Public Health England

Protecting and improving the nation's health

Wirral

Work and Health Profile 2019

This profile has been designed as a resource to accompany the Liverpool City Region (LCR) Wealth and Wellbeing Programme. As such it should be read alongside other discussion papers that are available on wealth and wellbeing in LCR.

This document is designed to prompt local discussions on the work and health agenda and similar profiles are available for each of the other five local authorities that make the LCR Combined Authority.

This profile contains six sections:
- Section 1 provides some background information about the Metropolitan Borough of Wirral, including a population summary and an overview of out-of-work benefit claimant data.
- Section 2 explores the relationships between unemployment and other factors at a local level.
- Section 3 contains a 'key lines of enquiry' approach to help test the assumptions of the data contained in Section 2 and guide possible interpretations. It also begins to formulate ideas about what action or next steps should be considered.
- Section 4 contains links to evidence that might support identified actions.
- Section 5 contains technical information relating to the data used during preparation of this profile, including explanatory notes.
- Section 6 (appendices) contains definitions of the key terms used throughout this profile (Appendix 1) and additional data supporting Table 3 (Appendix 2) to enable comparisons between individual boroughs of the LCR or the national benchmark.

Key messages

- Poor health seems to be a major underlying reason of economic inactivity in Wirral and across LCR.
- Mental ill-health is recorded as the primary reason for more than half of out-of-work benefit claims.

Section 1: Background information and overview of worklessness

The Metropolitan Borough of Wirral is one of the six local authorities that make LCR (Figure 1). In 2018 Wirral was a home to just over 323,000 residents, of which 145,900 were economically active. As of 2017, the main industrial sectors that Wirral residents were employed in were: health and social work activities (24.3%), wholesale and retail trade (14.6%) and education (10.7%). At £405 a week, the earnings of local employees match the LCR average but still fall around £35 short of the national benchmark (£440).

At 5.2%, the proportion of out of work families with dependent children is also significantly higher in Wirral than across England (4.2%). Residents of Wirral are generally well educated – 35.1% hold NVQ4 or above. This is more than the LCR average but still around 4 percentage points less than the national average (39.3%). The proportion of people living in 20% most deprived areas in Wirral is noticeably lower than the LCR average of 44.8%, though at 30.7% it is still over 10 percentage points higher than the England average (20.2%).

Figure 1. Geography and population of the Liverpool City Region (LCR).

Deprivation is a major determinant of health and historically health inequalities have generally been higher in the North West than elsewhere. For example, average life expectancy is 2.5 years lower in LCR than in the rest of the country. The prevalence of ill-health is increasing and limiting conditions and disabilities remain one of the key barriers to employment.

Liverpool City Region borough

- Halton
- Knowsley
- Liverpool
- Sefton
- St Helens
- Wirral

Poor health accounts for a 33% gap in productivity between LCR and the national average. This is equivalent to £3.2bn or 10% of the LCR Gross Value Added (GVA) measure of the economy.

In addressing economic inactivity attributable to health issues, there is a spectrum of need and opportunity: from increasing the employability of people with chronic conditions or disabilities to improving working conditions or solving the wider problems of the labour market.

Good work is known to be a factor in maintaining health and wellbeing. Healthy workers are more motivated to stay in work, return to work after sickness more quickly and are at lower risk of long-term illness.

The aim of this profile is, therefore, to provide an overview of employment and worklessness in Wirral, show the potential for intervention and prompt local discussion about the work and health agenda.

Source: Labour Market Profile – Wirral and PHE Fingertips – Public Health Profiles

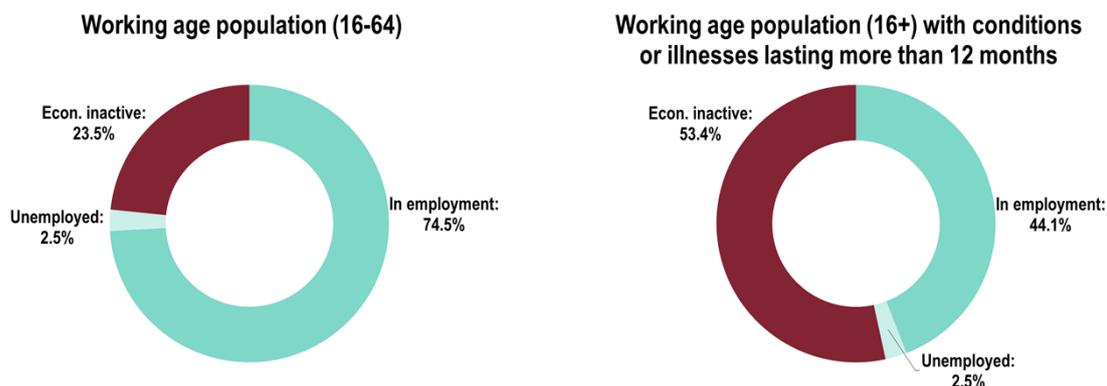**Figure 2. Labour market summary, Wirral, January 2018 to December 2018.**
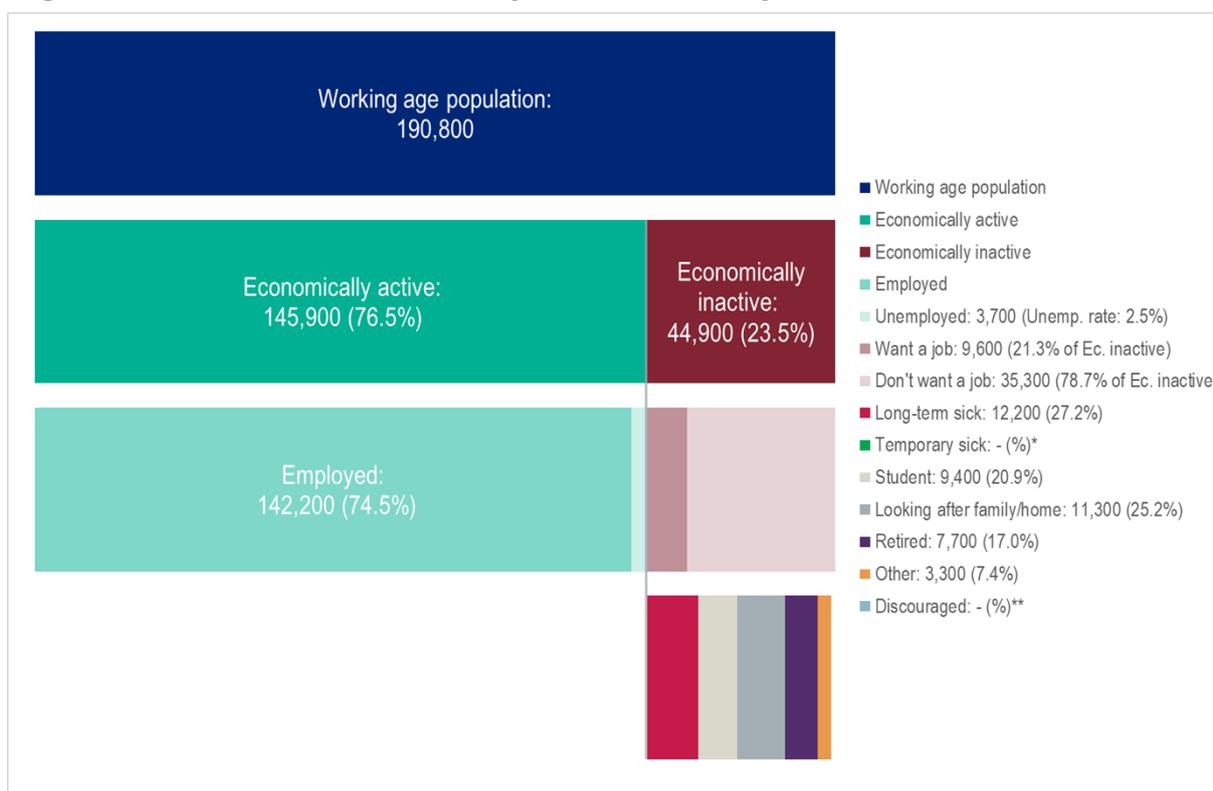
Note: * Count less than 500 and not represented graphically. ** Sample size zero or potentially disclosive. Due to rounding and the lack of data for individuals classified as 'temporary sick' or 'discouraged', values and percentages within the economically inactive category may not add up to 44,900 and/or 100%, respectively.

