Department for Work & Pensions

Department of Health

Work, Health and Disability Green Paper Data Pack

Background information and methodology

October 2016

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Context of the statistics

Work is important for providing structure to life and contributes to a person's status and identity – generally, appropriate work is good for health and wellbeing. Unemployment has negative consequences for individuals, reducing quality of life, wellbeing and financial stability. Disabled people are considerably less likely to be in paid employment than people without a disability. As well as being costly for individuals, working age ill health is estimated to cost the economy around £100 billion a year. *Improving Lives: The Work, Health and Disability Green Paper* is consulting on how to address these issues.

Purpose of the statistics

The Work, Health and Disability Data Pack brings together a range of new statistics and existing data analysis to inform the consultation discussion on *Improving Lives*. The new analysis and statistics within the Data Pack are designed to support the case for change and inform discussions around potential reforms to improve work and health outcomes.

New analyses presented in the Data Pack include:

- Statistical analysis on work, health and disability using the Labour Force Survey
- Longitudinal analysis of disability and employment status using the Labour Force Survey
- Segmentation analysis of the disabled population using the Annual Population Survey, including segmentation of local authority by disabled population statistics
- Estimates of long-term sickness absence
- The economic cost of ill health at working ages
- Employment and Support Allowance customer journeys

This document sets out the methodology for producing each of these analyses. The data sources used and limitations of the analyses presented are described in the remainder of this document. Where appropriate, the comparability to previous analysis is discussed.

The key analysis and statistics provided in the Data Pack are intended to allow respondents to the Green Paper consultation to be better informed. As well as consultation respondents, we intend that these statistics will be used by a wide variety of people in the Department for Work and Pensions and the Department of Health, other central government Departments, the National Health Service, Northern Ireland, Scotland and Wales devolved administrations, as well as local authorities and employers across the United Kingdom, amongst others.

The statistics will also be used to answer Parliamentary Questions and requests under the Freedom of Information Act, as well as by journalists and commentators.

Definitions and terminology

Across each of the methodologies described in this document, there are many shared terms that are described and defined below:

- **Long-term health condition:** An individual is defined as having a long-term health condition if they report having a physical or mental health condition or illness that lasts, or is expected to last, 12 months or more.
- **Disability:** If a person with a long-term health condition or illness also reports that it reduces their ability to carry out day-to-day activities as well, then they are also considered to be disabled.
- **Incapacity benefits** refer to Employment and Support Allowance and its predecessors - Incapacity Benefit, Income Support on grounds of disability and Severe Disablement Allowance.
- **In employment** is defined as those of working age people who either: did paid work (as an employee or self-employed); had a job that they were temporarily away from; were placed with employers on government-supported training and employment programmes; or doing unpaid family work.
- **Economically inactive** people are those without a job who have not actively sought work in the last four weeks, and/or are not available to start work in the next two weeks
- **Unemployed** people are without a job, have actively sought work in the last four weeks and are available to start work in the next two weeks, or who are out of work, have found a job and are waiting to start it in the next two weeks.
- **A long-term sickness absence** is defined as a period of four weeks or more where an employed individual is prevented from working due to illness or injury.

Status of the statistics

Ad hoc publication

The Work, Health and Disability Green Paper Data Pack, and the statistics contained within it, are treated as an ad hoc statistical publication. The data pack is a one-off technical annex to support the case for change and reform within *Improving Lives: The Work, Health and Disability Green Paper* and to better inform the responses to the consultation.

Quality statement

These statistics have been developed using guidelines set out by the UK Statistics Authority. Given the number of different and varying statistics and analysis within the

Data Pack, the various and extensive quality assurance processes that have been undertaken for each set of statistics are detailed in turn throughout this document.

Feedback

We welcome feedback

Please let us know what you think of the presentation and content of our statistical release by emailing: Team.workandhealthanalysis@dwp.gsi.gov.uk

Useful links

Improving Lives: The Work, Health and Disability Green Paper

Work, Health and Disability Green Paper Data Pack and associated data tables.

1. Statistical analysis on work, health and disability using the Labour Force Survey

Source of the statistics

Much of the analysis in the Work, Disability and Health Green Paper Data Pack uses data from the Labour Force Survey (LFS) or a boosted version of the LFS, known as the Annual Population Survey (APS).This analysis includes:

- Statistics on the disabled population and those with long term health conditions and their wider characteristics, such as employment rate and type of health conditions.
- Longitudinal analysis on stability and change in disability and employment status
- Segmentation analysis on the characteristics of disabled people.
- Long term sickness absence estimates of those who are off work due to illness or injury for four consecutive weeks or more

The Labour Force Survey (LFS) is a large-scale multipurpose survey, which is designed to measure all aspects of people's work, including the education and training needed to equip them for work, the jobs themselves, job search for those out of work, and income from work.[1] The LFS is the key source for analysis of the labour market in the UK, and is used to produce official statistics on figures such as the employment rate.

The sample consists of approximately 40,000 responding UK households and 100,000 individuals per quarter. Respondents are interviewed for five successive waves at three-monthly intervals with around 20% of the sample being replaced every quarter. The LFS is intended to be representative of the entire working age UK population.

Further information about the LFS is available from the Office for National Statistics (ONS) website.[2]

[1] Information about the Labour Force Survey is, taken from the ONS Quality and Methodology report, which provides a brief overview of the survey

[2] https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/methodologies/labourforcesurveyuserguidance

Main measures

Economic activity and employment
The main definitions used in the LFS for the three economic groups (in employment, unemployed and economically inactive), are taken from standard International Labour Organisation (ILO) definitions. In the analysis in the data pack we sometimes distinguish between people in work (in paid employment or self-employment) or out of work (unemployed or economically inactive).

Long-term health condition
Information on long-term health conditions is collected in the LFS using the question:

Do you have any physical or mental health conditions or illnesses lasting or expected to last 12 months or more?

Disability
Where people report having a long-term health condition, a follow-up question is asked:

Does your condition or illness/do any of your conditions or illnesses reduce your ability to carry out day-to-day activities?

People who say yes to both questions are recorded as disabled according to the Government Statistical Service (GSS) harmonised standards of disability, which is in accordance with the Equality Act 2010 definition of disability.

2. Longitudinal analysis of disability and employment status using the Labour Force Survey

This section covers the methodology used in longitudinal analysis of the Labour Force Survey to examine change in disability status (whether a person is disabled or not) and employment status (whether a person is in employment or not) over time. This analysis is presented in Section 2 of the Work, Health and Disability Green Paper Data Pack. The analysis illustrates that the disabled population is dynamic; the reported disability status of an individual, as well as their employment status, may change over a short period.

Methodology

Data and sample

The longitudinal Labour Force Survey (LFS) tracks the individual journey of cohorts of survey respondents and allows us to examine stability and change in disability and employment status over time. The analysis looks at

- **Changes to disability status over the course of five quarters, around one year**. This analysis was conducted using the five-quarter LFS data, cohort Q2 2015 – Q2 2016, that included people who were of working age (16 to 64) in both the first (Q2 2015) and the last quarter (Q2 2016).
- **Changes in disability and employment status between two successive quarters.** This analysis was conducted using the two-quarter LFS data. Cohorts Q2 2015 – Q3 2015, Q3 2015 – Q4 2015, Q4 2015 – Q1 2016, Q1 2016 – Q2 2016 were pooled to produce average estimates of transitions between two quarters. In addition, the larger sample sizes allowed for more robust analysis.

