



Local action on health inequalities

Promoting good quality jobs to reduce health inequalities

Practice resource summary: September 2015



About Public Health England

Public Health England exists to protect and improve the nation's health and wellbeing, and reduce health inequalities. It does this through world-class science, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services. PHE is an operationally autonomous executive agency of the Department of Health.

About the UCL Institute of Health Equity

The UCL Institute of Health Equity (IHE) is led by Professor Sir Michael Marmot and seeks to increase health equity through action on the social determinants of health, specifically in four areas: influencing global, national and local policies; advising on and learning from practice; building the evidence base; and capacity building. The institute builds on previous work to tackle inequalities in health led by Professor Sir Michael Marmot and his team, including the Commission on Social Determinants of Health, Fair Society Healthy Lives (The Marmot Review) and the Review of Social Determinants of Health and the Health Divide for the WHO European Region (www.instituteofhealthequity.org).

About this practice resource summary

This resource was commissioned by PHE and produced by IHE. It is a summary of a more detailed practice resource on the same topic and is intended to help local authorities, health and wellbeing boards, and health and social care professionals when devising local programmes and strategies to reduce health inequalities.

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Summary

- 1. There are four ways in which the nature of work can adversely affect health: through adverse physical conditions of work; adverse psychosocial conditions at work; poor pay or insufficient hours; and temporary work, insecurity, and the risk of redundancy or job loss.
- 2. The most important determinant of an employee's work quality is their position in a company's hierarchy: jobs that are manual and routine are more likely than professional and managerial jobs to have health-adverse conditions, though this is not universally the case.
- 3. Features commonly associated with good jobs include: adequate pay; protection from physical hazards; job security and skills training with potential for progression; a good work-life balance and the ability for workers to participate in organisational decision-making. Skilled work typically has more protective elements and less health-adverse conditions.
- 4. There is evidence of an increase in high-paid and low-paid jobs at the expense of middle-ranking jobs. Increasing the quantity of jobs in England without consideration of job quality is likely to exacerbate social and health inequalities and create unequal economic growth.
- 5. Creating a strategy to avoid industries or sectors with poor health outcomes is largely unrealistic and potentially damaging. However, where those industries do exist, public health professionals should do all they can to help companies and their employees reduce the risks through adherence to health and safety recommendations and healthy workplace initiatives.
- 6. To develop better jobs for local populations, local partnerships can draw on what is known about the features of good and poor quality work, and can learn from emerging strategies that promote good quality jobs with employers. Local partners should encourage jobs where workers are valued, receive a living wage at minimum, have opportunities for promotion, and are protected from adverse conditions – like shift work – when possible.
- 7. Working to improve the skills base of people in local and regional labour markets may help to attract more skilled employment to the area, and contribute to improving the quality of work. This is particularly important in more economically deprived regions such as the north of England, where a skills deficit exists alongside greater health inequalities.

Introduction

The conditions in which we work have a huge impact on our health.¹ In the UK unemployment rates have been generally falling since 2011, to 5.6% for the period between March and May 2015.² However, this has arguably been associated with more part-time employment, increased use of zero-hours contracts^{3, 4, 5} and higher levels of in-work poverty.⁶ Poor quality jobs are an issue for health inequalities as they are concentrated at the lower end of the social gradient.⁷ It is therefore important that good quality jobs are encouraged to help reduce health inequalities.

While there has been general decline in the incidence of workplace-related illness it still affects millions of workers each year. Between 2013 and 2014, 1.2 million working people in Great Britain had an illness or condition believed to be caused, or exacerbated by, their current or previous work placement. Ill-health and injuries place a considerable burden on the NHS and result in considerable costs to society, estimated at £14.9bn to the British economy in 2012-13.8 In Greater Britain, 23.5 million days are lost due to work-related ill health and 4.7 million days due to workplace injury in 2013-14.9

This practice resource summary is designed to help local public health partnerships (public health teams, health and wellbeing boards and local enterprise partnerships), to influence job creation, given the current context of economic regeneration activity.

