

# **Health Inequalities Indicators**

# DIABETES

<i>Indicator</i>	Total Diabetes Prevalence
<i>Definition</i>	Indicator has an associated disease register. The information systems which underpin the QOF hold the numbers of patients on each of these registers, for each participating practice.
<i>Source</i>	NHS Quality and Outcomes Framework
<i>How is it calculated?</i>	Numerator is the numbers of patients from the disease register who are counted for QOF achievement. The denominator is the number of patients on the practice register.
<i>Frequency</i>	Annual
<i>Latest data</i>	2017/18
<i>Macro/Micro</i>	Micro – GP Comparison
<i>Caveats</i>	It is important to emphasise that QOF registers are constructed to underpin indicators on quality of care, and they do not necessarily equate to prevalence as may be defined by epidemiologists. For example, prevalence figures based on QOF registers may differ from prevalence figures from other sources because of coding or definitional issues. It is difficult to interpret year-on-year changes in the size of QOF registers, for example a gradual rise in QOF prevalence could be due partly to epidemiological factors (such as an ageing population) or to increased case finding and recording.

## Rationale

Around 7% of people in the UK have a diabetes diagnosis. A large proportion of cases and this can be attributable to increasing levels of obesity and other lifestyle risk factors that are considered modifiable with public health intervention.

Diabetic complications may result in considerable morbidity and have a detrimental impact on quality of life. Prompt diagnosis, effective treatment and monitoring are crucial to prevent significant damage to the body or even death. The diabetes register is made up of people who have a diagnosis of diabetes that has not been resolved and are eligible to receive NICE recommended care.

The indicator measures prevalence at practice level to identify possible under recording and underdiagnoses and measures the gap between the highest and lowest diagnosis rates in the City. It will allow monitoring of progress toward meeting previously unmet need as well as understanding the population need for identification and prevention programmes.

## Limitations

Practices on the Birmingham border may include patients who are not Birmingham residents, and conversely not all Birmingham residents may necessarily be registered with practices within Birmingham. Additionally some practices may have unusually young populations (such as those near Universities) and lower prevalence should be expected.

It may be difficult to determine if changes in the gap are due to better recording and / or diagnosis, or changes in prevalence.

## Preferred Direction of Travel and Exemplars

The preferred direction of travel is a reduction in the gap between the best performing practices and the worst performing practices to ensure equity of diagnosis across the city.

The best performing practice has a prevalence of 0.9% and the worst has a prevalence of 18.9%. This gives an overall gap of 18.1% between best and worst. The average for Birmingham is 8.6% and 6.8% for England.

It is suggested that all practices should aim to diagnose all patients and that performance under 8.6% (as the current Birmingham average) would require exception reporting to justify such low prevalence. This would also improve performance citywide.

## CORONARY HEART DISEASE

<i>Indicator</i>	Total CHD Prevalence
<i>Definition</i>	Indicator has an associated disease register. The information systems which underpin the QOF hold the numbers of patients on each of these registers, for each participating practice.
<i>Source</i>	NHS Quality and Outcomes Framework
<i>How is it calculated?</i>	Numerator is the numbers of patients from the disease register who are counted for QOF achievement. The denominator is the number of patients on the practice register.
<i>Frequency</i>	Annual
<i>Latest data</i>	2017/18
<i>Macro/Micro</i>	Micro – GP Comparison
<i>Caveats</i>	It is important to emphasise that QOF registers are constructed to underpin indicators on quality of care, and they do not necessarily equate to prevalence as may be defined by epidemiologists. For example, prevalence figures based on QOF registers may differ from prevalence figures from other sources because of coding or definitional issues. It is difficult to interpret year-on-year changes in the size of QOF registers, for example a gradual rise in QOF prevalence could be due partly to epidemiological factors (such as an ageing population) or to increased case finding and recording.

### Rationale

Coronary heart disease (CHD) is the single most common cause of premature death in the UK. The research evidence relating to the management of CHD is well established and if implemented can reduce the risk of death from CHD and improve the quality of life for patients. CHD can be managed effectively with a combination of lifestyle changes, medicine and, in some cases, surgery. With the right treatment, the symptoms of CHD can be reduced and the functioning of the heart improved and further episodes prevented.

