GIG CYMRU NHS WALES
Arsyllfa Iechyd Cyhoeddus Cymru
Public Health Wales Observatory

The wider determinants of health

What works to improve participation in work?

Technical report and narrative summary of systematic evidence mapping

Publication details:

Title: The wider determinants of health. What works to improve participation in work? Technical report and narrative summary of systematic evidence mapping.
Publisher: Public Health Wales NHS Trust
Date: April 2020
ISBN: 978-1-78986-154-102

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Acknowledgements:
The authors would like to acknowledge Dr Kirsty Little, Dr Ciaran Humphreys, Sian King and Claire Morgan for their contribution to this work

1 Content

2 Background and purpose

This document provides a narrative summary of the results of systematic evidence mapping, used to search for and sort evidence from systematic reviews on a series of broad questions on interventions to improve participation in work. It provides a summary of high-level research in this area and points to; interventions that may be useful, interventions that may not be useful, interventions that need further research and evidence gaps.

This work supports strategic priority one of Public Health Wales long-term strategy. This priority aims to influence the wider determinants of health, the social, economic and environmental factors that influence health and wellbeing and inequalities.

Note that the referencing in this document reflects the order in which documents appear in the evidence map. This is not always the same as the order in this report.

3 Method

3.1 Map questions

The primary question for the map was:

- What works to improve participation in work in order to improve health and reduce health inequalities?

The secondary questions for the map were:

- What is effective to get people into work?
- What is effective to ensure work contributes to good health and health equity?
- What is effective in keeping people in work?

3.2 Map framework

The map framework in Table 1 outlines topic areas considered relevant to the map questions; developed in conjunction with stakeholders and used to structure the literature search and the map.

Table 1: Map framework

Entering work	The work environment	Staying in work
Availability of good work. Initiatives to create jobs	Physical environment e.g. workplace health and	Management of short and long-term sickness

Entering work	The work environment	Staying in work
e.g. area regeneration schemes	safety, work pattern (hours, shift work)	
Education, skills and training, apprenticeships, traineeships	Psychosocial environment e.g. autonomy, conflict, perceptions of control, equality, inclusion, public sector employment, private sector employment	Support for those with additional needs (e.g. long-term health conditions)
Support for those with additional needs or disadvantage – e.g. health, disability, patterns of unemployment	Pay levels, pay distribution and transparency in pay distribution, availability of sufficient hours of work, access to occupational pension	Flexibility to facilitate inclusion, work life balance
Other support, for example affordable childcare, transport	Temporary work, job security, employment status, risk of redundancy, flexibility	Re-skilling of older and lower qualified workers
	Job satisfaction and wellbeing, employee voice and collective representation	
	Opportunities for development and progression	

3.3 Search strategy

Searches, conducted in August 2019, included the year 2000 onwards and were limited to systematic reviews with English abstracts.

Details of the search strategy are available on request. There was no search of journal contents lists, no follow-up of reference lists or citation tracking of included studies.

We searched the following databases and websites:

Campbell Collaboration
Cochrane Database of Systematic Reviews
HMIC
NICE
Social Care Online
US Taskforce Community Guides
Google Scholar
What Works Centre for Local Economic Growth
CINAHL+
Criminal Justice Database
EPPI-Centre
European Network for Workplace Health Promotion
Medline
PsycInfo
What Works Centre for Wellbeing

3.4 Reference management

References were recorded in a Reference Manager database.

3.5 Inclusion/exclusion criteria:

Types of studies/sources:
Include: Systematic reviews published in peer reviewed or grey literature. This will include systematic reviews underpinning guidelines for example NICE, US Taskforce Community Guides. Reviews of reviews ('umbrella reviews') will be included as a source of reviews but will not be included in the evidence map.

Exclude: Other types of sources including guidelines, secondary sources that are not systematic reviews, primary studies.

Types of participants:
Include: Working age 16+, high income countries i.e. OECD and EU-27
Exclude: Sources predominantly focused on those not aged 16+, not from high income countries.

Types of interventions:

Include: Universal interventions, policy interventions, interventions delivered in specific settings or interventions for specific populations that are intended to get people into work or to keep people in work or to improve or enhance working environments or people's experience of work.

Exclude: Other types of interventions including those delivered mainly at individual level, interventions delivered to those predominantly below 16 years old.

Types of outcome measures

Include: Primary outcome measures: Individual level measures of morbidity, mortality, health behaviours (for example tobacco/alcohol use, physical activity), validated measures of physical or mental wellbeing, validated measures of resilience, validated measures of job satisfaction, sickness absence.

Secondary outcome measures: Any employment related measures relevant to the content of Table 1. Area level measures of socio-economic status, income and material deprivation, income inequality and child poverty. Individual or organisational performance measures.

Exclude: Other outcome measures.

3.6 Screening

An information specialist screened search results at title; there was no consistency check. All records remaining after title screening were screened at abstract and full text by two reviewers, all first and second reviewer decisions, with reasons, were recorded in an inclusion/exclusion Table, any disagreements were resolved through discussion. We checked any reviews of reviews that met the inclusion criteria for reviews that searching had missed. Reviews of reviews were not included in the evidence map.

