robinson KA, Price EG, Gary TL, Jenckes MW, Gozu A, Smarth C, Palacio A, Feuerstein CJ, Bass EB, Powe NR. [Strategies for improving minority healthcare quality](#). *Evid Rep Technol Assess (Summ)* 2004;(90):1-8.

- 126 Beach MC, Gary TL, Price EG, Robinson K, Gozu A, Palacio A, Smarth C, Jenckes M, Feuerstein C, Bass EB, Powe NR, Cooper LA. [Improving health care quality for racial/ethnic minorities: a systematic review of the best evidence regarding provider and organization interventions.](#) *BMC Public Health* 2006;6:104.
- 127 Pearson A, Srivastava R, Craig D, Tucker D, Grinspun D, Bajnok I, Griffin P, Long L, Porritt K, Han T, Gi AA. [Systematic review on embracing cultural diversity for developing and sustaining a healthy work environment in healthcare.](#) *International Journal of Evidence-Based Healthcare* 2007;5(1):54-91.
- 128 Cardoza VJ, Documét PI, Fryer CS, Gold MA, Butler J 3rd. [Sexual health behavior interventions for U.S. Latino adolescents: a systematic review of the literature.](#) *J Pediatr Adolesc Gynecol* 2012;25(2):136-149.
- 129 Naaldenberg J, Kuijken N, van Dooren K, van Schroyen Lantman de Valk H. [Topics, methods and challenges in health promotion for people with intellectual disabilities: a structured review of literature.](#) *Res Dev Disabil* 2013;34(12):4534-4545.
- 130 Chase JA. [Physical activity interventions among older adults: a literature review.](#) *Res Theory Nurs Pract* 2013;27(1):53-80.
- 131 Barnett I, van Sluijs EM, Ogilvie D. [Physical activity and transitioning to retirement: a systematic review.](#) *Am J Prev Med* 2012;43(3):329-336.
- 132 Stav WB, Hallenen T, Lane J, Arbesman M. [Systematic review of occupational engagement and health outcomes among community-dwelling older adults.](#) *Am J Occup Ther* 2012;66(3):301-310.
- 133 Yehle KS, Plake KS. [Self-efficacy and educational interventions in heart failure: a review of the literature.](#) *J Cardiovasc Nurs* 2010;25(3):175-188.
- 134 Ashford S, Edmunds J, French DP. [What is the best way to change self-efficacy to promote lifestyle and recreational physical activity? A systematic review with meta-analysis.](#) *Br J Health Psychol* 2010;15(Pt 2):265-288.
- 135 Maslow GR, Chung RJ. [Systematic review of positive youth development programs for adolescents with chronic illness.](#) *Pediatrics* 2013;131(5):e1605-1618.
- 136 Lapalme J, Bisset S, Potvin L. [Role of context in evaluating neighbourhood interventions promoting positive youth development: a narrative systematic review.](#) *Int J Public Health* (published online February 2013).
- 137 Bungay H, Vella-Burrows T. [The effects of participating in creative activities on the health and well-being of children and young people: a rapid review of the literature.](#) *Perspect Public Health* 2013;133(1):44-52.
- 138 Interian A, Lewis-Fernández R, Dixon LB. [Improving treatment engagement of underserved U.S. racial-ethnic groups: a review of recent interventions.](#) *Psychiatr Serv* 2013;64(3):212-222.
- 139 Moorhead SA, Hazlett DE, Harrison L, Carroll JK, Irwin A, Hoving C. [A new dimension of health care: systematic review of the uses, benefits, and limitations of social media for health communication.](#) *J Med Internet Res* 2013;15(4):e85.
- 140 Comino EJ, Davies GP, Krastev Y, Haas M, Christl B, Furler J, Raymont A, Harris MF. [A systematic review of interventions to enhance access to best practice primary health care for chronic disease management, prevention and episodic care.](#) *BMC Health Serv Res* 2012;12:415.
- 141 Taylor CA, Shaw RL, Dale J, French DP. [Enhancing delivery of health behaviour change interventions in primary care: a meta-synthesis of views and experiences of primary care nurses.](#) *Patient Educ Couns* 2011;85(2):315-322.
- 142 Ho AY, Berggren I, Dahlborg-Lyckhage E. [Diabetes empowerment related to Pender's Health Promotion Model: a meta-synthesis.](#) *Nurs Health Sci* 2010;12(2):259-267.
- 143 Rambout L, Tashkandi M, Hopkins L, Tricco AC. [Self-reported barriers and facilitators to preventive human papillomavirus vaccination among adolescent girls and young women: A systematic review.](#) *Prev Med* 2014;58:22-32.
- 144 Vitolins MZ, Crandall S, Miller D, Ip E, Marion G, Spangler JG. [Obesity educational interventions in U.S. medical schools: a systematic review and identified gaps.](#) *Teach Learn Med* 2012;24(3):267-272.
- 145 Rose SA, Poynter PS, Anderson JW, Noar SM, Conigliaro J. [Physician weight loss advice and patient weight loss behavior change: a literature review and meta-analysis of survey data.](#) *Int J Obes (Lond)* 2013;37(1):118-128.
- 146 Bakhshi S, While AE. [Health professionals' alcohol-related professional practices and the relationship between their personal alcohol attitudes and behavior and professional practices: a systematic review.](#) *Int J Environ Res Public Health* 2013;11(1):218-248.
- 147 Holman DM, Benard V, Roland KB, Watson M, Liddon N, Stokley S. [Barriers to human papillomavirus vaccination among us adolescents: a systematic review of the literature.](#) *JAMA Pediatr* (published online November 2013).
- 148 Taukobong NP, Myezwa H, Pengpid S, Van Geertruyden JP. [The degree to which physiotherapy literature includes physical activity as a component of health promotion in practice and entry level education: a scoping systematic review.](#) *Physiother Theory Pract* 2014;30(1):12-19.
- 149 Hébert ET, Caughy MO, Shuval K. [Primary care providers' perceptions of physical activity counselling in a clinical setting: a systematic review.](#) *Br J Sports Med* 2012;46(9):625-631.
- 150 Hauer KE, Carney PA, Chang A, Satterfield J. [Behavior change counseling curricula for medical trainees: a systematic review.](#) *Acad Med* 2012;87(7):956-968.
- 151 Vatcharavongvan P, Hepworth J, Marley J. [The application of the parallel track model in community health promotion: a literature review.](#) *Health Soc Care Community* 2013;21(4):352-363.
- 152 Beach MC, Cooper LA, Robinson KA, Price EG, Gary TL, Jenckes MW, Gozu A, Smarth C, Palacio A, Feuerstein CJ, Bass EB, Powe NR. [Strategies for improving minority healthcare quality.](#) *Evid Rep Technol Assess (Summ)* 2004;(90):1-8.
- 153 Holden DJ, Jonas DE, Porterfield DS, Reuland D, Harris R. [Systematic review: enhancing the use and quality of colorectal cancer screening.](#) *Ann Intern Med* 2010;152(10):668-676.
- 154 Beach MC, Gary TL, Price EG, Robinson K, Gozu A, Palacio A, Smarth C, Jenckes M, Feuerstein C, Bass EB, Powe NR, Cooper LA. [Improving health care quality for racial/ethnic minorities: a systematic review of the best evidence regarding provider and organization interventions.](#) *BMC Public Health* 2006;6:104.
- 155 Sabatino SA, Lawrence B, Elder R, Mercer SL, Wilson KM, DeVinney B, Melillo S, Carvalho M, Taplin S, Bastani R, Rimer BK, Vernon SW, Melvin CL, Taylor V, Fernandez M, Glanz K. [Effectiveness of interventions to increase screening for breast, cervical, and colorectal cancers: nine updated systematic reviews for the guide to community preventive services.](#) *Am J Prev Med* 2012;43(1):97-118.

- 156 Camilloni L, Ferroni E, Cendales BJ, Pezzarossi A, Furnari G, Borgia P, Guasticchi G, Giorgi Rossi P. [Methods to increase participation in organised screening programs: a systematic review](#). *BMC Public Health* 2013;13:464.
- 157 Boulware LE, Barnes GJ, Wilson RF, Phillips K, Maynor K, Hwang C, Marinopoulos S, Merenstein D, Richardson-McKenzie P, Bass EB, Powe NR, Daumit GL. [Value of the periodic health evaluation](#). *Evid Rep Technol Assess (Full Rep)* 2006;(136):1-134.
- 158 Forbes C, Jepson R, Martin-Hirsch P. [Interventions targeted at women to encourage the uptake of cervical screening](#). *Cochrane Database Syst Rev* 2002;(3):CD002834.
- 159 Grilli R, Freemantle N, Minozzi S, Domenighetti G, Finer D. [Mass media interventions: effects on health services utilisation](#). *Cochrane Database Syst Rev*. 2000;(2):CD000389.
- 160 Jacobson VJC, Szilagyi P. [Patient reminder and patient recall systems to improve immunization rates](#). *Cochrane Database Syst Rev* 2005;(3):CD003941.
- 161 Stone EG, Morton SC, Hulscher ME, Maglione MA, Roth EA, Grimshaw JM, Mittman BS, Rubenstein LV, Rubenstein LZ, Shekelle PG. [Interventions that increase use of adult immunization and cancer screening services: a meta-analysis](#). *Ann Intern Med* 2002;136(9):641-651.
- 162 Ferroni E, Camilloni L, Jimenez B, Furnari G, Borgia P, Guasticchi G, Giorgi Rossi P. [How to increase uptake in oncologic screening: a systematic review of studies comparing population-based screening programs and spontaneous access](#). *Prev Med* 2012;55(6):587-596.
- 163 Lu M, Moritz S, Lorenzetti D, Sykes L, Straus S, Quan H. [A systematic review of interventions to increase breast and cervical cancer screening uptake among Asian women](#). *BMC Public Health* 2012;12:413.
- 164 Godin G, Vézina-Im LA, Bélanger-Gravel A, Amireault S. [Efficacy of interventions promoting blood donation: a systematic review](#). *Transfus Med Rev* 2012;26(3):224-237.e6.