The indicator compares prevalence at practice level to identify possible under recording and under-diagnoses and measures the gap between the highest and lowest diagnosis rates in the City. It will allow monitoring of progress toward meeting previously unmet need as well as understanding the population need for identification and prevention programmes.

### Limitations

Practices on the Birmingham border may include patients who are not Birmingham residents, and conversely not all Birmingham residents may necessarily be registered with practices within Birmingham. Additionally some practices may have unusually young populations (such as those near Universities) and lower prevalence should be expected.

It may be difficult to determine if changes in the gap are due to better recording and / or diagnosis, or changes in prevalence.

### Preferred Direction of Travel and Exemplars

The preferred direction of travel is a reduction in the gap between the best performing practices and the worst performing practices to ensure equity of diagnosis across the city. Additionally diagnosis prevalence should be as close as possible to the modelled prevalence, whilst acknowledging the limitations of the data.

The best performing practice has a prevalence of 0.1% and the worst has a prevalence of 5.2%. This gives an overall gap of 5.1% between best and worst. The average for Birmingham is 2.7% and 3.1% for England.

It is suggested that all practices should aim to diagnose all patients and that performance under 2.7% (as the current Birmingham average) would require exception reporting to justify such low prevalence. This would also improve performance citywide.

## PHYSICALLY ACTIVE ADULTS

<i>Indicator</i>	Percentage of Physically Active Adults
<i>Definition</i>	The number of respondents aged 19 and over, with valid responses to questions on physical activity, doing at least 150 moderate intensity equivalent (MIE) minutes physical activity per week in bouts of 10 minutes or more in the previous 28 days expressed as a percentage of the total number of respondents aged 19 and over.
<i>Source</i>	Public Health England (based on Active Lives, Sport England)
<i>How is it calculated?</i>	The numerator is divided by the denominator and multiplied by 100. Number of minutes presented is the moderate intensity equivalent minutes of activity, which consists of moderate activity plus double the number of vigorous minutes of activity.
<i>Frequency</i>	Annual
<i>Latest data</i>	2017/18
<i>Macro/Micro</i>	Macro – Citywide
<i>Caveats</i>	Active Lives is a self-report survey, which is subjective and is influenced by the respondent's ability to recall and assess their physical activity levels.

### Rationale

Physical inactivity is the 4th leading risk factor for global mortality accounting for 6% of deaths globally. People who have a physically active lifestyle have a 20-35% lower risk of cardiovascular disease, coronary heart disease and stroke compared to those who have a sedentary lifestyle. Regular physical activity is also associated with a reduced risk of diabetes, obesity, osteoporosis and colon/breast cancer and with improved mental health. In older adults physical activity is associated with increased functional capacities. The estimated direct cost of physical inactivity to the NHS across the UK is over £0.9 billion per year.

### Limitations

Active Lives is a self-report survey, which is subjective and is influenced by the respondent's ability to recall and assess their physical activity levels. Self-reported data may also be affected by respondent desire to conform to expectations and social norms. However, although this might affect the absolute values, this should not affect comparisons if the bias is consistent across populations.

The survey is sample based and the minimum sampled in a Local Authority area is 500 randomly selected from the Royal Mail Postal Address File. Data is then weighted to ONS population measures. As such the data may only be viewed as indicative although as it was developed in conjunction with Ipsos MORI can be considered robust.

Increased interventional activity in reference to promoting and normalising physical activity may exacerbate the bias inherent in self-reported data to conform to expectations and social norms.

### Preferred Direction of Travel and Exemplars

The preferred direction of travel is an increase in the percentage of physically active adults. There are multiple existing targets for individuals to indicate what an active lifestyle would consist of; NHS England suggest this should be 150 minutes of aerobic activity per week and 2 or more days per week of strength exercises.

Currently Birmingham has 61.0% self-reported physically active adults, and the region as a whole is broadly doing quite poorly at 63.2% against an England average of 66.3%. Given this context the suggested target is to meet the regional average, which would equate to approximately 60,000 more persons having a physically active lifestyle.