3.7 Critical appraisal

No critical appraisal of any systematic reviews included in the initial or final maps was undertaken. All studies described by their authors as a systematic review were included. We noted in the data extraction whether the systematic review involved critical appraisal of the included studies.

3.8 Initial mapping – data extraction

Included reviews were categorised using the map framework by one reviewer with decisions checked by the second reviewer. Some reviews contained material that was relevant to more than one category. The full reference of each included source, review question, topic area and outcome measures, whether or not critical appraisal was undertaken, a brief summary of the findings, from the review abstract where this was available and review authors conclusions were captured in an excel spreadsheet. This initial mapping allowed gaps, (for which no relevant systematic reviews were found), to be identified.

3.9 Final mapping

The final map (available here) includes only systematic reviews that, without critical appraisal, were considered to have been produced by recognised expert bodies using a robust methodology (which adheres to systematic review principles and includes critical appraisal using a recognised tool, list of sources available here). A list of systematic reviews that were included in the initial mapping but not included in the final map is available in the appendix.

3.10 Grading scheme

In the final map, the evidence summaries, written by one reviewer and checked by the second, are based on the findings and conclusions of the authors of the included reviews. Observatory Evidence Service reviewers

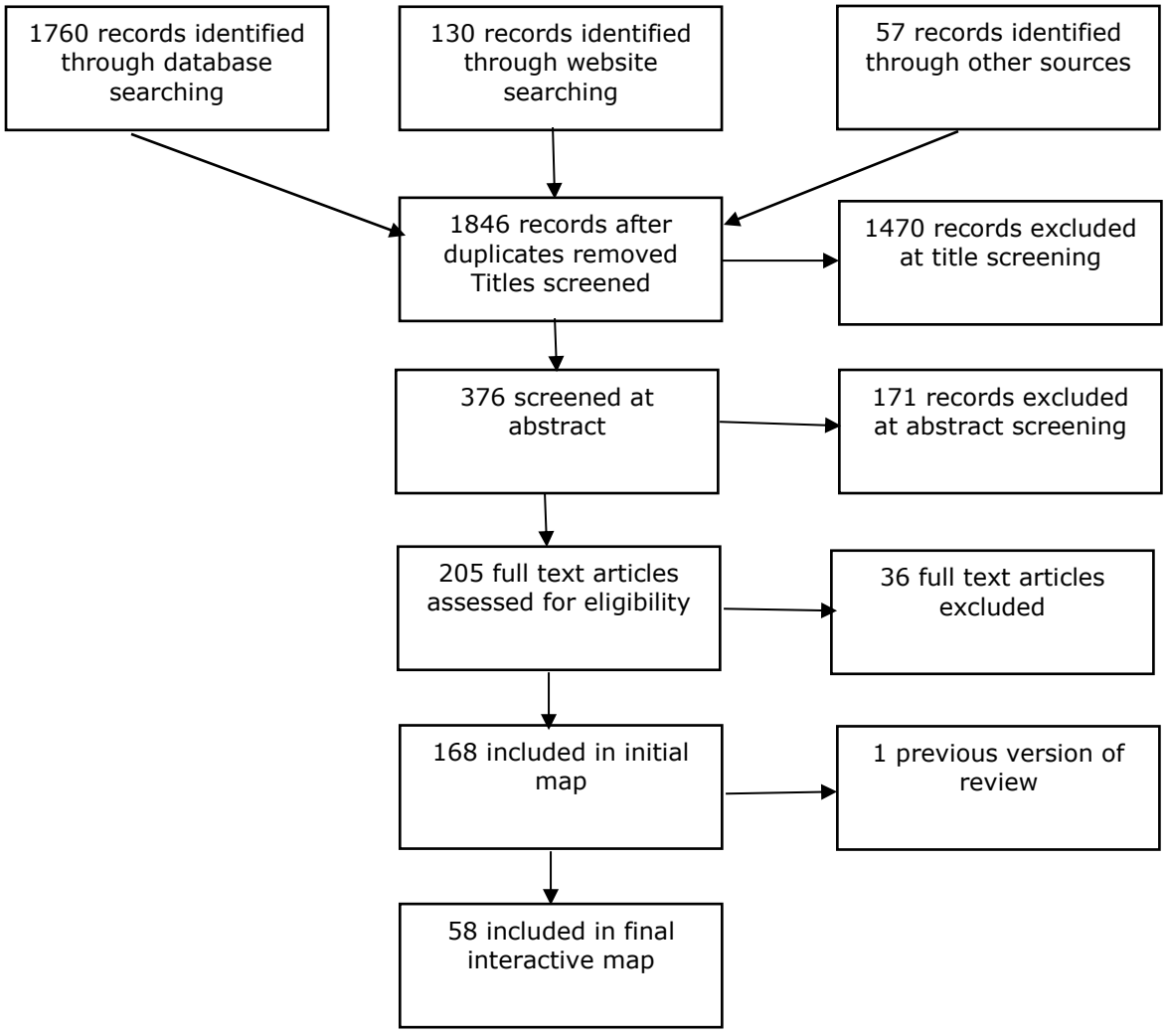
have not assessed the quality, strength and direction of the evidence. The quality of included studies, their design and conduct, would need careful consideration, before implementing actions or interventions based on this work.

