We are three academic researchers who represent different disciplines (Economics; Social Policy; Human Resource Management) but who have a longstanding shared interest in the measurement of disability and work. Our contribution is motivated by our concerns relating to the reliability of the indicator currently used to measure and monitor the disability employment gap and offers proposals to ensure the disability employment gap will be more accurately measured in future.

Executive Summary

1. The main definition of ‘disability’ used by Government is fragile:
   - The narrowing of the disability employment gap over the 2000s seen in the Labour Force Survey (LFS) is not evident when using other major government surveys, and seems to be an artefact of rising disability
   - For similar reasons, it is possible that the disability employment gap may increase even after successful policies have been implemented

We recommend that the monitoring of the disability employment gap includes a ‘basket’ of indicators, which not only includes information on the prevalence of disability and comparisons across a range of surveys, but also includes functional limitations-based measures that are likely to be more robust.

2. For the main (LFS) measure of disability, regular question changes have made it difficult to track trends in the disability employment rate over time. We also understand that the LFS disability measure may be changed again in the near future. This would make tracking the Government’s aspiration almost impossible. We recommend that further discontinuities are avoided or carefully managed using dual definitions in change over years.

3. Current debates are increasingly talking about the absolute number of disabled people that the Government need to get into employment to meet its aspiration. However, such a measure is potentially misleading since it is affected by changes in the size and composition of the working-age population. We recommend using a relative measure such as the disability employment gap over a target based on absolute numbers in employment. We also recommend that ‘adjusted’ disability employment gaps are included in the basket of indicators.

4. Disabled people also experience disadvantage in wellbeing at work, wages and quality of work. These can be measured as disability gaps. We recommend that the basket of indicators around disability and employment cover measures of the experience and quality of work to provide a more comprehensive picture of differences in the labour market experience between disabled and non-disabled employees.

Context
There is a gap in employment rates between disabled and non-disabled people of working-age which is large and enduring across developed countries. In the UK, it is between 30 and 45 percentage points depending on the measures used. Government has pledged ‘to halve the disability employment gap [and] transform policy, practice and public attitudes so that hundreds of thousands more disabled people who can and want to be in work find employment’ (Conservative Party Manifesto 2015). The Work and Pensions Select Committee Inquiry Terms of Reference (March 2016) estimates that this requires the movement of 1.2 million disabled people into work, effectively raising the disability employment rate from 46.7% to 63.5%.

Employment rates by disability status are typically estimated from the Labour Force Survey (LFS), a nationally representative household survey undertaken by Government. The trend in the disability employment gap (1998-2011) for working-age individuals has been downwards (see Jones and Wass, 2013). Although the gap remains high on this measure, the trend towards convergence has allowed Britain to stand out among its OECD neighbours as being particularly successful in integrating disabled people into the workplace.

However, as researchers who have studied the disability employment gap, we have serious concerns with the LFS measure of the disability employment gap, and its abilities to hold Government to account over its commitment on disability and employment.

1. A fragile measure of disability

The main definition of ‘disability’ used is fragile, and may show that the disability employment gap increases even after successful policies have been implemented.

The fragility of this measure can be seen when we compare the trends in the main survey used for monitoring the disability employment gap (the LFS) with two other major government surveys (the General Household Survey (GHS) and the Health Survey for England (HSE)). Put simply, the declining disability employment gap is not found in these other surveys, as shown clearly in Figure 1 (which is taken from Baumberg et al., 2015).

*Figure 1 Disability Employment Gaps in LFS, GHS and HSE 1998-2012*

*Source: Baumberg et al. (2015) Figure 2.*
One possibility is that these differences are due to methodological aspects of these surveys.1 However, even restricting the analysis to only those parts of the surveys that are strictly comparable, the same puzzling differences remain (see Baumberg et al. 2015).

One potentially important difference is that the proportion of working-age people reporting disability has been rising steadily in the LFS, but not the other two surveys.2 There is a strong association between the level of disability reporting and the disability employment rate3 – the people who move across the borderline between reporting and not reporting a disability are likely to be less severely disabled than people who will definitely report a disability. It seems that part of the narrowing of the disability employment gap in the LFS is an artefact of the increase in reported disability.

For similar reasons, it is possible that a successful disability employment strategy will appear to increase the disability employment gap.

With such a fragile measure of disability, the disability employment gap will be very sensitive to the responses of people who are on the borderline of reporting a disability. If the Government are successful in making workplaces more disability-friendly (and reducing the number of disability benefit claims), then these people may tell survey interviewers that they are not disabled. Because these people face less severe barriers than people who will say they are disabled throughout, the disability employment rate may rise – even though the Government’s policies have been successful.

