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The impact of Pathways to Work on work, earnings and self-reported health in the April 2006 expansion areas

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Abbreviations and acronyms

CMP	Condition Management Programme
DiD	Difference-in-differences
DWP	Department for Work and Pensions
ESA	Employment and Support Allowance
HMRC	HM Revenue & Customs
IB	Incapacity Benefit
IS	Income Support
JSA	Jobseeker's Allowance
NBD	National Benefits Database
PCA	Personal Capability Assessment
WERS	Workplace Employment Relations Survey
WFI	Work Focused Interview

Summary

Introduction

Pathways to Work (or 'Pathways') aims to support incapacity benefits customers in seeking work. It was piloted in three Jobcentre Plus districts in October 2003, with a further four pilot districts implementing the scheme from April 2004. Initially only those starting a new or repeat claim for incapacity benefits after these dates were obliged to participate in the programme. All new and repeat customers, other than those assessed as likely to find work within 12 months unassisted, or with severe health problems, were required to attend a series of Work Focused Interviews (WFIs) with Incapacity Benefits Personal Advisers. They were also offered a range of financial and non-financial support.

Having piloted Pathways in seven Jobcentre Plus districts, it was decided to extend it nationwide in stages. The first three expansions took place in October 2005 (four districts), April 2006 (six districts) and October 2006 (three districts). Following these expansions, Provider-led Pathways was rolled out to cover the remaining 60 per cent of the country. By April 2008, when this roll-out was complete, all new and repeat incapacity benefits customers were required to participate in the mandatory elements of Pathways. Employment and Support Allowance (ESA) was introduced as a replacement for incapacity benefits in October 2008, and so from this point onwards Pathways has been compulsory for new and repeat ESA customers.

Pathways is being evaluated by a number of research organisations, including the Institute for Fiscal Studies, Mathematica Policy Research, the National Centre for Social Research, the National Institute of Economic and Social Research, the Policy Studies Institute, the Social Policy Research Unit and David Greenberg of the University of Maryland. This report assesses the impact of Pathways on work, earnings and self-reported health outcomes in the April 2006 expansion areas. The analysis is based on surveys of incapacity benefits customers.

Study objectives

Although the impact of Pathways in the original pilot areas was evaluated previously (Bewley *et al.*, 2007), by studying its effect in the expansion areas it is possible to determine whether the picture that emerged initially is replicated elsewhere. A study of the potential generalisability of the findings from the pilot areas concluded that they were likely to be typical of the nationwide effect, although London may be somewhat distinct (Adam *et al.*, 2008). An analysis of administrative data on benefit receipt in the first two sets of expansion areas (Bewley *et al.*, 2008) indicated that Pathways did have a very similar impact on benefit receipt to that found in the pilot areas. However, this report uses survey data to look at work, earnings and self-reported health outcomes from Pathways, thus providing evidence on the consistency of its impact on a range of measures in different areas.

Methods

As with the evaluation of the impact of Pathways in the pilot areas, this study uses a difference-in-differences (DiD) approach. Outcomes for individuals starting a claim for incapacity benefits before and after the introduction of Pathways in the April 2006 expansion areas are compared with those for individuals starting a claim at the same points in time in a set of comparison areas. This method provides an estimate of what the levels of particular work, earnings and self-reported health measures would have been in the April 2006 expansion areas had Pathways not been introduced. Comparing this to the actual levels of these measures gives an estimate of the impact of Pathways.

The evaluation of the impact of Pathways in the pilot areas assessed outcomes over a period of around a year and a half following the enquiry about claiming incapacity benefits. Within the April 2006 expansion areas the survey interview took place about 16 months after the start of the claim for incapacity benefits.

Results

The average impact of Pathways

This study did not find a statistically significant impact from Pathways on any of the work, earnings and self-reported health outcomes considered in the April 2006 expansion areas. By contrast, within the pilot areas, the analysis of survey data showed that Pathways increased the proportion of customers who were in paid work around 19 months after they made an enquiry about claiming incapacity benefits. It also reduced the likelihood that they reported having a health problem that affected their day-to-day activities a great deal. This report considers the possible explanations for the failure to detect statistically significant effects in the April 2006 expansion areas.

Subgroup analyses

An analysis of the impact of Pathways on particular groups of incapacity benefits customers found no evidence that employment impacts varied between subgroups in the April 2006 expansion areas. However, it was more effective for women than men in reducing the incidence of self-reported health problems which affected everyday activities. Pathways also reduced the incidence of self-reported health problems amongst those aged 50 or more 16 months after the start of the qualifying claim at a greater level compared to those under the age of 50. There was no evidence that the impact of Pathways on work or self-reported health differed between customers with mental health conditions and those with physical problems, or between those with dependent children and those without, in the April 2006 expansion areas.

Although Pathways was more effective for some groups of customers than others, it did not have a statistically significant impact on any of the individual subgroups in the April 2006 areas. By contrast, within the pilot areas, it was possible to observe a statistically significant impact from Pathways on some subgroups.

Possible explanations for the variation in the impact of Pathways between areas

The results for the April 2006 expansion areas are noticeably different from those for the pilot areas, but there are differences in approach across the two studies that should be taken into account when comparing the findings: Firstly, the sample used in the pilot areas included individuals enquiring about incapacity benefits rather than only those who actually made a claim, as was the case in the April 2006 expansion areas. This meant that the pilot areas results captured any impact that Pathways had in deterring potential customers from pursuing a claim for incapacity benefits, as well as the impact on helping them off benefit and into work. This was not the case in the April 2006 expansion areas, so any apparent impact from Pathways could be expected to be smaller. DWP are undertaking further analysis to seek to establish whether Pathways did in fact have a deterrent effect.

Secondly, any analysis that is based on drawing samples at random from a population can only give an estimate of the true impact of a programme. Therefore, it is unsurprising that there was some variation in the observed impact of Pathways between the pilot and April 2006 expansion areas. Differences between the areas in the observed and unobserved characteristics of survey respondents may have meant that Pathways had a greater chance of being effective in some locations, e.g. if customers faced fewer barriers to work, or had a greater propensity to participate in the voluntary elements.

Finally, there may have been differences between the pilot and April 2006 expansion areas in the resources devoted to implementing Pathways which explain the differences in its effectiveness. Further research could give an indication of the relative contribution of each of these factors to the apparent variation in the impact of Pathways between the pilot and April 2006 expansion areas.

1 Introduction

1.1 Policy background

Between 1979 and 2002, the number of people claiming sickness and incapacity benefits in Britain rose by around 2 million, from 690,000 to 2.7 million. By 2002, total expenditure on incapacity benefits stood at approximately £16 billion a year. This compared with an estimated annual expenditure of £8 billion for lone parents and £4 billion for the unemployed (DWP, 2002).

Pathways to Work (or 'Pathways') was introduced as part of a wider package of measures designed to increase the employment rate. Pathways aims to raise progress into work by those claiming incapacity benefits. Over time, the number of people claiming incapacity benefits rose, largely because of the low off-flow rate by longer-term customers. Around three-fifths of customers leave incapacity benefits within a year of starting their claim. However, after a year, only one-in-five customers can expect to return to work within the next five years (DWP, 2002). Pathways aims to reduce long-term benefit dependency by giving customers support in the early stages of their claim.

1.2 The Pathways programme

Pathways consists of compulsory and voluntary elements. All new and repeat incapacity benefits customers are required to attend a WFI. They are then obliged to participate in further mandatory elements unless they have one of a specified list of very severe health conditions, or are assessed as likely to return to work unaided within 12 months. Customers from these exempt groups can nevertheless choose to participate in Pathways if they wish.