People who were outside working age (16 to 64) at any of the quarterly interviews were excluded from this analysis. People whose disability status was not reported in at least one of the quarterly interviews were also excluded from the analysis.

Changes to disability status over the course of a year

The working age population of 39.6 million people was identified and separated into four groups based on how their disability status was reported over the five-quarter observation period:

- People recorded as being disabled in all 5 quarterly interviews (4.6 million working age people).
- People whose disability status changed only once across the 5 quarterly interviews (3.6 million working age people).
- People whose disability status changed more than once across the 5 quarterly interviews (2.8 million working age people).
- People who were not reported as being disabled in any of the 5 quarterly interviews (28.5 million working age people).

Changes in disability and employment status between two successive quarters

The analysis presented in the Data Pack illustrates that the disability status of the working age population is fairly changeable. As many people can move both into and out of disability *and* employment between survey interviews, tracking changes in each state independently can be relatively complex.

The analysis reported in the Data Pack focuses on people recorded as disabled at the first quarter of an observation period. This sample of disabled people was split into two discrete groups based on whether they were in work or out-of-work. The analysis looks at how many people in each subgroup of disabled people (in work or out of work) report a change in their disability or employment status from one quarter to the next. This provides some insight into the volume of disabled people that may be moving into or out of employment, a key piece of evidence for understanding and explaining the challenge of halving the disability employment gap, as described in *Improving Lives*.

Disabled people who were in employment in the first quarter. For the 3.4 million in this group, the following work and disability statuses were observed in the next quarter:

- Remained disabled but moved out of work (150,000)
- No longer disabled but remained in work (900,000)
- Remained disabled and in employment (2.3 million)
- No longer disabled and moved out of work. These quarterly transitions were below 50,000 and were not shown in the flow charts within the Data Pack.

Disabled who were out-of-work in the first quarter. For the 3.8 million in the group, the following work and disability status changes were observed in the next quarter:

- Remained disabled and moved into employment (100,000)

- No longer disabled but remained out-of-work (300,000)
- Remained disabled and out-of-work (3.4 million)
- No longer disabled but moved into employment. These quarterly transitions were below 50,000 and were not shown in the flow charts within the Data Pack.

Caveats and uncertainty

People whose disability status was not reported in at least one of the quarterly interviews were excluded from the longitudinal analysis based on the assumption that:

- They have the same characteristics as people whose disability status was reported in all quarterly interviews; and
- They formed a relatively small proportion of the total working age population (less than 2%).

In the Data Pack, figures in the flow charts below 1 million were rounded to the nearest 50,000 and those above 1 million were rounded to the nearest 0.1 million.

It should be noted that the reported disability status of a person may change between interviews for various reasons, including:

- Differences between the expected and the actual duration of the health condition (given that a disabled person should have a health condition(s) that has lasted or is expected to last for at least 12 months).
- Fluctuations in the impact a health condition has on the person's ability to carry out day to day activities. These fluctuations may affect how people perceive the limiting nature of their health condition. For example, changes in the employment status might affect how people perceive the impact of their health condition on their day to day activities.
- Responses by proxy (given by another member of the household) that may not reflect the actual disability status of a person.

As this analysis is based on longitudinal survey data, the precision and accuracy of the estimates can be affected by response errors, sampling errors, and attrition bias (if people who were interviewed in all waves are not representative of the wider population). These factors have not been quantified, as the purpose of this analysis was to show the overall dynamics in disability and employment status. The movements in quarterly estimates give a broad illustration of the scale of changes rather than precise estimates of specific population movements.

This analysis is likely to understate total changes, because it cannot identify any intermediate changes in disability or employment status within each quarter. For example, someone who at the time of their first interview was out-of-work, gained then lost a job before the next quarter's interview, would be counted as remaining

workless over this period. Similarly, any short term fluctuations in disability status occurring between 2 successive quarterly interviews will not be captured in the data. By definition, the analysis excludes any transitions by those with missing health status data.

In the Data Pack, it is reported that as many as 150,000 people, among those who were who disabled in two successive quarters, moved out of employment. This is a rounded figure based on an initial estimate of 141,000, which has a 95% confidence interval of ±14,000 (±10% relative error).

The number of people who are disabled in two successive quarters and move into employment in the second quarter was quoted as 100,000. This figure resulted from rounding the initial estimate of 112,000 to the closest 50,000 given the 95% confidence interval around the initial estimate is ±12,000 (±11% relative error).

These confidence intervals have been approximated by treating the people who responded in both quarters of the longitudinal data set as a single sample. They give a broad indication of the potential sampling error associated with these estimates; they do not account for potential non-response bias or attrition bias.

Given the above caveats, it should be recognised that it is not possible to distinguish between the two figures in a reliable way to demonstrate an increasing or decreasing trend over time.

3. Socio-demographic segmentation of the disabled population using the Annual Population Survey

The purpose of this analysis is to reveal the diversity of the working age disabled population in the UK to better understand how different characteristics or circumstances are associated with a disabled person's likelihood of being in work. This is achieved by grouping the disabled population into segments based on socio-demographic factors like age, health and housing tenure, using decision tree analysis. This analysis is presented in Section 2 of the Work, Health and Disability Green Paper Data Pack.

Methodology

Data and sample

Data from the Annual Population Survey (APS), April 2015 – March 2016 were used, and a sample of working age (16 to 64) disabled people who were not in full time education was selected.

The sample corresponds to around 7 (6.9) million people among the working age population in the UK.

Measures

Dependent variable. The outcome variable was employment status: whether a person was in employment or out of work.

Explanatory variables. Socio-demographic variables known to be associated with employment chances were selected in the final analysis:

- age
- gender
- marital status

- ethnicity
- nationality
- highest level of qualification
- housing tenure
- existence of a health condition(s)
- the number of co-existing health conditions

Analytical approach

Decision tree analysis was used to sequentially subdivide the population by socio-demographic variables, which have the strongest association with a disabled person's likelihood of being in employment.

Explanatory variables were selected empirically. Chi square tests of independence were used to examine the association between each explanatory variable and the dependent variable, employment. This analysis was initially performed for a long list of potential explanatory variables, which were ranked on the strength of association with employment status, based on p values, with smaller p values indicating a stronger association with employment status. The explanatory variables that had the strongest association with employment status were selected for the final analysis; we refer to these variables as the most significant factors.