The links between job quality and health inequalities

In England there is a clear relationship between position in the social hierarchy and mortality ⁷ and a social gradient in employment status and working conditions. People in more disadvantaged socioeconomic groups are at higher risk of unemployment and, if employed, of poor working conditions. ^{1 10} Patterns of employment therefore both reflect and reinforce the social gradient of health, and there is inequality of access to labour market opportunities. ¹ Workers with fewer skills and qualifications are more likely to experience poor working conditions, as well as worse health. ^{4 5 11} Creating better quality jobs will help reduce health inequalities; increasing the number of poor quality jobs is likely to exacerbate inequalities.

There is also evidence that adverse work conditions are more common among ethnic minority groups and disabled people. For example, low pay is more common among Pakistani and Bangladeshi groups, with almost half being paid less than £7 per hour, whereas a quarter of white British workers were paid at this rate. People with a longstanding illness or disability are more likely to earn a below average income. In Great Britain in 2010, two-fifths of all adults aged 45–64 on belowaverage incomes had a limiting longstanding illness or disability, this was one-and-a-

half times the rate for those on average incomes and three times the rate for those on high incomes.¹²

Job quality and health impacts

Work can adversely impact an individual's health in five main ways (box A).

Box A. The nature of work can adversely affect health through:

- 1. Adverse physical conditions of work
- exposure to physical and chemical hazards
- long hours
- shift work
- 2. Adverse psychosocial conditions at work
- conflict
- lack of autonomy
- lack of control
- 3. Poor pay or insufficient hours
- 4. Temporary work, job insecurity and risk of redundancy
- 5. Job satisfaction and wellbeing

1. Adverse physical conditions at work

Physical and chemical hazards

Physical hazards include, for example, unhealthy or restricted posture at work, engaging in repetitive movements and heavy lifting. The most common work related illness in 2013/14 was musculoskeletal disorders (MSDs) (42% of all work-related illnesses).¹³

Long hours

Working 48 hours or more per week increases the risk of fatigue and accidents¹⁴ and there is some evidence that it can lead to stress, depression or mental ill health.^{14 15} In the UK approximately one in eight workers work more than 48 hours per week, rising to one in six in London.¹⁵

Shift work

Shift work is required in some industries to provide round-the-clock services to the population, however it is more concentrated in lower skilled occupations ¹⁶ and therefore the negative impacts will add to health inequalities. There are well established adverse health effects of shift work, ^{1 17 18} mainly a reduction in quality and quantity of sleep, fatigue, anxiety, depression, and increased neuroticism, increasing evidence of adverse cardiovascular effects, a possible increase in gastrointestinal disorders, increased risk of spontaneous abortion, and giving birth to low birth weight babies and prematurely.¹⁹

2. Adverse psychosocial conditions at work

There are a number of adverse psychological conditions at work that are related to increases in stress, mainly conflict and lack of autonomy and control, as discussed in the report. The number of cases of work-related stress, depression and anxiety in 2013-14 was 487,000 – 39% of all work-related illness.²⁰

3. Low pay and insufficient hours

The relationship between low income and poor health is well established. Income effects health through different broad pathways:

- material: through the ability to afford a healthy lifestyle
- psychosocial: through the impact that having insufficient income has on stress levels
- behavioural: the material and psychosocial impact of income can lead to maladaptive coping strategies such as drinking and smoking.

There may also be a vicious circle whereby poor health leads to a reduced income.²¹ The living wage is an hourly rate that considers the cost of reaching a minimum socially acceptable standard of living in the UK today, based on expert and public opinion. The proportion of employees earning below the living wage in 2014 was 22%, up from 21% in 2013 – a real-terms rise of 147,000 people to 5.28 million.²²

4. Temporary work, insecurity and the risk of redundancy

Studies show that workers reporting insecurity in their jobs have higher self-reported ill health relative to workers in secure employment. Workers exposed to chronic job insecurity had the highest self-reported morbidity, indicating that job security might act as a chronic stressor. Temporary workers are often exposed to strenuous and tiring positions, intense noise and repetitive movements, have less freedom to choose when to take personal leave and are rarely represented in health and safety committees. 23 24

5. Job satisfaction and wellbeing

Positive job and life satisfaction has been found to increase productivity and creativity, as well as reduce sickness absence.²⁵ ²⁶ ²⁷

Poor quality work can be experienced in all sectors but some sectors are more likely than others to result in poor quality work. While poor quality work typically follows a social gradient there are some well-paid jobs with negative qualities, for example managers may experience long working hours. Box B summarises the distribution of poor and good quality work in the UK.