Most individuals starting a claim for incapacity benefits have to undergo a Personal Capability Assessment (PCA). This is an assessment of the customer's health problem, made by health care professionals. Only those with particular types of very severe health conditions (about 20-25 per cent of all customers) are exempt from completing the full PCA (DWP 2002). One of the aims of Pathways was to reduce the length of time that elapsed before the PCA from about six months to three.

Pathways also required incapacity benefits customers to attend a series of WFIs, administered by an Incapacity Benefits Personal Adviser. New and repeat incapacity benefits customers were required to attend six WFIs at approximately monthly intervals, with deferrals and waivers as deemed appropriate by the Personal Adviser. These might be used where the Personal Adviser felt that an interview would not be of assistance to the individual, or appropriate in the circumstances.

The first WFI was compulsory for all incapacity benefits customers and took place about eight weeks after the start of the claim in order to avoid interviewing customers who entered work quickly and so did not need the assistance provided by Pathways. In addition, delaying the first WFI allowed time for issues related to the customer's benefit claim to be resolved so that the interview could focus more directly on matters concerned with possible work entry.

At the first WFI a screening tool was used to identify those most likely to return to work within a year without further assistance. From this point onwards these customers (about one-third of those not excluded because of the severity of their health condition) were not obliged to participate in the intensive series of WFIs (although they could participate on a voluntary basis). However, they were still required to take part in interviews triggered by certain changes of circumstances or if they had not been interviewed in the last three years.

The first WFI was also used to draw up an action plan, agreed between the Personal Adviser and the customer, setting out the steps needed to enhance the customer's likelihood of being able to work. Progress against this action plan could then be reviewed at subsequent WFIs.

Turning to the voluntary elements of Pathways, the customer could choose to participate in one of a number of schemes offered as part of the Choices package. The intention was that Personal Advisers would tell incapacity benefits customers about the range of options that were available to them, and then refer them to external providers where there was agreement that a particular scheme would be beneficial in preparing them for the labour market. Customers could choose between participating in the new Condition Management Programme (CMP) or an existing programme specifically aimed at those with health problems, such as the New Deal for Disabled People or Work Preparation. Alternatively, they could opt to take part in a generic programme such as Work Based Learning for Adults in England, Skill Build in Wales, Training for Work in Scotland, or Work Trials. The CMP was administered by local healthcare providers, and the aim was to assist the individual in coping with their health problem to improve their quality of life, as well as increasing the likelihood that they would be able to work at some point in the future (Barnes and Hudson, 2006).

As well as offering customers the opportunity to participate in training, it was possible for them to continue claiming incapacity benefits whilst working under the permitted work rules. Customers were allowed to work for up to 16 hours a week whilst remaining on benefits, provided that they earned less than £86.

Taking on permitted work was encouraged under Pathways as a first step towards leaving benefits.

Two elements of Pathways offered incapacity benefits customers financial support in making the transition into work. The Adviser Discretionary Fund gave Personal Advisers the ability to offer customers a small grant of up to £300 where this was likely to assist a return to work, for example, to buy tools or equipment for a new job, clothes for an interview, or to give short-term assistance in getting to work. Once the customer had entered work of 16 hours a week or more they might be eligible for the Return to Work Credit. Subject to meeting certain eligibility conditions, this provided a payment of £40 a week for up to 52 weeks to anyone earning less than £15,000 a year.

Finally, Pathways offered post-employment support (known as In-Work Support) to those incapacity benefits customers who entered work. As with the Choices package, this was administered by providers outside of Jobcentre Plus. The purpose was to help the customer stay in work and give them encouragement and advice on advancing in employment. A range of different types of support were available, covering occupational health, financial management and job coaching.

1.3 The roll-out of Pathways

Pathways was first piloted for new and repeat incapacity benefits customers in three Jobcentre Plus districts in October 2003 (Bridgend and Rhondda, Cynon, Taf; Derbyshire; and Renfrewshire, Inverclyde, Argyll and Bute). From 27 October 2003, anyone making a new or repeat claim for incapacity benefits was required to participate in Pathways unless they met the criteria for exemption. Pathways was introduced in a further four areas on 5 April 2004 (Essex; Gateshead and South Tyneside; Lancashire East; and Somerset). From 7 February 2005, Pathways was extended to a subgroup of existing customers within these pilot areas who had claims of up to about three years at that time. A further extension followed on 3 April 2006, bringing into Pathways existing customers within the pilot areas with claims of up to about seven years.

In addition to extending the customers covered by the original pilots, Pathways was expanded into new areas for new and repeat customers. It was introduced in a further four districts on 31 October 2005 (Cumbria; Glasgow; Lancashire West; and Tees Valley), with roll-out in six more areas on 25 April 2006 (Inner Mersey; Lanarkshire and East Dunbartonshire; Manchester Central; South Tyne and Wear Valley; South Yorkshire; and South West Wales), and a further three districts on 30 October 2006 (South Wales Valleys; Greater Mersey; and Staffordshire).

Whilst Jobcentre Plus Pathways continued to operate in those areas where it had already been introduced, the national roll-out of Pathways for new and repeat customers was completed by using private and voluntary sector providers to deliver the programme. Provider-led Pathways was introduced in 15 Jobcentre Plus districts on 3 December 2007 and in the remaining 16 areas on 28 April

2008. Since this date, all new and repeat incapacity benefits customers across the UK have been required to participate in Pathways, unless they meet the criteria for exemption. ESA was introduced as a replacement for incapacity benefits on 27 October 2008, and so therefore Pathways is compulsory for new and repeat ESA customers. Outside the October 2003 and the April 2004 pilot areas, participation in Pathways by existing incapacity benefits/ESA customers is currently entirely voluntary, although it is due to be extended to those under the age of 25 from November 2009 and eventually to all those under the age of 50 (DWP, 2008a).

1.4 The Pathways evaluation

A number of research organisations are involved in the evaluation of Pathways, including the Institute for Fiscal Studies, Mathematica Policy Research, the National Centre for Social Research, the National Institute of Economic and Social Research, the Policy Studies Institute, the Social Policy Research Unit and David Greenberg at the University of Maryland. There are many elements to the evaluation, including qualitative analysis, large-scale quantitative surveys, impact and cost-benefit analysis and a literature review of similar programmes in the USA.

The full evaluation of Jobcentre Plus Pathways in the original pilot areas is summarised in Dorsett (2008) whilst its impact on benefit receipt in the October 2005 and April 2006 expansion areas is assessed using administrative data in Bewley *et al.* (2008). The current report uses data from telephone surveys of incapacity benefits customers to estimate the impact on a range of possible outcomes from Jobcentre Plus Pathways for new and repeat customers in the areas where it was introduced in April 2006. These Jobcentre Plus districts are subsequently referred to as the April 2006 areas. By surveying recipients of incapacity benefits it was possible to consider a more comprehensive set of outcomes than were available in the administrative data, covering work, earnings, and self-reported health. As the survey took place an average of around 16 months after the respondent became eligible for Pathways, the majority of outcomes considered reflect the impact of Pathways at this point.

The findings from the current study have to be considered alongside those which emerged in the analysis of the administrative data, as well as the study of the original pilot areas. As the use of administrative data limited the range of outcomes which could be considered, the initial comparison of results from the expansion and pilot areas could not assess the similarity of findings across the full range of outcomes. However, in relation to the benefit outcomes, which could be compared, in many respects, the analysis of the administrative data in the expansion areas produced comparable results to those which emerged in the pilot areas. As this report is based on survey data, it is possible to compare the findings from the pilot areas and the April 2006 areas across a wider range of outcomes. Therefore, it gives an indication of whether the findings so far are likely to be replicated in other districts.

1.4.1 Summary of earlier findings

The analysis of the pilot areas found that around a year and a half after the start of a claim for incapacity benefits, Pathways increased the likelihood that those who made an enquiry about claiming incapacity benefits were in paid work by around 7.4 percentage points from a baseline of 29.7 per cent (Bewley *et al.*, 2007). This finding was statistically significant at the 10 per cent level, and evolved gradually over time.

By contrast, the impact of Pathways on claims for incapacity benefits appeared greatest in the early months after the start of the claim and then stabilized at a fairly low level after 10 months. At its peak in month five, Pathways reduced the proportion still claiming incapacity benefits by 6.3 percentage points, but its impact settled at between 1.5 and 2 percentage points from month 10 onwards. A very similar picture was evident from the analysis of administrative data in the first two groups of expansion areas, both in the timing and size of the impact from Pathways on incapacity benefits receipt. As well as reducing the receipt of incapacity benefits, Pathways increased the proportion of customers claiming Jobseeker's Allowance (JSA) in the first six months after the start of their claim for incapacity benefits. However, around a year after the start of the claim, there was a slight decrease in claims for JSA as a result of Pathways, although this reduction was not sustained.

Survey data analysis in the pilot areas showed that around a year and a half after making an enquiry about claiming incapacity benefits, Pathways reduced the proportion of customers who said that they had a health problem which limited their ability to carry out day-to-day activities a great deal by 10.8 percentage points, from a baseline of 49.8 per cent.

The pilot areas analysis explored whether Pathways had a stronger impact on particular subgroups of customers. This indicated that Pathways had more pronounced employment effects on women than men, but that its impact on receipt of incapacity benefits was slightly greater for men than women. However, analysis of administrative data on the receipt of incapacity benefits and of JSA in the first two sets of expansion areas found no evidence that the impact of Pathways varied by gender.

Pathways also produced positive effects on employment, incapacity benefits receipt and self-reported health for those under the age of 50 which were not apparent for those aged 50 or more in the pilot areas. The difference in the impact of Pathways on older and younger incapacity benefits customers also emerged from the analysis of administrative data in the expansion areas, which showed that for some of the period considered, Pathways was more effective in reducing the receipt of incapacity benefits by younger customers than for those aged 50 or more. However, there was less evidence that the impact of Pathways on JSA receipt varied with the age of the customer.

In the pilot areas Pathways reduced the receipt of incapacity benefits and the limiting impact of health problems on those whose main condition was not a mental or behavioural disorder and also had positive employment effects for this group, but had a less pronounced effect on those with a mental health condition. By contrast, in the expansion areas the analysis of administrative data suggested that Pathways was more effective in reducing the receipt of incapacity benefits by those with a mental health condition than for those with other types of health problems. Those with a mental health condition were also more likely to move onto JSA as a result of Pathways than those with other health problems.

Finally, Pathways raised the proportion of those with dependent children in paid work, whereas no such impact was apparent for those without dependent children. Pathways was also associated with a sizeable reduction in the proportion of those with dependent children who reported that they had a health problem which affected their daily activities by this point, whereas this was not the case for those without dependent children. Difficulties in reliably identifying whether customers had dependent children in the administrative data meant that it was not possible to assess whether there were also differences between the two groups in the impact of Pathways on benefit receipt.

1.4.2 The current report

This report builds on the findings in the pilot areas and from the analysis of administrative data in the first two sets of expansion areas by exploring whether these apparent differences between subgroups were also evident in the survey data for the April 2006 areas. Whilst the smaller number of observations provided by survey data reduce the likelihood of finding effects statistically significant, the number of survey respondents in the April 2006 areas analysis was around three times the number in the pilot areas, increasing the probability of being able to observe statistically significant impacts.

The first three pilot areas were chosen because they had a relatively high number of incapacity benefits customers and so Pathways may have had a different impact in these areas than would be the case elsewhere (Adam *et al.*, 2008). Adam *et al*. (2008) carried out a detailed analysis to assess whether Pathways was likely to have a similar impact on benefit receipt in the pilot areas to the country as a whole. They concluded that this would probably be the case, although it was more difficult to estimate the impact of Pathways in London, given the different patterns of claiming incapacity benefits there compared to the rest of the country. This report, together with Bewley *et al*. (2008), provides evidence to corroborate this analysis. All figures reported in the text are statistically significant at the 5 per cent level or better, unless otherwise stated.

1.5 Report outline

Chapter 2 describes the data used in the analysis. Chapter 3 then provides information on work and self-reported health outcomes for those who became eligible for Pathways in the April 2006 areas. The method of analysis is set out in Chapter 4 and Chapter 5 presents the findings. It also compares the observed impact of Pathways in the pilot and April 2006 areas and explores possible explanations for apparent differences. Chapter 6 then considers whether the impact of Pathways varied for particular groups of customers due to differences in their gender, age, the nature of their main health problem and whether dependent children were living within the household. Chapter 7 summarises the main results of the analysis, the differences between the pilot and April 2006 areas and the possible reasons for variations.

2 Data

2.1 Overview of data used

The findings presented in this report are based on surveys of incapacity benefits customers. An earlier report assessed the impact of Pathways on the receipt of incapacity benefits and JSA in the April 2006 areas using administrative data (Bewley *et al.*, 2008). By surveying incapacity benefits customers, it was possible to collect detailed information on the respondent's personal circumstances and activity in the period following the start of the claim. This made it possible to build up a picture of how Pathways affected incapacity benefits customers across a much wider range of outcomes than were available in the administrative data.

Whilst the more detailed range of information on survey respondents offered significant benefits over the analysis of administrative records, there are some disadvantages to the use of survey data. There is a possibility that survey respondents are not representative of the wider population of incapacity benefits customers. For example, if survey respondents who enter work as a result of Pathways are less likely to be available for interview, estimates of the impact of Pathways based on survey respondents may underestimate the importance of Pathways in helping customers into work. However, by comparing the characteristics of survey respondents against those of the population of incapacity benefits customers as a whole, it is possible to assess whether particular groups of customers are over-represented in the survey data and to establish whether there was any response bias.

Compared to analysis based on administrative records, the ability to detect statistically significant results using survey data is more likely to be limited by sample sizes. With fewer cases for analysis, the impacts of Pathways are less likely to be found to be statistically significant. Offsetting this to some extent, the richer nature of the survey data allows more individual characteristics to be taken into account, thereby increasing precision.

As already mentioned in Chapter 1, the expansion of Pathways into 13 additional Jobcentre Plus districts was carried out in three phases. This report concentrates on the impact of introducing Pathways in the second group of areas – those where it was implemented in April 2006.

2.2 Sample frame and sample identification

The sample of customers to be surveyed was drawn from the National Benefits Database (NBD). Every six weeks since 1999 live Incapacity Benefit (IB) and Income Support (IS) records have been scanned to construct a database of those claiming these benefits over time. The assumption is that someone observed at one scan who is not observed at the next, left benefit between the two dates. Whilst the NBD provides a precise start date for each claim, the actual date that the spell on benefits ended is not collected for IB and IS claims, and so the end date is set at random to some point between the two scans. As a result, the actual end date may occur up to six weeks before or after the imputed date.

In view of the six-weekly intervals between scans, it is possible for those claiming for a very short period to be omitted from the NBD. However, in other respects, it provides a comprehensive picture of everyone claiming incapacity and other benefits.

The dataset also contains the gender of the customer and their age at the start of the claim. In addition, the NBD includes details of the local authority in which they were living, based on the last information supplied before the end of their claim. By mapping local authorities onto Jobcentre Plus districts it was possible to distinguish between the April 2006 and comparison areas. This information could be used to compare the characteristics of survey respondents to those of the wider population of incapacity benefits customers in the April 2006 and comparison areas, before and after the introduction of Pathways. Section 2.4 summarises the findings of this analysis.