Figure 1: Grading scheme for interventions

The evidence suggests the intervention may be effective	Systematic review where the majority of studies (more than 50%) or meta-analysis suggest that there is a positive effect
Evidence is lacking or is inconsistent	Evidence is lacking - systematic review that found one or no relevant studies Evidence is inconsistent - systematic review where there is no clear majority of studies (more than 50%) or meta-analysis suggesting a positive effect or no effect
There evidence suggests that the intervention may not be effective	Systematic review where the majority of studies (more than 50%) or meta-analysis suggesting that there is no positive effect

4 Results

Figure 2: Flow of information through the mapping process



4.1 Initial evidence mapping – coverage and evidence gaps

One hundred and sixty eight sources were included in the initial evidence mapping. These were categorised using the map framework.

4.1.1 Entering work

Table 2 summarises the categories and interventions that the retrieved systematic reviews covered. The majority of the systematic reviews were concerned with support for those with long-term conditions. No systematic reviews covered support such as help with childcare or transport as a means of encouraging people to enter work.

The majority of the systematic reviews concerned with entering work did not consider health related outcomes. In the support for additional needs category only eight of the 31 reviews included health and wellbeing outcomes. Given the primary purpose of these reviews was to look at economic impacts; the lack of health outcomes is unsurprising. No reviews appear to have considered area level measures of socio-economic status, income and material deprivation, income inequality or child poverty as an outcome. This gap in coverage of relevant outcomes was apparent across all categories in the maps.

Table 2: Entering work

Category	Interventions covered	No. of reviews
Availability of work	Employment creation through entrepreneurship, mentoring, access to finance, estate renewal programmes, access to broadband, tax credit programmes, impact of major sports events	10
Education, skills and training	Active labour market programmes, vocational interventions, interventions to engage those not in education, employment or training, welfare to work programmes, employment training programmes, apprenticeships	8
Support for additional needs	Long-term physical and mental illnesses, learning disability, autistic spectrum disorder, resettled refugees	31
Other support	Access to and limiting benefits, support for older workers	5

4.1.2 The workplace environment

Table 3 summarises the categories and interventions the retrieved systematic reviews covered that relate to the workplace environment. The majority covered the physical workplace environment and most reviews focused on health and wellbeing outcomes.

With the exception of one review that looked at the impact of access to in-work tax credits on health outcomes, no reviews compared health status in relation to differences in pay levels, pay distribution and transparency in pay distribution, availability of sufficient hours of work or access to occupational pensions. Our search terms included relevant terms and should have identified any relevant reviews if they existed. The assumption is there is a gap (at least at systematic review level) in studies looking at differences in remuneration and other employment benefits and relevant outcomes.

We found no reviews looking at the impact of temporary work, job security, employment status or risk of redundancy on relevant outcomes. However, because the map focused on interventions, reviews looking at the association between perceived job insecurity as a risk factor for incident coronary heart disease and depression were excluded at abstract. We found no systematic reviews looking at the impact of opportunities for development or progression in the workplace and their impact on wellbeing and other relevant outcomes so it is assumed that this is a gap in the evidence at systematic review level.

Table 3: The workplace environment

Category	Interventions covered	No. of reviews
Physical environment	Prevention of musculoskeletal problems, work breaks and shift patterns, health and safety, reducing sedentary behaviour, office layout/design and lighting, travel to work	49
Psychosocial environment	Addressing the impact of organisational change, job design, privatisation of public utilities, workplace social environment, bullying, workplace culture, occupational stress	24
Remuneration	In-work tax credits	1
Security of employment	Paid maternity leave	1
Job satisfaction, employee voice	Improving employee wellbeing, wellbeing of older workers	12
Opportunities for development	Addressing gender bias	1

4.1.3 Staying in work

Table 4 summarises the categories and interventions the retrieved systematic reviews covered. There are gaps in review level evidence for the impact of flexible working and other interventions to improve work life balance and interventions for lower qualified workers. The majority of the systematic reviews address the management of sickness absence and support for those with additional needs such as long-term mental or physical health problems.

No reviews appear to have considered area level measures of socio-economic status, income and material deprivation, income inequality or

child poverty as an outcome. We assume this is a gap in the evidence at systematic review level.

Table 4: Staying in work

Category	Interventions covered	No. of reviews
Managing sickness absence	Employee assistance programmes, return to work after long-term sickness, reduction of long-term and recurrent short-term sickness absence	13
Support for those with additional needs	Musculoskeletal problems, stroke, learning disability, mental health problems, physical injuries, cancer, acquired brain injury, coronary heart disease, multiple sclerosis	48
Flexibility, work life balance	Flexible working	1
Older or lower qualified workers	Wellbeing and work participation in older workers	3

4.1.4 Evidence gaps

Table 5 outlines areas included in the initial framework where no systematic reviews were identified.