Source: Annual Population Survey

Key observations

- The illustration shows that measures of local economic activity can mask where the opportunities for intervention are. People on out-of-work benefits can be defined as either economically active or economically inactive.
- A good starting point for estimating the number of people likely to take up a job in the near future is to consider the unemployed and those who are economically inactive but claim that they want a job. For Wirral, this is a pool of about 13,300 people (3,700 + 9,600) – nearly 5,000 fewer than the total number of out-of-work benefit claimants (Table 1).
- Compared to other out-of-work benefit groups, the count of ESA claimants in Wirral is high. It is known that the majority of people on ESA are long-term claimants, for whom entering work may be difficult for a variety of reasons, including poor health or disability.
- Local policies and actions should consider most, if not all, of the factors which limit claimant's ability to return to work. Here, the support may need to go beyond that provided by employment advice alone. Making the labour market more accessible and accommodating for people with limiting health conditions or disabilities is another potential area for intervention.

Figure 3. Participation in the labour market, Wirral, January 2018 to December 2018.

Working age population (16-64)

Econ. inactive: 23.5%

Unemployed: 2.5%

In employment: 74.5%

Working age population (16+) with conditions or illnesses lasting more than 12 months

Econ. inactive: 53.4%

In employment: 44.1%

Unemployed: 2.5%

Note: Percentages may not add up to 100% due to rounding.

Source: Annual Population Survey

Key observation

- If we accept the premise that disability or ill-health should not be a barrier to employment, then the proportions of people in employment in the working age population and the population with long-term health conditions should be approximately the same. Of about 88,400 people (16+) with long-term conditions in Wirral, more than half (53.4%) are economically inactive. This is similar to the LCR average (54.5%) but still 2.5 percentage points higher than the England average (50.9%). Poor health seems to be a major underlying cause of economic inactivity in Wirral.

Benefit claimant analysis

Another way of measuring worklessness is by the number of claimants for out-of-work benefits. Of the working age population in Wirral, 12.4% claim benefits.

Table 1. Out-of-work benefit claimants, Wirral, November 2018.

Statistical Group typology	Adults aged 16-64 years			
	Wirral		LCR (%)	England (%)
	n	%		
Jobseeker's Allowance (JSA)	780	0.4	0.9	0.7
Employment and Support Allowance (ESA)	15,530	8.1	8.7	5.0
Incapacity Benefits (IB)	*	-	0.0	0.0
Lone parent	1,650	0.9	1.0	0.8
Others on income related benefit	60	0.0	0.0	0.0
All out-of-work benefits	18,020	9.4	10.7	6.6

Note: * Nil or negligible figure. Percentages calculated based on working age population data – Jan'18 to Dec'18 (Wirral n= 190,800; LCR n= 967,600; EN n= 34,728,600). Individual percentages may not add up due to rounding.

Source: Department for Work and Pensions (DWP) Benefits- Work and Pensions Longitudinal Study (WPLS)

Table 2. Percentage of working age population who are claiming out-of-work benefits, Liverpool City Region (by borough), November 2018.

LCR borough	%
Halton	7.6
Knowsley	12.8
Liverpool	12.8
Sefton	8.6
St Helens	12.0
Wirral	9.4

Source: DWP Benefits- Work and Pensions Longitudinal Study (WPLS)

Key observations

- Percentage of all out-of-work benefit claimants in Wirral is slightly lower than the regional (i.e. LCR) average (10.7%), but at 9.4% it still considerably exceeds the national average (6.6%).
- Among the six LCR boroughs, the percentage of out-of-work benefit claimants is relatively low in Wirral. The difference between Wirral and the two boroughs with the highest proportion of out-of-work benefit claimants (i.e. Knowsley and Liverpool) is over 3 percentage points.

Points for further consideration

- Comparison of the areas where ESA claimant count might be highest (or lowest) with the map in Figure 4 and the corresponding table.
- Closeness of the match between deprivation scores for these areas and the ESA counts.

Figure 4. Percentage of ESA claimants by 2003 ward boundaries, Wirral, November 2018.
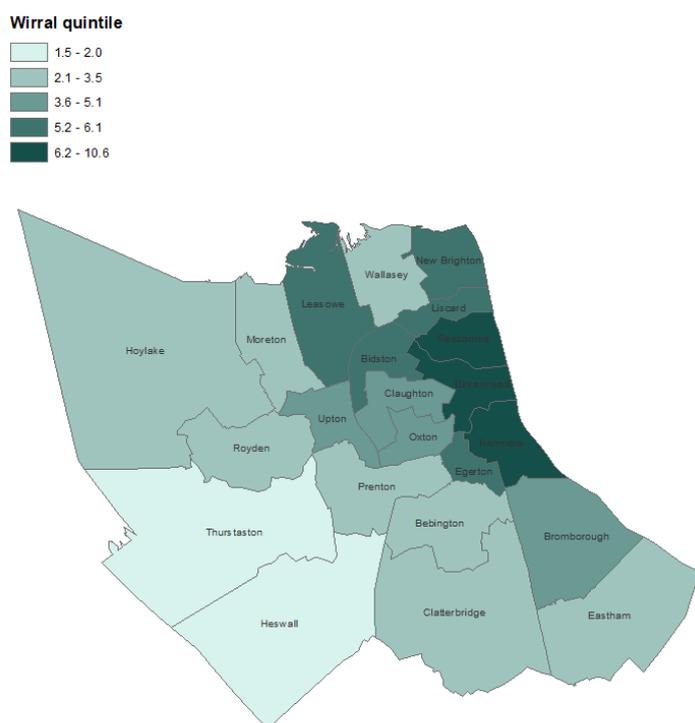
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Ward	n	%
Bebington	435	2.8
Bidston	945	6.1
Birkenhead	1,645	10.6
Bromborough	790	5.1
Clatterbridge	390	2.5
Claughton	755	4.9
Eastham	380	2.5
Egerton	920	5.9
Heswall	230	1.5
Hoylake	380	2.5
Leasowe	860	5.6
Liscard	860	5.6
Moreton	495	3.2
New Brighton	900	5.8
Oxton	605	3.9
Prenton	540	3.5
Royden	365	2.4
Seacombe	1,285	8.3
Thurstaston	310	2
Tranmere	1,190	7.7
Upton	735	4.8
Wallasey	450	2.9
Total	15,530	100.0

Note: Total number of ESA claimants presented here may be slightly different to that in Table 1 due to rounding or suppression.