The construction of the NBD from live benefits data and requirements on staff to collect data systematically, mean that key fields identifying individuals and recording benefit type, claim start dates, local authority, gender and age at the start of the claim, are complete for all records.

2.3 Timing of sampling and survey

The impact of Pathways was estimated by comparing the outcomes among a cohort of individuals beginning a claim after Pathways was introduced (between 1 August 2006 and 30 November 2006) with the outcomes of a cohort beginning a claim before it was introduced (between 1 August 2005 and 30 November 2005). These are referred to as the post- and pre-intervention cohorts respectively. The first claim for incapacity benefits by an individual within each date range is referred to as the qualifying claim, as it qualifies them for inclusion in the sample. Differences between the April 2006 areas and their comparison areas in this before-after comparison provide the estimate of the effect of Pathways, as described in detail in Chapter 4. Note that Pathways is targeted at those aged between 18 and 59, so those outside this age range were excluded from the analysis. For customers within areas operating

Pathways, eligibility was triggered by starting a claim for IB, or if they were already on IB when Pathways was introduced, starting a claim for IS on the grounds of disability (both subsequently referred to as claiming incapacity benefits).

Since it was only possible to draw the pre-intervention sample from customers starting their claim for incapacity benefits between about five and nine months before the introduction of Pathways, there was a possibility that some of the pre-intervention sample would leave incapacity benefits and then start a new claim after April 2006, thereby becoming eligible for Pathways. Further analysis found that 10.1 per cent of those in the pre-intervention cohort sample in the April 2006 areas made a further claim for incapacity benefits after Pathways was rolled out (over the 18-month period following their qualifying claim). Furthermore, it was possible for those in the pre-intervention cohort to volunteer to participate in Pathways after it was introduced in their Jobcentre Plus district (across all districts around 6 per cent of Pathways starts are voluntary (Mykhaylyk 2009)) and so this may have boosted the proportion of the pre-intervention cohort who actually experienced Pathways. Both of these factors might cause a slight reduction in the size of the estimated impacts, but would not be expected to result in a large underestimate of the impact of Pathways due to the small proportion of the cohort likely to have been affected.

Respondents in the pre-intervention sample were surveyed between 13 November 2006 and 10 April 2007 and those in the post-intervention sample were surveyed between 7 November 2007 and 30 April 2008. This meant that, for those in the pre-intervention sample, the survey interview took place between 14 and 19 months after the start of their qualifying claim (Table 2.1). For those in the post-intervention sample, between 14 and 21 months elapsed between the qualifying claim and the interview. On average, the interview took place 15 months after the start of the claim for those in the pre-intervention cohort, and 16 months after the qualifying claim for those in the post-intervention cohort. The timing of the interview was very similar in the April 2006 and comparison areas.

Table 2.1 Length of time between qualifying claim and survey interview

	Average number of months between qualifying claim and interview	
	Pre-intervention	**Post-intervention**
April 2006 areas		
Mean	15.3	16.1
Minimum	14.1	14.2
Maximum	18.9	20.9
Base	*2,840*	*2,780*
Comparison areas		
Mean	15.3	16.1
Minimum	14.1	14.2
Maximum	18.9	20.7
Base	*3,049*	*2,965*

Within the pilot areas, survey respondents were interviewed up to three times, with the final outcome interview taking place an average of around 19 months after the respondent had made an enquiry about claiming incapacity benefits. By contrast, survey respondents in the April 2006 areas were drawn from those actually claiming incapacity benefits and the interview took place an average of around 16 months after the start of the claim.

In total, 11,634 customers responded to the April 2006 areas survey. This means that the analysis presented in this report is based on a sample of respondents nearly three times the size of that featured in the main body of the pilot areas report. Table 2.1 also shows that a very similar number of people were surveyed in the April 2006 areas and their comparators in the pre- and post-intervention cohorts. Again, this was quite different to the pilot areas surveys, where the number of survey respondents in the pilot districts far exceeded the numbers in the comparison areas, particularly in the pre-intervention sample. The greater numbers of survey respondents in the April 2006 areas, and the more even split in the numbers interviewed in the April 2006 and comparison areas pre- and post-intervention should increase the likelihood of finding results statistically significant compared to the pilot areas analysis. However, the implications of this difference in sample sizes are discussed in more detail in Chapter 5.

2.4 The representativeness of survey respondents

The characteristics of respondents to the pre- and post-intervention surveys were compared to those of all incapacity benefits customers in the April 2006 and comparison areas to assess whether the survey respondents were representative of the population from which they were drawn. By assessing whether those with particular characteristics were more likely to respond to the interview it was

possible to identify some of the characteristics associated with non-response and so establish whether there was a need to weight the survey data. Weighting the proportion of survey respondents with particular characteristics to the proportions found in the administrative data enhances the likelihood that the findings are an accurate reflection of the true impact of Pathways on the population of incapacity benefits customers.

Which characteristics could be compared between administrative and survey data sources was restricted by the fairly limited range of background information on customers available in the administrative records. Differences between the survey and administrative data sources which were statistically significant are indicated with asterisks in the column of Table 2.2 headed 'Administrative data'.

Table 2.2 The characteristics of survey respondents and the population of incapacity benefits customers

	Proportion in each category		
	Survey data	**Administrative data**	**Weighted survey data**
Pre-intervention April 2006 areas			
Female	0.44	0.42**	0.42
Age (mean, in years)	40.1	38.7***	38.7
Under 30	0.25	0.28***	0.28
30-39	0.21	0.23**	0.23
40-49	0.25	0.24	0.24
50-59	0.30	0.25***	0.25
Mental health condition	0.36	0.40***	0.40
Base	*2,840*	*21,172*	*2,840*
Pre-intervention comparison areas			
Female	0.45	0.43*	0.43
Age (mean, in years)	41.1	39.2***	39.3
Under 30	0.22	0.27***	0.27
30-39	0.21	0.23**	0.23
40-49	0.27	0.24***	0.24
50-59	0.31	0.26***	0.26
Mental health condition	0.34	0.39***	0.39
Base	*3,049*	*9,398*	*3,049*

Continued

Table 2.2 Continued

	Proportion in each category		
	Survey data	Administrative data	Weighted survey data
Post-intervention April 2006 areas			
Female	0.48	0.44***	0.44
Age (mean, in years)	41.3	38.6***	38.7
Under 30	0.22	0.29***	0.29
30-39	0.19	0.22***	0.22
40-49	0.27	0.25**	0.25
50-59	0.32	0.24***	0.24
Mental health condition	0.35	0.41***	0.41
Base	*2,780*	*21,839*	*2,780*
Post-intervention comparison areas			
Female	0.48	0.43***	0.43
Age (mean, in years)	41.7	38.9***	38.9
Under 30	0.21	0.28***	0.28
30-39	0.18	0.22***	0.22
40-49	0.27	0.24***	0.24
50-59	0.34	0.26***	0.26
Mental health condition	0.32	0.38***	0.38
Base	*2,965*	*9,650*	*2,965*

Notes: ***=Difference statistically significant at the 1 per cent level; **=at the 5 per cent level; *=at the 10 per cent level.

The comparison presented in Table 2.2 was largely made using administrative data on survey respondents, to ensure that any differences between the two sources were not due to recall errors in the survey data. The only exception to this was in the case of the information on the health of survey respondents. Administrative data on the nature of the health condition was not available for all survey respondents and so self-reported information was used instead.

Table 2.2 shows that women were over-represented in the survey data when the proportion of survey respondents who were female was compared against the proportion of women claiming incapacity benefits within the April 2006 and comparison areas generally. The greater tendency of women to respond to the survey was particularly pronounced in the post-intervention period.