We therefore recommend that the monitoring of the disability employment gap includes a ‘basket’ of indicators, which not only includes information on the prevalence of disability and comparisons across a range of surveys, but also includes functional limitations-based measures that are likely to be more robust.

For various reasons – e.g. harmonisation with wider labour market monitoring, large sample sizes to enable local area analyses – it seems likely that the LFS will always be the main measure of labour market performance. However, we strongly recommend that this is compared to trends in other existing household surveys and is complemented by further measures that are less subject to the problems we have identified above.

The best way of doing this would be to explicitly measure disability using multiple definitions4, including using measures based on functional limitations which are less vague and subjective than terms like ‘longstanding illness’ or ‘day-to-day activities’. This would fit best practice internationally, much as it is impossible to eliminate subjectivity entirely. For example, the UK could use the short set of (six) questions on disability recommended by the Washington Group on Disability Statistics for national censuses,5 possibly by adapting related questions in major

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1 These are discussed in Baumberg et al. (2015) and include differences in definitions of disability, in methods used to interview people (e.g. telephone or face-to-face) and in areas of the country included in the survey.
2 The prevalence of limiting longstanding illness rose from 14.0% to 16.4% in the LFS 1998-2009, but fell in both the GHS (18.1 to 16.8%) and HSE (20.4 to 18.2%). The same trends are even more pronounced for longstanding illness (whether limiting or not), for which the LFS shows a rise of seven percentage points (25.3 to 32.3%), contrasting with falls in both GHS and HSE.
3 The year-to-year correlation between changes in the prevalence rate and the employment gap are very strong for LFS (-0.73), but effectively non-existent for the GHS and HSE.
4 Disability definitions and the questions for identifying disability differ across Government surveys (Bajekal et al., 2004). This creates differences in estimates of disability prevalence rates and disability employment gaps.
Government surveys. It would also be desirable to look at medium-term trends in the disability employment gap using the more robust measures, by repeating a functional limitations module in the Health Survey for England that was last asked in 2001.

### 2. Changing questions and series discontinuities

**For the main (LFS) measure of disability, regular question changes have made it very difficult to track trends in the disability employment rate.**

Changes in the questions used to identify disability in the LFS have been made without a means of measuring the impact of these changes, and therefore being able to adjust for them. This precludes using the LFS as an effective means of evaluating changes in legislation, policy or practice across time. For example, a change in the disability questions introduced in 1997 precluded evaluation of the impact of the Disability Discrimination Act (DDA) which was enacted in 1996.

More recently, a change in 2013 has similarly precluded ability to evaluate the impact of the Equality Act, any of the work programmes which started prior to 2013 or long-term development in equality practices in the workplace. For example, the disability employment gap series used by the Office for Disability Issues (from 1998 to Q2 2012) and the Terms of Reference of this Inquiry report (from Q2 2013 to Q4 2015) are not directly comparable. The main change in wording was to the question within the disability module which seeks to capture those whose disability falls within the statute.

**LFS Q2 1997-Q1 2013:** *Do these health problems or disabilities, when taken singly or together, substantially limit your ability to carry out normal day to day activities? If you are receiving medication or treatment, please consider what the situation would be without the medication or treatment. Yes;No*

**LFS Q2 2013 to date:** *Does your condition or illness reduce your ability to carry out day-to-day activities? Yes, a little; Yes, a lot; and Not at all.*

Since both measures have not been collected simultaneously it has been difficult to assess the impact of the change and therefore effectively manage it. Question rewording in 2013 has been found to reduce disability reporting among those who are employed and has created an upward step change in the disability employment gap (see Hankin 2016) and a discontinuity in the indicator.

The main justification for the question change was in response to perceived data deficiencies in relation to the new equality legislation (see White 2011). However, without reference in the question to ‘substantial’ or to ‘normal’ or to the effects of medication (which remain excluded within the Act), it is difficult to see how the new question is a better match to the new legislation (see Wass 2015b). Moreover, attempts to match survey questions to the statutory definition of disability are problematic because statutory definitions are continually re-interpreted by the courts. For example a case reported in 2013 led to a change in the interpretation of the Equality Act definition of disability that has

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5 These questions are ‘Do you have difficulty seeing, even if wearing glasses?’, ‘Do you have difficulty hearing, even if using a hearing aid?’, ‘Do you have difficulty walking or climbing steps?’, ‘Do you have difficulty remembering or concentrating?’, ‘Do you have difficulty (with self-care such as) washing all over or dressing?’, and ‘Using your usual (customary) language, do you have difficulty communicating, for example understanding or being understood?’ – see [http://www.cdc.gov/nchs/washington_group/wg_questions.htm](http://www.cdc.gov/nchs/washington_group/wg_questions.htm).