- 165 Corcoran J, Dattalo P, Crowley M. [Cervical cancer screening interventions for U.S. Latinas: a systematic review](#). *Health Soc Work* 2012;37(4):197-205.
- 166 Vernon SW, McQueen A, Tiro JA, del Junco DJ. [Interventions to promote repeat breast cancer screening with mammography: a systematic review and meta-analysis](#). *J Natl Cancer Inst* 2010;102(14):1023-1039.
- 167 Sawmynaden P, Atherton H, Majeed A, Car J. [Email for the provision of information on disease prevention and health promotion](#). *Cochrane Database Syst Rev* 2012;11:CD007982.
- 168 Brown JP, Clark AM, Dalal H, Welch K, Taylor RS. [Effect of patient education in the management of coronary heart disease: a systematic review and meta-analysis of randomized controlled trials](#). *Eur J Prev Cardiol* 2013;20(4):701-714.
- 169 Lam PP, Chambers LW, MacDougall DM, McCarthy AE. [Seasonal influenza vaccination campaigns for health care personnel: systematic review](#). *CMAJ* 2010;182(12):E542-548.
- 170 Beswick AD, Rees K, Griebsch I, Taylor FC, Burke M, West RR, Victory J, Brown J, Taylor RS, Ebrahim S. [Provision, uptake and cost of cardiac rehabilitation programmes: improving services to under-represented groups](#). *Health Technol Assess* 2004;8(41):1-152.
- 171 Shroufi A, Chowdhury R, Anchala R, Stevens S, Blanco P, Han T, Niessen L, Franco OH. [Cost effective interventions for the prevention of cardiovascular disease in low and middle income countries: a systematic review](#). *BMC Public Health* 2013;13:285.
- 172 Li R, Zhang P, Barker LE, Chowdhury FM, Zhang X. [Cost-effectiveness of interventions to prevent and control diabetes mellitus: a systematic review](#). *Diabetes Care* 2010;33(8):1872-1894.
- 173 Coleman T, Agboola S, Leonardi-Bee J, Taylor M, McEwen A, McNeill A. [Relapse prevention in UK Stop Smoking Services: current practice, systematic reviews of effectiveness and cost-effectiveness analysis](#). *Health Technol Assess* 2010;14(49):1-152.
- 174 Tappenden P, Campbell F, Rawdin A, Wong R, Kalita N. [The clinical effectiveness and cost-effectiveness of home-based, nurse-led health promotion for older people: a systematic review](#). *Health Technol Assess* 2012;16(20):1-72.
- 175 Garrett S, Elley CR, Rose SB, O'Dea D, Lawton BA, Dowell AC. [Are physical activity interventions in primary care and the community cost-effective? A systematic review of the evidence](#). *Br J Gen Pract* 2011;61(584):e125-133.
- 176 Kaspin LC, Gorman KM, Miller RM. [Systematic review of employer-sponsored wellness strategies and their economic and health-related outcomes](#). *Popul Health Manag* 2013;16(1):14-21.
- 177 Pelletier KR. [A review and analysis of the clinical and cost-effectiveness studies of comprehensive health promotion and disease management programs at the worksite: update VIII 2008 to 2010](#). *J Occup Environ Med* 2011;53(11):1310-1331.
- 178 van Dongen JM, Proper KI, van Wier MF, van der Beek AJ, Bongers PM, van Mechelen W, van Tulder MW. [Systematic review on the financial return of worksite health promotion programmes aimed at improving nutrition and/or increasing physical activity](#). *Obes Rev* 2011;12(12):1031-1049.
- 179 Lerner D, Rodday AM, Cohen JT, Rogers WH. [A systematic review of the evidence concerning the economic impact of employee-focused health promotion and wellness programs](#). *J Occup Environ Med* 2013;55(2):209-222.
- 180 Thompson RL, Summerbell CD, Hooper L, Higgins JP, Little PS, Talbot D, Ebrahim S. [Dietary advice given by a dietitian versus other health professional or self-help resources to reduce blood cholesterol](#). *Cochrane Database Syst Rev* 2003;(3):CD001366.
- 181 Cooper NJ, Kendrick D, Achana F, Dhiman P, He Z, Wynn P, Le Cozannet E, Saramago P, Sutton AJ. [Network meta-analysis to evaluate the effectiveness of interventions to increase the uptake of smoke alarms](#). *Epidemiol Rev* 2012;34(1):32-45.
- 182 Glenton C, Scheel IB, Lewin S, Swingler GH. [Can lay health workers increase the uptake of childhood immunisation? Systematic review and typology](#). *Trop Med Int Health* 2011;16(9):1044-1053.
- 183 Lorenc T, Marrero-Guillamón I, Aggleton P, Cooper C, Llewellyn A, Lehmann A, Lindsay C. [Promoting the uptake of HIV testing among men who have sex with men: systematic review of effectiveness and cost-effectiveness](#). *Sex Transm Infect* 2011;87(4):272-278.
- 184 Hou SI, Sealy DA, Kabiru CW. [Closing the disparity gap: cancer screening interventions among Asians--a systematic literature review](#). *Asian Pac J Cancer Prev* 2011;12(11):3133-3139.
- 185 Lewin S, Munabi-Babigumira S, Glenton C, Daniels K, Bosch-Capblanch X, van Wyk BE, Odgaard-Jensen J, Johansen M, Aja GN, Zwarenstein M, Scheel IB. [Lay health workers in primary and community health care for maternal and child health and the management of infectious diseases](#). *Cochrane Database Syst Rev* 2010;(3):CD004015.

- 186 Pennington M, Visram S, Donaldson C, White M, Lhussier M, Deane K, Forster N, Carr SM. [Cost-effectiveness of health-related lifestyle advice delivered by peer or lay advisors: synthesis of evidence from a systematic review](#). *Cost Eff Resour Alloc* 2013;11(1):30.
- 187 Powe BD, Faulkenberry R, Harmond L. [A review of intervention studies that seek to increase colorectal cancer screening among African-Americans](#). *Am J Health Promot* 2010;25(2):92-99.
- 188 Brouwers MC, De Vito C, Bahirathan L, Carol A, Carroll JC, Cotterchio M, Dobbins M, Lent B, Levitt C, Lewis N, McGregor SE, Paszat L, Rand C, Wathen N. [What implementation interventions increase cancer screening rates? a systematic review](#). *Implement Sci* 2011;6:111.
- 189 Fox C. [Evidence summary: what is the effectiveness of alternative approaches for increasing dental attendance by poor families or families from deprived areas?](#) *Br Dent J* 2010;208(4):167-171.
- 190 Ammerman A, Lindquist C, Hersey J, Jackman AM, Gavin NI, Garces C, Lohr KN, Cary TS, Whitener BL. [Efficacy of interventions to modify dietary behavior related to cancer risk](#). *Evid Rep Technol Assess (Summ)* 2000;(25):1-4.
- 191 Ammerman AS, Lindquist CH, Lohr KN, Hersey J. [The efficacy of behavioral interventions to modify dietary fat and fruit and vegetable intake: A review of the evidence](#). *Prev Med* 2002;35(1):25-41.
- 192 Beach MC, Gary TL, Price EG, Robinson K, Gozu A, Palacio A, Smarth C, Jenckes M, Feuerstein C, Bass EB, Powe NR, Cooper LA. [Improving health care quality for racial/ethnic minorities: a systematic review of the best evidence regarding provider and organization interventions](#). *BMC Public Health* 2006;6:104.
- 193 Beswick AD, Rees K, Griebisch I, Taylor FC, Burke M, West RR, Victory J, Brown J, Taylor RS, Ebrahim S. [Provision, uptake and cost of cardiac rehabilitation programmes: improving services to under-represented groups](#). *Health Technol Assess* 2004;8(41):iii-iv, ix-x, 1-152.
- 194 Beswick AD, Rees K, West RR, Taylor FC, Burke M, Griebisch I, Taylor RS, Victory J, Brown J, Ebrahim S. [Improving uptake and adherence in cardiac rehabilitation: literature review](#). *J Adv Nurs* 2005;49(5):538-555.
- 195 Bosch-Capblanch X, Abba K, Prictor M, Garner P. [Contracts between patients and healthcare practitioners for improving patients' adherence to treatment, prevention and health promotion activities](#). *Cochrane Database Syst Rev* 2007;(2):CD004808.
- 196 Boulware LE, Barnes GJ, Wilson RF, Phillips K, Maynor K, Hwang C, Marinopoulos S, Merenstein D, Richardson-McKenzie P, Bass EB, Powe NR, Daumit GL. [Value of the periodic health evaluation](#). *Evid Rep Technol Assess (Full Rep)* 2006;(136):1-134.
- 197 Bravata DM, Smith-Spangler C, Sundaram V, Gienger AL, Lin N, Lewis R, Stave CD, Olkin I, Sirard JR. [Using pedometers to increase physical activity and improve health: a systematic review](#). *JAMA* 2007;298(19):2296-2304.
- 198 Coren E, Barlow J, Stewart-Brown S. [The effectiveness of individual and group-based parenting programmes in improving outcomes for teenage mothers and their children: a systematic review](#). *J Adolesc* 2003;26(1):79-103.
- 199 Dewalt DA, Berkman ND, Sheridan S, Lohr KN, Pignone MP. [Literacy and health outcomes: a systematic review of the literature](#). *J Gen Intern Med* 2004;19(12):1228-1239.
- 200 Eakin EG, Bull SS, Glasgow RE, Mason M. [Reaching those most in need: a review of diabetes self-management interventions in disadvantaged populations](#). *Diabetes Metab Res Rev* 2002;18(1):26-35.
- 201 Elwy AR, Hart GJ, Hawkes S, Petticrew M. [Effectiveness of interventions to prevent sexually transmitted infections and human immunodeficiency virus in heterosexual men: a systematic review](#). *Arch Intern Med* 2002;162(16):1818-1830.