## SMOKING STATUS AT TIME OF DELIVERY

<i>Indicator</i>	Smoking status at time of delivery
<i>Definition</i>	The number of mothers known to be smokers at the time of delivery as a percentage of all maternities. A maternity is defined as a pregnant woman who gives birth to one or more live or stillborn babies of at least 24 weeks gestation, where the baby is delivered by either a midwife or doctor at home or in a NHS hospital.
<i>Source</i>	Calculated by PHE from the NHS Digital return on Smoking Status At Time of delivery (SATOD).
<i>How is it calculated?</i>	Crude percentage: numerator is divided by denominator and then multiplied by 100.
<i>Frequency</i>	Quarterly
<i>Latest data</i>	2017/18 Q4
<i>Macro/Micro</i>	Macro special interest group - Citywide
<i>Caveats</i>	The indicator is based on observation and is therefore susceptible to measurement bias. The data are collected by acute trusts that provide maternity services and then sent to CCGs on a commissioner basis. CCG level data are then converted to LA level using birth weighting. Where local authorities cross CCG boundaries (as is the case in Birmingham), the local authority estimate is a weighted average of the CCG indicator values.

### Rationale

Smoking in pregnancy has well known detrimental effects for the growth and development of the baby and health of the mother. On average, smokers have more complications during pregnancy and labour, including bleeding during pregnancy, placental abruption and premature rupture of membranes, increased risk of miscarriage, premature birth, stillbirth, low birth-weight, and sudden unexpected death in infancy.

Encouraging pregnant women to stop smoking during pregnancy may also help them kick the habit for good, and thus provide health benefits for the mother and reduce exposure to second hand smoke by the infant. The Royal College of Physicians estimates that illnesses among children caused by exposure to second-hand smoke lead to an estimated 300,000 general practice consultations and about 9,500 hospital admissions in the UK each year

### Limitations

As stated within caveats the information is susceptible to measurement bias, although there appears to be good coverage for the Birmingham area with only 481 (2.26%) as unknown smoking status.

There is a potential issue around smoking cessation having reached a saturation point in terms of effectiveness. The number of smokers at time of delivery has remained relatively static since 2015-16 (having lost circa 1% in that year and then being static since 2012-13).

In order to meaningfully target and address the remainder of this cohort new, innovative, and perhaps more innovative approaches will need to be utilised, as prior efforts are now seemingly only maintaining the status quo.

### Preferred Direction of Travel and Exemplars

The preferred direction of travel is a reduction in the percentage of smokers at the time of delivery. Currently Birmingham is performing well in this respect at 8.2%, compared to 11.9% and 10.8% for West Midlands and England respectively, and is the best performing Local Authority in the region. Birmingham is already compliant with the Birmingham and Solihull United Maternity & Newborn Partnership (BUMP) national target of 10%.

The Tobacco Control Plan contains a national ambition to reduce the rate of smoking throughout pregnancy to 6% or less by the end of 2022. Given the relatively low prevalence of smoking at time of delivery already present in Birmingham this should be viewed as a minimum target. This would equate to approximately 400 less smokers at time of delivery per year.

## DEPRESSION (GAP BETWEEN RECORDED AND MODELLED PREVALENCE)

<i>Indicators</i>	Depression: Recorded prevalence (aged 18+)	Estimated prevalence of depression (all ages)
<i>Definitions</i>	The percentage of patients aged 18 and over with depression, as recorded on practice disease registers.	Patient-reported doctor-diagnosed depression was derived from the number of patients that reported being diagnosed with depression by a health professional.
<i>Source</i>	NHS Quality and Outcomes Framework	Health Survey for England 2014
<i>How is it calculated?</i>	This indicator is calculated as the percentage point gap between the two indicators.	
<i>Frequency</i>	Annual	One-Off
<i>Latest data</i>	2017/18	2015
<i>Macro/Micro</i>	Micro – GP Comparison	
<i>Caveats</i>	See Caveats above regarding NHS Quality and Outcomes Framework	Modelled prevalence is from 2014 and at Birmingham level.

### Rationale

Depression is responsible for 12% of the global burden of non-fatal disease and is expected to be the world's second most disabling disease by 2020 (after Cardiovascular disease). Depression is responsible for 109 million lost working days every year in England at a cost of £9 billion.

The ambition is to reduce the number of people with depression, as this may reduce the resilience to dementia onset and progression, and to encourage further research into this association. One of the key factors in achieving this is first ensuring that depression is being accurately diagnosed and recorded in an equitable manner across the population. This measure shows the difference between the expected levels of depression and the levels of those diagnosed. Both under and over diagnosis of depression can be indicative of issues within the individual GP or at a system level and would require in-depth exploration.

### Limitations

The modelled prevalence estimates are from 2015 and in some cases practice populations might have changed significantly between 2015 and 2017/18 (period of latest recorded QOF prevalence). In some cases the actual QOF prevalence is above the modelled prevalence. This could be due to limitations of the model or changes in the practice population.

Due to changes in geographical boundaries it has not been possible to generate this measure for the West Midlands region or all Local Authorities that make up that region. Therefore the only available comparator is England.

### Preferred Direction of Travel and Exemplars

The preferred direction of travel is a reduction in the gap between the best performing practices and the worst performing practices to ensure equity of diagnosis across the city. Additionally diagnosis prevalence should be as close as possible to the modelled prevalence, whilst acknowledging the limitations of the data.

The best performing practice has a gap of -7.5% (which is to say they are diagnosing more people than the modelled prevalence would suggest). The worst practice has gap of 11.9% (diagnosing less than the model would suggest). This gives an overall gap of 19.4% between best and worst, compared to 5.1% for England.

There needs to be a more in depth analysis to understand the varying levels of performance, a conservative target would be to reduce to 15% although this should be reviewed as soon as the refreshed Public Health Outcomes Framework data is available.

## HEALTHY LIFE EXPECTANCY AT BIRTH

<i>Indicator</i>	Healthy Life Expectancy at Birth [male / female]
<i>Definition</i>	The average number of years a person would expect to live in good health based on contemporary mortality rates and prevalence of self-reported good health. For a particular area and time period, it is an estimate of the average number of years a newborn baby would live in good general health if he or she experienced the age-specific mortality rates and prevalence of good health for that area and time period throughout his or her life.
<i>Source</i>	Office for National Statistics
<i>How is it calculated?</i>	Healthy life expectancy is calculated by abridged life tables, for males and females separately using 5 year age bands. The life table extends the traditional life table by partitioning years lived into favourable and unfavourable health states to provide an estimate of healthy life expectancy for males and females at birth.
<i>Frequency</i>	Annual
<i>Latest data</i>	2015-17
<i>Macro/Micro</i>	Macro - Citywide
<i>Caveats</i>	The healthy life expectancy figures exclude residents of communal establishments except NHS housing and students in halls of residence where inclusion takes place at their parents' address.

### Rationale

This indicator is an extremely important summary measure of mortality and morbidity. Healthy life expectancy shows the years a person can expect to live in good health (rather than with a disability or in poor health).

It complements the supporting indicators by showing the overall trends in a major population health measure, setting the context in which local authorities can assess the other indicators and identify the drivers of healthy life expectancy.

There are clearly established deprivation related inequalities in healthy life expectancy, although links could be drawn to both major priorities of the Board and all the sub-fora.

### Limitations

Figures reflect healthy life expectancy among those living in an area in each time period rather than the number of years a baby born in the area could actually expect to live in good health (mortality rates of the area are likely to change in the future and many of those born in the area will live elsewhere for at least some part of their lives).

These indicators are slow to move and a balance should be struck between an aspirational target and an achievable one.

### Preferred Direction of Travel and Exemplars

The preferred direction of travel is an increase in the healthy life expectancy at birth for both males and females.

Birmingham males have a healthy life expectancy of 59.9, compared to 62.1 and 63.4 for the West Midlands and England respectively. The best performing areas in the region, and performing better than the England average, are Herefordshire (66.4) and Worcestershire (65.7).

Birmingham females have a healthy life expectancy of 58.9, compared to 62.9 and 63.8 for the West Midlands and England respectively. The best performing areas in the region, and performing better than the England average, are Herefordshire (67.5), Worcestershire (67.2), and Warwickshire (66.2).

It is suggested that the target set should be to improve incrementally towards the West Midlands average.

## GAP IN EMPLOYMENT RATE FOR THOSE IN CONTACT WITH SECONDARY MENTAL HEALTH SERVICES

*Indicator* Gap in the employment rate for those in contact with secondary mental health services and the overall employment rate (Persons)

*Definition* The percentage point gap between the percentage of working age adults who are receiving secondary mental health services and who are on the Care Programme Approach recorded as being employed (aged 18 to 69) and the percentage of all respondents in the Labour Force Survey classed as employed (aged 16 to 64)

*Source* ONS Annual Population Survey and NHS Digital

*How is it calculated?* Employment rate of adults in contact with secondary mental health services and employment rate of population as a whole are calculated. This indicator is calculated as the percentage point gap between the two indicators.

*Frequency* Annual

*Latest data* 2017-18

*Macro/Micro* Macro special interest - Citywide

*Caveats* In 2013/14 the calculation of the measure was changed. Previously, outcome scores were calculated from annual totals from the Mental Health Minimum Data Set (MHMDS), whereas now the outcome is calculated each month and the ASCOF measure for the year is derived as an average of these monthly scores.

### Rationale

There is robust and consistent evidence that work is good for your wellbeing as well as both physical and mental health. The strategy for public health takes a life course approach and this measure provides a good indication of the impact of long term illness on employment among those in the 'working well' life stage. It also provides a link to indicators in the NHS and Adult Social Care Outcomes Frameworks, and therefore cues to action across the wider strategic stakeholders that make up the Health and Wellbeing Board.

It is especially important that those in contact with secondary mental health services, and who therefore are already at a probable disadvantage in terms of mental health and wellbeing compared to the general population, are able to benefit from the positive health outcomes associated with being in employment.

### Limitations

The measure is focused on 'paid' employment, to be clear that voluntary work is to be excluded for the purposes of this measure; however there are benefits to voluntary work so this should perhaps not be discounted so readily.

Caution should be exercised in the interpretation of this indicator, while a reduction in the gap is indicative of a reduction in inequality this should be achieved by raising the employment levels of those in contact with secondary mental health services as opposed to reducing the employment rate overall.

### Preferred Direction of Travel and Exemplars

The preferred direction of travel is a reduction in the gap, whilst seeing an increase (or at least maintaining the current level) in the overall employment rate of the general population.

Currently Birmingham is performing relatively well on this indicator (60.4%) when compared with the West Midlands (65.7%) and England (68.2%), and is in fact the 14<sup>th</sup> highest performing Local Authority nationally. It is suggested that the target here would be to become best in class and exceed Hartlepool (51.1%).



## PERCENTAGE OF SERVICE USERS AGED 18-64 WITH LEARNING DISABILITIES IN EMPLOYMENT

<i>Indicator</i>	The percentage of service users aged 18-64 with learning disabilities in employment
<i>Definition</i>	The measure shows the proportion of all adults with a learning disability known to Birmingham City Council who receive long-term support services, who are recorded as being in employment. The definition requires this information to be collected each year for each person receiving services who is aged 18-64 and has a primary support reason of "learning disability support".
<i>Source</i>	Birmingham City Council Adult Social Care
<i>How is it calculated?</i>	The denominator is the number of persons on CareFirst with a recorded primary support reason of "learning disability support". The numerator is the number of persons on CareFirst with a recorded primary support reason of "learning disability support" and a record of being in employment.
<i>Frequency</i>	Annual
<i>Latest data</i>	May 2019
<i>Macro/Micro</i>	Macro Special Interest - Citywide
<i>Caveats</i>	There are known data recording issues. It is not currently possible to estimate the extent to which missing data contributes to underperformance. However, missing information is being reported to the social work teams.

### Rationale

There is robust and consistent evidence that work is good for your wellbeing as well as both physical and mental health. The strategy for public health takes a life course approach and this measure provides a good indication of the impact of long term illness on employment among those in the 'working well' life stage. It also provides a link to indicators in the NHS and Adult Social Care Outcomes Frameworks, and therefore cues to action across the wider strategic stakeholders that make up the Health and Wellbeing Board.

It is especially important that those in contact with learning disabilities, and who therefore are already at a probable disadvantage in terms of mental health and wellbeing compared to the general population, are able to benefit from the positive health outcomes associated with being in employment.

### Limitations

The measure is focused on 'paid' employment, to be clear that voluntary work is to be excluded for the purposes of this measure; however there are benefits to voluntary work so this should not be discounted so readily.

The measure only accounts for those persons with learning disabilities known to Birmingham City Council Adult Social Care within the reporting year and not all persons with learning disabilities. Therefore the measure does not include those persons with learning difficulties not known to Birmingham City Council, including those who may have previously been known / supported and no longer are.

As stated within caveats there are known data recoding issues that are being addressed, therefore caution should be exercised that should an improvement be seen, this may be attributable to improved recording as opposed to improved performance.

### Preferred Direction of Travel and Exemplars

The preferred direction of travel is an increase in the proportion of persons with learning disabilities in employment. Birmingham City Council currently has a rate of 1.37% compared with 5.4% nationally. This places Birmingham in the bottom quarter of all Local Authorities. To progress to the third quarter would require an additional 38 persons with learning disabilities to gain employment, to be in the top quarter would require an additional 171 persons from the current position. It is suggested the initial target is to move out of the bottom quarter.

## IMMUNISATION RATES (tbc)

<i>Indicators</i>	MMR Dose 2, seasonal flu of those under 65 with underlying health conditions or weakened immune systems, and seasonal flu for pregnant women.
<i>Definition</i>	TBC
<i>Source</i>	TBC
<i>How is it calculated?</i>	TBC
<i>Frequency</i>	TBC
<i>Latest data</i>	TBC
<i>Macro/Micro</i>	Micro – GP Comparison
<i>Caveats</i>	TBC

### Rationale

It is suggested that there are three sub-measures provided for this indicator; MMR Dose 2, seasonal flu of those under 65 with underlying health conditions or weakened immune systems, and seasonal flu for pregnant women. In the case of MMR this is currently of interest due to a record high of 97 suspected cases in 2018, more than double those in 2017 and the highest since 2010. The seasonal flu measures are often overlooked due to the focus on those aged over 65 but are equally as important and would benefit from additional focus.

Measles, mumps and rubella are highly infectious conditions that can have serious, potentially fatal complications, including meningitis, swelling of the brain (encephalitis) and deafness. They can also lead to complications in pregnancy that affect the unborn baby, and can lead to miscarriage.

In terms of seasonal flu, anyone in the risk groups detailed above is more likely to develop potentially serious complications of flu, such as pneumonia (a lung infection), so it's recommended that they have a flu vaccine every year to help protect them.

### Limitations

Currently unsure if micro-level data can be made available in the public domain due to the data governance in place. This will be confirmed at the November Health and Wellbeing Board and alternative arrangements made if these measure are not available.

### Preferred Direction of Travel and Exemplars

The preferred direction of travel is an increase in the rates of immunisation and to meet the national targets to achieve herd immunity.

Birmingham currently has MMR dose 2 coverage of 87.2% compared to 87.8% across the United Kingdom.

For seasonal flu vaccinations:

- Those in at risk groups aged under-65 are at 43.1% and 46.3% respectively for Sandwell and West Birmingham CCG and Birmingham and Solihull CCG respectively, the England average is 48.0%.
- For pregnant women coverage is 38.4% and 38.5% respectively for Sandwell and West Birmingham CCG and Birmingham and Solihull CCG respectively, the England average is 45.2%.

## ECONOMIC INACTIVITY FOR HEALTH REASON

<i>Indicator</i>	Employment and Support Allowance claimants
<i>Definition</i>	The percentage of the population aged 16-64 years claiming Employment and Support Allowance, Incapacity Benefit or Severe Disablement Allowance.
<i>Sources</i>	nomis: <a href="https://www.nomisweb.co.uk/">https://www.nomisweb.co.uk/</a> And ONS mid-year population estimates for the given year and geography for people aged 16-64.
<i>How is it calculated?</i>	The numerator is total claimant count for Employment and Support Allowance, Incapacity Benefit and Severe Disablement Allowance. The denominator is the population aged 16-64 years.
<i>Frequency</i>	Annual
<i>Latest data</i>	2018
<i>Macro/Micro</i>	Macro - Citywide
<i>Caveats</i>	<p>The numerator data are from the DWP's Work and Pensions Longitudinal Study and are for a single point in time, the final day of the reference month/year.</p> <p>Names, definitions and eligibility of benefits within the welfare system change over time.</p> <p>People who are not claiming ESA but who are economically inactive due to ill health or a disability will not be counted in this measure.</p>

### Rationale

This indicator is a measure of people of working age who due to having ill health or a disability are claiming Employment and Support Allowance (ESA) benefit, Incapacity Benefit (IB) or Severe Disablement Allowance (SDA). IB and SDA have been replaced by ESA, and currently (2017) make up approx. 2% of the total count. ESA (and IB/SDA) provides financial support for people unable to work to their full capacity due to ill health or disability along with personalised support and can be applied for from employment, self-employment or unemployment.. But while not working will be the right option for some of these people, staying out of work longer term may contribute to a worsening of health outcomes for others. This is because a person's employment status has both an associative and a causal relationship with a range of health outcomes.

Helping people back to work where appropriate (a focus of the 'Improving lives: Work, health and disability' green paper which this profile is intended to support) can improve health outcomes by connecting people to the health promoting aspects of work.

### Limitations

There is a data quality issue with regard to the upper age limit. ESA is limited to people below state retirement age and similarly Incapacity Benefit and Severe Disablement Allowance has been limited for the purposes of this indicator to those of working age in a given year; but even though working age is rapidly changing (several times each year) for women a denominator of population aged 16-64 years is used for both men and women. This leads to a small discrepancy for the 2017 data, but the discrepancy will be larger for previous years. Comparison across time will be influenced by this increasing discrepancy and so should not be made.

Names, definitions and eligibility of benefits within the welfare system change over time. Change in this indicator over time should be understood in this context, and does not necessarily reflect change in the health of the working age population, or change in the capacity of the labour market to employ people with varying health conditions. Universal Credit is gradually replacing Employment and Support Allowance (ESA). This will affect the rate of ESA claimants.

### Preferred Direction of Travel and Exemplars

The preferred direction of travel is a reduction in the number of claimants.

Currently Birmingham has 6.8% compared to 5.9% for the West Midlands and 5.4% for England. There are multiple Local Authorities in the region who are performing better than the England average, however given the starting point meeting the England average by learning lessons from these would be a pragmatic target.

## GAP IN SCHOOL READINESS FOR THOSE WITH FREE SCHOOL MEAL STATUS

<i>Indicators</i>	School Readiness: the percentage of children achieving a good level of development at the end of reception And School Readiness: the percentage of children with free school meal status achieving a good level of development at the end of reception.
<i>Definition</i>	Children (with free school meal status) defined as having reached a good level of development at the end of the Early Years Foundation Stage (EYFS) as a percentage of all eligible children
<i>Source</i>	Department for Education (DfE), EYFS Profile: EYFS Profile statistical series
<i>How is it calculated?</i>	Each is calculated as children defined as having reached a good level of development at the end of the EYFS as a crude proportion of all children eligible. This indicator is calculated as the percentage point gap between the two indicators.
<i>Frequency</i>	Annual
<i>Latest data</i>	2017-18
<i>Macro/Micro</i>	Macro Special Interest - Citywide
<i>Caveats</i>	Only includes pupils with a valid result for every achievement scale.  Pupils known to be eligible for free school meals excludes those for whom free school meal eligibility was unclassified or could not be determined.

### Rationale

Educational attainment is one of the main markers for wellbeing through the life course and so it is important that no child is left behind at the beginning of their school life. This is a key measure of early-years development across a wide range of developmental areas. Children from more deprived backgrounds are more at risk of poorer development and the evidence shows that differences by social background emerge early in life. We have therefore measured the gap in school readiness between those children with free school meal status as compared to the general population as a proxy for more deprived backgrounds. This clearly links in the Health and Wellbeing Board priority to reduce inequality and the *Creating a City without Inequality* sub-forum.

### Limitations

Caution should be exercised in the interpretation of this indicator, while a reduction in the gap is indicative of a reduction in inequality this should be achieved by raising the school readiness of those with free school meals status as opposed to lowering the school readiness overall.

Currently Birmingham has a gap of 7.9% compared to 12.7% in West Midlands and 14.9% for England. However, the underlying data has a more complex relationship. Birmingham is performing better than comparators in terms of school readiness for those with free school meal status, but worse for the general population.

### Preferred Direction of Travel and Exemplars

The preferred direction of travel is a reduction in the gap, whilst seeing an increase (or at least maintaining the current level) in the overall school readiness of the general population.

The best performing Local Authority in terms of the gap in the West Midlands region is Wolverhampton at 6.5% compared to an England average of 14.9%. Birmingham is already performing above the England average at 7.9%. Birmingham should therefore be aiming to become the exemplar for the region.