Source: DWP Benefits- Work and Pensions Longitudinal Study (WPLS)

Section 2: Data exploration

Figure 5. Treemap illustrating the conditions recorded as being the primary reason for ESA claim by age categories, Wirral, November 2018.
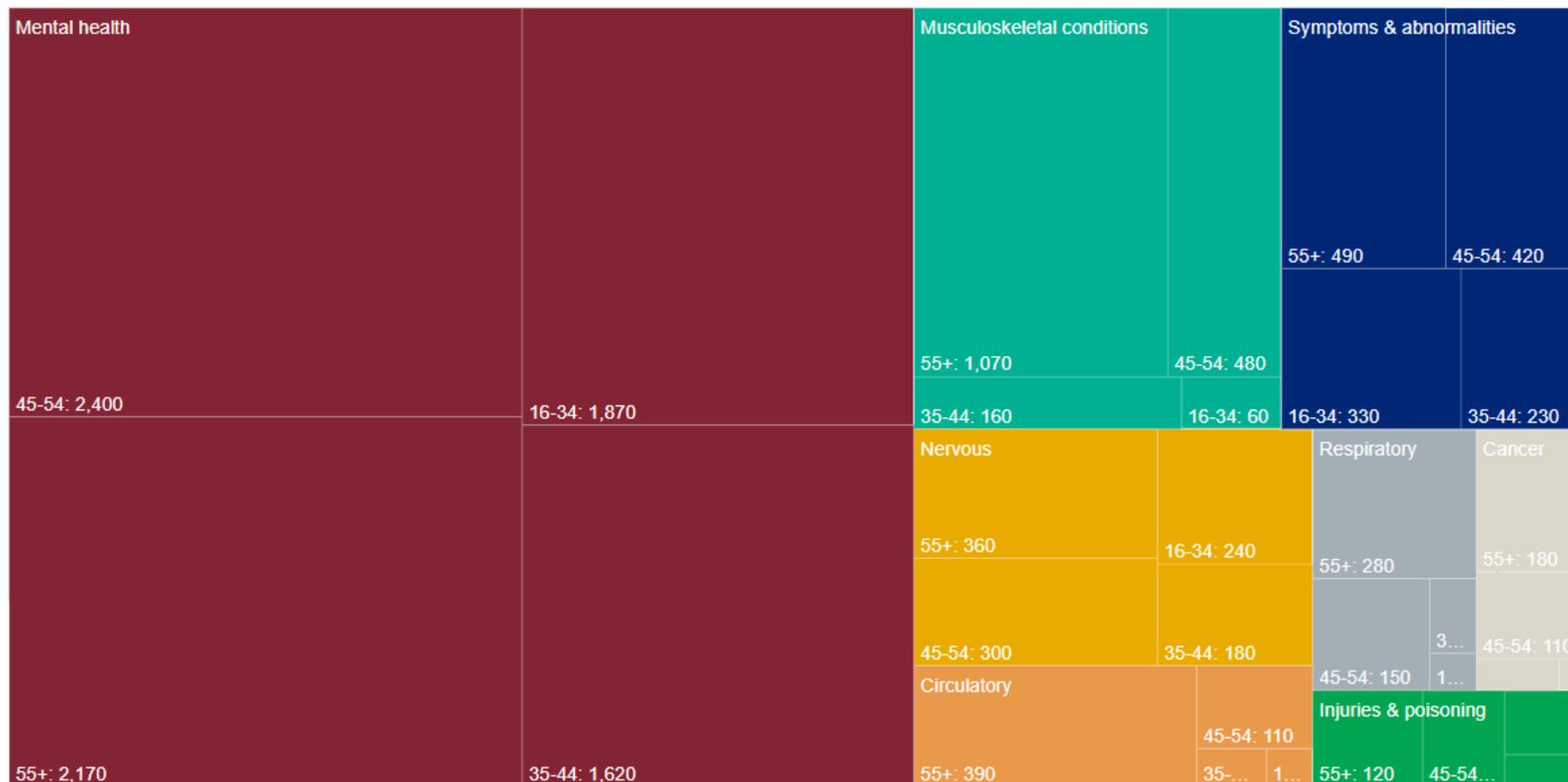
Note: The treemap displays the eight largest ranked clusters of conditions recorded as being the primary reason of an ESA claim. Please note, the age categories shown are not evenly sized.

Source: DWP Benefits- Work and Pensions Longitudinal Study (WPLS)

Key observations

- The treemap uses numbers rather than rates to emphasise the number of people with each condition and the relative distribution of conditions across the ESA claimant population in Wirral.
- Of the eight conditions, mental ill-health is recorded as the primary reason for an ESA claim in more than half the cases.
- In Wirral, there are more people aged 16-34 on health-related out-of-work benefits because of a mental health condition than all ages (i.e. 16-64) because of a musculoskeletal condition (i.e. second most common health-related reason for being out-of-work in the UK).
- For all health conditions and illnesses, older workers make the most claims.

Table 3. Directly standardised ESA claimant rates per 100,000 population, by ICD-10 chapter of condition, Wirral, November 2018.

Type of condition	Aged 16-64			Aged 50-64		
	Wirral	**LCR**	**England**	**Wirral**	**LCR**	**England**
Infections	20.8	26.7	26.1	44.7	52.4	51.9
Cancers	171.7	189.7	122.4	372.3	449.0	291.1
Blood	20.8	16.4	11.1	44.7	32.8	19.8
Endocrine	98.8	115.9	72.2	193.6	249.1	161.2
Mental	4,192.5	4,523.4	2,536.4	5,196.9	6,190.8	3,300.4
Nervous system	561.8	548.6	372.7	789.2	835.7	592.9
Eye	67.6	62.6	46.3	89.3	108.2	82.2
Ear	31.2	36.9	22.5	59.6	59.0	32.6
Circulatory	286.1	327.1	181.1	699.9	855.4	473.1
Respiratory	254.9	290.2	122.3	551.0	694.8	301.9
Digestive	140.4	144.6	71.5	253.1	275.3	132.5
Skin	31.2	37.9	20.5	44.7	72.1	37.4
Musculoskeletal	920.7	1,020.4	612.5	2,054.9	2,480.9	1,462.6
Genito/urinary	41.6	40.0	25.3	74.5	72.1	45.4
Pregnancy	*	6.2	3.9	*	*	0.9
Perinatal conditions	*	*	0.1	*	*	*
Congenital malformations	93.6	92.3	60.0	89.3	95.0	60.6
Symptoms and abnormalities	764.6	788.6	424.8	1,087.0	1,301.1	739.4
Injuries/poisoning	156.1	173.3	109.8	268.0	311.3	197.8
Other factors	182.1	205.1	128.2	297.8	358.6	254.5

🟩	Statistically better than LCR	🟧	Statistically similar to LCR
🟥	Statistically worse than LCR		

Note: * Suggests there were too few observations (< 10) in the age group of interest (16-64 or 50-64) to calculate a DSR. For these conditions comparisons with the regional (LCR) benchmark were not possible.

Source: DWP Benefits- Work and Pensions Longitudinal Study (WPLS)

Key observations

- For the entire working age population (16-64 years olds) in Wirral, DSRs for most conditions are statistically similar to the LCR values. In some cases however, they compare favourably with the regional benchmark.
- In the 16-64 age group, DSRs for all but one group of conditions (i.e. infections) are higher in Wirral than at the national level (see Appendix 2 to check statistical significance).
- For all but one group of conditions (i.e. congenital malformations), DSRs are higher among 50-64 year olds than for 16-64 year olds living in Wirral.