- 202 France EK, Glasgow RE, Marcus AC. [Smoking cessation interventions among hospitalized patients: What have we learned?](#) *Prev Med* 2001;32(4):376-388.
- 203 Kusters JP, Gotsche PC. [Regular self-examination or clinical examination for early detection of breast cancer](#). *Cochrane Database Syst Rev* 2003;(2):CD003373.
- 204 Lancaster T, Stead LF. [Self-help interventions for smoking cessation](#). *Cochrane Database Syst Rev* 2005;(3):CD001118.
- 205 National Institute for Clinical Excellence. [Promoting or creating built or natural environments that encourage and support physical activity](#). London: NICE, 2008.
- 206 National Institute for Clinical Excellence. [Workplace health promotion: how to encourage employees to be physically active](#). London: NICE, 2008.
- 207 National Institute for Clinical Excellence. [One to one interventions to reduce the transmission of sexually transmitted infections \(STIs\) including HIV, and to reduce the rate of under 18 conceptions, especially among vulnerable and at risk groups](#). London: NICE, 2007.
- 208 National Institute for Clinical Excellence. [Interventions in schools to prevent or reduce alcohol use among young people](#). London: NICE, 2007.
- 209 National Institute for Clinical Excellence. [Promoting children's social and emotional wellbeing in primary education](#). London: NICE, 2008.
- 210 Naughton F, Prevost AT, Sutton S. [Self-help smoking cessation interventions in pregnancy: a systematic review and meta-analysis](#). *Addiction* 2008;103(4):566-579.
- 211 Nicholson SO. [The effect of cardiovascular health promotion on health behaviors in elementary school children: an integrative review](#). *J Pediatr Nurs* 2000;15(6):343-355.
- 212 Pelletier KR. [A review and analysis of the clinical and cost-effectiveness studies of comprehensive health promotion and disease management programs at the worksite: update VI 2000-2004](#). *J Occup Environ Med* 2005;47(10):1051-1058.
- 213 Ranney L, Melvin C, Lux L, McClain E, Lohr KN. [Systematic review: smoking cessation intervention strategies for adults and adults in special populations](#). *Ann Intern Med* 2006;145(11):845-856.
- 214 Sarkisian CA, Brown AF, Norris KC, Wintz RL, Mangione CM. [A systematic review of diabetes self-care interventions for older, African American, or Latino adults](#). *Diabetes Educ* 2003;29(3):467-479.
- 215 Sorensen JB, Skovgaard T, Puggaard L. [Exercise on prescription in general practice: a systematic review](#). *Scand J Prim Health Care* 2006;24(2):69-74.
- 216 Stead LF, Hartmann-Boyce J, Perera R, Lancaster T. [Telephone counselling for smoking cessation](#). *Cochrane Database Syst Rev* 2013;8:CD002850.
- 217 Stead LF, Perera R, Lancaster T. [A systematic review of interventions for smokers who contact quitlines](#). *Tob Control* 2007;16 Suppl 1:i3-i8.
- 218 Thompson RL, Summerbell CD, Hooper L, Higgins JP, Little PS, Talbot D, Ebrahim S. [Dietary advice given by a dietitian versus other health professional or self-help resources to reduce blood cholesterol](#). *Cochrane Database Syst Rev* 2003;(3):CD001366.
- 219 Walters ST, Wright JA, Shegog R. [A review of computer and Internet-based interventions for smoking behavior](#). *Addict Behav* 2006;31(2):264-277.

- 220 Chan CW, Perry L. [Lifestyle health promotion interventions for the nursing workforce: a systematic review](#). *J Clin Nurs* 2012;21(15-16):2247-2261.
- 221 Blank L, Baxter SK, Payne N, Guillaume LR, Squires H. [Systematic review and narrative synthesis of the effectiveness of contraceptive service interventions for young people, delivered in health care settings](#). *Health Educ Res* 2012;27(6):1102-1119.
- 222 Fowles ER, Cheng HR, Mills S. [Postpartum health promotion interventions: a systematic review](#). *Nurs Res* 2012;61(4):269-282.
- 223 Happell B, Davies C, Scott D. [Health behaviour interventions to improve physical health in individuals diagnosed with a mental illness: a systematic review](#). *Int J Ment Health Nurs* 2012;21(3):236-247.
- 224 Allen K, Zoellner J, Motley M, Estabrooks PA. [Understanding the internal and external validity of health literacy interventions: a systematic literature review using the RE-AIM framework](#). *J Health Commun* 2011;16 Suppl 3:55-72.
- 225 Sheridan SL, Halpern DJ, Viera AJ, Berkman ND, Donahue KE, Crotty K. [Interventions for individuals with low health literacy: a systematic review](#). *J Health Commun* 2011;16 Suppl 3:30-54.
- 226 Wiggins N. [Popular education for health promotion and community empowerment: a review of the literature](#). *Health Promot Int* 2012;27(3):356-371.
- 227 Johnson BT, Scott-Sheldon LA, Carey MP. [Meta-synthesis of health behavior change meta-analyses](#). *Am J Public Health* 2010;100(11):2193-2198.
- 228 Hemsing N, Greaves L, O'Leary R, Chan K, Okoli C. [Partner support for smoking cessation during pregnancy: a systematic review](#). *Nicotine Tob Res* 2012;14(7):767-776.
- 229 Gierisch JM, Bastian LA, Calhoun PS, McDuffie JR, Williams JW Jr. [Smoking cessation interventions for patients with depression: a systematic review and meta-analysis](#). *J Gen Intern Med* 2012;27(3):351-360.
- 230 Smerecnik C, Grispen JE, Quaak M. [Effectiveness of testing for genetic susceptibility to smoking-related diseases on smoking cessation outcomes: a systematic review and meta-analysis](#). *Tob Control* 2012;21(3):347-354.
- 231 Schröder-Günther MA, Zhou M, Gerber A, Passon AM. [Primary tobacco prevention in China--a systematic review](#). *Asian Pac J Cancer Prev* 2011;12(11):2973-2980.
- 232 Hoedjes M, Berks D, Vogel I, Franx A, Visser W, Duvekot JJ, Habbema JD, Steegers EA, Raat H. [Effect of postpartum lifestyle interventions on weight loss, smoking cessation, and prevention of smoking relapse: a systematic review](#). *Obstet Gynecol Surv* 2010;65(10):631-652.
- 233 Cahill K, Moher M, Lancaster T. [Workplace interventions for smoking cessation](#). *Cochrane Database Syst Rev* 2008;(4):CD003440.
- 234 France EK, Glasgow RE, Marcus AC. [Smoking cessation interventions among hospitalized patients: What have we learned?](#) *Prev Med* 2001;32(4):376-388.
- 235 Lancaster T, Stead LF. [Self-help interventions for smoking cessation](#). *Cochrane Database Syst Rev* 2005;(3):CD001118.
- 236 National Institute for Clinical Excellence. [Smoking cessation services in primary care, pharmacies, local authorities and workplaces, particularly for manual working groups, pregnant women and hard to reach communities](#). London: NICE, 2008.
- 237 Pelletier KR. [A review and analysis of the clinical and cost-effectiveness studies of comprehensive health promotion and disease management programs at the worksite: update VI 2000-2004](#). *J Occup Environ Med* 2005;47(10):1051-1058.
- 238 Ranney L, Melvin C, Lux L, McClain E, Lohr KN. [Systematic review: smoking cessation intervention strategies for adults and adults in special populations](#). *Ann Intern Med* 2006;145(11):845-856.
- 239 Stead LF, Hartmann-Boyce J, Perera R, Lancaster T. [Telephone counselling for smoking cessation](#). *Cochrane Database Syst Rev* 2006;8:CD002850.
- 240 Stead LF, Perera R, Lancaster T. [A systematic review of interventions for smokers who contact quitlines](#). *Tob Control* 2007;16 Suppl 1:i3-i8.
- 241 Zbikowski SM, Magnusson B, Pockey JR, Tindle HA, Weaver KE. [A review of smoking cessation interventions for smokers aged 50 and older](#). *Maturitas* 2012;71(2):131-141.
- 242 Murray RL, Bauld L, Hackshaw LE, McNeill A. [Improving access to smoking cessation services for disadvantaged groups: a systematic review](#). *J Public Health (Oxf)* 2009;31(2):258-277.
- 243 Ranney L, Melvin C, Lux L, McClain E, Lohr KN. [Systematic review: smoking cessation intervention strategies for adults and adults in special populations](#). *Ann Intern Med* 2006;145(11):845-856.
- 244 Stead LF, Hartmann-Boyce J, Perera R, Lancaster T. [Telephone counselling for smoking cessation](#). *Cochrane Database Syst Rev* 2006;8:CD002850.
- 245 Stead LF, Perera R, Lancaster T. [A systematic review of interventions for smokers who contact quitlines](#). *Tob Control* 2007;16 Suppl 1:i3-i8.
- 246 France EK, Glasgow RE, Marcus AC. [Smoking cessation interventions among hospitalized patients: what have we learned?](#) *Prev Med* 2001;32(4):376-388.
- 247 Lancaster T, Stead LF. [Self-help interventions for smoking cessation](#). *Cochrane Database Syst Rev* 2002;(3):CD001118.
- 248 National Institute for Clinical Excellence. [Smoking cessation services in primary care, pharmacies, local authorities and workplaces, particularly for manual working groups, pregnant women and hard to reach communities](#). London: NICE, 2008.
- 249 Naughton F, Prevost AT, Sutton S. [Self-help smoking cessation interventions in pregnancy: a systematic review and meta-analysis](#). *Addiction* 2008;103(4):566-579.
- 250 Aveyard P, Begh R, Parsons A, West R. [Brief opportunistic smoking cessation interventions: a systematic review and meta-analysis to compare advice to quit and offer of assistance](#). *Addiction* 2012;107(6):1066-1073.
- 251 National Institute for Clinical Excellence. [Preventing the uptake of smoking by children and young people](#). London: NICE, 2008.