There was also a tendency for older customers to be more likely to respond to the surveys than younger customers. The average age of survey respondents exceeded that of the population of incapacity benefits customers in the April 2006 and comparison areas, and whilst those under the age of 40 were under-represented in the survey data, those aged 50 or more were over-represented. Finally, there were signs that mental or behavioural disorders were more common in the population

of incapacity benefits customers as a whole than amongst survey respondents. However, it is possible that this divergence was in part due to the different sources from which the information on the nature of the health condition was drawn for survey respondents and the population of incapacity benefits customers.

Given that there were significant differences between survey respondents and the population of incapacity benefits customers as a whole on these particular characteristics, it was decided to weight the survey data. The intention was that if the survey sample was more representative of the population from which it was drawn on these observed characteristics, it would be more likely to provide estimates of the impact of Pathways which would be an accurate reflection of its impact on the full population. The weight for a survey respondent with a particular set of characteristics was calculated as the reciprocal of the response rate among those customers sharing that set of characteristics.

The final column of Table 2.2 gives the proportion of survey respondents in each of the categories shown in column one, after weighting. The good match between the figures in the last two columns therefore indicates that the weights were effective in rebalancing the characteristics of survey respondents to those of the population of incapacity benefits customers. Also, after weighting, the characteristics of incapacity benefits customers were fairly similar in the April 2006 and comparison areas in the pre- and post-intervention periods.

2.5 Key variables

The survey interview collected detailed background information on the survey respondent and their household. They were also asked to provide information on what they had been doing since starting their claim for incapacity benefits, and their current activity and health. The analysis focused on the following outcome variables:

- whether the respondent was in paid work in the week prior to interview (defined as either employment or self-employment). This included people who were temporarily off work whilst on sick leave, holiday or on a training course, provided that they had been off work for less than 92 days;
- whether they usually worked at least 16 hours a week and were in paid work in the week prior to interview;
- whether they usually worked at least 30 hours a week and were in paid work in the week prior to interview;

- monthly take-home pay for those in paid work in the week prior to interview. For employees, this excluded tax and other deductions, whilst those who were self-employed were asked to give their average weekly income from the business after tax and National Insurance, choosing from three pay bands, from which a monthly amount could be calculated. Extreme values were trimmed and missing values were imputed for those in employment or self-employment who did not state their monthly pay[1]. Information on the earnings of the self-employed was not included in the calculation of monthly take-home pay in the pilot areas;
- whether the respondent reported a current health condition or disability which limited their ability to carry out day-to-day activities;
- whether they reported a current health problem which limited their day-to-day activities a great deal.

[1] In order to be able to estimate the impact of Pathways on monthly pay for all those in work (both the employed and the self-employed), mean monthly pay for the self-employed within each pay band was imputed by calculating the mean monthly pay of employees with earnings within this range.

3 Incapacity benefits customers in the April 2006 areas – characteristics and outcomes

3.1 Introduction

This chapter explores the work, earnings and self-reported health outcomes of a sample of incapacity benefits customers who became subject to Pathways in April 2006 (the post-intervention cohort described in Section 2.3), based on their survey responses. It also considers the main differences between survey respondents in the pilot and April 2006 areas on each of these outcome variables. Information on the similarities between survey respondents and the population from which they were drawn, in terms of their distribution across Jobcentre Plus districts, is presented in the Appendix. The Appendix also describes the personal characteristics of survey respondents in the April 2006 areas and how they compared to respondents in the pilot areas.

Within the pilot areas, the survey samples were drawn from two different sources, and so it was not possible to derive weights. As a result, this chapter considers the similarities in the outcomes experienced by incapacity benefits customers in the pilot and April 2006 areas using unweighted data.

3.2 Work outcomes

Table 3.1 shows that 26 per cent of survey respondents were in paid work in the week prior to interview. Within the pilot areas, 35 per cent of survey respondents

were in work either in the week of interview, or in the previous week, but the interview occurred around 19 months after the initial enquiry about making a claim for incapacity benefits, rather than an average of 16 months after starting the qualifying claim in the April 2006 areas.

Table 3.1 Working status at interview

	%
In paid work last week	26
Of which, in paid work for 16 hours per week or more	83
Of which, in paid work for 30 hours per week or more	55
Sample size	2,751

Notes: Based on unweighted survey data. The sample size shown is the minimum across the categories shown in the table.

Of those in the April 2006 areas who were working in the week before the survey interview, 83 per cent worked 16 or more hours per week and 55 per cent worked 30 or more hours per week. Within the pilot areas, 87 per cent of those in paid work around 19 months after the enquiry about claiming incapacity benefits were in paid work of at least 16 hours a week, whilst 56 per cent were in paid work of 30 hours a week or more.

3.3 Earnings outcomes

Average net earnings at the time of the survey interview were around £847 a month for those in work in the April 2006 areas (Table 3.2). Within the pilot areas, net monthly pay was £777 a month, although this would have related to a period nearly two years earlier and so some increase in pay levels over time is unsurprising.

Table 3.2 Average net monthly earnings of those in work at interview

	£
Average net monthly earnings	846.63 (469.26)
Sample size	717

Notes: Based on unweighted survey data. The estimate was based on 478 cases after trimming and removing extreme values, and excluding those who did not provide some of the information needed to calculated net monthly earnings. The standard deviation is shown in parentheses.

Where a respondent reported that they were in work in the week before interview, but failed to provide the information needed to calculate net monthly pay, this was imputed using the mean value from those in work. Prior to this, extreme values were trimmed by excluding the lowest and highest percentiles. Two additional cases where net monthly earnings were greater than £5,000 a month were also recoded to the mean value for all other respondents. Although the approach to

the calculation of net monthly earnings was largely the same in the pilot and April 2006 areas, information on the net earnings of the self-employed was not used in the pilot areas, but was included in the April 2006 areas. As the average net monthly earnings of the self-employed (based on the method of calculation described in Footnote 1) exceeded those of employees in the April 2006 areas, including the self-employed, had the effect of raising average net monthly earnings for those in work.

3.4 Self-reported health

Around 16 months after the qualifying claim for incapacity benefits, three-quarters of customers in the April 2006 areas reported that they still had a health condition or disability which limited their ability to carry out day-to-day activities (Table 3.3). This proportion was smaller in the April 2006 areas than it was in the pilot areas, where more than four-fifths (82 per cent) of customers reported having a limiting health problem around 19 months after the enquiry about claiming incapacity benefits. However, it was more common for those in the April 2006 areas to say that they had a health condition or disability which affected their daily activities a great deal. Whilst this was the case for 44 per cent of customers in the April 2006 areas around 16 months after the start of the qualifying claim, only 39 per cent of those in the pilot areas reported such severe health problems at the time of the final interview.

Table 3.3 Self-reported health at interview

	%
Health condition or disability that limits ability to carry out day-to-day activities	75
Health condition or disability that limits ability to carry out day-to-day activities 'a great deal'	44
Sample size	2,745

Notes: Based on unweighted survey data.

3.5 Summary

Survey respondents in the pilot and April 2006 areas differed on a number of dimensions when the outcome variables were considered. There were some signs that the likelihood of entering work was greater in the pilot areas than in the April 2006 areas. The average net monthly earnings of customers at the time of interview was higher in the April 2006 areas, but this at least partly reflected general increases in pay over time, and differences in the treatment of the self-employed in the calculation of monthly pay. Finally, customers in the April 2006 areas were less likely to report that they had a health problem which limited their daily activities at the time of interview than those in the pilot areas. However, the proportion who felt that they faced severe constraints on what they could do as a result of their health problems was greater in the April 2006 areas.

To some extent the differences between the pilot and April 2006 areas on the work and self-reported health outcomes of respondents may have been due to the differences in the timing of the outcome interview. However, this initial analysis of the outcomes for survey respondents in the April 2006 areas did suggest that the impact of Pathways, observed in the survey data, might differ between the pilot and April 2006 areas.

4 Methods

4.1 The evaluation problem

The purpose of this evaluation is to estimate the overall impact of Pathways. This impact is the difference between what happened to individuals in the April 2006 areas after the introduction of Pathways (the 'actual' outcome) and what could have been expected to happen had Pathways not been introduced. The latter hypothetical outcome is known as the 'counterfactual'. As the counterfactual is not observable, it must be estimated. There are several possible approaches to this.

One option is to use observed outcomes for individuals not subject to Pathways in the post-Pathways period as an estimate of the counterfactual. However, this is not a credible strategy if permanent differences exist between individuals in the April 2006 and comparison areas in such a way that the outcomes would be expected to differ regardless of the implementation of Pathways.

Another possibility is to base the estimate of the counterfactual on observed outcomes for individuals in the April 2006 areas before Pathways was introduced. However, this approach suffers from the problem that changes in outcomes in the April 2006 areas may happen over time, regardless of Pathways. Using the pre-intervention outcome as the estimate of the counterfactual would then result in these changes over time being wrongly attributed to Pathways.

This evaluation uses a DiD methodology, which combines the two approaches described above and thus avoids the problems which arise from using only one of them. This chapter explains how the DiD methodology works and the assumptions which must be satisfied for it to provide a correct estimate of the impact of Pathways. Some exploration of these assumptions was included in Bewley *et al.* (2008) and so the chapter concludes by summarising the findings of this analysis.

4.2 The difference-in-differences methodology

The DiD methodology compares the change in the outcome of interest for individuals in the April 2006 areas before and after the introduction of Pathways with the change for individuals in the comparison areas. The difference between these two before and after differences provides an estimate of the impact of Pathways.

Table 4.1 illustrates how the DiD estimator works using the observed percentages of customers in paid work at the time of the survey interview in the April 2006 areas and in the associated comparison areas. Such percentages are reported for the two groups of areas both before and after the introduction of Pathways. The 'before' column indicates that 27 per cent of individuals in the April 2006 areas who made a claim for incapacity benefits before Pathways was introduced were in paid work in the week before the interview. After Pathways was introduced this proportion was 25 per cent (the 'actual' outcome). Therefore, there was a reduction of 2 percentage points in the proportion of customers in paid work around 16 months after the survey interview in the April 2006 areas after the intervention.

Table 4.1 An illustration of the DiD estimator

	(B) Proportion claiming incapacity benefits at time of interview – before Pathways	Proportion claiming incapacity benefits at time of interview – after Pathways	Percentage point difference (A-B)
April 2006 areas	0.27	0.25	-2ppt
Comparison areas	0.26	0.25	-1ppt
DiD estimate			-1ppt

Notes: Table reports the actual proportion of customers on in paid work in the week before interview within the April 2006 areas. Based on weighted data. Unlike the impact estimates presented in Chapters 5 and 6, this example does not control for differences in customer characteristics. ppt=percentage points.

Calculating the same change for the comparison areas shows that there was a 1 percentage point reduction in the proportion of customers in work between these two points in time. In the absence of Pathways, it is assumed that there would have been the same change in the April 2006 areas. Under this 'common trends' assumption and assuming that the composition of the April 2006 and comparison groups remains unchanged, the DiD methodology can provide an unbiased estimate of the impact of Pathways.

Having made these assumptions, the counterfactual is simply the observed proportion of incapacity benefits customers in paid work in the April 2006 areas around 16 months after the start of their claim in the period before the introduction of Pathways (27 per cent) plus the change in the proportion of customers in paid work in the comparison areas after the intervention (-1 per cent). This gives an estimated counterfactual of 26 per cent. The estimated impact of Pathways is

then the difference between the actual outcome (25 per cent) and the estimated counterfactual (26 per cent). Therefore, in the example shown in Table 4.1, Pathways produced a reduction of 1 percentage point in the likelihood of a customer being in paid work around 16 months after the start of their claim.

In practice, this double differencing is performed within a regression framework to control for the effects on outcomes of the following observed characteristics of the customers:

- gender;
- age at the time of the qualifying claim for incapacity benefits;
- ethnicity;
- level of highest academic or vocational qualification;
- whether they were married or living as married;
- whether there were any children living in the household and any of them were aged between 16 and 18 and in full-time education;
- the nature of their main health condition;
- the length of time that the health problem had lasted.

This means that the DiD estimator indicates the impact of Pathways on incapacity benefits customers, having taken out differences due to these observed individual characteristics. The DiD methodology also allows us to control for the effect of unobserved characteristics so long as these do not change over time differently for the April 2006 and comparison areas.

For example, unobserved differences in the industrial structure may exist between the April 2006 and comparison areas, resulting in differences in employment opportunities. This may in turn lead to differences in the proportion in paid work at the time of interview. However, if the industrial structure in each area determines the proportion of people in paid work in the same way over time, the impact estimated by the DiD approach will be unaffected by these sustained differences.

Another possibility is that a general macroeconomic shock (for example, an economic downturn reducing the availability of jobs nationwide) may affect the proportion of customers who enter work in the April 2006 and comparison areas between the two points in time. Nevertheless, as long as this effect is common across both sets of areas, the DiD estimator removes its impact.

Differencing simultaneously through time and across groups removes the estimation bias caused by the two types of unobserved characteristics described. However, the DiD methodology is not able to control for those unobserved factors that affect the outcome and vary over time in a different way for the April 2006 and comparison groups.

4.3 Plausibility of the DiD assumptions

This section considers whether the two key assumptions underpinning the DiD approach – constant composition and common trends – are likely to be met in the current analysis. The constant composition assumption requires that the composition of the April 2006 and comparison area samples did not change after the introduction of Pathways. For example, if some individuals in the April 2006 areas were aware that Pathways was going to be rolled out before it actually happened they might have chosen to claim incapacity benefits earlier to avoid participating in Pathways. If this was the case, the pre-Pathways cohort in the April 2006 areas might have been composed of less motivated individuals compared to the post-Pathways cohort, with a consequent impact on their likelihood of entering work. If, in the pre-intervention period, customers were less likely to be in work in any given month as a result of being less motivated, the resulting DiD estimate would over-state the impact of Pathways.

In reality, it seems unlikely that many individuals would have brought forward their claim for incapacity benefits to avoid mandatory participation in Pathways since their ability to do this would probably be fairly limited. The possibility that more motivated individuals would delay the start of their claim for incapacity benefits until after the introduction of Pathways, so that they could receive additional support, is also unlikely, as those starting their claim before the introduction of Pathways in the April 2006 areas were able to participate voluntarily after roll-out. There would, therefore, be no advantage to delaying the start of the claim.

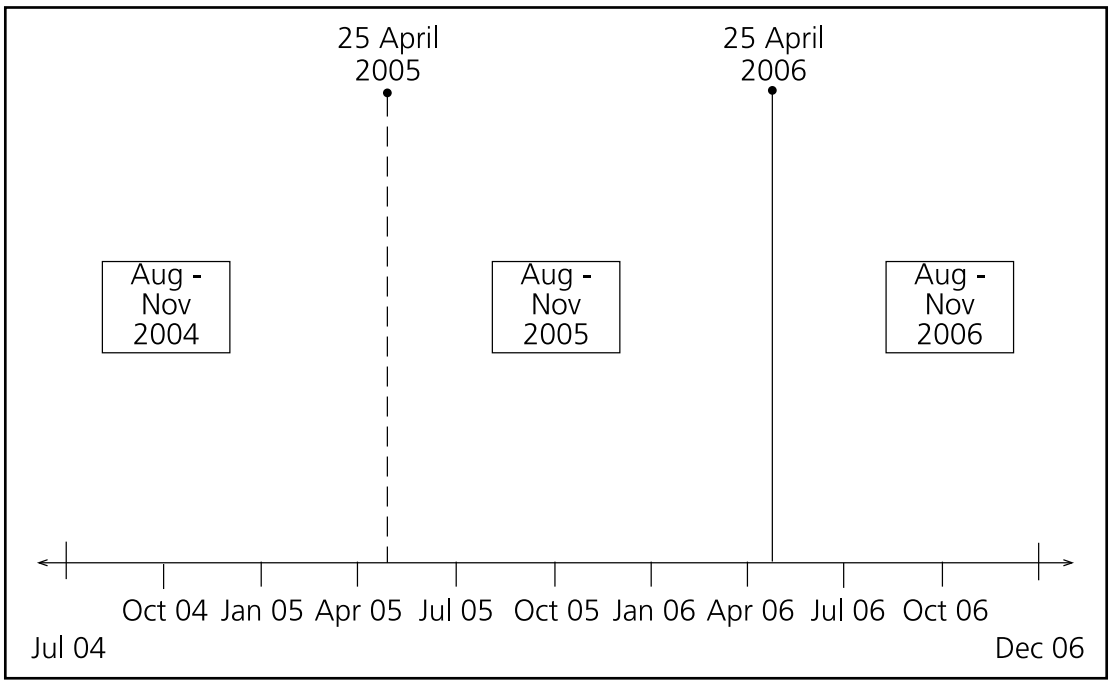
The common trends assumption can be explored by conducting a pre-programme test (Heckman and Hotz, 1989). This involves using the DiD estimator to check whether any statistically significant differences in trends between the April 2006 and comparison areas occurred between two points in time prior to the introduction of Pathways. If significant differences are apparent before Pathways was introduced, this suggests that a difference in trends might exist after the introduction of Pathways. Hence, the approach of constructing a counterfactual for the treatment group on the basis of observed trends in the comparison group becomes questionable. In essence, the pre-programme test amounts to testing the effect of an imaginary intervention taking place some time prior to Pathways. Should a significant effect of this imaginary intervention be found, this suggests the common trends assumption is unlikely to be met.

As there was only a single survey of incapacity benefits customers starting their claim before the introduction of Pathways, it was not possible to carry out pre-programme tests on the range of outcomes available in the survey data to assess whether the treatment and comparison areas followed a similar trend before the introduction of Pathways. However, it was possible to examine the pattern of benefit receipt in the period before the introduction of Pathways using administrative data. This gives some insight into whether the treatment and comparison areas were likely to follow a similar trend over time, at least in relation to benefit outcomes. This analysis was reported in Bewley *et al.* (2008) and the remainder of

this section summarises the intuition behind the pre-programme tests reported in Bewley *et al.* (2008).

Figure 4.1 shows the structure of the administrative data used to conduct the pre-programme tests. The analysis was based on two cohorts of individuals. The first cohort included individuals in both the April 2006 and the comparison areas who started a claim for incapacity benefits before an imaginary intervention taking place one year before the actual introduction of Pathways (indicated by the broken line). Those in the second cohort started their claim after this hypothetical intervention. The tests used the DiD methodology within a regression framework to estimate the impact of the imaginary intervention on the probability of an individual claiming incapacity benefits in any of the 18 months following the start of their qualifying claim.

Figure 4.1 Timing of the start of the claim for each cohort



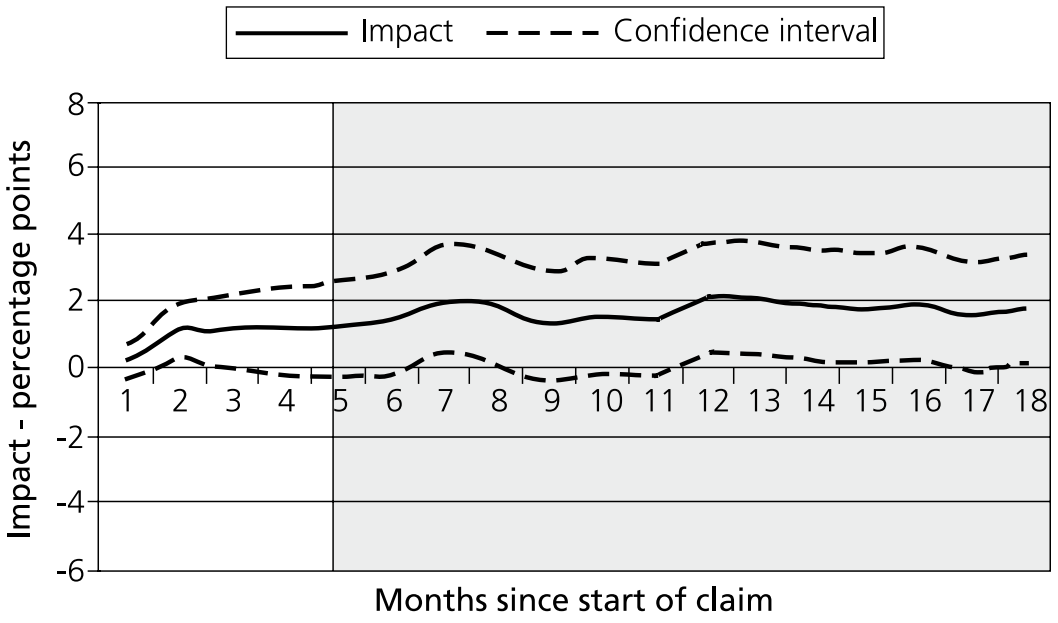
For the tests of the hypothetical intervention one year prior to the introduction of Pathways, the first cohort started their claim for incapacity benefits between 1 August and 30 November 2004, whilst those in the second cohort started their claim for incapacity benefits between 1 August and 30 November 2005. Figure 4.1 also shows the date of the actual intervention and the third (post-intervention) cohort used to assess the impact of Pathways.

4.4 Testing the common trends assumption

Figure 4.2 presents the results of the pre-programme tests in the April 2006 areas. This figure shows the impact of a hypothetical intervention one year before the roll-out of Pathways. The results show that one year before the introduction of

Pathways the April 2006 areas and their comparators followed a fairly similar trend in claims for incapacity benefits, but with small and marginally statistically significant differences throughout most of the first 18 months following the start of the qualifying claim.

Figure 4.2 Tests of the common trends assumption in the April 2006 areas one year before the introduction of Pathways



Source: Bewley *et al.* (2008).

The differences between the April 2006 and comparison areas after month five can perhaps be attributed to the introduction of Pathways in April 2006 (a minimum of five months after the pre-intervention cohort started their claim for incapacity benefits). Those in the pre-intervention cohort could become eligible for Pathways after its introduction, either voluntarily or, if they started a repeat claim for incapacity benefits after this point, on a mandatory basis. As mentioned in Section 2.3, 10.1 per cent of the pre-intervention cohort made a further claim for incapacity benefits after April 2006 and within the 18-month period covered by Figure 4.2. Depending on the precise date that those in the pre-intervention cohort started their claim for incapacity benefits (in the range 1 August 2005 to 30 November 2005), between approximately five and nine months would elapse between the start of the qualifying claim and the earliest date at which the customer could potentially join Pathways. The shaded part of Figure 4.2 indicates the period over which some of those in the pre-intervention cohort may have participated in Pathways.