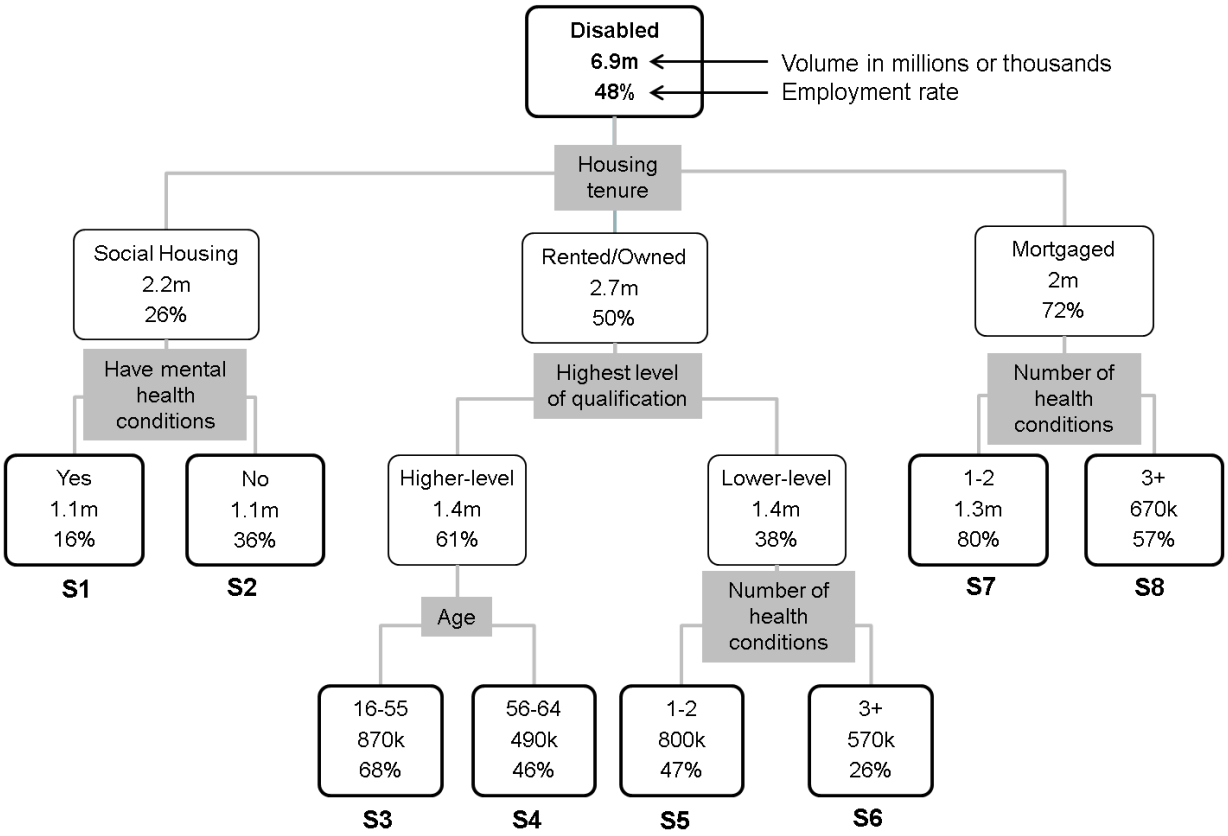
Decision tree analysis was used to split the sample into sizeable groups with the largest difference in employment rates based on the explanatory variables. Once this had been achieved, the same procedure was followed to sequentially split the resulting subgroups further, and expand the tree until the threshold for the minimum segment size was reached.

Each of the subsequent sub-group splits was driven by the explanatory variable that had the strongest association with employment status within the group; this means that key variables used to define each segment in the decision tree analysis can vary. For example, of the initial population of 6.9 million disabled people, the characteristic most strongly associated with disability employment is housing tenure. As can be seen from the decision tree diagram below, this splits the disabled population into three groups. For those disabled people whose housing tenure is social housing, the most significant factor is the existence of a mental health condition; in contrast, for those who live in privately rented or owner occupied housing, the most significant factor is the level of qualification.

Each segment was labelled so that it reflects the key characteristics of people in the group. Descriptive analysis was used to profile the segment according to the socio-demographic variables used in the analysis and its employment rate. Additionally, the disability employment rate gap was estimated for each segment. This is the difference between the employment rates of disabled people in the segment and their non-disabled counterparts (non-disabled people with the same key characteristics that are not health-related) as shown below:

	Disabled people*	Non-disabled people*
S1	In social housing with mental health conditions	In social housing
S2	In social housing without mental health conditions	In social housing
S3	In a rented or owned house with higher-level qualifications and aged between 16-55	In a rented or owned house with higher-level qualifications and aged between 16-55
S4	In a rented or owned house with higher-level qualifications and aged between 56-64	In a rented or owned house with higher-level qualifications and aged between 56-64
S5	In a rented or owned house with lower-level qualifications and 1 or 2 health conditions	In a rented or owned house with lower-level qualifications
S6	In a rented or owned house with lower-level qualifications and 3+ health conditions	In a rented or owned house with lower-level qualifications
S7	In mortgaged housing with 1 or 2 health conditions	In mortgaged housing
S8	In mortgaged housing with 3+ health conditions	In mortgaged housing

*of working age (16 to 64) who are not in full time education



Caveats and uncertainty

Statistical association

It should be noted that any statistical association identified between the explanatory variables and employment status by the decision tree analysis does not necessarily imply causation. While causal relationships may exist (for example, a health condition may affect the likelihood of a disabled person finding and staying in employment) this

cannot be demonstrated by the present analysis. However, the characteristics of these segments can be considered as potential candidates for barriers and drivers to employment.

As the decision tree expands, the groups that are formed get smaller and smaller. To ensure the formation of sizeable segments, a large threshold for the minimum size of each subgroup was chosen (approximately 500,000 disabled people at least in each segment).

Although a wide range of socio-demographic and health characteristics were considered, there may be other characteristics associated with disability employment, which are not included here. For example, geographic factors (such as deprivation and the availability of local employment or health support services) were not considered in this analysis.

This analysis revealed strong associations between each characteristic and employment status but not necessarily associations between the various socio-demographic variables. For example, the fact that those who live in social housing and have mental health conditions have an employment rate of 16% shows that the combination of social housing and mental health conditions is associated with a lower probability of being employed. It does not necessarily show that social housing and mental health conditions tend to appear together.

Tenure categorisation

Disabled people who live in privately rented housing and those disabled who live in owner occupied housing were grouped together in the analysis because they have very similar employment rates. Only when the split results in subgroups with very different employment rates, is the initial group further broken down by an explanatory variable. Based on this splitting criterion alone, the combined group of those disabled people who live in privately rented or owner occupied housing was broken down by other variables (qualification, health, age) but the distinction between these two housing tenure groups was not found to be significant at any point, as the tree was expanded.

The tree was developed using binary splits, other than the first split. For the first split we chose to use a three way split based on housing tenure. This formed three groups with distinctly different employment rates.

Exclusions from the analysis

Disabled people whose response was missing with respect to any of their characteristics included in the tree (for example missing level of qualification) were included in the decision tree analysis in order to identify the factors that are most strongly associated with disability employment. These cases accounted for less than 0.5% of the initial population of 6.9 million disabled people. When a group of disabled people was going to be split by a variable (for example by qualification), those cases

with missing information were considered as a separate additional group and merged with the group that has the closest employment rate.

The analysis excludes the 360,000 disabled people in full-time education, whose employment rates are much lower.

Characteristics of segments

The title used to describe each segment includes the key characteristics as they were identified by the decision tree analysis. However, this does not mean that some of these characteristics cannot appear in other segments as well. For example, segment 1 includes disabled people who live in social housing and all have a mental health condition (possibly together with other health conditions due to comorbidity) while segment 7 includes disabled people who live in mortgaged households and have 1 or 2 health conditions. However, segment 7 may also include disabled people who have mental health conditions. The main difference is that mental health was found to be the factor most strongly associated with employment for those disabled people who live in social housing. On the other hand, for those disabled people living in mortgaged housing, the most significant factor was the number of co-existing health conditions.

4. Segmentation of local authorities by disabled population characteristics using the Annual Population Survey

To explore geographic differences in the employment rate among the working age disabled population, upper tier local authorities were grouped into clusters based on the characteristics of the disabled population who live in each area across the UK. This analysis is presented in Section 2 of the Work, Health and Disability Green Paper Data Pack.