- 252 Naughton F, Prevost AT, Sutton S. [Self-help smoking cessation interventions in pregnancy: a systematic review and meta-analysis](#). *Addiction* 2008;103(4):566-579.
- 253 National Institute for Clinical Excellence. [Smoking cessation services in primary care, pharmacies, local authorities and workplaces, particularly for manual working groups, pregnant women and hard to reach communities](#). London: NICE, 2008.
- 254 Walters ST, Wright JA, Shegog R. [A review of computer and Internet-based interventions for smoking behavior](#). *Addict Behav* 2006;31(2):264-277.
- 255 Nayan S, Gupta MK, Strychowsky JE, Sommer DD. [Smoking cessation interventions and cessation rates in the oncology population: an updated systematic review and meta-analysis](#). *Otolaryngol Head Neck Surg* 2013;149(2):200-211.
- 256 Ammerman A, Lindquist C, Hersey J, Jackman AM, Gavin NI, Garces C, Lohr KN, Cary TS, Whitener BL. [Efficacy of interventions to modify dietary behavior related to cancer risk](#). *Evid Rep Technol Assess (Summ)* 2000;(25):1-4.

- 257 Ammerman AS, Lindquist CH, Lohr KN, Hersey J. [The efficacy of behavioral interventions to modify dietary fat and fruit and vegetable intake: A review of the evidence.](#) *Prev Med* 2002;35(1):25-41.
- 258 Thompson RL, Summerbell CD, Hooper L, Higgins JP, Little PS, Talbot D, Ebrahim S. [Dietary advice given by a dietitian versus other health professional or self-help resources to reduce blood cholesterol.](#) *Cochrane Database Syst Rev* 2003;(3):CD001366. [Cochrane Library](#)
- 259 Hendrie GA, Brindal E, Baird D, Gardner C. [Improving children's dairy food and calcium intake: can intervention work? A systematic review of the literature.](#) *Public Health Nutr* 2013;16(2):365-376.
- 260 Kremers S, Reubsæet A, Martens M, Gerards S, Jonkers R, Candel M, de Weerd I, de Vries N. [Systematic prevention of overweight and obesity in adults: a qualitative and quantitative literature analysis.](#) *Obes Rev* 2010;11(5):371-379.
- 261 Lemacks J, Wells BA, Ilich JZ, Ralston PA. [Interventions for improving nutrition and physical activity behaviors in adult African American populations: a systematic review, January 2000 through December 2011.](#) *Prev Chronic Dis* 2013;10:E99.
- 262 Perez LG, Arredondo EM, Elder JP, Barquera S, Nagle B, Holub CK. [Evidence-based obesity treatment interventions for Latino adults in the U.S.: a systematic review.](#) *Am J Prev Med* 2013;44(5):550-560.
- 263 Holub CK, Elder JP, Arredondo EM, Barquera S, Eisenberg CM, Sánchez Romero LM, Rivera J, Lobelo F, Simoes EJ. [Obesity control in Latin American and U.S. Latinos: a systematic review.](#) *Am J Prev Med* 2013;44(5):529-537.
- 264 Bond M, Wyatt K, Lloyd J, Taylor R. [Systematic review of the effectiveness of weight management schemes for the under fives.](#) *Obes Rev* 2011;12(4):242-253.
- 265 Osei-Assibey G, Kyrou I, Adi Y, Kumar S, Matyka K. [Dietary and lifestyle interventions for weight management in adults from minority ethnic/non-White groups: a systematic review.](#) *Obes Rev* 2010;11(11):769-776.
- 266 Knowlden AP, Sharma M. [Systematic review of family and home-based interventions targeting paediatric overweight and obesity.](#) *Obes Rev* 2012;13(6):499-508.
- 267 Branscum P, Sharma M. [A systematic analysis of childhood obesity prevention interventions targeting Hispanic children: lessons learned from the previous decade.](#) *Obes Rev* 2011;12(5):e151-158.
- 268 Woodman J, Harden A, Thomas J, Brunton J, Kavanagh J, Stansfield C. [Searching for systematic reviews of the effects of social and environmental interventions: a case study of children and obesity.](#) *J Med Libr Assoc* 2010;98(2):140-146.
- 269 Hesketh KD, Campbell KJ. [Interventions to prevent obesity in 0-5 year olds: an updated systematic review of the literature.](#) *Obesity* 2010;18 Suppl 1:S27-35.
- 270 Verhaeghe N, De Maeseneer J, Maes L, Van Heeringen C, Annemans L. [Effectiveness and cost-effectiveness of lifestyle interventions on physical activity and eating habits in persons with severe mental disorders: a systematic review.](#) *Int J Behav Nutr Phys Act* 2011;8:28.
- 271 Jinks A, Cotton A, Rylance R. [Obesity interventions for people with a learning disability: an integrative literature review.](#) *J Adv Nurs* 2011;67(3):460-471.
- 272 Cabassa LJ, Ezell JM, Lewis-Fernández R. [Lifestyle interventions for adults with serious mental illness: a systematic literature review.](#) *Psychiatr Serv* 2010;61(8):774-782.
- 273 Hartman MA, Hosper K, Stronks K. [Targeting physical activity and nutrition interventions towards mothers with young children: a review on components that contribute to attendance and effectiveness.](#) *Public Health Nutr* 2011;14(8):1364-1381.
- 274 Marshall SJ, Simoes EJ, Eisenberg CM, Holub CK, Arredondo EM, Barquera S, Elder JP. [Weight-related child behavioral interventions in Brazil: a systematic review.](#) *Am J Prev Med* 2013;44(5):543-549.
- 275 Greaves CJ, Sheppard KE, Abraham C, Hardeman W, Roden M, Evans PH, Schwarz P. [Systematic review of reviews of intervention components associated with increased effectiveness in dietary and physical activity interventions.](#) *BMC Public Health* 2011;11:119.
- 276 Hendrie GA, Brindal E, Baird D, Gardner C. [Improving children's dairy food and calcium intake: can intervention work? A systematic review of the literature.](#) *Public Health Nutr* 2013;16(2):365-376.
- 277 Sargent GM, Pilotto LS, Baur LA. [Components of primary care interventions to treat childhood overweight and obesity: a systematic review of effect.](#) *Obes Rev* 2011;12(5):e219-235.
- 278 Laddu D, Dow C, Hingle M, Thomson C, Going S. [A review of evidence-based strategies to treat obesity in adults.](#) *Nutr Clin Pract* 2011;26(5):512-525.
- 279 National Institute for Clinical Excellence. [Guidance for occupational therapy interventions and physical activity interventions to promote the mental wellbeing of older people in primary care and residential care.](#) London: NICE, 2008.
- 280 Guo JL, Tsai YY, Liao JY, Tu HM, Huang CM. [Interventions to reduce the number of falls among older adults with/without cognitive impairment: an exploratory meta-analysis.](#) *Int J Geriatr Psychiatry* (published online December 2013).
- 281 Choi M, Hector M. [Effectiveness of intervention programs in preventing falls: a systematic review of recent 10 years and meta-analysis.](#) *J Am Med Dir Assoc* 2012;13(2):188.e13-21.
- 282 Szalina SG, Browning C, Yasin S. [Interventions to promote physical activity in older people with type 2 diabetes mellitus: a systematic review.](#) *Front Public Health* 2013;1:71.
- 283 Chase JA. [Physical activity interventions among older adults: a literature review.](#) *Res Theory Nurs Pract* 2013;27(1):53-80.
- 284 Barnett I, Guell C, Ogilvie D. [The experience of physical activity and the transition to retirement: a systematic review and integrative synthesis of qualitative and quantitative evidence.](#) *Int J Behav Nutr Phys Act* 2012;9:97.
- 285 Simek EM, McPhate L, Haines TP. [Adherence to and efficacy of home exercise programs to prevent falls: a systematic review and meta-analysis of the impact of exercise program characteristics.](#) *Prev Med* 2012;55(4):262-275.
- 286 Horne M, Tierney S. [What are the barriers and facilitators to exercise and physical activity uptake and adherence among South Asian older adults: a systematic review of qualitative studies.](#) *Prev Med* 2012;55(4):276-284.
- 287 Hoehner CM, Ribeiro IC, Parra DC, Reis RS, Azevedo MR, Hino AA, Soares J, Hallal PC, Simões EJ, Brownson RC. [Physical activity interventions in Latin America: expanding and classifying the evidence.](#) *Am J Prev Med* 2013;44(3):e31-40.
- 288 Liu J, Davidson E, Bhopal R, White M, Johnson M, Netto G, Deverill M, Sheikh A. [Adapting health promotion interventions to meet the needs of ethnic minority groups: mixed-methods evidence synthesis.](#) *Health Technol Assess* 2012;16(44):1-469.

- 289 Janßen C, Sauter S, Kowalski C. [The influence of social determinants on the use of prevention and health promotion services: Results of a systematic literature review.](#) *Psychosoc Med* 2012;9:Doc07.
- 290 Ickes MJ, Sharma M. [A systematic review of physical activity interventions in Hispanic adults.](#) *J Environ Public Health* 2012;2012:156435.
- 291 Cleland V, Granados A, Crawford D, Winzenberg T, Ball K. [Effectiveness of interventions to promote physical activity among socioeconomically disadvantaged women: a systematic review and meta-analysis.](#) *Obes Rev* 2013;14(3):197-212.
- 292 Cleland CL, Tully MA, Kee F, Cupples ME. [The effectiveness of physical activity interventions in socio-economically disadvantaged communities: a systematic review.](#) *Prev Med* 2012;54(6):371-380.
- 293 George ES, Kolt GS, Duncan MJ, Caperchione CM, Mummery WK, Vandelanotte C, Taylor P, Noakes M. [A review of the effectiveness of physical activity interventions for adult males.](#) *Sports Med* 2012;42(4):281-300.
- 294 Biddle SJ, O'Connell S, Braithwaite RE. [Sedentary behaviour interventions in young people: a meta-analysis.](#) *Br J Sports Med* 2011;45(11):937-942.