Evidence for a substantial number of the interventions that had been included in systematic reviews was lacking or inconsistent so we cannot tell if they are effective. These are gaps in the evidence base at review level.

There appears to be a lack of systematic reviews that address outcomes relevant to health inequalities. This leads to the assumption that there is a lack of relevant primary studies. Only three of 168 included reviews looked for studies with outcomes relevant to health inequalities and none were identified.

Table 5: Evidence gaps

Entering work	Work environment	Staying in work
The impact of interventions to support people to enter work such as help with childcare or transport	Reviews looking at health status in relation to differences in pay levels, pay distribution and transparency in pay distribution, availability of sufficient hours of work or access to occupational pensions	Reviews looking at the impact of flexible working and interventions to improve work life balance
The health impact of interventions to support or encourage people to enter work	Reviews looking at the impact of temporary work, job security, employment status or risk of redundancy on health status	Systematic reviews looking at area level measures of socio-economic status, income and material deprivation, income inequality or child poverty
Systematic reviews looking at area level measures of	Systematic reviews looking at area level measures of	

Entering work	Work environment	Staying in work
socio-economic status, income and material deprivation, income inequality or child poverty	socio-economic status, income and material deprivation, income inequality or child poverty	

5 Results - inclusions in final evidence map

Fifty eight of the 168 (35%) systematic reviews included in the initial map were included in the final map. These were reviews from the What Works Centre for Local Economic Growth, Campbell and Cochrane reviews, work from EPPI-Centre and reviews undertaken to support the development of National Institute for Health and Care Excellence (NICE) guidance. Most topics included in the initial map were covered in the final map.

Some sources included material that was relevant to more than one element of the framework, so these are duplicated in the interactive map.

5.1 Entering work

Table 6: Entering work – final inclusions

Category	Source of review	No. of reviews
Availability of work	What works centre for local economic growth	8
Education, skills and training	What Works Centre for Local Economic Growth Campbell systematic reviews	2 3
Support for additional needs	EPPI-Centre Cochrane systematic reviews Campbell systematic reviews	1 3 4
Other support	Campbell systematic reviews	1

5.1.1 Availability of work

Table 7. What might increase the availability of work?

Intervention	Evidence summary
Grants, loans and subsidies to support innovation[2]	The evidence suggests that access to grants, loans and subsidies to encourage innovation may increase the availability of work
Access to finance[4]	The evidence suggests that policies designed to improve access to finance (for example loan subsidies or guarantees) may increase the availability of work
Broadband[1]	The evidence is inconsistent so it is not possible to tell whether access to broadband increases the availability of work

Intervention	Evidence summary
Research and development tax credits[3]	Evidence is lacking so it is not possible to tell whether tax credit programmes boost research and development and increase the availability of work
EU structural funds[5]	The evidence is inconsistent so it is not possible to tell whether economic area based initiatives increase the availability of work
Enterprise zones[6]	The evidence is inconsistent so it is not possible to tell whether geographic area based initiatives increase the availability of work
Business advice[7]	The evidence is inconsistent so it is not possible to tell if business advice increases the availability of work
Estate renewal[8]	The evidence suggests that estate renewal may not be effective in increasing the availability of work

5.1.2 Education, skills development and training

Table 8: Do education, skills development and training help get people into employment?

Intervention	Evidence summary
Active labour market programmes[9, 10]	The evidence suggests that participation in active labour market programmes (including classroom and on the job training, work experience, and skills training) may be effective in getting people into work. Larger effects were seen in programmes targeting disadvantaged youth[10]
Welfare to work programmes[11]	The evidence suggests that welfare to work programmes may be effective in getting people into work
Apprenticeships[12]	The evidence suggests that apprenticeships may be effective at getting people into work
Employment training[13]	The evidence is inconsistent so it is not possible to tell if employment training programmes targeting people over 18 years are effective at getting people into work

5.1.3 People who need additional support

Table 9: What interventions support those with additional needs to get employment?

Topic	Evidence summary
Common mental health problems[14]	The evidence suggests that mental health interventions may be effective in helping people with common mental health problems to find work
Supported employment for people with severe mental illness[15, 16]	The evidence suggests that supported employment may help people with severe mental illness to find work
Cancer[20]	The evidence suggests that employment interventions for cancer survivors may help them to gain or maintain employment
Common mental health problems[14]	Evidence is lacking on employment interventions to help those with common mental health problems find work
Transition services for people with autistic spectrum disorder[17] Employment assistance for adults with autistic spectrum disorder[18]	Evidence is lacking so it is not possible to tell whether pre-graduation transition services for young people with autistic spectrum disorder help them to find work The evidence is inconsistent so it is not possible to tell if employment assistance helps adults with autistic spectrum disorder find work
Multiple sclerosis[19]	Evidence is lacking so it is not possible to tell whether vocational rehabilitation helps people with multiple sclerosis to find work
Resettled refugees[21]	Evidence is lacking so it is not possible to tell whether interventions to improve the self-sufficiency of settled refugees are effective in helping them to find work

5.1.4 Generic support to find work

Table 10: What generic support helps people to find work?