Methodology

Data and sample

This analysis looks at the UK disabled population of working age across the country by grouping upper tier local authorities together based on the following characteristics:

- Proportion of local population who are disabled (disability prevalence)
- Proportion of disabled people who are in employment (disability employment rate)
- Proportion of disabled with no qualifications
- Proportion of disabled with 4+ health conditions (indicative of quality of health status)
- Proportion of disabled living in social housing (as a proxy for social disadvantage)

All these proportions were estimated for the working age population (16 to 64).

These factors were chosen to describe the composition disabled population in different areas and their prevalence among the overall population.

The analysis was conducted using the Annual Population Survey (APS) data. Data sets for April 2014 – March 2015 and April 2015 – March 2016 were combined to produce 2-year average annual estimates and create larger samples for more robust estimates at a local level.

Analytical approach

Cluster analysis was used to group the upper tier local authorities in the UK into four distinct clusters. Each cluster has local authorities whose disabled populations have similar composition with respect to the proportions mentioned in the previous section. Descriptive analysis was used to profile each cluster of local authorities according to socio-demographic and health variables. Additionally, the disability employment rate gap was estimated for each cluster. This is the difference between employment rates between disabled people and non-disabled people within each cluster of areas.

Caveats and uncertainty

The purpose of this exploratory geographic analysis is to show a possible way of grouping together areas with disabled populations that have similar characteristics. However, such cluster analysis could be conducted using other factors as well that may have not been considered in this analysis. Such examples may include deprivation and local health and employment support for people with health conditions. Using different variables in the analysis may have resulted in the formation of different clusters.

This analysis was carried out on a higher geographic level (upper tier local authorities instead of district level) in order to get larger samples for more robust estimates. Large geographic variation is expected even within each local authority.

The local authorities within each cluster are displayed with the same colour on maps shown in the Data Pack, but this does not mean that they are identical; there is variation within clusters but this will be relatively less than there is between clusters. The profile of each cluster is defined by how it compares with the overall population. For example, if the average proportion of disabled people having mental health conditions among the local authorities in a cluster is lower than the average proportion of disabled people across all the local authorities in the UK then this cluster is described as having a lower prevalence of mental health conditions.

5. Estimates of long-term sickness absence

This section covers the methodology used to produce analysis of long term sickness absence (LTSA), including the caveats and uncertainty surrounding it. We define a LTSA as an absence from work due to illness or injury for four consecutive weeks or more. This analysis is presented in Section 3 of the Work, Health and Disability Green Paper Data Pack.

Methodology

Calculation of long term sickness absence

This analysis was conducted using the five-wave longitudinal Labour Force Survey (LFS), specifically the cohorts ending in quarters Q2 2014 to Q2 2016. This means our analysis includes 9 cohorts.

Within one cohort of data, each respondent is interviewed five times. At each interview, their current employment status and whether they had been prevented from working due to an illness or injury for 4 weeks or more in the previous three months is recorded. If in any of the **last four quarters** a person is recorded as being an employee (this excludes other forms of employment such as those who are self-employed, on a government supported training or an unpaid family worker) we then further analyse these people and their responses to the 4 week sickness absence question. We are therefore only looking at people that have been an employee at interview in the last 12 months.

Of these people, if they report having a 4 week sickness absence in the same interview as they report currently being an employee, they are counted as having a LTSA. The sum of these people forms our main estimate of employees with a LTSA. We can then calculate the proportion of all employees with a LTSA by dividing this figure by the total of people that were an employee at one of the four interviews in the last 12 months. This analysis is repeated on the latest 9 cohorts.

This calculation tries to focus on LTSAs experienced by employees. However, the survey does not ask whether they were an employee at the time of their absence (as opposed to other forms of employment). Therefore, some LTSAs may have occurred whilst the individual was not an employee but they may have found work as an employee by the time of the interview. These are included in our estimates. Conversely a person may have been an employee at the time of their LTSA, but not

at the point of interview, including those who may have left their job as a result of their LTSA. These people are excluded from our estimates.

Our figure represents the number of employees that have had a LTSA, not the number of spells. If a respondent is an employee at the same time as reporting that they have had a LTSA in more than one of their last four quarterly interviews, they will only be counted once. This measure therefore is not a measure of the total number of absences; it is a measure of individuals who have at least one LTSA during the 12 months before their final interview.

Time series of LTSA

As the sample sizes for each cohort are small, our reported figures are based on rolling four cohort averages. This means that our latest data point (labelled Q3 15 to Q2 16 on Chart 3.9) is the average of the cohorts whose final interview took place in Q3 2015, Q4 2015, Q1 2016 or Q2 2016.

The bars around our numerical estimates represent the 95% confidence interval; this shows the extent of the sampling errors and there is a 95% chance that the true value lies within those ranges.

LTSA characteristic breakdown

In order to provide robust estimates, four cohorts (those ending in Q3 2015, Q4 2015, Q1 2016 and Q2 2016) have been merged together to obtain a larger sample size to breakdown the LTSA statistic by various employee characteristics. A larger sample size reduces the sampling error and means we can have greater confidence in our estimates.

The LTSA figure is broken down by: sex, age, employer size, long-term health condition and disability status. As the respondent is asked about each of these characteristics in every interview, there will be multiple responses for each as these conditions are not always static; people can develop and recover from health conditions for example. For consistency, we have used the characteristic stated in the **final** interview to give a more up to date representation of the types of people having a LTSA. Therefore, the characteristic given may not be a reflection of the characteristic at the time of the LTSA. In any case, these characteristics are not necessarily *causing* different absence rates, but should give a broad view of the sorts of people who experience such absences. For the age breakdown, the reason for the upper age limit being 70 is because the LFS longitudinal datasets only include respondents up to that age.

In the case of the breakdown by long-term health condition, it is important to note that the reported health condition may not be related to the cause of the LTSA. In addition, people can report more than one long-term health condition; this analysis focuses only on what they report as their “main” health condition. Those that have data missing in this field are assumed to have no health condition.

Caveats and uncertainty

Sample bias

When estimating a trait for a whole population from a sample, there is always an inherent sample error. This means that our random sample may not be indicative of the whole population and the results could be inaccurate. To give an idea of the potential scale of this problem we have included the 95% confidence intervals (CI) for our time series of LTSA. This CI displays the range of values that the figure can take for us to be 95% certain that the true value lies within.

For the latest data point, the confidence intervals are as follows:

	Central	Lower 95% Estimate	Upper 95% Estimate
Number of LTSAs (millions)	1.8	1.6	1.9
Proportion of all employees (per cent)	6.1	5.7	6.6

Reporting error

As with any question on a survey, it is possible that the question may be misinterpreted and answered incorrectly. Our chief concern is that respondents may have answered ‘yes’ to having an LTSA in the previous three months, and ‘yes’ to currently being an employee, but were not in work while they had their LTSA. As the question doesn’t explicitly ask whether they have been off sick away from work and only if they were prevented from working, people may misinterpret this as them not being able to find work because of an illness or injury, as opposed to them having a sickness absence. This would result in some people who were not employees at the time of their LTSA being counted as a LTSA.

This misinterpretation is possible, and if this occurs it would inflate our estimate. It is difficult to quantify how much this occurs in our sample, but it is unlikely to be large. This is because our analysis is restricted to people who are in employment at the point of interview, and the guidance for the interviewer explains that this question is aimed at people who are in work.

In the main LTSA estimate, if a respondent’s answer to the sickness absence question is missing they are treated as not having a LTSA. For our analysis of the LTSA population by characteristics, where a value (for example the respondent’s age) is missing that respondent is excluded from that particular analysis of the characteristic.