- 295 Camacho-Miñano MJ, LaVoie NM, Barr-Anderson DJ. [Interventions to promote physical activity among young and adolescent girls: a systematic review.](#) *Health Educ Res* 2011;26(6):1025-1049.
- 296 Chillón P, Evenson KR, Vaughn A, Ward DS. [A systematic review of interventions for promoting active transportation to school.](#) *Int J Behav Nutr Phys Act* 2011;8:10.
- 297 Monasta L, Batty GD, Macaluso A, Ronfani L, Lutje V, Bavcar A, van Lenthe FJ, Brug J, Cattaneo A. [Interventions for the prevention of overweight and obesity in preschool children: a systematic review of randomized controlled trials.](#) *Obes Rev* 2011;12(5):e107-118.
- 298 Bélanger-Gravel A, Godin G, Vézina-Im LA, Amireault S, Poirier P. [The effect of theory-based interventions on physical activity participation among overweight/obese individuals: a systematic review.](#) *Obes Rev* 2011;12(6):430-439.
- 299 Bird EL, Baker G, Mutrie G, Ogilvie D, Sahlqvist S, Powell J. [Behavior change techniques used to promote walking and cycling: a systematic review.](#) *Health Psychol* 2013;32(8):829-838.
- 300 Kassavou A, Turner A, French DP. [Do interventions to promote walking in groups increase physical activity? A meta-analysis.](#) *Int J Behav Nutr Phys Act* 2013;10:18.
- 301 Gourlan MJ, Trouilloud DO, Sarrazin PG. [Interventions promoting physical activity among obese populations: a meta-analysis considering global effect, long-term maintenance, physical activity indicators and dose characteristics.](#) *Obes Rev* 2011;12(7):e633-645.
- 302 Yang L, Sahlqvist S, McMinn A, Griffin SJ, Ogilvie D. [Interventions to promote cycling: systematic review.](#) *BMJ* 2010;341:c5293.
- 303 Orrow G, Kinmonth AL, Sanderson S, Sutton S. [Effectiveness of physical activity promotion based in primary care: systematic review and meta-analysis of randomised controlled trials.](#) *BMJ* 2012;344:e1389.
- 304 Nocon M, Müller-Riemenschneider F, Nitzschke K, Willich SN. [Review article: Increasing physical activity with point-of-choice prompts - a systematic review.](#) *Scand J Public Health* 2010;38(6):633-638.
- 305 Soler RE, Leeks KD, Buchanan LR, Brownson RC, Heath GW, Hopkins DH. [Point-of-decision prompts to increase stair use. A systematic review update.](#) *Am J Prev Med* 2010;38(2 Suppl):S292-300.
- 306 Coren E, Barlow J, Stewart-Brown S. [The effectiveness of individual and group-based parenting programmes in improving outcomes for teenage mothers and their children: a systematic review.](#) *J Adolesc* 2003;26(1):79-103.
- 307 van der Kruk JJ, Kortekaas F, Lucas C, Jager-Wittenaar H. [Obesity: a systematic review on parental involvement in long-term European childhood weight control interventions with a nutritional focus.](#) *Obes Rev* (published online June 2013).
- 308 Barr-Anderson DJ, Adams-Wynn AW, DiSantis KI, Kumanyika S. [Family-focused physical activity, diet and obesity interventions in African-American girls: a systematic review.](#) *Obes Rev* 2013;14(1):29-51.
- 309 Niemeier BS, Hektner JM, Enger KB. [Parent participation in weight-related health interventions for children and adolescents: a systematic review and meta-analysis.](#) *Prev Med* 2012;55(1):3-13.
- 310 Van Lippevelde W, Verloigne M, De Bourdeaudhuij I, Brug J, Bjelland M, Lien N, Maes L. [Does parental involvement make a difference in school-based nutrition and physical activity interventions? A systematic review of randomized controlled trials.](#) *Int J Public Health* 2012;57(4):673-678.
- 311 Rosen LJ, Noach MB, Winickoff JP, Hovell MF. [Parental smoking cessation to protect young children: a systematic review and meta-analysis.](#) *Pediatrics* 2012;129(1):141-152.
- 312 Hingle MD, O'Connor TM, Dave JM, Baranowski T. [Parental involvement in interventions to improve child dietary intake: a systematic review.](#) *Prev Med* 2010;51(2):103-111.
- 313 National Institute for Clinical Excellence. [Community-based interventions to reduce substance misuse among vulnerable and disadvantaged children and young people.](#) London: NICE, 2007.
- 314 Kaunonen M, Hannula L, Tarkka MT. [A systematic review of peer support interventions for breastfeeding.](#) *J Clin Nurs* 2012;21(13-14):1943-1954.
- 315 Beake S, Pellowe C, Dykes F, Schmied V, Bick D. [A systematic review of structured compared with non-structured breastfeeding programmes to support the initiation and duration of exclusive and any breastfeeding in acute and primary health care settings.](#) *Matern Child Nutr* 2012;8(2):141-161.
- 316 Ibanez G, de Reynal de Saint Michel C, Denantes M, Saurel-Cubizolles MJ, Ringa V, Magnier AM. [Systematic review and meta-analysis of randomized controlled trials evaluating primary care-based interventions to promote breastfeeding in low-income women.](#) *Fam Pract* 2012;29(3):245-254.
- 317 Ingram L, MacArthur C, Khan K, Deeks JJ, Jolly K. [Effect of antenatal peer support on breastfeeding initiation: a systematic review.](#) *CMAJ* 2010;182(16):1739-1746.
- 318 Hall J. [Effective community-based interventions to improve exclusive breast feeding at four to six months in low- and low-middle-income countries: a systematic review of randomised controlled trials.](#) *Midwifery* 2011;27(4):497-502.
- 319 Renfrew MJ, Dyson L, McCormick F, Misso K, Stenhouse E, King SE, Williams AF. [Breastfeeding promotion for infants in neonatal units: a systematic review.](#) *Child Care Health Dev* 2010;36(2):165-178.
- 320 Johnson M, Jones R, Freeman C, Woods HB, Gillett M, Goyder E, Payne N. [Can diabetes prevention programmes be translated effectively into real-world settings and still deliver improved outcomes? A synthesis of evidence.](#) *Diabet Med* 2013;30(1):3-15.
- 321 Kusters JP, Gotzsche PC. [Regular self-examination or clinical examination for early detection of breast cancer.](#) *Cochrane Database Syst Rev* 2003;(2):CD003373.

- 322 Wierenga D, Engbers LH, Van Empelen P, Duijts S, Hildebrandt VH, Van Mechelen W. [What is actually measured in process evaluations for worksite health promotion programs: a systematic review.](#) *BMC Public Health* 2013;13(1):1190.
- 323 Malik SH, Blake H, Suggs LS. [A systematic review of workplace health promotion interventions for increasing physical activity.](#) *Br J Health Psychol* (published online July 2013).
- 324 Vuillemin A, Rostami C, Maes L, Van Cauwenberghe E, Van Lenthe FJ, Brug J, De Bourdeaudhuij I, Oppert JM. [Worksite physical activity interventions and obesity: a review of European studies \(the HOPE project\).](#) *Obes Facts* 2011;4(6):479-488.
- 325 Buchberger B, Heymann R, Huppertz H, Friepörtner K, Pomorin N, Wasem J. [The effectiveness of interventions in workplace health promotion as to maintain the working capacity of health care personal.](#) *GMS Health Technol Assess* 2011;7:Doc06.
- 326 Hutchinson AD, Wilson C. [Improving nutrition and physical activity in the workplace: a meta-analysis of intervention studies.](#) *Health Promot Int* 2012;27(2):238-249.
- 327 Cancelliere C, Cassidy JD, Ammendolia C, Côté P. [Are workplace health promotion programs effective at improving presenteeism in workers? A systematic review and best evidence synthesis of the literature.](#) *BMC Public Health* 2011;11:395.
- 328 Barr-Anderson DJ, AuYoung M, Whitt-Glover MC, Glenn BA, Yancey AK. [Integration of short bouts of physical activity into organizational routine: a systematic review of the literature.](#) *Am J Prev Med* 2011;40(1):76-93.
- 329 Leeks KD, Hopkins DP, Soler RE, Aten A, Chattopadhyay SK. [Worksite-based incentives and competitions to reduce tobacco use. A systematic review.](#) *Am J Prev Med* 2010;38(2 Suppl):S263-274.
- 330 Ni Mhurchu C, Aston LM, Jebb SA. [Effects of worksite health promotion interventions on employee diets: a systematic review.](#) *BMC Public Health* 2010;10:62.
- 331 Groeneveld IF, Proper KI, van der Beek AJ, Hildebrandt VH, van Mechelen W. [Lifestyle-focused interventions at the workplace to reduce the risk of cardiovascular disease - a systematic review.](#) *Scand J Work Environ Health* 2010;36(3):202-215.
- 332 Wong JY, Gilson ND, van Uffelen JG, Brown WJ. [The effects of workplace physical activity interventions in men: a systematic review.](#) *Am J Mens Health* 2012;6(4):303-313.
- 333 Osilla KC, Van Busum K, Schnyer C, Larkin JW, Eibner C, Mattke S. [Systematic review of the impact of worksite wellness programs.](#) *Am J Manag Care* 2012;18(2):e68-81.
- 334 Maes L, Van Cauwenberghe E, Van Lippevelde W, Spittaels H, De Pauw E, Oppert JM, Van Lenthe FJ, Brug J, De Bourdeaudhuij I. [Effectiveness of workplace interventions in Europe promoting healthy eating: a systematic review.](#) *Eur J Public Health* 2012;22(5):677-683.
- 335 Rongen A, Robroek SJ, van Lenthe FJ, Burdorf A. [Workplace health promotion: a meta-analysis of effectiveness.](#) *Am J Prev Med* 2013;44(4):406-415.