Points for further consideration

- Factors or local characteristics which can help explain the similarities in health between ESA claimants living in Wirral and across LCR.
- Comparison of the prevalence of conditions among the out-of-work population in Wirral with other boroughs of the Combined Authority, LCR as a whole and the national benchmark (see Appendix 2).
- Closeness of the match between deprivation scores and ESA counts.
- Reasons why DSRs are generally higher among older workers.

Table 4. Table illustrating other socio-demographic characteristics that have a statistical association with reported out-of-work status for the older working age population (50-64 years). Liverpool City Region, 2016.

Male		Female	
Increased likelihood of reporting out-of-work status	**Reduced likelihood of reporting out-of-work status**	**Increased likelihood of reporting out--of-work status**	**Reduced likelihood of reporting out-of-work status**
Single or divorced	Access to cars/vans	Those who have reported that they have moved in the past year	Access to cars/vans
Living in rented accommodation	Better qualifications/higher educational attainment	Living in rented accommodation	Reporting themselves to be in 'good health'
Living with person who has a limiting long term illness	Reporting themselves to be in 'good health'	Reporting no current passport*	Better qualifications/higher educational attainment
Those who have reported that they have moved in the past year			

Note: * Passport ownership was used as a proxy for wider socio-demographic phenomena (e.g. social mobility).

Source: Unpublished 2011 Census analysis, Local Knowledge and Intelligence Service, PHE

Section 3: Interpretation

Key lines of enquiry

Data quality checks

- Is the data presented in the profile accurate to the best of your knowledge?
- Do you have more granular or more up to date data that could be used (for example, SUS, primary care data or Jobcentre Plus data)?
- Does the quantitative data in the report concur with locally available quantitative or qualitative data, such as local burden of disease analysis, or lifestyle surveys?
- Does the overall picture concur with the needs identified within the local Joint Strategic Needs Assessment (JSNA)?

Observations

- In which areas do the local data show a difference from the national average in respect of unemployment rates, types of benefit claimed, barriers to employment and ill-health within the out-of-work population? This should include an appreciation of differences that are better or worse than the national benchmark.
- Is there a difference between the health status of the general population and that reported within the out-of-work population?
- Does Wirral demography contain concentrations of the socio-demographic characteristics that have been shown to be more or less likely to be associated with worklessness (Table 4)?
- Are there any apparent inconsistencies or incongruences in the data presented (i.e. high levels of employment in areas where there are known to be a concentration of rented accommodation, which is known to be a characteristic associated with reporting out-of-work status)?

Insights

- Is there a difference between the general health profile and that of the out-of-work population? Can this be explained by methodology weaknesses, aspects of service design (e.g. by enhanced self-management programmes or diversion schemes, genuine concentrations of ill-health within the out-of-work population that are not present in the general population, aspects of service provision or general under-provision for hard to reach groups)?
- Can the data in the profile be connected with the result of local intelligence exercises to support insight, such as community development work, Healthwatch, patient groups and user groups?
- Which areas are at risk of having a combination of characteristics that would increase the likelihood of worklessness (i.e. high rates of chronic illness within

particular black and minority ethnic (BME) communities where cohabitations is known to be high)?

- Can a pen picture be created for the communities that need to be targeted or the types of service that needs to be enhanced?

Actions

- What priorities can be identified from this work: priority communities, priority health conditions, priority service gaps or reconstituted provision?
- What is the nature of the response required (e.g. commission new services, amend current provision, specify new interventions, specify target 'client group', commission further intelligence, identify new stakeholders)?
- Where in the governance structures should the accountability and responsibility for action lie?
- Who will coordinate and oversee action? Will activity be directed as a function of health workstreams or work programme workstreams?

Further investigations

- What gaps in understanding have been identified and how will these gaps be addressed?
- What mechanisms are available to support further analysis (i.e. use of partnership local authority analysts/researchers, academic health science networks, PHE, private contractors, etc.)?
- What is the process for determining if the gap is a local one or one shared by a number of boroughs where a once-for-all approach would be better?
- How will progress be monitored and evaluated?
- Can you replicate this profile locally with near real-time data?

Section 4: Sources of evidence

The following is a list of quality sources of evidence relevant to the PHE Work and Health Profiles.

Based on the key themes emerging from these profiles, sample searches were conducted about what methods are effective in helping to get individuals currently out-of-work due to mental health and musculoskeletal (MSK) conditions back into employment.

Original searches took place between May and June 2016, and were updated in June 2019. Key search terms included worklessness, unemployment, mental health and health inequalities. Examples of the types of evidence available, with some brief details, are presented for information below.

Please note that no assessment was made of the quality of the material listed (please refer directly to the source for more details). Therefore, this is not intended to be an exhaustive list of the available evidence.

Sample sources and examples of the types of evidence:

Sample evidence	Example findings/details
The Cochrane Database of Systematic Reviews (CDSR)	
Return-to-work coordination programmes for improving return to work in workers on sick leave Vogel et al, 2017	Little benefit of offering return-to-work coordination programmes for workers on sick leave for at least four weeks compared to usual practice.
Interventions to help depressed people resume work Nieuwenhuijsen at al, 2014	Adding a work-directed intervention to a clinical one can reduce days on sick leave.
Supported employment for adults with severe mental illness Kinoshita et al, 2013	Enhancing primary or occupational care with CBT can reduce sick leave compared with usual care.
Improving return to work in adults suffering from symptoms of distress Arends et al, 2012	Problem solving therapy (PST) speeds up partial return to work (PTW) compared with no intervention or usual care. CBT or PST no more effective for full return to work than no treatment or usual care.

National Institute for Health and Care Excellence (NICE) guidance documents	
Rheumatoid arthritis in adults: management [NG100] July 2018	This guideline covers diagnosing and managing rheumatoid arthritis. It is directed at healthcare professionals, commissioners and providers of healthcare as well as patients with RA and their families.
Bipolar disorder: assessment and management [CG185] April 2018	This clinical guideline covers recognising, managing and treating bipolar disorder in children, young people and adults. It is directed at health and social care professionals, patients with bipolar disorder, their carers and families/ relatives.
Depression in adults: recognition and management [CG90] April 2018	This clinical guideline covers identifying and managing depression in individuals aged 18 or over, in primary and secondary care. It is directed at healthcare professionals, people with depression, their families and carers.
Low back pain and sciatica in over 16s: assessment and management [NG59] November 2016	This guideline covers assessing and managing low back pain (LBP) and sciatica in individuals aged 16 or over. It is directed at healthcare professionals, commissioners and providers of healthcare, LBP and sciatic patients, their families and carers.
Autism spectrum disorder in older adults: diagnosis and management [CG142] August 2016	This clinical guidance covers diagnosing and managing suspected or confirmed autism spectrum disorder in people aged 18 or over. It is directed at health and social care professionals, commissioners and providers of healthcare, adults with autism, their families, partners and carers.
Two resource packs are available for the following conditions: MSK • Osteoarthritis • Rheumatoid arthritis • Low back pain	The resource packs, hosted on the NW PHE Khub site contain the following: 1) Links to supporting resources for commissioners including relevant NICE guidelines, commissioning and costing tools, implementation and audit tools 2) Compilation of all statements and associated measures for Quality Standards