Attrition bias

As our dataset is longitudinal, the same people are interviewed five times over a year and our data only contains those who successfully answered at all five points. Therefore, there is a potential for attrition bias. Attrition bias can mean that the people who actually answer the survey all five times may not be indicative of the wider population. An initial look into potential attrition bias suggests that in our

methodology we could miss around 5% of LTSA cases. This would indicate that the actual number of employees with a LTSA could be closer to 1.9 million (with a 95% confidence interval of around 1.75m – 2.05m), but we are unable to ascertain that with any certainty.

Comparison with previous estimates

The LTSA estimates presented here **should not to be compared** with previously published estimates of LTSA at a point in time due to the substantial methodological differences.

The LTSA estimates presented here are based on the analysis of data from 12 month longitudinal cohorts of the LFS and are not comparable to 'snapshot' estimates of LTSA at one point in time, such as: "Steadman K, Wood M, Silvester H. *Health and wellbeing at work: a survey of employees, 2014*. Department for Work and Pensions. Report number: 901, 2015", and "DWP, *Adhoc statistical analysis, Long term sickness absence*, February 2014".

The current analysis estimates the number of LTSAs in a year, while the previous Adhoc statistical analysis estimates the number of LTSAs experienced by people who were employees within a month of interview. The difference between the two is that our analysis captures people who were employees, and had a LTSA in the previous three months, at any of four interviews rather than just one, as in the previous estimates. This means we capture people who had a LTSA and later left the labour market, as long as they were employees by the time of the next quarterly interview.

Finally the current estimate is for the UK, while the previous ones were for GB.

6. Income analysis

Calculation of income for families where someone is disabled

This analysis was conducted using Households Below Average Income (HBAI) data for 2014/15. HBAI uses data from the Family Resources Survey (FRS) to derive a measure of disposable household income. Adjustments are made to take into account the size and composition of households to make figures comparable.

The FRS covers a sample of around 20,000 private households in the United Kingdom. Therefore, certain individuals, for example students in halls of residence and individuals in nursing or retirement homes will not be included.

The full quality and methodology document for the HBAI can be found here:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/530905/households-below-average-income-quality-metholodogy-2014-2015.pdf

Equivalisation
In order to allow comparisons of the living standards of different types of households, income is adjusted in HBAI to take into account variations in the size and composition of the households in a process known as equivalisation. Equivalence scales conventionally take an adult couple without children as the reference point. The process then increases relatively the income of single person households and reduces relatively the incomes of households with three or more persons

Income
The income measure used in HBAI is weekly net disposable equivalised income Before Housing Costs (BHC). This comprises total income from all sources of all household members including dependants. In detail income includes:

- usual net earnings from employment;
- profit or loss from self-employment (losses are treated as negative income);
- state support – all benefits and tax credits, including state pension;
- income from occupational and private pensions;
- investment income;
- maintenance payments, if a person receives them directly;
- income from educational grants and scholarships;
- the cash value of certain forms of income in kind, including free school meals.

Working-age
Working-age adults are defined as all adults below State Pension age.

Economic status of the family
The economic status of the family classification is in line with the International Labour

Organisation economic status classification. A family is classed as being in work if at least one adult in the family works at least part time.

Caveats

Sampling Error
Results from surveys are estimates and not precise figures - in general terms the smaller the sample size, the larger the uncertainty. Confidence intervals help to interpret the certainty of these estimates, by showing the range of values around the estimate that the true result is likely to be within.

Non-Sampling Error
These results are based on data from respondents to the survey. If people give inaccurate responses or certain groups of people are less likely to respond this can introduces biases and errors. This non-sampling error can be minimised through effective and accurate sample and questionnaire design and extensive quality assurance of the data. However, it is not possible to eliminate it completely, nor can it be quantified.

7. The cost of ill-health at working ages

Ill-health that prevents working age people from participating in work has costs for individuals affected and other stakeholders. Employers are affected by sickness absence; there is also a cost to the economy of lost production due to sickness absence and economic inactivity, while the health service faces extra costs when treating illnesses which prevent people working. The costs borne by Government include NHS costs, and the costs of welfare benefit payments for people whose ill-health prevents them working. Where ill-health prevents people working, the Government also forgoes tax and national insurance revenues due to a lower level of economic activity. This section sets out the approach that has been used to estimate each of these elements. This analysis is presented in Section 1 of the Work, Health and Disability Green Paper Data Pack.

Background

In 2008, Dame Carol Black's Review of the health of Britain's working age population estimated that the cost of working age ill health was around £100bn a year. Subsequently, the 2011 independent review of sickness absence estimated that sickness absence cost employers £9bn in 2010. This section describes the methods that have been used in the Data Pack to review and, where appropriate, update these estimates. It describes the approach used to estimate:

- Costs to the economy, including NHS costs
- Cost to government, including NHS costs

For the purpose of these costings, working age is as defined in the various sources used, normally 16-64 years. It is recognised that 64 is not a binding upper limit but further analysis of flexible retirement age is unlikely to change the costings significantly.

The cost to business

The figures used to estimate the costs to business come from the independent review of sickness absence of 2011[i] (Table 9), as no robust information exists to update the estimates of sick pay made at that time. The costing is based on business costs of sick pay and other expenditure related to sickness absences. As sick pay involves transfers between employers and employees, it does not involve a direct economic cost. Costs of lost production are included in costs to the economy and to government, discussed below.

The cost to the economy

The cost to the economy used in the present approach updates estimates presented in the 2008 review of the health of working age people.[ii] In particular, the *costs of conditions which can be prevented or remedied and that keep people out of work*. For the present approach, this is interpreted as health conditions which influence the likelihood of an individual who would otherwise be in work actually being in work. This approach excludes NHS costs of health conditions that are incurred regardless of whether a person is in work, or would continue to be incurred after they entered work.

The following costs are also excluded:

- Costs of working age inactivity due to working age people having informal caring responsibilities for people who are not of working age, or of working age but unlikely to return to work. The rationale is that because the cared-for person is unlikely to resume employment, the cost will continue whether care is provided by the current carer or someone else.
- Costs associated with working age social care recipients. While progress to employment is a measured outcome for this group[3], employment rates are much lower than other groups with health conditions or disability; it is therefore assumed, cautiously, that people in this group are generally unlikely to directly enter employment.
- Costs of preventable working age mortality. Although future policy interventions may be able to mitigate these costs, available data does not allow a robust overview assessment of scope to influence mortality and extra time in work.

These estimates focus on the costs that would not have occurred had the health issues affecting individuals not happened. They are not a definitive assessment of what might be achieved by further intervention. Further interventions could include measures to prevent, treat or manage ill-health and the outcomes may be affected by

[3] Indicator details are at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/400155/PHOF_at_a_glance_February_2015.pdf

individual health at the outset of an intervention. The extent to which health barriers can be overcome and individual potential realised will be better understood as interventions are implemented to address health issues, and individual barriers and outcomes become clearer. Therefore, the estimates in this costing can be regarded as the maximum "prize" from fully addressing working age health conditions which prevent work; the actual prize will reflect the impact of health on individuals' potential for work and the scope of interventions to address health barriers to work and any subsequent improvements to work and health outcomes.