- 336 Kahn-Marshall JL, Gallant MP. [Making healthy behaviors the easy choice for employees: a review of the literature on environmental and policy changes in worksite health promotion.](#) *Health Educ Behav* 2012;39(6):752-776.
- 337 Soler RE, Leeks KD, Razi S, Hopkins DP, Griffith M, Aten A, Chattopadhyay SK, Smith SC, Habarta N, Goetzel RZ, Pronk NP, Richling DE, Bauer DR, Buchanan LR, Florence CS, Koonin L, MacLean D, Rosenthal A, Matson Koffman D, Grizzell JV, Walker AM. [A systematic review of selected interventions for worksite health promotion. The assessment of health risks with feedback.](#) *Am J Prev Med* 2010;38(2 Suppl):S237-262.
- 338 Cahill K, Moher M, Lancaster T. [Workplace interventions for smoking cessation.](#) *Cochrane Database Syst Rev* 2008;(4):CD003440.
- 339 Pelletier KR. [A review and analysis of the clinical and cost-effectiveness studies of comprehensive health promotion and disease management programs at the worksite: update VI 2000-2004.](#) *J Occup Environ Med* 2005;47(10):1051-1058.
- 340 Freak-Poli RL, Cumpston M, Peeters A, Clemes SA. [Workplace pedometer interventions for increasing physical activity.](#) *Cochrane Database Syst Rev* 2013;4:CD009209.
- 341 To QG, Chen TT, Magnussen CG, To KG. [Workplace physical activity interventions: a systematic review.](#) *Am J Health Promot* 2013;27(6):e113-123.
- 342 Weare K, Nind M. [Mental health promotion and problem prevention in schools: what does the evidence say?](#) *Health Promot Int* 2011;26 Suppl 1:i29-69.
- 343 National Institute for Clinical Excellence. [Promoting children's social and emotional wellbeing in primary education.](#) London: NICE, 2008.
- 344 Bonell C, Wells H, Harden A, Jamal F, Fletcher A, Thomas J, Campbell R, Petticrew M, Whitehead M, Murphy S, Moore L. [The effects on student health of interventions modifying the school environment: systematic review.](#) *J Epidemiol Community Health* 2013;67(8):677-681.
- 345 Lonsdale C, Rosenkranz RR, Peralta LR, Bennie A, Fahey P, Lubans DR. [A systematic review and meta-analysis of interventions designed to increase moderate-to-vigorous physical activity in school physical education lessons.](#) *Prev Med* 2013;56(2):152-161.
- 346 Evans CE, Christian MS, Cleghorn CL, Greenwood DC, Cade JE. [Systematic review and meta-analysis of school-based interventions to improve daily fruit and vegetable intake in children aged 5 to 12 y.](#) *Am J Clin Nutr* 2012;96(4):889-901.
- 347 Ganann R, Fitzpatrick-Lewis D, Ciliska D, Peirson L. [Community-based interventions for enhancing access to or consumption of fruit and vegetables among five to 18-year olds: a scoping review.](#) *BMC Public Health* 2012;12:711.
- 348 Wang D, Stewart D. [The implementation and effectiveness of school-based nutrition promotion programmes using a health-promoting schools approach: a systematic review.](#) *Public Health Nutr* 2013;16(6):1082-1100.
- 349 Lavelle HV, Mackay DF, Pell JP. [Systematic review and meta-analysis of school-based interventions to reduce body mass index.](#) *J Public Health* 2012;34(3):360-369.
- 350 Luckner H, Moss JR, Gericke CA. [Effectiveness of interventions to promote healthy weight in general populations of children and adults: a meta-analysis.](#) *Eur J Public Health* 2012;22(4):491-497.
- 351 Kriemler S, Meyer U, Martin E, van Sluijs EM, Andersen LB, Martin BW. [Effect of school-based interventions on physical activity and fitness in children and adolescents: a review of reviews and systematic update.](#) *Br J Sports Med* 2011;45(11):923-930.
- 352 Delgado-Noguera M, Tort S, Martínez-Zapata MJ, Bonfill X. [Primary school interventions to promote fruit and vegetable consumption: a systematic review and meta-analysis.](#) *Prev Med* 2011;53(1-2):3-9.
- 353 Lubans DR, Boreham CA, Kelly P, Foster CE. [The relationship between active travel to school and health-related fitness in children and adolescents: a systematic review.](#) *Int J Behav Nutr Phys Act* 2011;8:5.
- 354 Van Cauwenberghe E, Maes L, Spittaels H, van Lenthe FJ, Brug J, Oppert JM, De Bourdeaudhuij I. [Effectiveness of school-based interventions in Europe to promote healthy](#)

- [nutrition in children and adolescents: systematic review of published and 'grey' literature](#). *Br J Nutr* 2010;103(6):781-797.
- 355 National Institute for Clinical Excellence. [Interventions in schools to prevent or reduce alcohol use among young people](#). London: NICE, 2008.
- 356 Thomas RE, McLellan J, Perera R. [School-based programmes for preventing smoking](#). *Cochrane Database Syst Rev* 2013;4:CD001293.
- 357 Foxcroft DR, Tsertsvadze A. [Universal alcohol misuse prevention programmes for children and adolescents: Cochrane systematic reviews](#). *Perspect Public Health* 2012;132(3):128-134.
- 358 Barry MM, Clarke AM, Jenkins R, Patel V. [A systematic review of the effectiveness of mental health promotion interventions for young people in low and middle income countries](#). *BMC Public Health* 2013;13:835.
- 359 Krishnaswami J, Martinson M, Wakimoto P, Anglemeyer A. [Community-engaged interventions on diet, activity, and weight outcomes in U.S. schools: a systematic review](#). *Am J Prev Med* 2012;43(1):81-91.
- 360 van Sluijs EM, Kriemler S, McMinn AM. [The effect of community and family interventions on young people's physical activity levels: a review of reviews and updated systematic review](#). *Br J Sports Med* 2011;45(11):914-922.
- 361 Carson KV, Brinn MP, Labiszewski NA, Esterman AJ, Chang AB, Smith BJ. [Community interventions for preventing smoking in young people](#). *Cochrane Database Syst Rev* 2011;(7):CD001291.
- 362 Metcalf B, Henley W, Wilkin T. [Effectiveness of intervention on physical activity of children: systematic review and meta-analysis of controlled trials with objectively measured outcomes \(EarlyBird 54\)](#). *BMJ* 2012;345:e5888.
- 363 Kraak VI, Story M, Wartella EA. [Government and school progress to promote a healthful diet to American children and adolescents: a comprehensive review of the available evidence](#). *Am J Prev Med* 2012;42(3):250-262.
- 364 Atkin AJ, Gorely T, Biddle SJ, Cavill N, Foster C. [Interventions to promote physical activity in young people conducted in the hours immediately after school: a systematic review](#). *Int J Behav Med* 2011;18(3):176-187.
- 365 Jackson C, Geddes R, Haw S, Frank J. [Interventions to prevent substance use and risky sexual behaviour in young people: a systematic review](#). *Addiction* 2012;107(4):733-747.
- 366 Pennant M, Davenport C, Bayliss S, Greenheld W, Marshall T, Hyde C. [Community programs for the prevention of cardiovascular disease: a systematic review](#). *Am J Epidemiol* 2010;172(5):501-516.
- 367 Baker MK, Simpson K, Lloyd B, Bauman AE, Singh MA. [Behavioral strategies in diabetes prevention programs: a systematic review of randomized controlled trials](#). *Diabetes Res Clin Pract* 2011;91(1):1-12.
- 368 Lam OL, McGrath C, Bandara HM, Li LS, Samaranyake LP. [Oral health promotion interventions on oral reservoirs of staphylococcus aureus: a systematic review](#). *Oral Dis* 2012;18(3):244-254.
- 369 Ingram JC, Deave T, Towner E, Errington G, Kay B, Kendrick D. [Identifying facilitators and barriers for home injury prevention interventions for pre-school children: a systematic review of the quantitative literature](#). *Health Educ Res* 2012;27(2):258-268.
- 370 Wahi G, Parkin PC, Beyene J, Uleryk EM, Birken CS. [Effectiveness of interventions aimed at reducing screen time in children: a systematic review and meta-analysis of randomized controlled trials](#). *Arch Pediatr Adolesc Med* 2011;165(11):979-986.
- 371 Johnson BT, Scott-Sheldon LA, Huedo-Medina TB, Carey MP. [Interventions to reduce sexual risk for human immunodeficiency virus in adolescents: a meta-analysis of trials, 1985-2008](#). *Arch Pediatr Adolesc Med* 2011;165(1):77-84.
- 372 Pearson M, Garside R, Moxham T, Anderson R. [Preventing unintentional injuries to children in the home: a systematic review of the effectiveness of programmes supplying and/or installing home safety equipment](#). *Health Promot Int* 2011;26(3):376-392.
- 373 Lassi ZS, Haider BA, Bhutta ZA. [Community-based intervention packages for reducing maternal and neonatal morbidity and mortality and improving neonatal outcomes](#). *Cochrane Database Syst Rev* 2010;(11):CD007754.
- 374 Jacobs DE, Brown MJ, Baeder A, Sucusky MS, Margolis S, Hershovitz J, Kolb L, Morley RL. [A systematic review of housing interventions and health: introduction, methods, and summary findings](#). *J Public Health Manag Pract* 2010;16(5 Suppl):S5-10.
- 375 Free C, Roberts IG, Abramsky T, Fitzgerald M, Wensley F. [A systematic review of randomised controlled trials of interventions promoting effective condom use](#). *J Epidemiol Community Health* 2011;65(2):100-110.
- 376 Burton J, Darbes LA, Operario D. [Couples-focused behavioral interventions for prevention of HIV: systematic review of the state of evidence](#). *AIDS Behav* 2010;14(1):1-10.
- 377 Freijy T, Kothe EJ. [Dissonance-based interventions for health behaviour change: a systematic review](#). *Br J Health Psychol* 2013;18(2):310-337.