Topic	Evidence summary
Unemployment benefits[22]	The evidence suggests that the exhaustion of unemployment benefits, or the prospect of exhaustion, may be effective in getting people into work

5.2 The work environment

Table 11: The work environment – final inclusions

Category	Source of review	No. of reviews
Physical environment	Cochrane systematic reviews	12

Category	Source of review	No. of reviews
	Reviews for NICE guidance	1
Psychosocial environment	Cochrane systematic reviews Reviews for NICE guidance Campbell systematic reviews	4 3 1
Remuneration	Cochrane systematic review	1
Wellbeing	Cochrane systematic review	1

5.2.1 The physical work environment

Table 12: Which interventions in the physical work environment support the health and wellbeing of employees or prevent harm?

Topic	Evidence summary
Workplace interventions[34]	The evidence suggests that sit stand desks may reduce sitting in the short to medium-term
Musculoskeletal problems Prevention of neck and upper limb disorders[23]	The evidence is inconsistent so it is not possible to tell whether arm supports or an alternative mouse are effective in preventing upper limb and neck disorders in office workers. Evidence is lacking for other interventions
Management of carpal tunnel syndrome[25]	Evidence is lacking so it is not possible to tell whether ergonomic positioning or equipment is effective in managing carpal tunnel syndrome
Working hours/shift patterns Older workers[27]	Evidence is lacking so it is not possible to tell whether changes to shift patterns have positive impacts on the health and wellbeing of older workers
Flexible working interventions[28]	Evidence on flexible working interventions such as self-scheduling is inconsistent and evidence on gradual/partial retirement is lacking so it is not possible to tell if these have positive effects on worker health and wellbeing
Night shift work[29]	Evidence is lacking so it is not possible to tell whether interventions to help workers adapt to night shift work have positive effects on their health and wellbeing

Topic	Evidence summary
Safe working environment	
Enforcement of health and safety regulations[30]	The evidence is lacking or is inconsistent so it is not possible to tell whether enforcement of health and safety regulations prevents occupational diseases and injuries
Prevention of hearing loss[31]	Evidence is lacking so it is not possible to tell whether interventions to prevent occupational noise induced hearing loss are effective
Prevention of occupational injuries[32]	Evidence is lacking so it is not possible to tell whether interventions to prevent occupational injuries are effective
Reducing sedentary behaviour	
Organisational travel plans[33]	The evidence is inconsistent so it is not possible to tell whether organisational travel plans are effective for reducing sedentary behaviour
Workplace interventions[34]	Evidence on longer-term effects is lacking The evidence is inconsistent so it is not possible to tell whether workplace policy changes, provision of information and counselling and multi-component interventions are effective in reducing sitting
Workplace lighting[35]	Evidence is lacking so it is not possible to tell whether changes to workplace lighting improve worker alertness and mood
Organisational travel plans[33]	Evidence is lacking so it is not possible to tell whether organisational travel plans are effective for improving workers health
Prevention of musculoskeletal disorders[24]	The evidence suggests that changes to work break frequencies to prevent musculoskeletal disorders may not be effective
Prevention of back pain[26]	The evidence suggests that manual handling advice and use of assistive devices may not be effective in preventing back pain or back pain related disability

5.2.2 The psychosocial work environment

Table 13: What interventions to modify the psychosocial environment benefit workers health and wellbeing or prevent harm?

Topic	Evidence summary
Stress prevention and management	
Teachers[41]	The evidence suggests that organisational interventions may be effective for reducing work-related stress in teachers
Healthcare workers[43]	The evidence suggests that interventions to reduce occupational stress in healthcare workers may be effective
Bullying[36]	Evidence is lacking so it is not possible to tell whether interventions prevent bullying in the workplace
Workplace policy and practices	
Line managers[37, 39]	Evidence is lacking so it is not possible to tell which supervisory level approaches enhance employee health and wellbeing
Work place interventions[38]	The evidence is inconsistent so it is not possible to tell whether workplace interventions to support line managers enhance employee health and wellbeing
Stress prevention and management	
Computer based interventions[40]	The evidence is inconsistent so it is not possible to tell whether computer based interventions prevent or reduce worker stress
Teachers[41]	Evidence is lacking for interventions changing work characteristics and multi-component interventions so it is not possible to tell if these are effective
Police officers[42]	The evidence suggests that interventions for stress management in police officers may not be effective
Remuneration[44]	The evidence suggests that access to in-work tax credits may have no effect on adults health status

5.3 Staying in work

Table 14: Staying in work – final inclusions

Category	Source of review	No. of reviews
Managing sickness absence	Reviews for NICE guidance Cochrane systematic reviews	3 2
Support for additional needs	Cochrane systematic reviews Campbell systematic reviews EPPI-Centre	10 2 1
Older workers	Review for NICE guidance	1

5.3.1 Managing sickness absence

Generic interventions

Table 15: Which generic interventions are effective in reducing sickness absence and supporting return to work?