Box B. Key messages on the distribution of poor and good quality work

- the construction industry has the highest physical injury rate due to physical hazards
- health and social care workers are most susceptible to both stress and musculoskeletal disorders
- long hours (more than 45 hours per week) are most associated with the agricultural sector and for managers
- shift work is most prevalent for health workers
- stress is most prevalent for welfare and housing professionals, followed by workers in teaching and education
- low-paid work is most associated with retail, waitressing, and residential care
- the worst work for poor stability and security is in elementary occupations and agriculture

For all health-adverse working conditions, a social gradient has been observed, with those at the lower end of the social gradient most affected. While certain aspects of poor quality work have improved – for example injury rates – others, such as low pay and job security, have declined since the 2008 recession.

Good-quality work is less well monitored than health-adverse work. However, from what we do know:

- managers are the most likely to have permanent or fixed term contracts (96.7%), and the public administration and defence sector are most likely to issue such contracts
- stress was lower in small workplaces; however there are concerns about the resources available to small workplaces to tackle health-adverse conditions - for example small workplaces are less likely to have HR departments

- there is a relationship between pay and life satisfaction. However, some
 of the highest scoring employee groups are company secretaries and
 fitness instructors, illustrating that good work isn't simply about high pay
 and seniority
- healthcare workers, particularly in public hospitals and medical practice activities have high rights of progressing from low pay

Promoting health-protective work

There are two avenues to consider when aiming to promote health-protective work: promoting the features that constitute good work and promoting industries that provide good work. Creating a strategy to avoid industries or sectors with poor health outcomes is largely unrealistic and potentially damaging. However where those industries do exist, public health professionals should do all they can to help companies and their employees reduce the risks, through strong adherence to health and safety recommendations and healthy workplace initiatives. The Marmot Review summarised the features of good work, as illustrated in box C.¹

Box C. Features of good work¹

- 1. Free of core features of precariousness, such as lack of stability and high risk of job loss, lack of safety measures (exposure to toxic substances, elevated risks of accidents, and the absence of minimal standards of employment protection).
- Enables the working person to exert some control through participatory decisionmaking on matters such as the place and the timing of work and the tasks to be accomplished.
- 3. Places appropriately high demands on the working person, both in terms of quantity and quality, without overtaxing their resources and capabilities and without doing harm to their physical and mental health.
- 4. Provides fair employment in terms of earnings reflecting productivity and in terms of employers' commitment towards guaranteeing job security.
- 5. Offers opportunities for skills training, learning and promotion prospects within a life course perspective, sustaining health and work ability and stimulating the growth of an individual's capabilities.
- 6. Prevents social isolation and any form of discrimination and violence.
- 7. Enables workers to share relevant information within the organisation, to participate in organisational decision-making and collective bargaining and to guarantee procedural justice in case of conflicts.
- 8. Aims at reconciling work and extra-work/family demands in ways that reduce the cumulative burden of multiple social roles.
- 9. Attempts to reintegrate sick and disabled people into full employment wherever possible.

10. Contributes to workers' wellbeing by meeting the basic psychological needs of self-efficacy, self-esteem, sense of belonging and meaningfulness.

How local policymakers can reduce health inequalities

A typology of actions available to reduce health inequalities generally is shown in table 1 and applied to tackling stress in the workplace.²⁸

Table 1. Typology of actions for tackling health inequalities

Action	Explanation	Application to stress in the workplace
Strengthening individuals	Aimed at strengthening individuals in disadvantaged circumstances, and using person-based agencies. Some build up self-confidence and skills in people, others address the relative powerlessness of the worst-off in society. Examples: health information campaigns, life skills groups, and one-to-one counselling/support.	Person-based approaches, offering counselling and education to increase a person's skill and capacity to cope with the stress produced by the work set-up.
Strengthening communities	Aimed at building social cohesion and mutual support. These interventions either encourage social interactions between members or groups of the same community, or they foster interactions on a society-wide basis, between different groups on the social scale.	Improvements in communication patterns and human relations, providing opportunities for making decisions, joint problemsolving with workmates and constructive feedback on how the job is going.
Improving living and working conditions	These initiatives identify the critical cause of observed health inequalities to be greater exposure to health-damaging environments, both at home and at work, with declining social position. Historically improvements in day-to-day living and working conditions and access to services have been important in improving the health of populations.	There are changes in large- scale organisational issues – redesigning production processes and management strategies that influence the tasks individuals are asked to do.

	Examples: safer workplaces, better housing, and better access to health and social care.	
Promoting Healthy macro- policies	This perspective first identifies the causes of health inequalities in the overarching macroeconomic, cultural and environmental conditions that influence the standard of living. Promoting healthy macro-policies entails looking at which policies reduce poverty. Following such policies subsequently reduces health inequalities. These policies tend to span several areas and work across the population as a whole, unlike some of those in the other categories.	There are entry points for interventions to influence the outside pressures imposed on workplace organisations. Market conditions and rules about competition, national labour relations programmes which influence employment rates, job security, wages, and national levels of unemployment and so on potentially have a huge impact on the psychosocial stress experienced in individual workplaces, even though these macro-policies are outside one organisation's control.

Strategies to improve skills

Skills have been described as, "the foundation for growth and prosperity".²⁹ One strategy to encourage the growth of good quality jobs – those providing key elements for protecting health – is to encourage skilled jobs.

Box D. Designing local skills strategies – OECD recommendations for building local skills³⁰

1. Access to relevant information and data

Local actors – including the Jobcentre Plus, local enterprise partnerships (LEPs) and health and wellbeing boards – need to develop evidence-based skills strategies from an understanding of the skills, supply and demand in a local labour force (sometimes referred to as the local "skills ecology"). One role is collecting data on skills demand and skills supply from the Labour Force Survey to ensure that training is being well targeted to local business needs. Jobcentre Plus currently helps identify skills demand by matching people with jobs, as well as recommending training programmes to help unemployed workers adapt to the local economy. The partnerships defining the local skills supply and demand should include higher

education institutions and work programmes such as Jobcentre Plus.³¹ Jobcentre Plus is seen to be particularly effective, with 83% of employers reporting themselves satisfied with its services³². Jobcentre Plus has also recently been praised by the National Audit Office for coping well with increasing numbers of claimants.³²

2. Look to the future and anticipate change

Localities should strike the right balance between attracting talent, integrating disadvantaged groups into the workforce development system and upgrading the skills of the low qualified. Developing a strong skills strategy may require providing incentives for local actors to work towards longer-term objectives and investment in sustainable growth of worker productivity.

3. Better mapping of skills provision

Joining up disparate education and training systems locally is crucial to helping people

build on their learning over time while in and outside of employment. In New York, "career ladders" have proved a very good way of linking up education and training provision into a coherent system in certain sectors, to provide workers with career and pay progression, so that people can, for example, see how a basic course in retail can ultimately lead to a management position in a local department store.

4. Building strong relationships with employers

The success of local skills strategies depends on the ability of local actors to foresee future growth and skills demands. Skills strategies need to be subject to regular review and adjustment as economies and industries evolve. In particular, localities need to develop "flexible specialisation", building on specific strengths and local comparative advantage but adapting these to new forms of market demand as they emerge.

Internationally, strategies have been successfully employed to increase the skill level in areas described as having a skills deficit, such as Michigan in the United States. ³³ The Michigan skills strategy suggests that the key step that needs to be taken is to identify skills and work in partnership with local employers:

Initiative: Michigan skills strategy³³

The Michigan strategy identified five key sectors in which future jobs and wages growth was possible, based on a wider economic strategy and labour market intelligence. This led to the formation of employer-led cluster partnerships, bringing

together employers, training providers and state bodies to:

- identify industry skills shortages and long-term skills challenges
- work with training providers and welfare-to-work providers to fill these gaps
- develop career progression pathways so people can improve their earnings, opening up entry-level opportunities for new entrants
- stimulate employer demand for skills.

Noteworthy lessons from this case study include:

- the important role played by dedicated and skilled intermediaries in facilitating and sustaining collaboration
- the start-up funding of around US \$100,000 (which was intended to be selfsustaining) needed to be supplemented on an ongoing basis from grants and donations from charitable foundations and through further attraction of mainstream workforce development resources available from the state government.

The Sheffield City Deal Initiative gives an example of an initiative in England designed to increase skills and wages.

Initiative: Sheffield City Deal, 2015–2021³⁴

The City Deal secured £4m in skills funding from central government, with a further £23.8m of adult skills and apprenticeships budgets channelled from central government departments. Local co-funding includes £6m to £12m of local authority funding and a minimum of £37.5m of employer investment.

The City Deal has four main strands:

- skills for growth: including upskilling existing employees and creating apprenticeships
- financial tools for growth: establishing a regional investment fund which pools funding streams
- transport: increasing connectivity and bringing forward investment in key projects
- advanced manufacturing and procurement: developing a national centre for procurement in advanced manufacturing and nuclear research

The skills package agreed under the City Deal has two main strands to be achieved over a three-year period:

 to create an additional 4,000 apprenticeships, through an Apprenticeship Training Agency and Group Training Associations, to support small and medium-sized enterprises (SMEs) that are unable to meet the cost or risk of employing

- apprentices full time; using public procurement to maximise apprenticeship creation; and supporting young people who are not in education, employment or training (NEET) into apprenticeships
- to train 2,000 current employees with the skills needed by businesses locally, with employers shaping skills provision; financial incentives for providers to deliver training to meet employer demand; and developing bespoke commissions to meet the needs of local employers.

As this work is ongoing it has not yet been evaluated.

Local authorities and job creation

Key initiatives that can support local authority efforts to create jobs include LEPs and Enterprise Zones (EZs). Central Government policy supports these schemes and they have been further supported by Growth Deals, which provide further funding.³⁵

Box E. The Government's vision for local enterprise partnerships³¹

- articulate a clear long-term strategy for enterprise growth based on a realistic appraisal of the area's strengths and opportunities
- identify existing barriers to business growth, for example, in terms of land-use planning, infrastructure (in the broadest sense), skills/labour market, and the actions required to remove them
- gain buy-in from all sides to a small number of objectives and outcomes that can survive institutional/political changes over the long run, not least because the financing mechanisms used will likely pitch short-term risk against long-term gain
- "sell" the area by taking responsibility for bids for central government funding (for example, the Regional Growth Fund), leveraging private investment capital and influencing local funding streams (such as the Community Infrastructure Levy and retained business rates) and ensuring these deliver against locally-agreed priorities, without necessarily being the direct budget holders
- focus on improving the local business environment through strategic planning, transport networks, and matching training offers to labour market needs.

European Social Fund

The European Social Fund (ESF) gives support to employment programmes across the EU. In the UK one of the main focus regions of the ESF has been Cornwall, an economically deprived area.

Initiative: European Social Fund – Cornwall, 2007–13^{36 37}

The ESF in Cornwall aimed to contribute to sustainable economic growth and social inclusion by extending employment opportunities and by developing a skilled and adaptable workforce. The programme had two broad objectives:

- to increase employment by providing training and support to unemployed and disadvantaged groups
- to provide targeted support to build a better and more competitive workforce.

It also has two cross-cutting themes: gender equality and equal opportunities; and sustainable development.

The funding was allocated as follows:

- tackling worklessness by reducing or removing the barriers to employment (€75m)
- improving local workforce skills (€118 m)

More research on the long-term impacts of this project is needed to understand whether or not the increased skills base increased the number of good quality jobs and reduced the number of poor quality jobs.

Box F. Features of a job creation strategy to help reduce health inequalities

A successful strategy should:

- work collaboratively with central and local government; secure funding for skills mapping and skills development
- build links between relevant actors, specifically: employers, employees groups, universities and other further education establishments, and groups committed to tackling poverty and social exclusion
- prioritise the creation of jobs that have health-protective elements skilled jobs and those with access to training and progression – which in turn will bring more health-protective elements including better pay
- use active labour market policies to help those most at risk from health-adverse conditions (those at the lower end of the social gradient) to attain work that protects their health.

The health sector: leading by example

The health sector is already the largest employer in the UK, employing around 3.9 million people.³⁸ Healthcare services are increasingly being provided outside normal working hours and there will be a movement to more shift work – creating new jobs in the health services that are themselves health-promoting should be a priority for the sector. This entails the health sector taking action against the main causes of poor health in the workplace, including shift work, stress and musculoskeletal disorders, as well as paying the living wage at minimum and providing opportunities for promotion. Beyond this it is beneficial to give employees autonomy over factors that affect their health. The Trades Union Congress (TUC) Healthy Workplaces Project did this well.

Initiative: TUC Healthy Workplaces Project³⁹

The TUC northern region ran a Healthy Workplaces Project as a way of using the workplace to involve employees in health improvement activities. It was a partnership between employers, unions and the NHS. Employee-led health initiatives were conducted at the workplace and subsequently audited. Depending on the success of the scheme, workplaces were awarded a gold, silver or bronze award.

- 200 employers were involved
- 40% of employers reported a fall in sickness and absence as a result of the project
- 70% of employers and 90% of employees felt the workplace was a better place

to work

 50% of employers and employees felt relationships between management and staff had improved.

Conclusion

The UK's economic recovery is creating new jobs but there is evidence of an increase in high-paid and low-paid jobs at the expense of middle-ranking jobs. Most of the low-level jobs being created have been in social care, leisure and retail – the sectors most associated with low pay and a lack of guaranteed hours, training and job security. Increasing the quantity of jobs in England without consideration of the quality of these jobs may therefore exacerbate social inequalities and disrupt economic growth.

This practice resource has identified the common aspects of both good and poor quality work. It has also highlighted how different features of work are strongly associated with each other. Where possible, the job types and sectors where the features of good and poor quality work are more common have been identified. For example, working for a large employer or in healthcare is known to be positively associated with moving out of low pay, whereas sectors linked to hospitality have low rates of staff progression. Conversely, employees in the healthcare sector experience higher rates of stress and workplace injury.

A strategy to avoid industries or sectors with poor health outcomes is largely unrealistic and potentially damaging. Clearly, it cannot be recommended that areas avoid having healthcare-related jobs because of the risk of musculoskeletal disorders, or that there are no process, plant and machine operatives because they have five times the national injury rate. However, where those industries exist or are encouraged into an area, public health professionals should do all they can to help companies and their employees reduce the risks, through strong adherence to health and safety recommendations and healthy workplace initiatives working in partnership with businesses.

Job creation strategies will also need to be developed and implemented in partnerships with relevant bodies and groups for example, LEPs, business leaders and universities. The inclusion of an anti-poverty organisation – the Joseph Rowntree Foundation – in Leeds' More Jobs, Better Jobs strategy is likely to be of particular interest for other local area.

References

- 1. The Marmot Review Team. Fair Society, Healthy Lives: Strategic review of health inequalities in England post-2010. London: Marmot Review Team, 2010.
- 2. UK Economic prospects. Secondary UK Economic prospects 2014. http://www.pwc.co.uk/the-economy/publications/uk-economic-outlook/ukeo-nov2014-prospects.jhtml.

- 3. Office for National Statistics. People and proportion in employment on a zero-hour contract 2000-2012, October to December, each year (ONS Labour Force Survey). 2014.
- Unite. Government must act to halt rise in zero hours, http://www.unitetheunion.org/news/governmentmustacttohaltriseinzerohours/. Secondary Government must act to halt rise in zero hours, http://www.unitetheunion.org/news/governmentmustacttohaltriseinzerohours/. 2013.
- 5. BBC News online. Cable warns of exploitation of zero-hours contracts BBC online 2013.
- 6. MacInnes MD. Monitoring Social Exclusion and Poverty 2014. Joseph Rowntree Foundation 2014:162.
- 7. Bell R, Britton A, Brunner E, et al. Work, stress and health: The Whitehall II study. In: Ferrie J, ed. London: International Centre for Health and Society/Department of Epidemiology, 2004.
- 8. Health and Safety Executive. Health and Safety Statistics: Annual Report for Great Britain 2013/2014. Secondary Health and Safety Statistics: Annual Report for Great Britain 2013/2014 2014. http://www.hse.gov.uk/statistics/overall/hssh1314.pdf.
- 9. Office for National Statistics. Health and Safety Statistics: Annual Report for Great Britain 2013/14 2014.
- 10. Siegrist J, Montano D, Hoven H. Final Scientific Report: Working conditions and health inequalities, evidence and policy implications: Universität Düsseldorf, 2014.
- 11. MacInnes MD. Monitoring Social Exclusion and Poverty 2014. Joseph Rowntree Foundation 2014:162.
- 12. The Poverty Site. Longstanding illness/disability. Secondary Longstanding illness/disability. http://www.poverty.org.uk/61/index.shtml.
- 13. Health and Safety Executive. Musculoskeletal Disorders in Great Britain 2014, 2014.
- 14. Health and Safety Executive. HSE Human Factors Briefing Note No. 10 Fatigue. Secondary HSE Human Factors Briefing Note No. 10 Fatigue. http://www.hse.gov.uk/humanfactors/topics/10fatigue.pdf.
- 15. Compton-Edwards M. Married to the job?: Chartered Institute of Personnel and Development, 2001.
- Eurofound. European Working Conditions Survey mapping the results. Secondary European Working Conditions Survey – mapping the results 2010. http://old.eurofound.europa.eu/surveys/smt/ewcs/results.htm.
- 17. Devore EE, Grodstein F, Schernhammer ES. Shift Work and Cognition in the Nurses' Health Study. American Journal of Epidemiology 2013.
- 18. Boivin DB, Boudreau P. Impacts of shift work on sleep and circadian rhythms. Pathologie Biologie 2014;62.
- 19. Harrington JM. Health effects of shift work and extended hours of work. Occup Environ Med 2001; 58:68-72 2001.
- 20. Health and Safety Executive. Stress and psychological disorders in Great Britain 2013, 2013.
- 21. Benzeval M, Bond, L., Campbell, M., Egan, M., Lorenc T, Petticrew, M and Popham F. How does money influence health?: Joseph Rowntree Foundation, 2014.
- 22. KPMG. Living Wage Research for KPMG: Structural Analysis of Hourly Wages and Current Trends in Household Finances, 2014.
- 23. Benach J, Muntaner C. Precarious employment and health: developing a research agenda. Journal of Epidemiology and Community Health 2007;**61**(4):276-77.
- 24. Lee WW, Park JB, Min KB, et al. Association between work-related health problems and job insecurity in permanent and temporary employees. Annals of Occupational and Environmental Medicine 25:15 2013.
- De Neve J, Oswald AJ. Estimating the Influence of Life Satisfaction and Positive Affect on Later Income Using Sibling Fixed Effects. Proceedings of the National Academy of Sciences 2012;109, no. 49:19953–58.
- 26. Diener E, Helliwell J, Kahneman D. *International Differences in Well-Being*: Oxford University Press, 2010.
- 27. O'Donnell G, Deaton A, Durand M, et al. Wellbeing and Policy, 2014.
- 28. Whitehead M. A typology of actions to tackle social inequalities in health. Journal of Epidemiology and Community Health 2007;61(6):473-78.
- 29. Hesltine M. No Stone Unturned in the Pursuit of Growth, 2012.
- 30. Froy F, Giguère S, Hofer A. Designing Local Skills Strategies, 2012.

- 31. Business Innovation and Skills Committee. Local Enterprise Partnerships Ninth Report of Session 2012–13 Report, together with formal minutes, oral and written evidence. House of Commons 2013.
- 32. Pollard E, Behling F, Hillage J, et al. Jobcentre Plus Employer Satisfaction and Experience Survey 2012 DWP 2012.
- 33. IPPR North, Northern Economic Futures Commission. Northern Prosperity is National Prosperity: A strategy for revitalising the UK economy: Institute for Public Policy Research, 2012.
- 34. Sissons P, Jones K. How Can Local Skills Strategies Help Low Earners?: Joseph Rowntree Foundation. 2014.
- 35. BIS. Participation Rates In Higher Education: Academic Years 2006/2007 2012/2013 (Provisional). In: BIS, ed., 2014.
- 36. Dickinson P, Lloyd R. European Social Fund: Support for In-Work Training research Research Report No 666, 2010.
- 37. SW England Regional Development Agency. Impact Analysis: ESF Objective One Programme, Cornwall and the Isles of Scilly Volume 1: Findings and Recommendations Report, 2008.
- 38. Office for National Statistics. Business Register and Employment Survey, 2014.
- 39. TUC. Work and Wellbeing: a trade union resource. 2013.