- 378 Noordman J, van der Weijden T, van Dulmen S. [Communication-related behavior change techniques used in face-to-face lifestyle interventions in primary care: a systematic review of the literature](#). *Patient Educ Couns* 2012;89(2):227-244.
- 379 Bonfioli E, Berti L, Goss C, Muraro F, Burti L. [Health promotion lifestyle interventions for weight management in psychosis: a systematic review and meta-analysis of randomised controlled trials](#). *BMC Psychiatry* 2012;12:78.
- 380 Chase JA, Conn VS. [Meta-analysis of fitness outcomes from motivational physical activity interventions](#). *Nurs Res* 2013;62(5):294-304.
- 381 Arbesman M, Mosley LJ. [Systematic review of occupation- and activity-based health management and maintenance interventions for community-dwelling older adults](#). *Am J Occup Ther* 2012;66(3):277-283.
- 382 Conn VS, Hafdahl AR, Mehr DR. [Interventions to increase physical activity among healthy adults: meta-analysis of outcomes](#). *Am J Public Health* 2011;101(4):751-758.
- 383 Thomson CA, Ravia J. [A systematic review of behavioral interventions to promote intake of fruit and vegetables](#). *J Am Diet Assoc* 2011;111(10):1523-1535.
- 384 National Institute for Clinical Excellence. [One to one interventions to reduce the transmission of sexually transmitted infections \(STIs\) including HIV, and to reduce the rate of under 18 conceptions, especially among vulnerable and at risk groups](#). London: NICE, 2007.
- 385 Hinrichs T, Brach M. [The general practitioner's role in promoting physical activity to older adults: a review based on program theory](#). *Curr Aging Sci* 2012;5(1):41-50.
- 386 Wanyonyi KL, Themessl-Huber M, Humphris G, Freeman R. [A systematic review and meta-analysis of face-to-face communication of tailored health messages: implications for practice](#). *Patient Educ Couns* 2011;85(3):348-355.

- 387 Jepson RG, Harris FM, Platt S, Tannahill C. [The effectiveness of interventions to change six health behaviours: a review of reviews](#). *BMC Public Health* 2010;10:538.
- 388 Olsen JM, Nesbitt BJ. [Health coaching to improve healthy lifestyle behaviors: an integrative review](#). *Am J Health Promot* 2010;25(1):e1-e12.
- 389 Tolli MV. [Effectiveness of peer education interventions for HIV prevention, adolescent pregnancy prevention and sexual health promotion for young people: a systematic review of European studies](#). *Health Educ Res* 2012;27(5):904-913.
- 390 Lazarus JV, Sihvonen-Riemenschneider H, Laukamm-Josten U, Wong F, Liljestrand J. [Systematic review of interventions to prevent the spread of sexually transmitted infections, including HIV, among young people in Europe](#). *Croat Med J* 2010;51(1):74-84.
- 391 Weibel AR, Okonsky J, Trompeta J, Holzemer WL. [A systematic review of the effectiveness of peer-based interventions on health-related behaviors in adults](#). *Am J Public Health* 2010;100(2):247-253.
- 392 Beach MC, Cooper LA, Robinson KA, Price EG, Gary TL, Jenckes MW, Gozu A, Smarth C, Palacio A, Feuerstein CJ, Bass EB, Powe NR. [Strategies for improving minority healthcare quality](#). *Evid Rep Technol Assess (Summ)* 2004;(90):1-8.
- 393 Jacobson VJC, Szilagyi P. [Patient reminder and patient recall systems to improve immunization rates](#). *Cochrane Database Syst Rev* 2005;(3):CD003941.
- 394 Sarkisian CA, Brown AF, Norris KC, Wintz RL, Mangione CM. [A systematic review of diabetes self-care interventions for older, African American, or Latino adults](#). *Diabetes Educ* 2003;29(3):467-479.
- 395 Stead LF, Hartmann-Boyce J, Perera R, Lancaster T. [Telephone counselling for smoking cessation](#). *Cochrane Database Syst Rev* 2006;8:CD002850.
- 396 Thompson RL, Summerbell CD, Hooper L, Higgins JP, Little PS, Talbot D, Ebrahim S. [Dietary advice given by a dietitian versus other health professional or self-help resources to reduce blood cholesterol](#). *Cochrane Database Syst Rev* 2003;(3):CD001366.
- 397 Dennis CL, Kingston D. [A systematic review of telephone support for women during pregnancy and the early postpartum period](#). *J Obstet Gynecol Neonatal Nurs* 2008;37(3):301-314.
- 398 Neubeck L, Redfern J, Fernandez R, Briffa T, Bauman A, Freedman SB. [Telehealth interventions for the secondary prevention of coronary heart disease: a systematic review](#). *Eur J Cardiovasc Prev Rehabil* 2009;16(3):281-289.
- 399 Goode AD, Reeves MM, Eakin EG. [Telephone-delivered interventions for physical activity and dietary behavior change: an updated systematic review](#). *Am J Prev Med* 2012;42(1):81-88.
- 400 Head KJ, Noar SM, Iannarino NT, Grant Harrington N. [Efficacy of text messaging-based interventions for health promotion: a meta-analysis](#). *Soc Sci Med* 2013;97:41-48.
- 401 Militello LK, Kelly SA, Melnyk BM. [Systematic review of text-messaging interventions to promote healthy behaviors in pediatric and adolescent populations: implications for clinical practice and research](#). *Worldviews Evid Based Nurs* 2012;9(2):66-77.
- 402 Gurman TA, Rubin SE, Roess AA. [Effectiveness of mHealth behavior change communication interventions in developing countries: a systematic review of the literature](#). *J Health Commun* 2012;17 Suppl 1:82-104.
- 403 Lustria ML, Noar SM, Cortese J, Van Stee SK, Glueckauf RL, Lee J. [A meta-analysis of web-delivered tailored health behavior change interventions](#). *J Health Commun* 2013;18(9):1039-1069.
- 404 Chou WY, Prestin A, Lyons C, Wen KY. [Web 2.0 for health promotion: reviewing the current evidence](#). *Am J Public Health* 2013;103(1):e9-18.
- 405 Bailey JV, Murray E, Rait G, Mercer CH, Morris RW, Peacock R, Cassell J, Nazareth I. [Computer-based interventions for sexual health promotion: systematic review and meta-analyses](#). *Int J STD AIDS* 2012;23(6):408-413.
- 406 Nguyen B, Kornman KP, Baur LA. [A review of electronic interventions for prevention and treatment of overweight and obesity in young people](#). *Obes Rev* 2011;12(5):e298-314.
- 407 Krebs P, Prochaska JO, Rossi JS. [A meta-analysis of computer-tailored interventions for health behavior change](#). *Prev Med* 2010;51(3-4):214-221.
- 408 Portnoy DB, Scott-Sheldon LAJ, Johnson BT, Carey MP. [Computer-delivered interventions for health promotion and behavioral risk reduction: A meta-analysis of 75 randomized controlled trials, 1988-2007](#). *Prev Med* 2008;47(1):3-16.
- 409 Hieftje K, Edelman EJ, Camenga DR, Fiellin LE. [Electronic media-based health interventions promoting behavior change in youth: a systematic review](#). *JAMA Pediatr* 2013;167(6):574-580.
- 410 Hamel LM, Robbins LB. [Computer- and web-based interventions to promote healthy eating among children and adolescents: a systematic review](#). *J Adv Nurs* 2013;69(1):16-30.
- 411 Delgado-Noguera M, Tort S, Martínez-Zapata MJ, Bonfill X. [Primary school interventions to promote fruit and vegetable consumption: a systematic review and meta-analysis](#). *Prev Med* 2011;53(1-2):3-9.
- 412 Broekhuizen K, Kroeze W, van Poppel MN, Oenema A, Brug J. [A systematic review of randomized controlled trials on the effectiveness of computer-tailored physical activity and dietary behavior promotion programs: an update](#). *Ann Behav Med* 2012;44(2):259-286.
- 413 Lau PW, Lau EY, Wong del P, Ransdell L. [A systematic review of information and communication technology-based interventions for promoting physical activity behavior change in children and adolescents](#). *J Med Internet Res* 2011;13(3):e48.
- 414 Hamel LM, Robbins LB, Wilbur J. [Computer- and web-based interventions to increase preadolescent and adolescent physical activity: a systematic review](#). *J Adv Nurs* 2011;67(2):251-268.
- 415 Kodama S, Saito K, Tanaka S, Horikawa C, Fujiwara K, Hirasawa R, Yachi Y, Iida KT, Shimano H, Ohashi Y, Yamada N, Sone H. [Effect of Web-based lifestyle modification on weight control: a meta-analysis](#). *Int J Obes (Lond)* 2012;36(5):675-685.
- 416 Kohl LF, Crutzen R, de Vries NK. [Online prevention aimed at lifestyle behaviors: a systematic review of reviews](#). *J Med Internet Res* 2013;15(7):e146.
- 417 Brouwer W, Kroeze W, Crutzen R, de Nooijer J, de Vries NK, Brug J, Oenema A. [Which intervention characteristics are related to more exposure to internet-delivered healthy lifestyle promotion interventions? A systematic review](#). *J Med Internet Res* 2011;13(1):e2.
- 418 Webb TL, Joseph J, Yardley L, Michie S. [Using the internet to promote health behavior change: a systematic review and meta-analysis of the impact of theoretical basis, use of behavior change techniques, and mode of delivery on efficacy](#). *J Med Internet Res* 2010;12(1):e4.
- 419 Peng W, Crouse JC, Lin JH. [Using active video games for physical activity promotion: a systematic review of the current state of research](#). *Health Educ Behav* 2013;40(2):171-192.
- 420 Short CE, James EL, Plotnikoff RC, Girgis A. [Efficacy of tailored-print interventions to promote physical activity: a systematic review of randomised trials](#). *Int J Behav Nutr Phys Act* 2011;8:113.

- 421 Willis A, Davies M, Yates T, Khunti K. [Primary prevention of cardiovascular disease using validated risk scores: a systematic review](#). *J R Soc Med* 2012;105(8):348-356.