Mental health • Depression • Anxiety • Autism • Bipolar disorder • Psychosis and schizophrenia	(QS identify priorities for service improvement and define measures to track progress) 3) Compilation of all 'do not do' recommendations from relevant MSK and MH guidance – these are designed to support disinvestment and efficiency decisions 4) Links to the NICE return on investment tools for public health (these aim to support investment decisions by commissioners in local authorities) 5) Table of NICE service quality indicators relevant to the stated conditions.
Health Evidence (HE)	
Effectiveness of eHealth interventions for reducing mental health conditions in employees: A systematic review and meta-analysis Stratton et al, 2017	Reasonable evidence that eHealth interventions can reduce mental health and stress symptoms post intervention and still have a benefit, although reduced, at follow-up.
Efficacy of mindfulness-based interventions on depressive symptoms among people with mental disorders: A meta-analysis Klanin-Yobus et al, 2012	Mindfulness can help improve depressive symptoms.
Vocational interventions (VI) for unemployed: Effects on work participation and mental distress. A systematic review Audhoe et al, 2010	Weak evidence for vocational interventions (VI) improving participation in work.
Department for Work and Pensions (DWP) research and policy papers	

Self-employment for people with disabilities and health conditions DWP, 2019	Research to enhance the understanding of the experience of self-employment for individuals with disabilities and health conditions – particularly the challenges and types of support required to set up, grow and sustain their business.
Improving lives: The Work, Health and Disability Green Paper DWP, 2016	Review of the employment situation of individuals with disabilities and long term health conditions.
What works for whom in helping disabled people into work? DWP, 2013	Quick review of international evidence to inform the national disability strategy.
Quantifying the effectiveness of interventions for people with common health conditions in enabling them to stay in or return to work: A rapid evidence assessment DWP and University of Sheffield, 2012	Early interventions benefit health outcomes, but less quality evidence for employment outcomes (and whether return to work is sustained). Greater coverage of evidence for MSK than MH (see particularly Table 1 for more details).
Health at work – an independent review of sickness absence Black and Frost, 2011	Review to diagnose the effects of sickness absence on individuals, employers and the state as well as to suggest ways of combating the sickness absence burden.
Is work good for your health and well-being? Waddell and Burton, 2006	Investigates the health benefits of work and concludes that that any work (not just 'good' work) is better for wellbeing than being unemployed, assuming that the person isn't returning to the same work context that caused the health issue in the first place.
Public Health England reports, tools and evidence briefings	
Musculoskeletal Health: applying All Our Health January, 2019	Guidance to promote musculoskeletal health in professional practice.

Does remaining in work benefit those with musculoskeletal disorders? Mar, 2018	Evidence briefing which summarises the benefits of staying in work for individuals with musculoskeletal disorders (MSKs). Time period: 2006 – 2018
What are the methods for improving mental or physical health after a transition from unemployment to employment in those with a long-term condition or disability? Mar, 2018	Evidence briefing which summarises the evidence on interventions for improving mental and physical health on returning to work for those with a long-term health condition or disability. Time period: 2008 – 2018
How can healthcare workers help young people not in employment education or training (NEETs) transition into work? Feb, 2018	Evidence briefing which summarises the evidence on the measures that can be taken by healthcare workers to help young who are not in employment, education or training (NEETs) move into work. Time period: 1998 – 2018
What is the impact of job loss and unemployment on the physical and mental health of older adults, and how can they be supported back into work? Feb, 2018	Evidence briefing which summarises the evidence on the effects job loss and unemployment have on the health of older adults, and how can healthcare professionals support them to return to work. Time period: 2006 – 2018
How can health care workers help patients with a health condition and/or disability remain in or get back into work? Feb, 2018	Evidence briefing which summarises the evidence on the ways in which healthcare workers can help people with chronic health conditions return to work. Time period: 1998 – 2018
Movement into Employment: Return on Investment Tool October, 2017	Tool to estimate the benefits of moving an individual from unemployment into sustainable employment.

Public Health England reports, tools and evidence briefings (cont.)

Local action on health inequalities: reducing social isolation across the lifecourse PHE and UCL Institute of Health Equity, 2015	Summarises evidence, outlines who is most at risk and identifies interventions.
Local action on health inequalities: Increasing employment opportunities and improving workplace health PHE and UCL Institute of Health Equity, 2014	Summarises evidence and outlines potential actions locally.
Local Government Association (LGA)	
Health, work and health related worklessness PHE and LGA, 2016	Gives practical ways local authorities can reduce worklessness and presents a number of national case studies.
This list of sources of evidence was updated in June 2019 by Rachel Gledhill, from the North of England Knowledge and Library Services, PHE.	

Section 5: Technical notes

There are a number of important considerations to note in respect of this profile:

- The focus of the profile is on aspects of ill-health recovery and access to work for those currently out-of-work. Issues of productivity, short term sickness absence, presenteeism, and the prevention of ill-health for the in-work population are fundamental components of the work and health agenda but – due to limited data availability – they do not feature within this profile. It is possible that insight generated through the use of this profile might be used to inform work in the areas that are out of scope.
- While most data within the profile considers the full working age population, a small subgroup is considered in some analyses (i.e. the older working age population). This subgroup has been identified as being of particular significance since unemployment in older age is strongly predictive of reduced life expectancy and older age workers also perform a key role in respect of establishing intergenerational aspiration. Results of other sub-group analyses (e.g. of younger workers) are not presented here, as population samples were either too small or analyses showed no significant effect.
- This profile uses a variety of data and analytical techniques to explore local phenomena. It is important to ensure that any conclusions drawn from data presented here have due regard to the limitations and assumptions which underpin the analyses.
- Where possible, the profile includes the latest data (i.e. from November 2018), although some sections make use of previous findings (e.g. analysis of the 2011 Census microdata).

Section 1 notes

Data presented in this section were released in November 2018 and include all claims (i.e. 100% processing of DWP records) and, therefore, are not subject to sampling error. However, any analysis of out-of-work benefit data is subject to considerable change as a result of welfare reform and the introduction of, and transition to, Universal Credit. Data presented here relate to the current system of welfare, whereas future interpretation or application of these insights needs to be seen in the context of potential changes to the welfare system.

It is not possible to subset employment aspirations (want a job/don't want a job) of the economically inactive population by their personal characteristics (e.g. student, temporary sick, etc.). Hence, Figure 2 presents these two dimensions as discrete subsets of the overall economically inactive population.

The aim of the Statistical Group typology (Table 1) is to present each person by the main reason why they are claiming benefit. Each client is classified just once and data includes all claims, therefore it is not subject to sampling error. The lack of data for Incapacity Benefit (IB) claimants can be explained by the fact that Employment and Support Allowance (ESA) replaced Incapacity Benefit and Income Support paid for all new claims from 27th October 2008. Most people who receive an out-of-work benefit on the grounds of incapacity are, therefore, already included in the ESA count. The only possibility for one to be on IB today is if the benefit was awarded before 27th October 2008 and the claim has been ongoing ever since. For Wirral, this count is negligible, and data for this category were not presented to avoid disclosure.

Section 2 notes

This report lacks information on any local or indeed LCR- wide programme designed to tackle barriers to employment. Therefore, it does not provide detail on the effectiveness of any existing measures of personalised support or on the extent to which these measures meet their objectives. A more detailed picture could be drawn, for example, by looking at the initial assessment information gathered by local employment and recruitment agencies.

The treemap (Figure 5) displays the eight largest ranked clusters of conditions as reasons for ESA claims. For all boroughs in LCR the top eight conditions are the same and include: mental ill-health (1), musculoskeletal conditions (2), symptoms (3), diseases of the nervous system (4), diseases of the circulatory system (5), diseases of the respiratory system (6), injuries (7) and cancers (8). Please note, the age categories shown are not evenly sized.

The analysis presented in Table 4 is the product of some exploratory work, using samples of anonymised records (SARs) data, also known as Census microdata. It represents a summary (at LCR level) of those survey measures, where there was a clear differential associated with either a 'workless' or 'in work' status for males or females.

- The table only considers the older working age group (50-64 year olds), because the results of multiple logistic regression were most reliable for this age group.
- Some of the characteristics are more prominent in certain local authorities than others but this can be unrelated to the actual prevalence of the specific characteristic. For example, two areas may have a high proportion of the population professing Muslim religion, but in only one of these localities is Muslim religion differentially associated with a workless status. In this scenario, it is hypothesised that the interaction between religious identity and the structure of the local employment market is the key feature and not the religious identity per se.

- Similarly, specific survey measures may operate as a proxy for wider socio-demographic phenomena. For example, the association between workless status and owning a passport may represent a specific level of social mobility rather than simply ownership of the document itself – a solution to addressing worklessness is unlikely to be found in issuing people with passports (or other photo ID).

The purpose of the analysis contained in Table 4 is to prompt discussion about targeting and evidence application at a local level. Key lines of enquiry are listed in Section 3 to help provide a structure to the interpretation of this exploratory analysis.

Section 6 (Appendix 2) notes

Tables A1 and A2 present age standardised ESA claimant rates in each of the six LCR boroughs, for the two age groups of interest: 16-64 year olds (Table A1) and 50-64 year olds (Table A2). The aim of these tables is threefold:
1. to support the findings for this borough already summarised in Table 3
2. to allow further comparisons between the six LCR boroughs
3. to determine if there are any statistically significant differences between them and the regional or national benchmark.

Section 6 (Appendix 1): Definitions

This profile makes use of several key terms. To aid the understanding of data and findings contained in this report, those terms are further explained here. Where possible, definitions were derived from Nomis – the main data source used in preparation of this report. Further notes were added as appropriate.

Economically active – people who are either in employment (employed or self-employed) or actively looking for a job and who are available to start work with immediate effect (i.e. 2 weeks from the date of their interview).

Economically inactive – people who are neither in employment nor unemployed. This refers to people who are retired, or whose circumstances make it impossible for them to work.

Note: This population can be broken down into those who are inactive but want a job, and those who declare no interest in entering the labour market. Alternatively, it can be subset by the personal characteristics of those who declare themselves as economically inactive (e.g. students, individuals with caring responsibilities, etc.). However, it is not possible to subset employment aspirations by reasons of economic inactivity. In other words, we were unable to tell if, for example, students are more likely to want a job than those who look after their family/home. For this reason, Figure 2 presents these two classifications as separate breakdowns of the overall economically inactive population.

Employed – people who are in paid work (whether as employees or self-employed) or temporarily away from work (e.g. on holiday), those on government supported training and employment programmes and, finally, those doing unpaid family work. For the ease of presentation, the umbrella term 'Employed' was used to represent all of these groups.

Unemployed – people without a job who have looked for work in the past four weeks and who are able to start work within the next two weeks or those waiting to start a job they have already obtained.

Note: In the context of this profile, both 'Economically inactive but wanting a job' and 'Unemployed' are thought to be in good health, with no severe barriers to work and doing everything they can to be in employment (Figure 2). A sum of the respective counts is, therefore, a useful measure of the number of people able to move into work within a reasonably short time frame and at a relatively low resource investment.

Workless – people who are unemployed or economically inactive – i.e. whose commitments or personal circumstances make it impossible for them to work – irrespective of whether they are students, looking after family/home or if they belong to any other category of the economically inactive population.

Note: For the purpose of the analysis presented in Table 4, we have taken the 2011 Census sample of 'unemployed' and 'permanently sick' LCR residents as 'workless'. Persons who reported themselves as full-time students, retired, looking after family/home, other or discouraged were excluded from the comparisons. The analysis only considers older workers (i.e. 50-64 year olds) because the results of multiple logistic regression were most reliable for this age-group.

Jobseeker's Allowance (JSA) – is a benefit payable to the unemployed. It can also be claimed by people who participate in some government training schemes. To be eligible for JSA claimants must:

- be 18 or over but below state pension age (though some exceptions may apply to 16 & 17 year olds),
- not be in full-time education,
- be in England, Scotland or Wales,
- be actively seeking work or work on average less than 16 hours per week,
- be available for work at least 40 hours per week.

Employment and Support Allowance (ESA) – is a benefit payable to people of working age, who are out-of-work due to ill-health or whose capacities to undertake work are severely restricted. ESA provides financial and personalised support to help those people get back into work. Historically, LCR has always had a high proportion of ESA claimants compared to the rest of the country, and the vast majority of claimants have been on this benefit for a longer term (i.e. at least one year). In the context of this profile, people on ESA are a key group, and the high ESA claimant count shows the importance of addressing underlying barriers to work across LCR.

Note: People on DWP benefits are categorised according to the main reason why they are claiming benefit. Each client is classified to a single group. Benefits are arranged hierarchically, so if a person claims more than one benefit, they are assigned to the top most benefit which they receive.

Together with lone parents, Incapacity Benefits (IB) and others on income-related benefits, JSA and ESA claimants make the main out-of-work benefits reported in Table 1. These groups were chosen as the closest representation of all those benefit recipients who cannot be in full-time employment. People

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claiming solely Bereavement Benefits or Disability Living Allowance (DLA) are not included, as they are not on out-of-work or income-based benefits. Of all people claiming out-of-work benefits in Wirral, the vast majority are on ESA (Table 1).

Section 6 (Appendix 2): Supporting data

Table A1. Directly standardised ESA claimant rates per 100,000 population, by ICD-10 chapter of condition. Liverpool City Region boroughs, November 2018.

Type of condition	Aged 16-64														
	Halton			Knowsley			Liverpool			Liverpool City Region			England		
	DSR	CI$_{lower}$	CI$_{upper}$	DSR	CI$_{lower}$	CI$_{upper}$	DSR	CI$_{lower}$	CI$_{upper}$	DSR	CI$_{lower}$	CI$_{upper}$	DSR	CI$_{lower}$	CI$_{upper}$
Infections	12.7	6.1	23.3	10.7	5.1	19.7	26.7	21.5	32.8	26.7	23.5	30.1	26.1	25.6	26.7
Cancers	202.6	172.4	236.5	235.6	205.5	268.9	189.9	175.4	205.2	189.7	181.2	198.6	122.4	121.3	123.6
Blood	*	*	*	*	*	*	14.8	11.0	19.6	16.4	14.0	19.2	11.1	10.8	11.5
Endocrine	76.0	58.0	97.8	139.2	116.3	165.3	130.5	118.6	143.3	115.9	109.2	122.8	72.2	71.3	73.1
Mental	2,962.8	2,843.9	3,085.3	5,279.2	5,132.8	5,428.6	5,316.0	5,238.5	5,394.5	4,523.4	4,481.3	4,565.8	2,536.4	2,531.2	2,541.7
Nervous system	481.1	434.0	532.0	653.2	602.4	707.2	551.8	527.0	577.4	548.6	534.0	563.5	372.7	370.7	374.7
Eye	25.3	15.5	39.1	85.7	67.9	106.6	56.4	48.6	65.0	62.6	57.7	67.7	46.3	45.6	47.0
Ear	*	*	*	32.1	21.7	45.9	38.6	32.2	45.8	36.9	33.2	40.9	22.5	22.0	23.0
Circulatory	316.5	278.5	358.3	439.0	397.6	483.7	335.2	316.0	355.3	327.1	315.9	338.7	181.1	179.7	182.5
Respiratory	177.3	149.1	209.2	396.2	356.9	438.7	359.0	339.0	379.8	290.2	279.3	301.1	122.3	121.1	123.5
Digestive	88.6	69.1	112.0	192.7	165.6	223.1	157.2	144.1	171.2	144.6	137.1	152.3	71.5	70.6	72.4
Skin	12.7	6.1	23.3	42.8	30.6	58.3	38.6	32.2	45.8	37.9	34.2	42.0	20.5	20.1	21.0
Musculo-skeletal	962.3	895.1	1,033.2	1,338.5	1,265.3	1,414.8	1,062.0	1,027.5	1,097.4	1,020.4	1,000.4	1,040.6	612.5	609.9	615.1
Genito/urinary	25.3	15.5	39.1	53.5	39.7	70.6	47.5	40.4	55.4	40.0	36.1	44.2	25.3	24.8	25.8
Pregnancy	*	*	*	*	*	*	11.9	8.5	16.2	6.2	4.7	7.9	3.9	3.7	4.1
Perinatal conditions	*	*	*	*	*	*	*	*	*	*	*	*	0.1	0.0	0.0
Congenital malformations	101.3	80.3	126.1	85.7	67.9	106.6	80.1	70.8	90.2	92.3	86.4	98.5	60.0	59.2	60.8
Symptoms	658.4	603.0	717.5	963.7	901.8	1,028.8	845.5	814.7	877.1	788.6	771.1	806.4	424.8	422.7	427.0
Injuries/poisoning	114.0	91.6	140.1	192.7	165.1	223.1	189.9	175.4	205.2	173.3	165.1	181.8	109.8	108.7	110.9
Other factors	202.6	172.4	236.5	267.7	235.5	303.0	195.8	181.1	211.3	205.1	196.2	214.3	128.2	127.0	129.4

Note: * Suggests there were too few observations (< 10) in the age group of interest (16-64 year olds) to calculate a DSR.

Source: DWP Benefits- Work and Pensions Longitudinal Study (WPLS)

Table A1 (cont.). Directly standardised ESA claimant rates per 100,000 population, by ICD-10 chapter of condition. Liverpool City Region boroughs, November 2018.

Type of condition	Aged 16-64														
	Sefton			St Helens			Wirral			Liverpool City Region			England		
	DSR	CI$_{lower}$	CI$_{upper}$	DSR	CI$_{lower}$	CI$_{upper}$	DSR	CI$_{lower}$	CI$_{upper}$	DSR	CI$_{lower}$	CI$_{upper}$	DSR	CI$_{lower}$	CI$_{upper}$
Infections	24.4	17.5	33.3	27.3	18.4	39.0	20.8	14.9	28.3	26.7	23.5	30.1	26.1	25.6	26.7
Cancers	177.2	157.4	198.9	182.1	157.7	209.2	171.7	153.6	191.2	189.7	181.2	198.6	122.4	121.3	123.6
Blood	6.1	2.9	11.2	9.1	4.4	16.7	20.8	14.9	28.3	16.4	14.0	19.2	11.1	10.8	11.5
Endocrine	91.7	77.6	107.6	136.6	115.6	160.3	98.8	85.3	113.9	115.9	109.2	122.8	72.2	71.3	73.1
Mental	3,752.7	3,659.4	3,847.8	4,297.4	4,175.6	4,421.7	4,192.5	4,101.5	4,285.1	4,523.4	4,481.3	4,565.8	2,536.4	2,531.2	2,541.7
Nervous system	525.6	491.1	562.0	519.0	477.2	563.4	561.8	528.8	596.3	548.6	534.0	563.5	372.7	370.7	374.7
Eye	67.2	55.3	81.0	54.6	41.7	70.3	67.6	56.5	80.3	62.6	57.7	67.7	46.3	45.6	47.0
Ear	36.7	28.0	47.2	45.5	33.8	60.0	31.2	23.8	40.2	36.9	33.2	40.9	22.5	22.0	23.0
Circulatory	256.7	232.7	282.5	373.3	338.0	411.2	286.1	262.7	311.0	327.1	315.9	338.7	181.1	179.7	182.5
Respiratory	201.7	180.5	224.7	273.1	243.1	305.9	254.9	232.8	278.5	290.2	279.3	301.1	122.3	121.1	123.5
Digestive	122.2	105.9	140.7	118.4	98.9	140.5	140.4	124.2	158.2	144.6	137.1	152.3	71.5	70.6	72.4
Skin	30.6	22.7	40.3	18.2	11.1	28.1	31.2	23.8	40.2	37.9	34.2	42.0	20.5	20.1	21.0
Musculo-skeletal	825.1	781.7	870.3	1,110.8	1,049.3	1,174.9	920.7	878.3	964.6	1,020.4	1,000.4	1,040.6	612.5	609.9	615.1
Genito/urinary	36.7	28.0	47.2	27.3	18.4	39.0	41.6	33.0	51.8	40.0	36.1	44.2	25.3	24.8	25.8
Pregnancy	*	*	*	*	*	*	*	*	*	6.2	4.7	7.9	3.9	3.7	4.1
Perinatal conditions	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Congenital malformations	103.9	88.9	120.7	91.0	74.1	110.7	93.6	80.5	108.4	92.3	86.4	98.5	60.0	59.2	60.8
Symptoms	678.4	639.1	719.5	737.5	687.6	790.1	764.6	726.1	804.8	788.6	771.1	806.4	424.8	422.7	427.0
Injuries/poisoning	146.7	128.7	166.5	200.3	174.7	228.6	156.1	138.9	174.7	173.3	165.1	181.8	109.8	108.7	110.9
Other factors	207.8	186.3	231.1	209.4	183.2	238.3	182.1	163.5	202.2	205.1	196.2	214.3	128.2	127.0	129.4

Note: * Suggests there were too few observations (< 10) in the age group of interest (16-64 year olds) to calculate a DSR.

Source: DWP Benefits- Work and Pensions Longitudinal Study (WPLS)

Table A2. Directly standardised ESA claimant rates per 100,000 population, by ICD-10 chapter of condition. Liverpool City Region boroughs, November 2018.

Type of condition	Aged 50-64														
	Halton			Knowsley			Liverpool			Liverpool City Region			England		
	DSR	CI$_{lower}$	CI$_{upper}$	DSR	CI$_{lower}$	CI$_{upper}$	DSR	CI$_{lower}$	CI$_{upper}$	DSR	CI$_{lower}$	CI$_{upper}$	DSR	CI$_{lower}$	CI$_{upper}$
Infections	38.8	18.6	71.4	*	*	*	59.1	43.8	77.9	52.4	44.6	61.2	51.9	50.6	53.3
Cancers	466.1	386.4	557.3	478.6	405.1	561.7	543.4	494.8	595.4	449.0	425.5	473.4	291.1	287.8	294.4
Blood	*	*	*	*	*	*	35.4	23.9	50.6	32.8	26.7	39.9	19.8	19.0	20.7
Endocrine	194.2	144.1	256.0	319.1	259.6	388.1	354.4	315.4	396.8	249.1	231.7	267.4	161.2	158.8	163.7
Mental	4,078.3	3,835.3	4,332.6	7,371.0	7,073.5	7,677.9	8,776.4	8,577.9	8,978.3	6,190.8	6,102.8	6,279.7	3,300.4	3,289.4	3,311.4
Nervous system	699.1	600.7	809.1	925.4	821.9	1,038.2	1,004.0	937.7	1,073.9	835.7	803.6	868.8	592.9	588.3	597.6
Eye	77.7	47.5	120.0	159.5	118.4	210.3	129.9	106.8	156.6	108.2	96.8	120.5	82.2	80.5	84.0
Ear	*	*	*	95.7	64.6	136.7	82.7	64.5	104.5	59.0	50.7	68.3	32.6	31.5	33.7
Circulatory	815.7	709.1	933.8	1,053.0	942.4	1,173.0	1,086.7	1,017.6	1,159.3	855.4	822.9	888.8	473.1	468.9	477.3
Respiratory	427.3	351.1	515.0	893.5	791.9	1,004.5	1,051.3	983.3	1,122.7	694.8	665.5	725.0	301.9	298.6	305.2
Digestive	155.4	111.0	211.6	319.1	259.6	388.1	378.0	337.7	421.8	275.3	257.0	294.6	132.5	130.3	134.8
Skin	38.8	18.6	71.4	95.7	64.6	136.7	94.5	74.9	117.6	72.1	62.9	82.3	37.4	36.2	38.6
Musculo-skeletal	2,291.6	2,110.4	2,484.2	3,031.4	2,841.6	3,230.4	3,153.8	3,035.3	3,275.8	2,480.9	2,425.3	2,537.4	1,462.6	1,455.4	1,470.0
Genito/urinary	77.7	47.5	120.0	95.7	64.6	136.7	106.3	85.5	130.7	72.1	62.9	82.3	45.4	44.1	46.7
Pregnancy	*	*	*	*	*	*	*	*	*	*	*	*	0.9	0.8	1.2
Perinatal conditions	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Congenital malformations	77.7	47.5	120.0	95.7	64.6	136.7	94.5	74.9	117.6	95.0	84.4	106.6	60.6	59.1	62.1
Symptoms	1,126.4	1,000.5	1,263.8	1,563.5	1,428.2	1,708.3	1,724.3	1,637.2	1,815.4	1,301.1	1,260.9	1,342.2	739.4	734.2	744.6
Injuries/ poisoning	233.0	177.8	300.0	319.1	259.6	388.1	389.8	348.9	434.2	311.3	291.9	331.8	197.8	195.1	200.5
Other factors	388.4	316.0	472.4	478.6	405.1	561.7	448.9	404.9	496.3	380.2	358.6	402.7	254.5	251.5	157.6

Note: * Suggests there were too few observations (< 10) in the age group of interest (50-64 year olds) to calculate a DSR.

Source: DWP Benefits- Work and Pensions Longitudinal Study (WPLS)

Table A2 (cont.). Directly standardised ESA claimant rates per 100,000 population, by ICD-10 chapter of condition. Liverpool City Region boroughs, November 2018.

Type of condition	Aged 50-64														
	Sefton			St Helens			Wirral			Liverpool City Region			England		
	DSR	CI_{lower}	CI_{upper}	DSR	CI_{lower}	CI_{upper}	DSR	CI_{lower}	CI_{upper}	DSR	CI_{lower}	CI_{upper}	DSR	CI_{lower}	CI_{upper}
Infections	50.0	33.8	71.4	55.1	33.7	85.2	44.7	30.1	63.8	52.4	44.6	61.2	51.9	50.6	53.3
Cancers	400.3	351.3	454.3	413.5	350.0	485.2	372.3	327.5	421.4	449.0	425.5	473.4	291.1	287.8	294.4
Blood	16.7	8.0	30.7	27.6	13.2	50.7	44.7	30.1	63.8	32.8	26.7	39.9	19.8	19.0	20.7
Endocrine	166.8	135.7	202.9	220.5	174.9	274.5	193.6	161.7	229.9	249.1	231.7	267.4	161.2	158.8	163.7
Mental	4,670.2	4,498.8	4,846.4	4,989.7	4,762.4	5,225.0	5,196.9	5,025.9	5,372.2	6,190.8	6,102.8	6,279.7	3,300.4	3,289.4	3,311.4
Nervous system	733.9	666.9	805.8	689.2	606.4	780.1	789.2	723.4	859.3	835.7	803.6	868.8	592.9	588.3	597.6
Eye	83.4	61.9	109.9	82.7	55.8	118.1	89.3	68.2	115.0	108.2	96.8	120.5	82.2	80.5	84.0
Ear	50.0	33.8	71.4	55.1	33.7	85.2	59.6	42.6	81.1	59.0	50.7	68.3	32.6	31.5	33.7
Circulatory	567.1	508.4	630.7	964.9	866.4	1,071.4	699.9	638.0	766.1	855.4	822.9	888.8	473.1	468.9	477.3
Respiratory	417.0	366.9	472.0	578.9	503.3	662.7	551.0	496.2	610.1	694.8	665.5	725.0	301.9	298.6	305.2
Digestive	200.2	165.9	239.3	220.5	174.9	274.5	253.1	216.5	294.2	275.3	257.0	294.6	132.5	130.3	134.8
Skin	50.0	33.8	71.4	27.6	13.2	50.7	44.7	30.1	63.8	72.1	62.9	82.3	37.4	36.2	38.6
Musculo-skeletal	1,734.6	1,630.8	1,843.3	2,591.3	2,428.3	2,762.4	2,054.9	1,947.9	2,166.3	2,480.9	2,425.3	2,537.4	1,462.6	1,455.4	1,470.0
Genito/urinary	50.0	33.8	71.4	55.1	33.7	85.2	74.5	55.3	98.2	72.1	62.9	82.3	45.4	44.1	46.7
Pregnancy	*	*	*	*	*	*	*	*	*	*	*	*	0.9	0.8	1.2
Perinatal conditions	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Congenital malformations	100.1	76.4	128.8	110.3	78.8	150.2	89.3	68.2	115.0	95.0	84.4	106.6	60.6	59.1	62.1
Symptoms	950.7	874.3	1,032.1	1,130.3	1,023.5	1,245.1	1,087.0	1,009.6	1,168.8	1,301.1	1,260.9	1,342.2	739.4	734.2	744.6
Injuries/poisoning	266.9	227.1	311.6	330.8	274.3	395.6	268.0	230.3	310.2	311.3	291.9	331.8	197.8	195.1	200.5
Other factors	350.3	304.5	401.0	358.4	299.4	425.5	297.8	258.0	342.1	380.2	358.6	402.7	254.5	251.5	157.6

Note: * Suggests there were too few observations (< 10) in the age group of interest (50-64 year olds) to calculate a DSR.

Source: DWP Benefits- Work and Pensions Longitudinal Study (WPLS)