6 Two major surveys (the Family Resources Survey and Understanding Society) already ask people about functional impairments in some form. These questions would perhaps be more reliable if the initial screening question is removed.
caused confusion in more recent judgements that attempt to relate this new interpretation to statistics generated from the LFS.\textsuperscript{7}

**We understand that the LFS disability measure may be changed again in the near future. This would make tracking the Government’s aspiration almost impossible. We recommend that further discontinuities are avoided or carefully managed using dual definitions in change over years.**

### 3. Numbers vs. rates

While the original disability employment aspiration in the Conservative Manifesto was phrased in terms of the disability employment *gap* (in percentage points), more recent discussion has often been around the *absolute number* of disabled people that need to be brought into employment. **However, this measure is potentially misleading as the size and age composition of the working-age population are constantly changing.**

To illustrate this, we have combined the official National Population Projections\textsuperscript{8} with age- and gender-specific disability and disability employment rates from the Labour Force Survey.\textsuperscript{9} This suggests that from 2015-2025, *without* any policy effects:

- The number of working-age disabled people is projected to rise by 327,000 people (partly because of a rise in the total working-age population and partly because the working-age population is ageing);
- The number of working-age disabled people who are employed is projected to rise by 93,000.

**As a result, a relative measure such as the disability employment gap is preferable to a target based on absolute numbers in employment.** However, even this can be misleading where the working-age population is ageing. Using the projections above, the disability employment gap is projected to rise by 0.4 percentage points (from 32.6 to 33.0 percentage points) 2015-2025.

The same issue can be seen when looking at the evolution of the disability employment gap over the 2000s. Jones and Wass (2013) calculate adjusted ‘disability penalties’ that take into account changing personal characteristics of the working-age population, shown in Figure 2 below.\textsuperscript{10} In the Figure, the original (unadjusted) gaps are filled markers, while the adjusted penalties are hollow markers. A narrowing gap is evident for both men and women – but the unadjusted declines are greater than the adjusted declines.

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\textsuperscript{7} In the case of *Aderemi v London and South Easter Railway Ltd* [2013] ICR 591, Langstaff J provided the following interpretation to the definition of disability in the Equality Act 2010: ‘unless a matter can be classified as within the heading “trivial” or “insubstantial”, it must be treated as substantial’ (para 14). This represents a change of definition when compared with the Guidance Notes set out in Sections D15 to D27 of the DDA (1995) and which had until Q2 2013 provided guidance to respondents and interviewers in the LFS. In other words, re-interpretation of the statutory definition of disability in *Aderemi* lowers the disability classification threshold compared to that in the DDA Guidance Notes. For further details, see Wass 2015a and 2015b.

\textsuperscript{8} Principal projections, 2014-based, from [https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections](https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections)

\textsuperscript{9} From the April-June 2015 wave, using the Equalities Act definition of disability.

\textsuperscript{10} Disability is defined here as long-standing ill health or disability which substantially and adversely affects activities of day-to-day living and the amount or the type of work that might be undertaken. It is this more restricted definition that gives rise to the larger employment gap relative to Figure 1.
We therefore recommend that adjusted disability employment gaps are also included in the basket of indicators referred to above.

Figure 2. Adjusted and Unadjusted Disability Employment Gaps

4. The quality of work

The focus of disability-related inequality within government has been on the disability employment gap. The experience of work among disabled individuals and the quality of employment have received far less attention, even though they are important dimensions of inequality and determinants of the willingness to seek and remain in work. Academic evidence has highlighted a disability gap in hourly earnings, which exists even after accounting for other personal characteristics (Jones et al. 2006). There are also significant disability gaps in reported wellbeing at work as measured by anxiety-contentment, job satisfaction and perceptions of fairness of managers (Jones 2016, Bacon et al. 2016).

Given the availability of measures of the nature of employment in large and representative surveys, we recommend that the basket of indicators around disability and employment cover the experience and quality of work to provide a more comprehensive picture of differences in the labour market experience between disabled and non-disabled employees.

May 2016
References:


