# 5. Poverty among working-age adults in poor health

#### **Key findings**

Between 2007–08 and 2016–17, government spending on workingage health-related benefits rose by 18% in real terms.

At the same time, there has been gradual growth in the proportion of 25- to 54-year-olds with a long-standing illness (one lasting at least 12 months), which reached 26% in 2016–17. Recent increases have been driven by more people reporting mental health conditions.

The employment gap between people with and without a longstanding illness varies substantially by education. In 2016–17, 70% of 25- to 54-year-olds with a long-standing illness were in paid work, compared with 88% of those without – a gap of 18 percentage points (ppts). But this gap is 10ppts for those who left education at or after age 18 and 24ppts for those who left education earlier. In fact, high-education people with a long-standing illness have an employment rate only 8ppts below that of healthy low-education people.

People aged 25–54 with long-standing mental health problems have particularly poor labour market outcomes.

Only 53% of those with a long-standing mental health problem are in employment, compared with 70% of all individuals with a long-standing illness and 88% of those without one. The average weekly pay for those in work with mental health problems is 13% and 23% below the average for all unwell and healthy individuals respectively. People with mental health issues are also on average significantly younger than those with another long-standing illness.

Those with a longstanding illness are much more likely to have been out of work for a long time. Around a quarter of 25- to 54-year-olds with a long-standing illness have been out of work 'long-term' (i.e. for at least three years), compared with 7% of healthy people. The difference is particularly large for men: almost three-quarters of long-term workless men (aged 25–54) are in ill health and about a quarter have mental health problems.

Income poverty rates are higher for those in poor health, but these do not tell the whole story. Ill people are even more likely to be in persistent poverty and material deprivation.

People aged 25–54 with a long-standing illness are about 50% more likely to be in relative income poverty than healthy 25- to 54-year-olds (18% versus 12%). But this is highly likely to understate the difference in their living standards, since illness and disability can lead to higher costs of living. In addition, ill people are about 70% more likely to be on a persistently low income (10% versus 6%) and are nearly twice as likely to be 'materially deprived' (32% versus 17%).

As well as having low employment rates, people with mental health conditions are particularly likely to have low living standards.

Those with a mental health condition have considerably higher poverty and material deprivation rates than the unwell population at large. This is especially true for those with at least one other condition, who are more than three times as likely to be materially deprived as the healthy population (56% versus 16%).

In Chapter 2, we discussed recent trends in average living standards, and how these vary by several demographic groups. In this chapter, we analyse how living standards differ between those with and without long-standing health problems. There are many ways in which health and living standards may interact. First, poor health may reduce an individual's living standards as they have to spend more money on goods or services to mitigate the impact of their health condition. Second, poor health may restrict the amount of paid work that an individual may do (if they can do any at all), or restrict the type of work that they can do, reducing their earnings. Third, being on a low income may itself worsen certain health problems. Fourth, poor health and low incomes might both be caused by similar factors, such as low educational qualifications. Fifth, being unwell may directly reduce someone's living standards in a broad sense, even if it does not affect their material standard of living. For all of these reasons, one might expect the living standards of those in poor health to be lower than those of the general population.

These issues are of increasing policy interest for (at least) three reasons. First, as is shown below, spending on benefits related to health has become an increasingly large share of working-age benefit expenditure and is expected to continue to grow significantly. Second, long-term sickness or disability is the second most common reason for 25- to 54-year-olds to be out of work (after looking after family) and is (now) a significantly more important reason than simply being unable to find a job despite searching for one (i.e. 'unemployed' according to the technical definition). Third, the government has set a target to halve the gap in the employment rate between those with a disability and those without (Department for Work & Pensions and Department of Health & Social Care, 2017).

In the analysis in this chapter, we focus on a group that is often termed 'prime-working-age' individuals – those aged 25–54. This is partly because determinants of living standards for retired people are quite different from those for working-age individuals. Further, the decision over when to retire is itself likely to be influenced by health (e.g.

French, 2005). This is an important issue in its own right, but a rather different one. Younger adults (18–24) are relatively unlikely to have a health condition, and again the determinants of their living standards are rather different from those for people of 'prime working age', since many are still in full-time education or live with parents.

As in the other chapters, we rely primarily on data from the Family Resources Survey, though we also use information from the Labour Force Survey and Understanding Society surveys too. In all these surveys, the main measure of ill health that we use is whether the individual reports having a physical or mental health condition that has lasted or is expected to last at least 12 months. This is to some extent a subjective measure, and individuals may differ on precisely what constitutes a 'physical or mental health condition'. We refer to this measure as having a 'long-standing illness' (though some 'physical and mental health conditions' – such as being blind or deaf – may not technically be 'illnesses'). While there are multiple ways of measuring whether individuals are in poor health, analysis of a range of other measures of health, including self-reported assessments of health and reporting a disability, showed similar patterns across demographic groups and employment statuses, suggesting that our findings are not specific to one particular measure of health.

It is important to note that the 'long-standing illness' measure that we use is different from the 'disability' measure that the government's employment gap targets. <sup>29</sup> An individual is defined as disabled if they have a long-standing illness *and* that illness reduces their ability to carry out day-to-day activities. In terms of the impact on employment, the disability measure is arguably more relevant since it attempts to capture whether or not the condition limits day-to-day activities. However, it is possible that people with the same health condition might report that it affects their day-to-day life differently based on their other circumstances. For example, when answering the survey, people who are out of work might report that their health condition affects their day-to-day life more than if they were in work, as a justification for being out of work. In addition, while some government statistics (e.g. 'disabled' poverty rates in the HBAI data) refer to people living in a family where someone is disabled, we focus purely on the outcomes of those individuals with a long-standing illness, rather than anyone living in a family where someone has a long-standing illness.

The remainder of this chapter proceeds as follows. Section 5.1 looks at trends in the frequency of poor health and in spending on health-related benefits. Section 5.2 analyses the characteristics of 25- to 54-year-olds in poor health, including the illnesses they suffer from, and Section 5.3 examines their labour market outcomes and how they differ from those of the healthy population. Section 5.4 looks at how these differences relate to the living standards of those in poor health and discusses which measures of living standards are most appropriate for these people. Section 5.5 concludes.

<sup>&</sup>lt;sup>29</sup> Though the government's employment target is focused on the narrower disability measure, one of the Department for Work & Pensions's objectives is to 'improve outcomes and ensure financial security for disabled people and people with health conditions' (see https://www.gov.uk/government/publications/department-forwork-and-pensions-single-departmental-plan/department-for-work-and-pensions-single-departmental-plan-2018).

## 5.1 Trends in poor health and in spending on health-related benefits

How frequent is poor health among prime-working-age people and how has this changed in recent years? Figure 5.1 shows the proportion with a long-standing illness, as well as the proportion reporting a disability. It presents the rates recorded in the Family Resources Survey (FRS) and the Labour Force Survey (LFS) between 1997–98 (first year in which a comparable 'long-standing illness' question is asked in the LFS) and 2016–17 (latest FRS data). Changes in the survey questions (indicated by breaks in the lines) somewhat limit what we can learn regarding long-term trends, particularly in the LFS, where there have been two survey changes in the last 10 years. Despite this, there are three things we can say from the figure. First, the rates of long-standing illness and disability were roughly constant from 2002–03 to 2008–09. Second, there appears to have been an increase in the rates of both disability and long-standing illness since at least 2013–14, though that increase is substantially larger (and commences around 2008–09) in the FRS. Third, in 2016–17, around a quarter of the population aged 25–54 had a long-standing illness and about one in six had a disability.

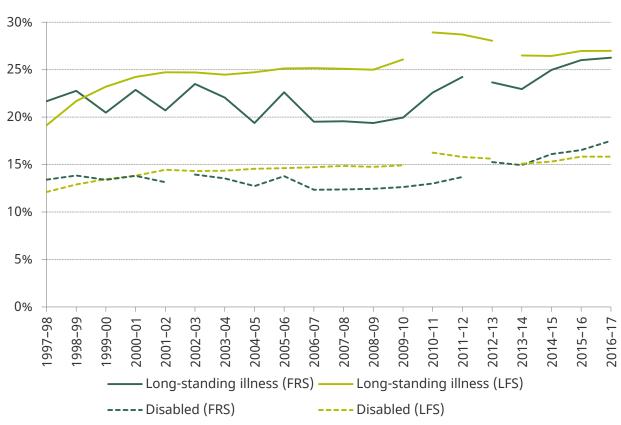


Figure 5.1. Long-standing illness and disability rates for 25- to 54-year-olds, FRS and LFS, Great Britain

Note: Gaps in lines indicate structural breaks in the series due to changes in the surveys. Trends before and after breaks cannot be directly compared.

Source: Authors' calculations using Labour Force Survey and Family Resources Survey, 1997–98 to 2016–17.

Health issues are important for a government that is interested in getting more people into work. As was shown in Chapter 2, there has been a substantial increase in

employment in recent years, but a lot of that increase has come from falling unemployment and a falling proportion of people (mostly women) who are not in paid work because they are looking after their families. Figure 5.2 uses LFS data to show the proportion of 25- to 54-year-olds who are out of work for various reasons. In 2017, 3.9% of the prime-working-age population were out of paid work due to being long-term sick or disabled. This was higher than the 2.8% who were unemployed, but lower than the 5% rate seen around 2000. For men aged 25 to 54 in 2017, being long-term sick or disabled is the most common reason for being out of paid work (3.7% of the population), with unemployment the next most common (2.8%).

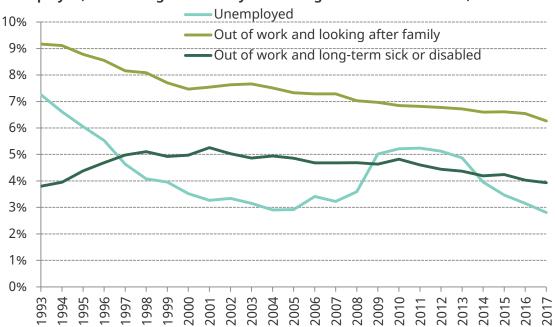


Figure 5.2. Percentage of 25- to 54-year-olds who are out of work because they are unemployed, are looking after family or are long-term sick or disabled, Great Britain

Source: Authors' calculations using Labour Force Survey, 1993 to 2017.

The patterns shown in Figure 5.2 are replicated when we look at trends in spending on health-related benefits. Figure 5.3 shows real spending on several types of benefits since 1978–79. Three of them – unemployment benefits, income support and incapacity benefits – are income replacement benefits, targeted at those who have a low income due to being out of work. Unemployment benefits are paid to those who are looking for work but cannot find any, income support to those who are not expected to be able to work due to family commitments (looking after a dependent child as a lone parent or caring for an ill family member), and incapacity benefits to those who are unable to work due to poor health. The figure also shows spending on disability benefits, which are designed to compensate those who have higher living costs because of a disability.

There are three key things to note from Figure 5.3. First, spending on unemployment benefits and income support has fallen since the mid 1990s, while spending on incapacity benefits has remained roughly constant in real terms. Incapacity benefits have thus made up an increasingly large share of the spending on income replacement benefits. Second, spending on disability benefits has continually increased in real terms since 1978–79. Third, between 2007–08 and 2016–17, spending on health-related benefits (incapacity and disability benefits) increased by 18% in real terms (largely driven by rises in disability

benefit spending). Over this same period, spending on other working-age benefits rose by 12%. The difference is forecast to be starker in future years: between 2016–17 and 2022–23, spending on health-related benefits is expected to increase by 15%, while spending on other working-age benefits is expected to fall by 5%. Health-related benefits are therefore becoming increasingly important in fiscal terms. It is also worth noting that, as shown by Emmerson, Joyce and Sturrock (2017), in recent years the caseload of and spending per claimant on health-related benefits have consistently exceeded forecasts, sometimes by large margins. Were this pattern to repeat itself, spending on health-related benefits over the next few years could increase by more than Figure 5.3 suggests.

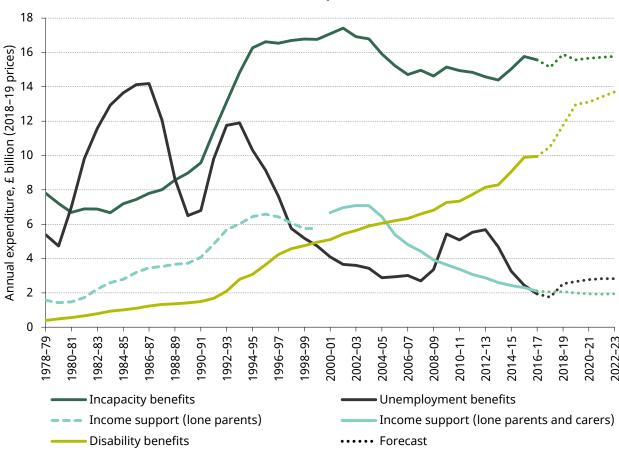


Figure 5.3. Expenditure on working-age income replacement and disability benefits in Great Britain, historical and forecast, 2018–19 prices

Note: Incapacity benefits include employment & support allowance, incapacity benefit, severe disablement allowance, invalidity benefit, sickness benefit, and income support on the grounds of disability. Disability benefits include disability living allowance, personal independence payment, attendance allowance and mobility allowance. Income support for lone parents between 1978–79 and 1999–2000 (dashed line) includes only those not also receiving the disability premium. Figures for 2017–18 to 2022–23 are based on the Office for Budget Responsibility (OBR)'s March 2018 forecast for benefit spending.

Source: Authors' calculations using Department for Work & Pensions, 'Benefit expenditure and caseload tables', Spring Statement 2018.

#### 5.2 The characteristics of those in poor health

Given the prevalence of long-standing illness among 25- to 54-year-olds, together with the increasing fiscal importance of health-related benefits, it is important to know what type of people have a long-standing illness. This section therefore explores the demographic characteristics of those with long-standing health problems and describes the frequency of different types of problems.

Figure 5.4 shows the main health problem that individuals with a long-standing illness report (using the LFS). Because of the changes in the surveys referred to above, the figure only runs from 2013–14 to 2017–18 (over which time the questions are consistent). However, even over that relatively short period, there is a clear trend of increasing prevalence of mental health problems. In just four years, the share of those with a long-standing illness reporting mental health as their main problem rose from 15.3% to 20.0%.

There is evidence from the LFS and other sources that this is a continuation of a longer-running trend. Prior data from the LFS recorded a 4 percentage point (ppt) increase in the share reporting mental health as their main health problem between 1997–98 and 2012–13. The FRS (which records a slightly different measure of health problems) shows a strong increase in the frequency of mental health conditions between 2012–13 and 2016–17. Between 2000 and 2017, the share of claims for incapacity benefit, severe disablement allowance, and employment & support allowance that were on the grounds of mental or behavioural disorders increased from around a third to a half.<sup>30</sup>

Compared with the increase in mental health problems, other changes over the period are relatively small. The largest is a decline in the proportion of people reporting problems or disabilities associated with the back, neck and limbs, from 25½% to 23%.

<sup>&</sup>lt;sup>30</sup> Authors' calculations using data from Nomis (https://www.nomisweb.co.uk/). This point has been noted by Banks, Blundell and Emmerson (2015), who find that this trend holds true across all ages and for men and women.

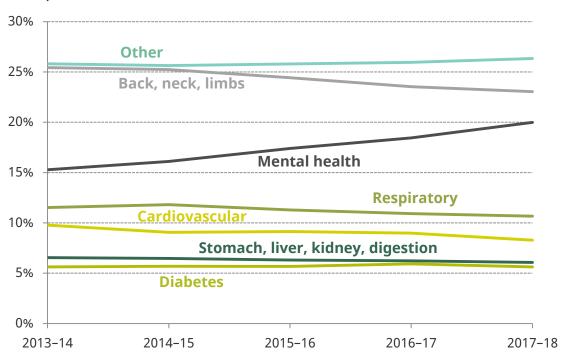


Figure 5.4. Main health problem among 25- to 54-year-olds with a long-standing illness, Great Britain

Note: 'Other' includes difficulties in seeing and hearing, speech impediments, skin conditions, epilepsy, learning difficulties and progressive illnesses.

Source: Authors' calculations using Labour Force Survey, 2013–14 to 2017–18.

Figure 5.5 shows the proportions of 25- to 54-year-olds who have a long-standing illness for different demographic groups. Given the recent rise in the fraction reporting mental health as their main long-standing health problem, the figure also splits those with a long-standing illness by whether they have a mental health or other illness.<sup>31</sup> It shows that poor health is correlated with certain family structures: single people and those without dependent children are more likely to have a long-standing illness. Single people are also about three times as likely as those in couples to have a mental illness. Those who stayed in education until at least the age of 18 are less likely to be unwell than those who did not, with a third of the latter group reporting a long-standing illness. Women are slightly more likely than men to have a long-standing illness and a long-standing mental illness. A particularly notable finding is that while younger people are less likely to have a long-standing illness, they are just as likely to have a mental health problem. Mental illness is therefore more prevalent among the young unwell population than among the older unwell population.

<sup>&</sup>lt;sup>31</sup> Table C.1 in Appendix C shows the proportion of those with and without a long-standing illness (split by mental health and other) that fall into each of the demographic groups shown in Figure 5.5.

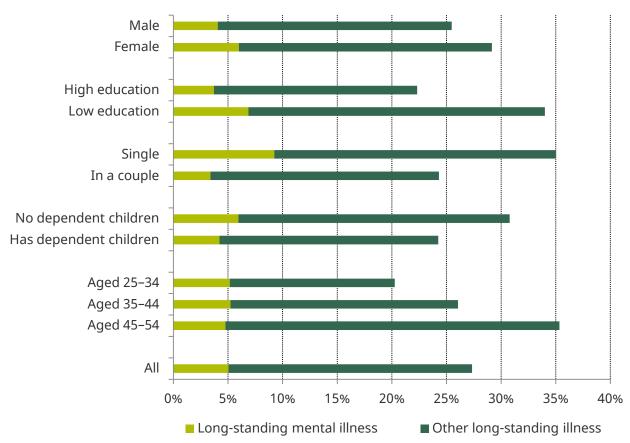


Figure 5.5. Percentage of 25- to 54-year-olds with a long-standing illness (mental health and other) by demographic group, 2016–17, Great Britain

Note: 'Low education' refers to those who finished full-time education below the age of 18; others are 'high education'. An individual with a long-standing illness is categorised according to what they identify as their 'main' illness.

Source: Authors' calculations using Labour Force Survey, 2016–17.

# 5.3 The labour market outcomes of those in poor health

Since employment prospects have a substantial impact upon individuals' living standards, this section investigates how the labour market outcomes of those with a long-standing illness differ from those without. Figure 5.6 shows the difference in the proportion of people in paid employment (the 'employment gap') between 25- to 54-year-olds with and without a long-standing illness – in the LFS and the FRS. Note that the government's official target relates to the employment gap between disabled and non-disabled individuals, whereas Figure 5.6 shows the employment gap between individuals with and without a long-standing illness.

As in the previous section, changes in the survey questions do somewhat limit analysis of long-term trends in this employment gap, but we can note several things from the figure. First, the difference in employment rate between those with and without a long-standing illness now stands at around 20ppts. Healthy prime-working-age individuals have an employment rate of around 87–88%, while those with a long-standing illness have one of 67–70% (depending on the exact data source). Second, this gap has fallen since 2013–14,

though the FRS indicates a larger fall than the LFS (4ppts and 2ppts respectively). Third, the gap appears to be lower than it was pre-recession.

The *disability* employment gap (which the government's official target relates to) stood at 32ppts (among all working-age individuals) in 2016–17 – somewhat larger than the gap seen in Figure 5.6. This is not particularly surprising since the disability measure only includes those who say their condition affects their day-to-day activities (see discussion in the introduction to the chapter), and so are particularly likely to be out of work. It is worth noting that, as shown by Emmerson, Joyce and Sturrock (2017), meeting the government's target of halving the disability employment gap would require about a third of the out-of-work disabled to move into work, assuming there is no change in the employment rate of those who are not disabled.

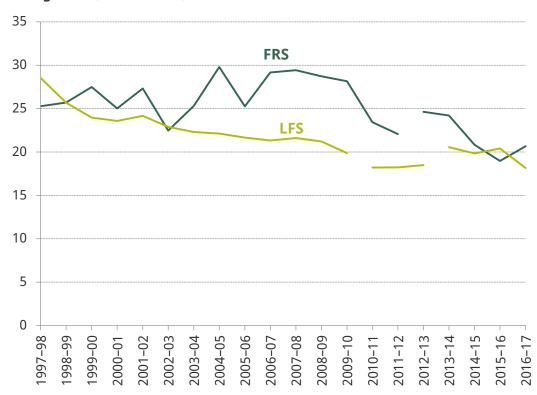


Figure 5.6. Employment gap between 25- to 54-year-olds with and without a longstanding illness, FRS and LFS, Great Britain

Note: Gaps in lines indicate structural breaks in the series due to changes in the surveys. Trends before and after breaks cannot be directly compared.

Source: Authors' calculations using Labour Force Survey and Family Resources Survey, 1997–98 to 2016–17.

This overall employment gap varies considerably for different groups. Figure 5.7 shows full- and part-time employment rates for different demographic groups for those with and without a long-standing illness (termed here for convenience 'unwell' and 'healthy') among the 25- to 54-year-old population. The figure shows that the employment gap is much larger among the low-educated. The gap for high-education individuals (those who finished full-time education aged 18 or over) is 10ppts, whereas for the low-educated (who finished before age 18) it is 24ppts. In fact, the employment rate of those with high

education and a long-standing illness is only 8ppts less than the rate for low-educated individuals without such an illness.

The figure also shows that, of those who are employed, people with a long-standing illness are more likely to work part-time than those without one. This indicates that poor health affects the *amount* of work individuals do, as well as whether or not they work at all.

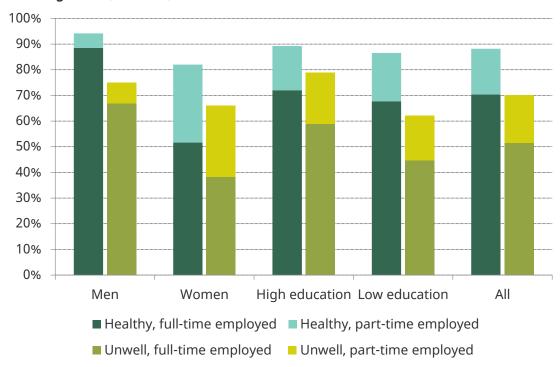


Figure 5.7. Employment status of 25- to 54-year-olds with and without a long-standing illness, 2016–17, Great Britain

Note: 'Low education' refers to those who finished full-time education below the age of 18; others are 'high education'.

Source: Authors' calculations using Labour Force Survey, 2016–17.

These differences in employment rates raise the question of how long those not in paid employment spend out of work. Figure 5.8 shows the proportion of those out of work for a short and long period among the same demographic groups, where an individual is classed as 'short-term' out of work if they have been employed in the last three years and as 'long-term' out of work if they have not been employed in the last three years.<sup>32</sup>

The figure shows that being out of work for a long period is more prevalent for those with a long-standing illness. Around 75% of those with a long-standing illness who are not in paid work have been out of work for at least three years, compared with about 60% for healthy individuals. That means that nearly a quarter of all individuals with a long-standing illness are 'long-term' out of work, whereas only 7% of healthy individuals are.

<sup>&</sup>lt;sup>32</sup> Clearly, being out of paid work for almost (but not quite) three years is not a short time to spend out of the labour force. However, given the large proportion of people with long-standing illnesses who are out of work for more than three years, this seems a pertinent definition in this context.

This pattern is particularly noticeable for men – in part because remaining out of work for a long time to look after family and home is relatively prevalent among women. Just 2% of healthy men are out of work long-term, whereas 18% of men with a long-standing illness are. There are also some differences by education: around 30% of the low-educated with a long-standing illness are long-term out of work – three times the figure for their healthy counterparts.

Figure 5.9 focuses on the composition of the long-term out of work. It shows that out of all men who have been out of work for at least three years, almost three-quarters have a long-standing illness and about a quarter have a mental health problem. Again we see differences by education: two in three of those with low education who are long-term out of work have a long-standing illness and one in five have a mental illness – in both cases, considerably higher than the proportions for those with high education (two in five and one in ten respectively).

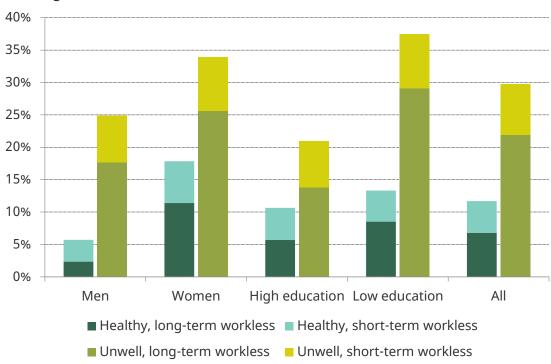


Figure 5.8. Out-of-work rates among 25- to 54-year-olds with and without a long-standing illness, 2016–17, Great Britain

Note: 'Low education' refers to those who finished full-time education below the age of 18; others are 'high education'. A person is defined as 'short-term workless' if they have been employed within the last three years and as 'long-term workless' if they have not been employed within the last three years.

Source: Authors' calculations using Labour Force Survey, 2016–17.

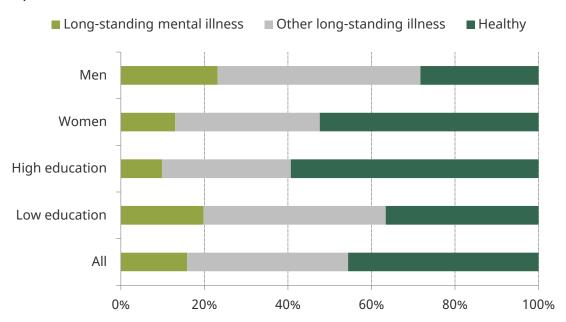


Figure 5.9. Composition of 25- to 54-year-olds who are long-term out of work, 2016–17, Great Britain

Note: 'Low education' refers to those who finished full-time education below the age of 18; others are 'high education'. A person is defined as 'long-term out of work' if they have not been employed within the last three years. An individual with a long-standing illness is categorised according to what they identify as their 'main' illness.

Source: Authors' calculations using Labour Force Survey, 2016–17.

Thus far we have mostly considered the employment status of unwell individuals as a group. However, it is likely that people with different illnesses will have very different rates of labour market attachment. Table 5.1 explores this by showing what proportion of unwell individuals have different problems as their main illness, together with their employment rate, median earnings and mean hours (the last two are conditional on being in paid work as an employee).

The table shows that the three most common illness categories (problems with back, neck and limbs; mental illness; 'other') are also the three with the lowest employment rates, earnings levels and hours. These groups account for much of the average difference in employment between ill and healthy individuals. Conversely, the other four categories (respiratory; cardiovascular; diabetes; stomach, liver, kidney, digestion) all show employment rates only about 5–10ppts below those of healthy individuals, median earnings only 1–4% below, and similar mean hours.

The most striking findings from the table are the statistics for those with mental health problems. They have an employment rate 17ppts below the average for those with a long-standing illness and 36ppts below that of healthy people.<sup>33</sup> Similarly, their median earnings are 13% and 23% below the average for unwell and healthy individuals respectively – a difference driven by both lower hourly wages and fewer hours worked. These differences

<sup>&</sup>lt;sup>33</sup> These results are consistent with findings from TUC research that adults with a disability due to mental illness have lower employment rates that other disabled people with physical health conditions (TUC, 2017).

in labour market outcomes are of particular importance given that, as seen in Figure 5.4, people with mental health problems are making up an increasingly large share of those with a long-standing illness. Were this trend to continue, and the labour market statistics of this group not improve, it would make it more difficult for the government to meet its disability employment gap target. That said, it should be noted that between 2013–14 and 2016–17 – a period over which mental health problems have become increasingly common – the employment rate for this group increased substantially, from 43% to 53% (and in 2017–18 it has risen further, to 57%). It is possible that there is a compositional effect at play here, with individuals with more minor mental health issues (which have less of an impact on their labour market prospects) increasingly reporting their problem as a long-standing illness. This would tend to push up the number of people recorded as having mental health problems while also improving the employment rate statistics among this group.<sup>34</sup>

The low employment rate seen among those with a mental health problem also helps explain why, as noted in Section 5.2, mental and behavioural disorders make up half of the incapacity benefits caseload, even though they only account for around 20% of the ill population: since those with mental health conditions are particularly likely to be out of work, they are also particularly likely to be eligible for incapacity benefits. That employment rates among those with mental health problems appear to be increasing also suggests that the rising share of mental health and behavioural disorders among the incapacity benefits caseload is accounted for by a general increasing prevalence of mental health problems, rather than by a falling employment rate for people with them.

Table 5.1. Employment rate, earnings and hours of 25- to 54-year-olds by main health problem, 2016–17, Great Britain

Main health problem	Share of unwell population	Employ- ment rate	Median earnings of employees (£ per week)	Mean weekly hours of employees
Respiratory	11%	83%	475	38
Cardiovascular	9%	81%	462	39
Diabetes	6%	80%	462	39
Stomach, liver, kidney,				
digestion	6%	78%	467	37
Back, neck, limbs	24%	71%	423	37
Other	26%	67%	413	36
Mental health	18%	53%	369	34
All with long-standing				
illness	100%	70%	423	37
All without long- standing illness		88%	479	39

<sup>&</sup>lt;sup>34</sup> Given that those with mental health problems are more likely to be in certain demographic groups (e.g. female and low education – see Table C.1 in Appendix C), and since employment rates vary across demographic groups, one might wonder whether the low level of employment among those with mental health problems is merely a result of their different demographics. However, if we control for sex, age, education, presence of children and presence of a partner, the employment gap between those with mental health conditions and those with other conditions remains, with a magnitude about three-quarters of that seen in Table 5.1.

Note to Table 5.1: 'Other' includes difficulties in seeing and hearing, speech impediments, skin conditions, epilepsy, learning difficulties and progressive illnesses. The sample sizes for median earnings are not particularly large for some of the smaller groups, and so the numbers presented should be treated as indicative.

Source: Authors' calculations using Labour Force Survey, 2016–17.

In summary, compared with the healthy population, those with a long-standing illness are generally older, less educated, more likely to be single and without dependent children, and less likely to be in work. Those who are in work are more likely to be working part-time, while those who are out of work are likely to have been out of work for at least three years. The employment rate and earnings of the ill population vary considerably according to what illness is involved, with those reporting a mental illness particularly likely to be out of work, or to have low earnings if they are in work. This may be especially concerning given the increased prevalence of mental health problems seen in recent years.

## 5.4 Living standards of those with long-standing illnesses

Given that the employment rate of people with long-standing illnesses is substantially below that of the healthy population, an important question is how their living standards compare and how they have changed over time. Importantly, as discussed in the introduction to the chapter, health problems often bring with them higher living costs, which would lead living standards to be even worse than expected given incomes.

The Department for Work & Pensions presents measures of income poverty among the disabled that exclude disability benefits from income, on the basis that these are simply there to compensate for higher costs. This has advantages and may well yield a better comparison between the living standards of the disabled and non-disabled. On the other hand, if disability benefit receipts do not perfectly track the costs of disability, the comparison will be imperfect. The measures may be particularly limited for following trends over time as they will, by construction, ignore the impact of changes to disability benefits. As trends are a key focus of this chapter, we therefore examine a range of alternative measures of living standards in this analysis.

Figure 5.10 shows, for those aged 25–54, the relative poverty rates (defined as having a household income below 60% of the median) measured before and after deducting housing costs ('BHC' and 'AHC' respectively) for those with and without a long-standing illness. Trends using an absolute poverty line (not shown) are very similar after 2003–04.

Poverty rates are consistently about 5–10ppts (8–14ppts) higher among those with a long-standing illness than among those without when measured on a BHC (AHC) basis, with little clear trend over time. The only period that shows a clear change is the years immediately following the recession (2007–08 to 2011–12), when the gap narrowed by about 4ppts. This is because the recession had a substantial impact on employee incomes, and since the healthy population are more likely to be in work, they were more likely to be affected.

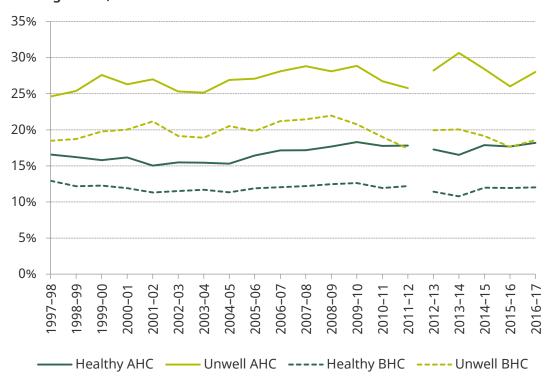


Figure 5.10. Relative poverty rates for 25- to 54-year-olds with and without a long-standing illness, Great Britain

Note: 'AHC' and 'BHC' refer to incomes measured after and before housing costs respectively. Gaps in lines indicate structural breaks in the series due to changes in the surveys. Trends before and after breaks cannot be directly compared.

Source: Authors' calculations using Family Resources Survey, 1997–98 to 2016–17.

Given that those with a long-standing illness have a lower employment rate and average earnings level, it is not surprising that their poverty rate is higher. However, these poverty rates are based upon measuring household incomes at a single point in time (a 'snapshot'), and there are two key reasons why such poverty rates are particularly unlikely to accurately capture the material living standards of those in ill health. First, these people may have expenses associated with mitigating the effects of their illness. This means that they need a greater income in order to achieve the same standard of living as those who do not have such costs. Second, their low incomes may be considerably more persistent. We saw in the previous section how those in ill health are more likely to be out of work for at least three years. People on low income for just a short period may be able to draw on savings or borrow in order to maintain their standard of living. But this option may not be available to those who find themselves with low income for many years.

As well as the 'snapshot' poverty rates seen above, Figure 5.11 presents two alternative measures of low living standards for those with and without a long-standing illness: persistent income poverty and material deprivation. Persistent poverty is measured using the Understanding Society data, which allow us to see the same individuals at different points in time. A person is deemed in persistent poverty if they are in snapshot poverty in at least three out of the four years between 2012–13 and 2015–16.35 Material deprivation is

<sup>&</sup>lt;sup>35</sup> For more on persistent poverty in the UK, see Cribb et al. (2017).

discussed further in Chapter 4 but, broadly, material deprivation scores are based upon asking families what goods and services they feel they are able to afford (e.g. whether they can afford to keep their home in a decent state of decoration, or whether they can save £10 a month). Inability to afford items contributes to higher scores. For the purposes of this chapter, we define a family as materially deprived if its material deprivation score is in the highest 20% of those for 25- to 54-year-olds based on the nine 'adult' material deprivation questions contained in the FRS data.  $^{36}$ 

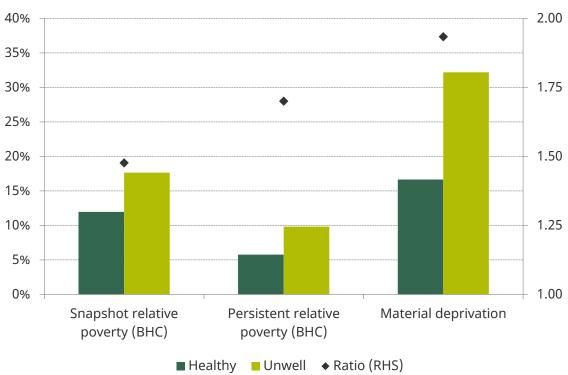


Figure 5.11. Poverty and material deprivation rates for 25- to 54-year-olds with and without a long-standing illness, 2015–16, Great Britain

Note: The snapshot relative poverty and material deprivation rates are from the Family Resources Survey, 2015–16. The persistent relative poverty rate is from Understanding Society, 2012–13 to 2015–16. For this figure, a family is defined as in material deprivation if its material deprivation score is in the highest 20% of the sample. This does not correspond to the official material deprivation statistics.

Source: Authors' calculations using Family Resources Survey, 2015–16 and Understanding Society, 2012–13 to 2015–16.

The figure shows that these alternative measures of low living standards indicate a greater difference between those with and without a long-standing illness than the snapshot poverty measure. Those with a long-standing illness have a snapshot poverty rate of 18%, compared with a 12% rate for healthy individuals – a ratio of 1.5. For persistent poverty, this ratio rises to 1.7, with 10% of those with a long-standing illness being in persistent poverty compared with 6% of those without. On the material

<sup>&</sup>lt;sup>36</sup> There is no official material deprivation measure for non-pensioner adults without children. For this exercise, we use the responses to the material deprivation questions to construct a material deprivation score for adults aged 25–54. The 'weights' placed on each question are derived using the responses given by families where the adults in the family are all under the age of 60.

deprivation measure, the ratio rises again, to 1.9, with 32% of those with a long-standing illness being materially deprived, compared with 17% of the healthy 25- to 54-year-old population.

This confirms that, unsurprisingly, snapshot income poverty underestimates the low living standards of those in poor health. The higher rate of persistent poverty among those with a long-standing illness than among those without may explain part of the difference between these two – those who are persistently on a low income may, as suggested previously, find it harder to borrow or use savings to avoid material deprivation than those who are just temporarily on a low income. Material deprivation should, in addition, pick up the impacts of the higher living costs of those in ill health.

Figure 5.12 further illuminates the link between snapshot incomes, ill health and material deprivation. It shows the proportion of people in each quintile of the snapshot income distribution who are in material deprivation, split by whether or not they have a long-standing illness (within an income quintile, healthy and unwell individuals have, on average, about the same level of income). Not surprisingly, those in higher income quintiles are less likely to be materially deprived. But the figure also shows that, within each income quintile, those who are in ill health are considerably more likely to be materially deprived than those who are healthy. In fact, ill individuals in the second quintile are actually slightly more likely to be in material deprivation than healthy individuals in the poorest quintile, despite having on average an income that is 70% higher. Again, both the higher persistence of low income among individuals with a long-standing illness and their higher costs are likely to be at work here.<sup>37</sup>

<sup>&</sup>lt;sup>37</sup> Belfield et al. (2015) showed that certain characteristics – such as being a renter – are associated with a higher degree of material deprivation even among those who are in poverty. Those with a long-standing illness are more likely to be in these groups, which likely explains some of the higher rate of material deprivation seen in Figure 5.12. However, even within demographic groups, those in poverty with a long-standing illness are considerably more likely to be materially deprived than those without an illness, suggesting that illness itself increases material deprivation.

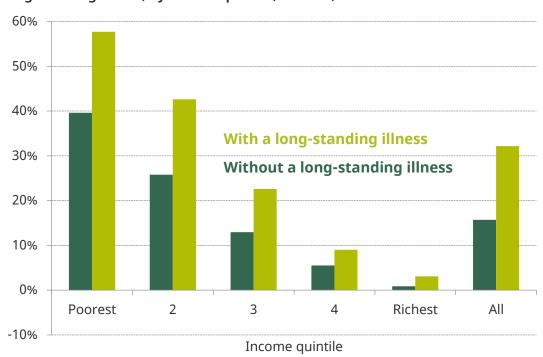


Figure 5.12. Material deprivation rates for 25- to 54-year-olds with and without a long-standing illness, by income quintile, 2016–17, Great Britain

Note: For this figure, a family is defined as in material deprivation if its material deprivation score is in the highest 20% of the sample. This does not correspond to the official material deprivation statistics.

Source: Authors' calculations using Family Resources Survey, 2016–17.

We saw in the previous section that labour market outcomes vary by type of illness. We now examine whether these differences feed through to living standards. Table 5.1 showed that people with mental health problems are considerably less likely to be in employment than others with a long-standing illness and that those who are in work are likely to be paid less. Figure 5.13 analyses whether these labour market outcomes translate into lower living standards. For this we use the FRS, which asks respondents to list all the health problems they have, rather than identifying a 'main' problem (as the LFS does). As a result, the figure groups individuals according to whether they report just one illness, or two or more, and whether or not they list mental health as one of those illnesses. Table C.2 in Appendix C shows the proportions of the unwell population that fall into each category.

The figure shows that those with at least two illnesses (who make up about a third of the unwell 24- to 54-year-old population) tend to have considerably worse employment rates and living standards than those with just one. More than half of those with two or more illnesses are out of work, compared with about a quarter of individuals with one illness. Those with at least two illnesses are also about 60% more likely to be in poverty than those with only one illness, and almost twice as likely to be materially deprived.

Second, the low employment rate of those with mental health problems does seem to feed through to lower living standards. Overall, people with mental health problems have relative poverty and material deprivation rates of 40% and 50% respectively. The figure specifically shows the poverty and deprivation rates for those who *only* have a mental health problem, and also the rates for those with at least one illness in addition to a mental health problem. Among those who only have one illness, the relative poverty and material deprivation rates are roughly two-thirds higher for those with mental health problems than for those with another illness. Among those with at least two illnesses, those who list mental health as one of them have poverty and material deprivation rates about a third higher than those who do not list mental health. This means that individuals with mental health problems and at least one other problem (16% of the unwell population) have a relative poverty rate of 43% and a material deprivation rate of 56% – considerably above the averages for the unwell population as a whole (28% and 33% respectively), and even further above the averages for the healthy population (18% and 16% respectively).

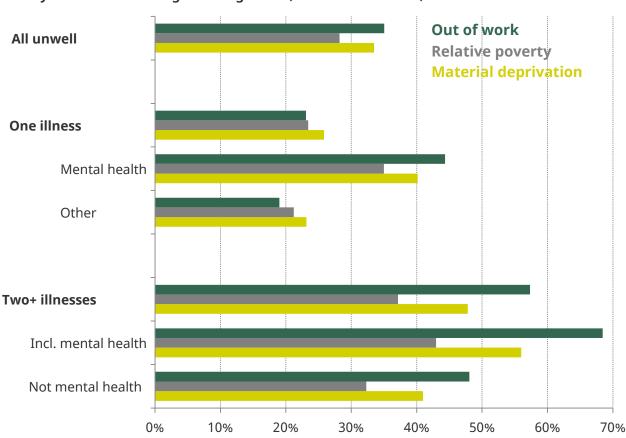


Figure 5.13. Material deprivation, relative AHC poverty and out-of-work rates for 25-to 54-year-olds with a long-standing illness, 2012–13 to 2016–17, Great Britain

Note: For this figure, a family is defined as in material deprivation if its material deprivation score is in the highest 20% of the sample. This does not correspond to the official material deprivation statistics. 'AHC' refers to incomes measured after housing costs.

Source: Authors' calculations using Family Resources Survey, 2012–13 to 2016–17.

#### 5.5 Conclusion

There is some indication that certain kinds of poor health are on the rise in the prime-working-age population, and certainly spending on health-related benefits is likely to increase over the next few years – a period when other working-age benefit expenditure is expected to fall. At the same time, the government has set a target to cut the 'disability employment gap' by half: a very ambitious target, which would require roughly one in three disabled people who are out of work to move into employment.

The employment gap between 25- to 54-year-olds with and without a long-standing illness currently stands at around 20 percentage points. Much of the employment gap is down to the lower employment rates seen among those reporting mental health and back, neck and limb problems. The overall gap has shown some signs of reducing in recent years. However, prospects for future falls may be hampered by the increasing share of the ill population with mental health problems, since their employment rate (and average earnings) is well below that of the healthy population. Those with mental health problems are disproportionately likely to be female, single and less educated, and are on average younger than people with other illness. Individuals with a long-standing illness are also more likely to be out of work for a long period, with about a quarter of them workless for at least three years. People with mental health problems make up about one in six of the long-term out-of-work prime-working-age population, a share that rises to one in four for men.

This chapter has provided evidence that 25- to 54-year-olds with long-standing illnesses have significantly lower material living standards than those in better health. Income poverty rates, measured using incomes at a particular point in time, are about 50% higher among the ill population than among the healthy. Those with a long-standing illness are about 70% more likely to be in persistent poverty and this – together with higher living costs – contributes to them being almost twice as likely to be in material deprivation. Even among people with similar current incomes, those in ill health are much more likely to be materially deprived.

The living standards of those with long-standing mental health conditions are particularly poor. This is especially true for those with another condition in addition to mental health problems, who have a material deprivation rate about three-and-a-half times as high as the healthy population. If the recent trend of greater frequency of mental health conditions continues, then worse outcomes seen among this group are particularly concerning.