- 422 Bosch-Capblanch X, Abba K, Prictor M, Garner P. [Contracts between patients and healthcare practitioners for improving patients' adherence to treatment, prevention and health promotion activities](#). *Cochrane Database Syst Rev* 2007;(2):CD004808.
- 423 Bravata DM, Smith-Spangler C, Sundaram V, Gienger AL, Lin N, Lewis R, Stave CD, Olkin I, Sirard JR. [Using pedometers to increase physical activity and improve health - a systematic review](#). *JAMA* 2007;298(19):2296-2304.
- 424 Eakin EG, Bull SS, Glasgow RE, Mason M. [Reaching those most in need: a review of diabetes self-management interventions in disadvantaged populations](#). *Diabetes Metab Res Rev* 2002;18(1):26-35.
- 425 National Institute for Clinical Excellence. [Four commonly used methods to increase physical activity: brief interventions in primary care, exercise referral schemes, pedometers and community-based exercise programmes for walking and cycling](#). London: NICE, 2006.
- 426 Nicholson SO. [The effect of cardiovascular health promotion on health behaviors in elementary school children: an integrative review](#). *J Pediatr Nurs* 2000;15(6):343-355.
- 427 Sorensen JB, Skovgaard T, Puggaard L. [Exercise on prescription in general practice: a systematic review](#). *Scand J Prim Health Care* 2006;24(2):69-74.
- 428 Black ME, Yamada J, Mann V. [A systematic literature review of the effectiveness of community-based strategies to increase cervical cancer screening](#). *Can J Public Health* 2002;93(5):386-393.
- 429 Grilli R, Freemantle N, Minozzi S, Domenighetti G, Finer D. [Mass media interventions: effects on health services utilisation](#). *Cochrane Database Syst Rev* 2000;(2):CD000389.
- 430 Marcus AC, Crane LA. [A review of cervical cancer screening intervention research: implications for public health programs and future research](#). *Prev Med* 1998;27(1):13-31.
- 431 Vidanapathirana J, Abramson MJ, Forbes A, Fairley C. [Mass media interventions for promoting HIV testing](#). *Cochrane Database Syst Rev* 2005;(3):CD004775.
- 432 McWhirter JE, Hoffman-Goetz L. [Systematic review of population-based studies on the impact of images on UV attitudes and behaviours](#). *Health Promot Int* (published online May 2013).
- 433 Bala MM, Strzeszynski L, Topor-Madry R, Cahill K. [Mass media interventions for smoking cessation in adults](#). *Cochrane Database Syst Rev* 2013;6:CD004704.
- 434 Bala M, Strzeszynski L, Cahill K. [Mass media interventions for smoking cessation in adults](#). *Cochrane Database Syst Rev* 2008;(1):CD004704.
- 435 Lovato C, Linn G, Stead LF, Best A. [Impact of tobacco advertising and promotion on increasing adolescent smoking behaviours](#). *Cochrane Database Syst Rev* 2003;(4):CD003439.
- 436 National Institute for Clinical Excellence. [Guidance on preventing the uptake of smoking by children and young people](#). London: NICE, 2008.
- 437 Sowden AJ, Arblaster L. [Mass media interventions for preventing smoking in young people](#). *Cochrane Database Syst Rev* 2000;(2):CD001006.
- 438 Wilson LM, Avila Tang E, Chander G, Hutton HE, Odelola OA, Elf JL, Heckman-Stoddard BM, Bass EB, Little EA, Haberl EB, Apelberg BJ. [Impact of tobacco control interventions on smoking initiation, cessation, and prevalence: a systematic review](#). *J Environ Public Health* 2012;2012:961724.
- 439 Brinn MP, Carson KV, Esterman AJ, Chang AB, Smith BJ. [Mass media interventions for preventing smoking in young people](#). *Cochrane Database Syst Rev* 2010;(11):CD001006.
- 440 Gould GS, McEwen A, Watters T, Clough AR, van der Zwan R. [Should anti-tobacco media messages be culturally targeted for Indigenous populations? A systematic review and narrative synthesis](#). *Tob Control* 2013;22(4):e7.
- 441 Ferri M, Allara E, Bo A, Gasparri A, Faggiano F. [Media campaigns for the prevention of illicit drug use in young people](#). *Cochrane Database Syst Rev* 2013;6:CD009287.
- 442 Brown DR, Soares J, Epping JM, Lankford TJ, Wallace JS, Hopkins D, Buchanan LR, Orleans CT. [Stand-alone mass media campaigns to increase physical activity: a Community Guide updated review](#). *Am J Prev Med* 2012;43(5):551-561.
- 443 Flynn BS, Worden JK, Bunn JY, Solomon LJ, Ashikaga T, Connolly SW, Ramirez AG. [Mass media interventions to reduce youth smoking prevalence](#). *Am J Prev Med* 2010;39(1):53-62.
- 444 O'Keefe DJ, Wu D. [Gain-framed messages do not motivate sun protection: a meta-analytic review of randomized trials comparing gain-framed and loss-framed appeals for promoting skin cancer prevention](#). *Int J Environ Res Public Health* 2012;9(6):2121-2133.
- 445 O'Keefe DJ, Nan X. [The relative persuasiveness of gain- and loss-framed messages for promoting vaccination: a meta-analytic review](#). *Health Commun* 2012;27(8):776-783.
- 446 Gallagher KM, Updegraff JA. [Health message framing effects on attitudes, intentions, and behavior: a meta-analytic review](#). *Ann Behav Med* 2012;43(1):101-116.
- 447 Schmidt M. [Social marketing and breastfeeding: a literature review](#). *Glob J Health Sci* 2013;5(3):82-94.
- 448 Janssen MM, Mathijssen JJ, van Bon-Martens MJ, van Oers HA, Garretsen HF. [Effectiveness of alcohol prevention interventions based on the principles of social marketing: a systematic review](#). *Subst Abuse Treat Prev Policy* 2013;8:18.
- 449 Beach MC, Gary TL, Price EG, Robinson K, Gozu A, Palacio A, Smarth C, Jenckes M, Feuerstein C, Bass EB, Powe NR, Cooper LA. [Improving health care quality for racial/ethnic minorities: a systematic review of the best evidence regarding provider and organization interventions](#). *BMC Public Health* 2006;6:104.
- 450 Pearson A, Srivastava R, Craig D, Tucker D, Grinspun D, Bajnok I, Griffin P, Long L, Porritt K, Han T, Gi AA. [Systematic review on embracing cultural diversity for developing and sustaining a healthy work environment in healthcare](#). *International Journal of Evidence-Based Healthcare* 2007;5(1):54-91.
- 451 Hamilton FL, Greaves F, Majeed A, Millett C. [Effectiveness of providing financial incentives to healthcare professionals for smoking cessation activities: systematic review](#). *Tob Control* 2013;22(1):3-8.
- 452 Jenkinson CE, Dickens AP, Jones K, Thompson-Coon J, Taylor RS, Rogers M, Bamba CL, Lang I, Richards SH. [Is volunteering a public health intervention? A systematic review and meta-analysis of the health and survival of volunteers](#). *BMC Public Health* 2013;13:773.
- 453 Capacci S, Mazzocchi M, Shankar B, Macias JB, Verbeke W, Pérez-Cueto FJ, Kozioł-Kozakowska A, Piórecka B, Niedzwiedzka B, D'Addesa D, Saba A, Turrini A, Aschemann-Witzel J, Bech-Larsen T, Strand M, Smillie L, Wills J, Traill WB. [Policies to promote healthy eating in Europe: a structured review of policies and their effectiveness](#). *Nutr Rev* 2012;70(3):188-200.
- 454 Carter MA, Edwards R, Signal L, Hoek J. [Availability and marketing of food and beverages to children through sports settings: a systematic review](#). *Public Health Nutr* 2012;15(8):1373-1379.

- 455 Atun R, de Jongh TE, Secci FV, Ohiri K, Adeyi O, Car J. [Integration of priority population, health and nutrition interventions into health systems: systematic review](#). *BMC Public Health* 2011;11:780.
- 456 Olden PC, Hoffman KE. [Hospitals' health promotion services in their communities: findings from a literature review](#). *Health Care Manage Rev* 2011;36(2):104-113.
- 457 Eyles H, Ni Mhurchu C, Nghiem N, Blakely T. [Food pricing strategies, population diets, and non-communicable disease: a systematic review of simulation studies](#). *PLoS Med* 2012;9(12):e1001353.
- 458 Powell LM, Chiqui JF, Khan T, Wada R, Chaloupka FJ. [Assessing the potential effectiveness of food and beverage taxes and subsidies for improving public health: a systematic review of prices, demand and body weight outcomes](#). *Obes Rev* 2013;14(2):110-128.
- 459 Martin A, Suhrcke M, Ogilvie D. [Financial incentives to promote active travel: an evidence review and economic framework](#). *Am J Prev Med* 2012;43(6):e45-57.
- 460 Hopkins DP, Razi S, Leeks KD, Priya Kalra G, Chattopadhyay SK, Soler RE. [Smokefree policies to reduce tobacco use. A systematic review](#). *Am J Prev Med* 2010;38(2 Suppl):S275-289.
- 461 Robertson-Wilson JE, Dargavel MD, Bryden PJ, Giles-Corti B. [Physical activity policies and legislation in schools: a systematic review](#). *Am J Prev Med* 2012;43(6):643-649.
- 462 Ickes MJ, Erwin H, Beighle A. Systematic review of recess interventions to increase physical activity. *J Phys Act Health* 2013;10(6):910-926.
- 463 Ridgers ND, Salmon J, Parrish AM, Stanley RM, Okely AD. [Physical activity during school recess: a systematic review](#). *Am J Prev Med* 2012;43(3):320-328.
- 464 Masset E, Haddad L, Cornelius A, Isaza-Castro J. [Effectiveness of agricultural interventions that aim to improve nutritional status of children: systematic review](#). *BMJ* 2012;344:d8222.