Topic	Evidence summary
Long-term sickness absence; short-term outcomes (3 months) [47]	The evidence suggests that individual employee focused interventions for those with musculoskeletal conditions may be effective in supporting return to work in the short-term
Long-term sickness absence; medium-term outcomes (12 months) [47]	The evidence suggests that workplace focused interventions for people with musculoskeletal conditions may be effective in reducing the time to return to work in the medium-term
Recurrent short-term sickness absence[45]	Evidence is lacking and it is not possible to tell whether interventions to reduce recurrent short-term sickness absence are effective
Movement from short-term to long-term sickness absence[46]	Evidence is lacking and it is not possible to whether interventions reduce movement from short to long-term sickness absence
Long-term sickness absence; short-term outcomes (3 months) [47]	Evidence is lacking so it is not possible to tell whether individual employee focused interventions for those with musculoskeletal or mental health problems are effective in reducing days of sickness absence in the short-term
Long-term sickness absence; medium-term outcomes (12 months) [47]	Evidence is lacking so it is not possible to tell whether individual employee focused interventions for people with mental health problems increase the proportion returning to work in the medium-term
	Evidence is lacking so it is not possible to tell whether individual employee focused interventions for people with

Topic	Evidence summary
	musculoskeletal problems reduce days of sickness absence in the medium-term
Long-term sickness absence; medium-term outcomes (12 months) [47]	Evidence is lacking so it is not possible to tell whether workplace focused interventions for mixed populations reduce time to return to work in the medium-term
Work disability[48]	The evidence is inconsistent so it is not possible to tell whether workplace interventions for people on sick leave are effective in reducing sickness absence
Return to work coordination programmes[49]	Evidence is lacking so it is not possible to tell whether return to work coordination programmes reduce cumulative sickness absence days in the short-term (6 months) and very long-term (beyond 12 months)
Long-term sickness absence; short-term outcomes (3 months) [47]	The evidence suggests combined interventions (workplace and individual employee focused) for those with mental health problems may not be effective in increasing return to work in the short-term
Long-term sickness absence; medium-term outcomes (12 months) [47]	The evidence suggests that individual employee focused interventions for people with musculoskeletal conditions may not be effective in increasing the proportion returning to work in the medium-term The evidence suggests that individual employee focused interventions for people with mental health problems may not be effective in reducing days of sickness absence in the medium-term The evidence suggests that individual employee focused interventions for people with musculoskeletal disorders and people with mental health problems may not be effective in reducing the time to return to work in the medium-term The evidence suggests combined interventions (workplace and individual employee focused) for those with musculoskeletal conditions and for those with mental health problems may not be effective in increasing the proportion returning to work in the medium-term

Topic	Evidence summary
	The evidence suggests combined interventions (workplace and individual employee focused) for those with mental health problems may not be effective in reducing the number of days of sickness absence in the medium-term The evidence suggests combined interventions (workplace and individual employee focused) for those with musculoskeletal conditions and for those with mental health problems may not be effective in reducing the time to return to work in the medium-term
Return to work coordination programmes[49]	The evidence suggests that return to work coordination programmes may not be effective in in reducing time to return to work at 6, 12 and more than 12 months or in reducing cumulative sickness absence at 12 months

Specific interventions

Table 16: Which interventions for people with specific conditions reduce sickness absence?

Topic	Evidence summary
People with cancer[52]	The evidence suggests that multidisciplinary physical, psycho-educational and/or vocational interventions may be effective in supporting people with cancer to return to work
Depression[56]	The evidence suggests that work directed interventions added to clinical intervention may reduce sickness absence in people with depression
Neck pain[50]	Evidence is lacking so it is not possible to tell whether interventions reduce sickness absence in people on sick leave because of neck pain
Workplace disability management programmes[53]	Evidence is lacking so it is not possible to tell whether workplace disability management programmes help to reduce sickness absence
Inflammatory arthritis[55]	Evidence is lacking so it is not possible to tell if non-pharmacological interventions reduce sickness absence for people with inflammatory arthritis

Topic	Evidence summary
Multiple sclerosis[19]	Evidence is lacking so it is not possible to tell whether vocational rehabilitation improves employment outcomes in people with multiple sclerosis
Adjustment disorder[51]	The evidence suggests that problem solving therapies may not be effective in reducing time to partial return to work in people with adjustment disorder The evidence suggests that CBT may not be effective in reducing time to return to work in people with adjustment disorders
Coronary heart disease[54]	The evidence suggests that psychological interventions (including health education), work directed counselling, exercise programmes and combined cardiac rehabilitation programmes for people with coronary heart disease may not be effective in reducing sickness absence (days until return to work)
Back pain[57]	The evidence suggests that physical conditioning may not be effective in improving employment outcomes in people on sick leave because of back pain

Support for those with additional needs

Table 17: Which interventions support those with additional needs to remain in employment?

Topic	Evidence summary
People with cancer Multidisciplinary interventions[52] Employment interventions [20]	 The evidence suggests that multidisciplinary physical, psycho-educational and/or vocational interventions may be effective in supporting people with cancer to return to work The evidence suggests that employment interventions for cancer survivors may help them to maintain employment
Workplace disability management programmes[53]	Evidence is lacking so it is not possible to tell whether workplace disability management programmes support people to maintain employment
Inflammatory arthritis[55]	Evidence is lacking so it is not possible to tell whether non-pharmacological interventions for people with inflammatory arthritis reduce job loss

Topic	Evidence summary
Multiple sclerosis[19]	Evidence is lacking so it is not possible to tell whether vocational rehabilitation programmes for people with multiple sclerosis helps them to maintain employment
Autistic spectrum disorder[18]	Evidence is lacking so it is not possible to tell whether employment assistance is effective in helping adults with autistic spectrum disorder maintain employment
Older workers[58]	Evidence is lacking so it is not possible to tell whether interventions support older workers to remain in employment
Coronary heart disease[54]	The evidence suggests that psychological interventions (including health education), physical conditioning and combined interventions may not be effective for keeping people with coronary heart disease in employment

6 Discussion

This section considers the extent to which the sources retrieved and included in the map are able to address the map questions. The questions were:

Primary question

What works to improve participation in work in order to improve health and reduce health inequalities?

Secondary questions

What is effective to get people into work?

What is effective to ensure work contributes to good health and health equity?

What is effective in keeping people in work?

For the primary question many of the included reviews looked at outcomes relevant to work participation and health outcomes, however few seem to have considered outcomes relevant to health inequalities. In the final map a review from the What Works Centre on enterprise zones included poverty (poverty rate) and found that half of the ten studies that considered the impact on this found positive effects[6]. However, the report does not quantify this. A review looking at the effects of organisational travel plans included

impact on health inequalities as a specific outcome[33]. This found no studies that measured the social distribution of effects or adverse effects. A review included in the initial, but not final, map looking at the impact of a compressed working week on health and work life balance included impact in inequalities in health as an outcome[59]. This found no studies reporting differential impacts by socio-economic groups and noted that most studies were conducted in homogenous populations.

With the exception of these and the What Works Centre reviews[1-5, 7, 8], which looked at interventions that had the potential to create employment, the reviews identified mainly focused on individual level outcomes. The material retrieved and included in both the initial and final maps does not allow the impact of work on health inequalities to be assessed.

Generally where there is evidence that something might work, effect sizes are small, studies are weak and many have limited applicability to the UK. The systematic reviews included in the final map are predominantly inconclusive, their authors having found that evidence is lacking or results are inconsistent.

6.1 What is effective to get people into work?

Both initial and final maps provide material that answers this question. Policies and interventions covered in initial mapping, but not the final map included entrepreneurship, the impact of major sporting events, interventions for people with learning disability, mentorship, assistive technology for people with cognitive problems and employment interventions for offenders (Table 2).

The reviews included in the final map suggest that policies supporting access to loans grants and subsidies to encourage innovation may increase the number of jobs that are available[2] (Table 7). For other policy interventions including access to broadband, research and development tax credits, access to financial support, access to business advice and initiatives either geographically or economic area based, the evidence is insufficient to support any conclusions[2-7]. Policies to encourage estate renewal may be detrimental because they may increase property prices but not create employment opportunities for the local population[8] (Table 7).

Apprenticeships, involving paid employment in a firm and training may be an effective way to get people into work (Table 8)[12]. However, the evidence on employment training for those over 18 years, including day-release, short courses and retraining is inconsistent[13].

Welfare-to-work programmes, including job search assistance and training, subsidised employment, job clubs and vocational training and active labour market programmes, which seem to be similar, may encourage people into

work[9, 11]. The prospect, or actual, exhaustion of unemployment benefits also seems to encourage people into work[22] (Table 8).

To get those with additional needs into work (Table 9) supported employment may be effective for people with severe mental illness and psychosocial interventions may help those who have had cancer[15, 16, 20]. For people with autistic spectrum disorder, evidence for pre-graduation transition services is lacking and inconsistent for employment assistance[17, 18]. There is a lack of evidence on the impact of vocational rehabilitation for people with multiple sclerosis and interventions for people with common mental health problems[19, 14]. One review also looked for interventions to support resettled refugees to become economically self-sufficient but found no relevant studies[21].

6.2 What is effective to ensure work contributes to good health and health equity?

The majority of the systematic reviews we retrieved looked at the physical work environment and there was good coverage of the psychosocial environment (Table 3). Only one review looked at remuneration in the form of impact of in-work tax credits on health[44]. One review looked at the impact of paid maternity leave but we found no other reviews on security of employment. This may be because studies in this area are likely to be looking at the relationship between job insecurity and wellbeing rather than interventions. Only one review looked at opportunities for development. Rather than looking at the impact of this, it was concerned with interventions that prevented gender bias in recruitment. We found no reviews looking specifically at interventions to improve job satisfaction or the impact of union membership, work councils or other forms of employee voice. No reviews addressed health equity; none looked at differences in outcomes associated with socio-economic status.

The coverage of the initial and final maps were very similar. No reviews covering security of employment, job satisfaction or employee voice, opportunities for development, privatisation of public utilities or job design, covered in the initial map, are included in the final map.