Finally, the analyses do not estimate the impact of health on productivity at work. Again, this is difficult to assess robustly but commentators suggest that the economic costs could be larger than for employee sickness absence.[4]

The methods used to estimate each of the four elements of the cost to the economy are each discussed in turn in the remainder of this section:

- lost production due to worklessness
- lost production due to sickness absence
- lost production due to informal caring
- NHS costs

Lost production due to worklessness, £73-103bn

This is the key element of the costings. Volumes are proxied by numbers of people reporting health-related inactivity in the Annual Population Survey (APS). The GB volume in the 2015 APS is 2.1 million.

The other element of the calculation is the lost production per individual. A number of factors, relating to the counterfactual of how productive these individuals would have been if they were in work, influence the assumption made here, and a number of measures might be used. It seems reasonable to assume that the value of their output should be greater than their wage, reflecting employment on-costs and a profit margin. Gross Value Added (GVA) captures all the above.

GVA is measured as an average (mean) value per filled job. It was £48,823 for the UK in 2013.[5] This has been rounded here to £50,000 per employee as a broad illustrative assumption.[6] Data on sickness absence also shows that absence is more

[4] See, for example, Houses of Parliament, Parliamentary Office of Science & Technology. *Mental Health and the Workplace*, Postnote number 422, October 2012. http://researchbriefings.files.parliament.uk/documents/POST-PN-422/POST-PN-422.pdf

[5] Data in table B3 in dataset at https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/labourproductivity/datasets/subregionalproductivitylabourproductivitygvaperhourworkedandgvaperfilledjobindicesbyuknuts2andnuts3subregions

[6] To the extent that GVA includes a measure of sickness absence, this estimate underestimates losses because it measures output net of any absence rather than output without any absence.

prevalent among workers with lower than average earnings,[7] and it is not clear that those who are currently inactive would be as productive as those in work. Therefore, a central estimate here uses GVA adjusted by the ratio of median to mean earnings, while a higher estimate uses GVA per employee without that adjustment. The adjustment factor, based on ratios of median to mean hourly earnings excluding overtime in 2014 from the Annual Survey of Hours and Earnings (11.56 and 15.16) is 0.73. Using these assumptions, central and high estimates are **£81bn**[8] and **£103bn**[9] respectively.

As a check on the method used here, lost output in 2007 was re-estimated using the method adopted for 2015. It was 11% higher than the original estimate from 2008. If the 2015 estimate is adjusted to be consistent with 2007, the central estimate is reduced to £73m, therefore this is the lower bound of the estimate presented here.

Lost production due to sickness absence, £15-20bn

ONS statistics record a total of 138.7m days of sickness absence in 2015.[10] Assuming a 230 day working year based on a total of 6 weeks for statutory holidays and annual leave entitlement, this amounts to just over 600,000 full-time equivalent posts. Using GVA assumptions above suggests lost output of £20-30bn. However, there are arguments for reducing this figure:

- not all of this absence can be avoided: some will relate to conditions which cannot be prevented or remedied, and there will be a non-zero minimum for the level of sickness absence; and
- the output loss on days of absence may be mitigated by higher output on other days, or reorganisation of other work.

Conversely, an indication of the minimum cost can be gained from considering sick pay. As sick pay does not offer full replacement of usual pay, and wages are an indicator of output, lost output is likely to be significantly larger than sick pay. Annual payments of sick pay are close to £10bn, so a significantly larger loss of output is likely to be in the range £15-20bn. This compares with an estimate of £15bn for 2010 in the 2011 independent review of sickness absence. Growth in the economy since 2010 suggests the cost of absence is likely to have increased in absolute terms, so the £15bn estimate from 2010 is assumed to be the lower bound of a range extending to £20bn.

[7] See discussion of absence rates by occupation in http://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/labourproductivity/articles/sicknessabsenceinthelabourmarket/2014-02-25
[8] 2.106m multiplied by £50000, multiplied by 0.73
[9] 2.106m multiplied by £50000
[10] Data at http://www.ons.gov.uk/file?uri=/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/adhocs/005914estimateofthenumberofdaysofsicknessabsencetakenbyreasonuk2013to2015/sicknessabsence20132015final.xls

Lost production due to informal caring, £1bn

Census 2011 identified 5.8 informal carers in England and Wales (6.6 million including Scotland). Information on the characteristics of carers is available from the NHS Digital survey of unpaid carers in England[iii]. An initial survey in 2012/13 was repeated in 2014/15. The survey covers informal, unpaid carers aged 18 or over, caring for a person aged 18 or over, where the carer has been assessed or reviewed, either separately or jointly with the cared-for person, by social services during the 12 months prior to the sample being identified.

The population of carers relevant to the economic cost of working age ill-health are: i) carers of working age; ii) caring for people of working age; who iii) would work if they were not carers and whose caring responsibilities prevent them working[11]. All of these conditions must be met to be relevant for the present calculations.

Multiplying the numbers of carers recorded in the Census, including Scotland, by the proportions of carers with characteristics of interest from the survey of informal carers (assuming the same distributions of characteristics applied across GB) gives an estimate of 224,000 carers (Table 1).

If the value of their output was mean GVA per filled job adjusted for the ratio of median to mean wages, the value of lost output is £8.5bn, or £11bn if GVA is unadjusted.

Table 1. Assumptions used to estimate carer volumes

Number of informal carers in England and Wales	5,800,000
Number of informal carers in Scotland	759,000
Total number of carers in Great Britain	6,559,000
Of whom:	%
carers of working age	57
caring for people of working age	30
would work if they were not carers and whose caring responsibilities prevent them working	20
Estimated total carers in scope	224,000

Sources:http://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthcaresystem/articles/2011censusanalysisunpaidcareinenglandandwales2011andcomparisonwith2001/2013-02-15
http://www.gov.scot/Resource/0047/00473691.pdf
Assumptions based on https://www.gov.uk/government/statistics/personal-social-services-survey-of-adult-carers-in-england-2014-15

[11] Care involving people who are not of working age (as carer or cared-for) is assumed to be outside the scope of a work and health intervention; it is not clear that they are a target group for interventions to help people with health conditions to work. Similarly, working-age people without health conditions are not a target group for such interventions, while working age people with health conditions which prevent work are included in these estimates.

An important caveat to these calculations is that those cared-for may not have "avoidable" health conditions which can be prevented or treated. For practical purposes a work and health intervention could not mitigate the economic cost of care recipients health problems as they would require care from the carer or someone else. Evidence on the duration of care provided by the subset of carers of interest shows that only 2% cared-for had been looked after by the carer for less than a year and 9% between 1 and 3 years. It is assumed, conservatively that less than 5% of cared-for people will return to work, which suggests that informal care costs incurred will be very difficult to mitigate and those that can be mitigated are estimated to be **less than £1bn per annum**.

Table 2. Duration of care

About how long have you been looking after or helping the person you care for?	
	% of group
Less than 6 months	0.3
Over 6 months but less than a year	1.8
Over 1 year but less than 3 years	8.5

Source: derived from NHS Digital. Personal Social Services Survey of Adult Carers in England, 2014-15. Publication date: September 16, 2015. https://www.gov.uk/government/statistics/personal-social-services-survey-of-adult-carers-in-england-2014-15

Base: working age carers, caring for working aged, who state "I am not in paid employment because of my caring responsibilities"

NHS costs, £7bn

Limited sources exist to update the estimate of NHS costs included in Dame Carol Black's Review (£5-11bn). The approach taken has been to identify evidence on service usage and impacts of health conditions on employment; use it to estimate the proportions of service usage on conditions which impact on employment; then apply those proportions to estimated total expenditures on working age people relating to particular categories of health care.