Included studies in the final map covering the physical workplace environment (Table 12) suggest that evidence on prevention of musculoskeletal disorders is lacking or inconsistent[23, 25]. Where there is sufficient evidence to draw conclusions it is likely that interventions are not effective[24, 26]. Evidence on interventions modifying work hours or shift patterns to improve or prevent deterioration in health and wellbeing is lacking or inconsistent[27-29]. We found the same for interventions to promote a safe working environment[30-32]. To reduce sitting in the workplace sit-stand desks may be effective in the short to medium-term but evidence on the impact of workplace policy changes, counselling and multi-component

interventions is inconsistent[34]. Evidence on the impact of organisational travel plans on workers sedentary behaviour is inconsistent and on their health more generally, is lacking[33]. Changes in workplace lighting to improve worker alertness and mood was considered in one review, however, this found evidence was lacking[35].

We found very little evidence for interventions shown to be effective in improving the psychosocial environment at work (Table 13). The final map included one review that reported a lack of evidence on interventions to prevent bullying[36]. Evidence where supervisory approaches or workplace interventions are most likely to enhance employee health and wellbeing is inconclusive[37-39.] We found inconsistent evidence for computer-based interventions to prevent or reduce worker stress[40]. Organisational interventions may prove effective to reduce work related stress in teachers but evidence for changing work characteristics or multi-component interventions is lacking[41]. Stress management interventions for police officers may not be effective[42], whereas those to reduce occupational stress in healthcare workers may have some impact[43]. A review looking at the effect of in-work tax credits found that these may have no effect on the health status of the adults who receive them[44].

6.3 What is effective in keeping people in work?

The systematic reviews we included in initial mapping for this area predominantly involved interventions for those with additional needs such as musculoskeletal and mental health problems, learning disability, cancer and acquired brain injury (Table 4). Reviews addressing the management of sickness absence looked at employee assistance programmes and interventions to reduce both long and short-term sickness. We found one review on the impact of flexible working and three that looked at wellbeing and work participation in older workers. We found no reviews looking at interventions for lower qualified workers. No reviews looked at whether interventions to keep people working had an impact on outcomes other than reduction in sick leave or staying in employment.

There were no notable differences between the coverage of the final and initial maps.

Five reviews looked at generic interventions for the management of sickness absence (Table 15). These found a lack of evidence on interventions to reduce recurrent short-term sickness absence or movement from short to long-term absence[45, 46]. Evidence around longer-term sickness absence varied according to the outcomes that studies considered[47]. Individual employee focused interventions for those with musculoskeletal conditions may support return to work at three months and workplace interventions may reduce the time to return to work at 12 months, but evidence for all other interventions was either inconclusive or suggested no effect[47, 48]. Return to work coordination programmes may also not be effective in

reducing sickness absence in the medium-term and evidence is lacking on their short-term (six months) and very long-term (12 months) impact[49].

We found that the evidence on interventions to reduce sickness absence for people with specific health problems is mixed (Table 16). One review looked at reducing sickness absence in those with neck pain, this found a lack of evidence[50]. People with an adjustment disorder may be supported to return to work by problem solving therapies. However, cognitive behavioural therapy for this problem may not be effective[51]. Multidisciplinary physical and psycho-educational and/or vocational interventions may be effective in helping people who have cancer to return to work[52]. We found that no conclusions can be drawn on workplace disability management programmes because evidence is lacking[53]. A range of interventions for people with coronary heart disease, including counselling and cardiac rehabilitation may have no impact on days of sickness absence[54]. Evidence is lacking on the impact on sickness absence for non-pharmacological interventions for people with inflammatory arthritis and vocational rehabilitation for those with multiple sclerosis[55, 19]. Work directed interventions in combination with clinical care may reduce sickness absence for those who have depression[56]. For those with back pain physical conditioning may not have an impact on sick leave[57].

Some of the reviews we included in the final map looked at the impact of interventions that might support those with a range of health problems to maintain their employment (Table 17). For people with cancer multidisciplinary physical, psycho-educational and/or vocational interventions may be effective, as may employment interventions for cancer survivors[52, 20]. For workplace disability programmes however, evidence is lacking[53]. Psychological interventions for those with coronary heart disease (including health education), physical conditioning and combined interventions may not help them to stay in employment[54]. There is a lack of evidence on non-pharmacological interventions for those with inflammatory arthritis and vocational rehabilitation programmes for those with multiple sclerosis, so it is not possible to tell if these help prevent job loss[55].

7 Limitations

The method used to produce this map has a number of limitations:

- The strength, quality and direction of evidence has not been assessed by Observatory Evidence Service reviewers

- The evidence summaries may over simplify the findings of the included systematic reviews. The evidence map and the full reports of the included reviews should be consulted for complete information

- Findings from the included systematic reviews have been considered separately and the overall strength, quality and direction of the body of evidence has not been assessed. The overlap of studies across the included reviews has not been explored

- Limiting the final map to systematic reviews that were considered to have been well conducted without appraising is likely to have missed well conducted reviews that may have covered additional topics

- Only including systematic reviews means that new and emerging evidence is likely to have been excluded and topics that have not been systematically reviewed will have been missed.

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9 Appendix

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