Hospital services. Key data to inform assumptions needed to estimate of hospital service costs come from the Adult Inpatient Survey.[12]

In the survey 14% of respondents say "my condition causes difficulties at work or in education and training" (Question 79) and 40% of respondents in total are of working age (Question 77). Reducing the 14% to 13% to exclude those in education and training, around a third (13/40) of working age recipients of hospital services are

[12] Data in the "About You" worksheet of the 'Adult inpatient Survey 2015[12]: national tables' in the 'Open data' section of http://www.cqc.org.uk/content/adult-inpatient-survey-2015

affected. However, the proportion of hospital spend on health conditions keeping people from work seems likely to be lower: not all of those for whom the condition causes difficulties will be prevented from working, and those for whom work would be feasible apart from their health condition seem - in general - likely to be less ill than the treated population as a whole. If it is assumed that less expensive conditions affect people who might work, this can be reflected by assuming that they need half as much treatment and each treatment is half as expensive, so that the unit cost of treating them is a quarter of the average cost. With these assumptions, the one third of working age recipients of hospital services who say their condition causes difficulties at work are assumed to account for 9% of the total working age spend on hospital services.

General and acute services. With no separate information for these services the same assumption as for hospital services is used.

Primary care. The GP Patient Survey[iv] reports that 78.6% of users are working age, and 58.6 percentage points, or three quarters, in work (Question 53). There is no direct evidence on the link between using GP services and ability to work. If it is assumed i) that those presenting to GPs are likely to be less well than the general workforce, but ii) not receiving intensive treatment, it might be assumed that their health conditions only mildly affect capacity to work. Assuming that people presenting to GPs have double the population sickness absence rate of about 2%[13], the proportion of cost due to working age ill-health affecting work is estimated as 3% (4 per cent of the 75% of working age users of GP services who are in work).

In addition 4.2 percentage points of the 78.6 per cent of working age users are sick or disabled. It is not clear how far their usage relates to conditions affecting capacity to work, so assuming half or 2.1 percentage points, leads to an estimated share of working age cost as follows: 2.1/0.786=2.67%.

Costs for other categories of labour market status are unlikely to be unrelated to work, so in total 5.67% of primary care costs are assumed to relate to work.

Mental health services. The focus here is dedicated spending on mental health treatment. For context, Figure 2 in the Sainsbury Centre for Mental Health (2003) Policy Paper 3: The Economic and Social Costs of Mental Illness[v] shows £5.0bn spent on adults (excluding children and the elderly).

This will include spending on people who are in work. Those whose health affects their work are likely to be more severely affected than those in work. With 40% employed, 60% not employed, it may be assumed for illustrative purposes that 10 of the 60 will never work, giving a 40:50:10 ratio for which relative shares of costs are

[13] Percentage of hours lost to sickness absence reported as 2.0% in 2013 in 'Percentage of hours lost' in http://www.ons.gov.uk/ons/rel/lmac/sickness-absence-in-the-labour-market/2014/all-data-used-in--sickness-absence-in-the-labour-market-.xls

assumed to be 20:60:20, so it is assumed that 60% of costs incurred on mental health treatment are relevant to conditions which prevent sufferers working.

Costs for the employed group are excluded even though they are relevant if mental health still affects their work. This offsets to some extent the fact that costs incurred for those who are not employed won't all relate to capacity to work.

Prescribing. The costs of prescribing are excluded on the basis that it is unclear how far they are linked to being out of work and whether or not costs would be saved if the recipient was in work. The purpose of work and health interventions is to help people remain in, gain, or return to work. This would not always involve remedying the condition which affects work; returning to work may help conditions and reduce prescribing costs, but an outcome where an individual was helped to work with their existing condition – and no change in prescribing – would still be a worthwhile outcome.

Summary
Applying these shares to estimated working age treatment costs by category for England suggests work-related NHS treatment costs of £6.2bn pa at 2015-16 prices, or £7bn if scaled up to GB using estimates of NHS spend in England and the devolved administrations.

Total economic cost

Summing the elements gives the totals, estimated for 2015-16, shown in Table 3.

Table 3. Estimates of costs of working age ill-health to the economy, 2015

	£bn
Lost production due to worklessness	73-103
Sickness Absence	15-20
Informal Care	<1
NHS costs	7
Total	**95-130**

The cost to the Government

In addition to the NHS costs described above in costs to the economy, working age ill-health generates costs to government arising from loss of flowbacks and additional benefit payments.

Lost flowbacks to exchequer, £21-29bn

Lost output implies foregone tax revenues from individuals and employers. Tax revenues in scope are income tax, employer and employee national insurance, value added tax and corporation tax.

A flowback rate is applied to lost output to estimate lost flowbacks. The flowback rate is obtained by estimating flowbacks from in-scope taxes and national insurance as a percentage of GDP using data from the Budget 2016 Red Book[vi]. Data for 2014-15 and 2015-16 shows that the flowback rate averages 23.5%. Applying this to lost output from worklessness, sickness absence and informal care described earlier generates estimated lost flowbacks of £21bn in the low case and £29bn in the high case.

Additional benefit payments, £19bn

The present approach focuses on estimating the cost of social security benefits received by people due to ill-health which prevents them working. As discussed above, the interest is in the cost of health problems preventing work which might be addressed by policy intervention, so the estimates aim to focus on preventable or remediable health conditions. This criterion does not map precisely onto benefit receipt groups. By and large, people with long-term health conditions or disabilities receive incapacity benefits (primarily Employment and Support Allowance) or disability benefits (Personal Independence Payment or Disability Living Allowance). The relevant group will be primarily but not exclusively receiving sickness benefits, but may also receive disability benefits; while returning to work may not be an immediate prospect for all recipients of incapacity benefits.

It would be unrealistic to replicate detailed individual-level assessment activity to make any adjustments to administrative data, so adopting a proportionate approach, these costs have been proxied by receipt of incapacity benefits.

Using published estimates of 2015-16 working age benefit spend,[14] the cost of benefits payments were estimated as shown in Table 4 overleaf.

[14] Specific references are workbook https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/524240/outturn-and-forecast-budget-2016.xlsx: cell BS5 in Incapacity benefits worksheet, cell BS7 in Industrial injuries benefits worksheet, cells BS17 and 19 in Housing Benefit worksheet, cell BS8 in Income Support worksheet, and cell BS5 in Carers Allowance worksheet.

Table 4. Assumptions used to adjust working age benefit spend in the calculation of working age ill-health, 2015-16

Total working age-benefit spend	Assumption	Adjusted amount used in estimate
£14.9bn on incapacity benefits and £0.4bn on industrial injuries	None. Rounded figure.	**£15bn**
£7bn on Housing Benefit disability/incapacity premium	Half of Housing Benefit premium in scope based on approximate ratios of sickness and disability benefit budgets	**£3.5bn**
£2.5bn on Carers Allowance, £0.9bn Housing Benefit for carers, and £0.6bn on Income Support for carers.	In line with findings about limited scope to mitigate requirements for caring activity so that carers can return to work, it is assumed that a limited proportion of the combined £4bn spend on carers benefits can be mitigated	**£0.5bn**
	Total:	**£19bn**

NHS cost, £7bn

The estimate used for the cost to the economy, described above, is also used in the costs to Government.

Total Government cost

Summing all the elements described, gives a total estimated cost to Government of £47-55bn (Table 5).

Table 5. Estimated costs of working age ill health to Government, 2015

	£bn
Lost flowbacks to exchequer	21-29
Additional benefit payments	19
NHS costs	7
Total	**47-55**

8. Employment and Support Allowance Customer Journeys

Section 4 of the Data Pack looks at the supporting statistics of claimants on Employment and Support Allowance (ESA) and its predecessors - Incapacity Benefit (IB), Income Support on grounds of disability and Severe Disablement Allowance (SDA). This evidence is presented to strengthen our understanding of this diverse claimant group including their characteristics and their customer journey. All figures cover Great Britain.

Methodology

Main out-of-work benefits

The time series of the main out-of-work benefits has been calculated from a range of DWP data sources over time. The sources are as follows:

JSA/UC Figures:

- http://www.ons.gov.uk/ons/rel/lms/labour-market-statistics/february-2016/table-cla01.xls
- Note this includes those claiming Jobseeker's Allowance (JSA) plus the searching for work element of Universal Credit (UC).

ESA/IB/SDA Figures:

- pre-1999 data:
- https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/259185/timeseriesIBSDA.xls
- Aug 1999-latest quarterly data: http://tabulation-tool.dwp.gov.uk/100pc/wa/tabtool_wa.html
- Latest data https://www.gov.uk/government/statistics/dwp-statistical-summaries-2016

Lone Parents on Income Support Figures:

- pre-1999 data: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/259186/timeseriesIS.xls

- Aug 1999-latest quarterly data: http://tabulation-tool.dwp.gov.uk/100pc/wa/tabtool_wa.html
- Latest data https://www.gov.uk/government/statistics/dwp-statistical-summaries-2016

DWP ESA / PIP / DLA Reference Dataset

The DWP ESA / PIP / PIP Reference Dataset combines DWP administrative data for ESA and disability benefits; Personal Independence Payment and Disability Living Allowance (PIP / DLA). This dataset provides a snapshot of the overlap between ESA and PIP / DLA claimants at the end of April 2016.

The ESA caseload includes both ESA claims and those migrated from incapacity benefits. The DLA caseload only includes working age cases. Figures have been aligned with DWP published statistics.

ESA Customer Journey

The DWP ESA Reference Dataset builds on the DWP ESA / PIP / DLA Reference dataset and merges further DWP and HMRC administrative data, such as P45 employment data. This provides a high-level picture of the end-to-end customer journeys to show:

- where claimants were in the quarter before their ESA claim
- their latest outcome at the Work Capability Assessment (WCA)
- and their destination if they leave ESA.

As an illustration of flows through the end-to-end ESA journey, we take a cohort of new ESA claims made between 1st April 2013 and 31st March 2014. It excludes those moving to ESA as a result of the migration from incapacity benefits during this period.

Work Capability Outcome (WCA)

- WCA outcomes are presented as the latest outcome (so will take the outcome of the latest repeat assessment for any cases who have been reassessed in this period), up to and including September 2016.
- Around 4% of all WCA outcomes are not presented in the 2013/14 cohort analysis. Around 1% are currently waiting for a Work Capability Assessment (or repeat assessment) and in the remaining cases WCA information is incomplete. Therefore totals and proportions may not add up as a result of this exclusion.

Origins

- Origins are calculated in the 3 months prior to the ESA claim start date, in a hierarchy as follows; Employment, Jobseeker's Allowance (JSA), ESA, Other DWP Benefits and Other.

- HMRC P45 employment data does not include self-employment. Therefore, we are unable to distinguish those who were in self-employment in the 3 months prior to the ESA claim start date in this analysis.
- The 'Other DWP benefits' category includes, but is not limited to: Income Support (IS), Attendance Allowance (AA), Bereavement Benefit (BB), Disability and Living Allowance (DLA), Invalid Care Allowance (ICA), Severe Disablement Allowance (SDA) and Widow's Benefit (WB). However it is important to note that the analysis excludes any cases migrated from Incapacity Benefit, Income Support on grounds of disability or Severe Disablement Allowance, so it would only capture individuals claiming those benefits previously if they had closed their claim voluntarily and opened an ESA claim within 3 months.
- The 'Other' category is likely to include, but is not limited to: self-employment, education / training and prison. Further breakdowns are not possible.

Destinations

- This looks at destinations immediately after leaving ESA, up to and including September 2016.
- Destinations are calculated in a hierarchy (should a claimant have more than one destination within the time period of interest) as follows: ESA claim still live, Employment within 1 month, Jobseeker's Allowance (JSA) within 1 month, ESA within 6 months, Other DWP Benefits within 12 months, Deceased (within 1 month of leaving ESA) or Other.
- Therefore, should a claimant start employment and start claiming JSA within 1 month of closing their ESA claim, then this would be counted as an employment spell in the analysis since employment is first in the hierarchy.
- ESA destinations are calculated within 6 months to reflect the policy up until April 2015 which meant that ESA claimants found fit for work could only make another claim to ESA with the same condition after 6 months, unless their condition has deteriorated or they had developed another primary condition. Since April 2015 claimants found fit for work are unable to reclaim indefinitely unless their condition has deteriorated or they have developed another primary condition.
- HMRC P45 employment data does not include self-employment. Therefore, we are unable to distinguish those leaving ESA for self-employment in this analysis.
- The 'Other DWP benefits within 12 months' category includes, but is not limited to: Attendance Allowance (AA), Bereavement Benefit (BB), Employment and Support Allowance (ESA) (for those claiming ESA between 6 and 12 months of leaving ESA), Invalid Care Allowance (ICA), Income Support (IS), Jobseeker's Allowance (JSA), Severe Disability Allowance (SDA) and Widow's Benefit (WB).
- The 'Other' category is likely to include, but is not limited to: self-employment, retirement, education / training, gone abroad and prison. Further breakdowns are not possible.

All numbers in this chapter have been rounded to the nearest 1,000 and proportions to the nearest percentage point. Therefore figures may not sum due to rounding.

Source of statistics

Some ESA statistics have been created from published data sources including DWP Tabulation Tool and NOMIS.

Further information on DWP Tabulation available here:

http://tabulation-tool.dwp.gov.uk/100pc/esa/tabtool_esa.html#metainfo

Further information on NOMIS available here:

http://www.nomisweb.co.uk/articles/96.aspx

[i] Dame Carol Black and David Frost CBE. *Health at work – an independent review of sickness absence*. CM8205, November 2011. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/181060/health-at-work.pdf

[ii] Dame Carol Black. *Working for a Healthier Tomorrow*. London: TSO, March 2008. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/209782/hwwb-working-for-a-healthier-tomorrow.pdf

[iii] NHS Digital. *Personal Social Services Survey of Adult Carers in England, 2014-15.* Publication date: September 16, 2015. https://www.gov.uk/government/statistics/personal-social-services-survey-of-adult-carers-in-england-2014-15

[iv] IPSOS MORI Social Research Institute. *NHS England GP Patient Survey – National summary report, January 2016 publication*. IPSOS MORI, 2016 http://gp-survey-production.s3.amazonaws.com/archive/2016/January/January+2016+National+Summary+Report.pdf

[v] The Sainsbury Centre for Mental Health. Policy Paper 3. *Economic and social costs of mental illness in England*. 4 June 2003 https://www.centreformentalhealth.org.uk/economic-and-social-costs-2003

[vi] HM Treasury. *Budget 2016*. HC 901, March 2016. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/508193/HMT_Budget_2016_Web_Accessible.pdf