4.5 Implications for the analysis

The main implication of the pre-programme tests is that the pre-intervention cohort in the April 2006 areas may have been affected by the introduction of Pathways. As a result, using this cohort to estimate the counterfactual may result in a small bias in the impact estimates. The pre-programme tests suggest that the impact estimates would probably understate the extent to which Pathways reduced incapacity benefits receipt by approximately 2 percentage points. The fact that the tests suggest a possible bias is relevant to the consideration of the impact on work and other outcomes and should be borne in mind when considering the results presented in Chapter 5 and Chapter 6. However, the pre-programme tests were based on benefits, rather than employment, data. This means that there is no indication of how large the bias is likely to be, as results presented in Bewley *et al.* (2007) showed that benefits and employment impacts can differ substantially.

5 Results

Summary

- Within the April 2006 areas, there was no evidence from the analysis of survey data that Pathways had a statistically significant impact on whether incapacity benefits customers entered paid work, had higher earnings or experienced improvements in their self-reported health.
- By contrast, the analysis of survey data in the pilot areas suggested that Pathways did increase the likelihood that customers were found in paid work around 19 months after they made an enquiry about claiming incapacity benefits. It also reduced the probability of them reporting that they had a health problem which affected their day-to-day activities a great deal at this point.
- There are a number of possible explanations for the apparent variation in the impact of Pathways between the pilot and April 2006 areas.
- Differences between the pilot and April 2006 areas in the estimation approach used in the studies may account for some of this discrepancy. These include differences in the:
  - sampling frames used (the April 2006 areas analysis considered those who made a claim only whilst the pilot areas analysis considered those enquiring about incapacity benefits);
  - timing of the outcome interviews.
- Other possible explanations include differences between the pilot and April 2006 areas in:
  - the delivery of Pathways;
  - the characteristics of incapacity benefits customers and their propensity to participate in Pathways;
  - labour market conditions.

5.1 Introduction

This chapter presents estimates of the impact of Pathways on a number of work outcomes, earnings and self-reported health. These estimates were obtained using the methods described in the previous chapter. The analysis takes into account differences in the characteristics of individuals in the April 2006 and comparison areas to ensure that the estimated impact of Pathways is not due to observable differences in the composition of each group. Although the analysis is based on survey data that are weighted to match the distribution of characteristics in the administrative data, an analysis of the unweighted data produced very similar findings.

In assessing the results presented in this chapter it is important to remember that the pre-programme test in Chapter 4 indicated that the pre-intervention sample may have been affected by Pathways. This arises either if Personal Advisers sought to provide elements of Pathways before its introduction, or because some customers participated in Pathways after April 2006 (voluntarily or as a result of making a repeat claim for incapacity benefits after this point). If this were the case, it would be more difficult to detect a statistically significant positive impact from Pathways and a small positive effect might even change sign and appear negative.

Having assessed the impact of Pathways in the April 2006 areas, the chapter moves on to summarise the main differences between these findings and those in the pilot areas. It then considers some of the possible explanations for the divergences in the observed impact of Pathways.

5.2 The impact of Pathways on work outcomes

The tables in this chapter report the estimated impact of Pathways on each of the measures listed in the first column, obtained using the DiD methods described in Chapter 4. Using Table 5.1 as an example, the column headed 'P-value' indicates the level of statistical significance of the impact estimate. Smaller p-values are associated with greater confidence that the impact estimate is an accurate reflection of the true impact of Pathways. The column headed 'Base' gives the percentage of incapacity benefits customers who would have been expected to be in paid work by the time of the survey interview had Pathways not been introduced (the counterfactual). This is calculated by deducting the estimated impact of Pathways from the average outcome for those in the April 2006 areas and gives an indication of the base against which the impact of Pathways should be assessed. For example, a small percentage point impact of Pathways from a low base would imply a greater proportional effect than a small percentage point impact from a higher base. The final column gives the number of observations used to calculate the impact estimate.

Table 5.1 Estimate of the impact of Pathways on work outcomes at time of interview

	Impact estimate	P-value	Base	Sample size
In paid work, any hours	-0.9	55	25.8	11,631
In paid work, 16 hours or more	-2.3	12	23.3	11,498
In paid work, 30 hours or more	-2.2	10	16.5	11,498

Notes: Based on weighted survey data. ***=statistically significant at the 1 per cent level; **=statistically significant at the 5 per cent level; *=statistically significant at the 10 per cent level.

Table 5.1 suggests that Pathways did not have a statistically significant effect on the proportion of customers in paid work around 16 months after the start of the qualifying claim for incapacity benefits. There was also no evidence that Pathways had an impact on the likelihood of customers working 16 or more, or 30 or more, hours a week.

5.3 The impact of Pathways on earnings

The impact of Pathways on average net monthly earnings was not statistically significant (Table 5.2). The low estimate of net monthly earnings had Pathways not been introduced is due to the fact that those who were not in work at the time of interview were treated as having zero earnings. This means that the impact of Pathways on earnings is estimated for all customers, rather than only those who found work.

Table 5.2 Estimate of the impact of Pathways on net monthly earnings at time of interview

	Impact estimate	P-value	Base	Sample size
Monthly net earnings at time of interview (£)	£20.12	18	£191.91	11,631

Notes: ***=statistically significant at the 1 per cent level; **=statistically significant at the 5 per cent level; *=statistically significant at the 10 per cent level.

5.4 The impact of Pathways on self-reported health

There was no evidence that Pathways had a statistically significant impact on the proportion of incapacity benefits customers who felt that their health problems affected their day-to-day activities, or that they affected their activities a great deal, in the April 2006 areas (Table 5.3).

Table 5.3 Estimate of the impact of Pathways on self-reported health at time of interview

	Impact estimate	P-value	Base	Sample size
Health problem affects day-to-day activities	0.2	91	74.1	11,507
Health problem affects day-to-day activities a great deal	0.6	74	42.6	11,507

Notes: Based on weighted survey data. ***=statistically significant at the 1 per cent level; **=statistically significant at the 5 per cent level; *=statistically significant at the 10 per cent level.

5.5 Comparing the impact of Pathways on outcomes in the pilot and April 2006 areas

Within the pilot areas, Pathways raised the probability of being in paid work by around 7.4 percentage points (statistical significance at the 10 per cent level). The employment impact observed in the April 2006 areas was not statistically significant, even at the 10 per cent level. Pathways did not have a statistically significant impact on average net monthly earnings at the time of the final interview in either the pilot areas or the April 2006 areas.

There was no evidence that Pathways had a statistically significant impact on the proportion of incapacity benefits customers who felt that their health problems affected their day-to-day activities in either the pilot or April 2006 areas. However, the impact of Pathways on the likelihood of survey respondents reporting that their health problem limited their daily activities a great deal did seem to differ between the pilot and April 2006 areas. Pathways was associated with a reduction of 10.8 percentage points in the proportion of customers who reported having severely-limiting health problems in the pilot areas. By contrast, there was no evidence that the perceived severity of the health problem was affected by Pathways in the April 2006 areas.

The impact on health in the pilot areas might have been partly due to the employment effect reducing the likelihood of customers reporting a limiting health problem, rather than Pathways bringing about a clear improvement in health. The knowledge that they were capable of working could reduce the feeling amongst incapacity benefits customers that their health problem affected their daily activities a great deal. The potential association between working and perceived health may explain why, in the April 2006 areas, Pathways did not appear to affect the likelihood of customers reporting health problems which severely limited their activities. Since it also had no impact on the probability of a customer being in paid work around 16 months after the start of their claim for incapacity benefits in the April 2006 areas, it is perhaps unsurprising that an association between Pathways and the self-reported health of respondents was not evident.

5.6 Discussion

This chapter concludes by considering the potential explanations for the apparent differences between the pilot and April 2006 areas in the impact of Pathways. Each subsection considers a possible reason for finding stronger evidence of a positive impact from Pathways in the pilot areas than in the April 2006 areas. These potential explanations include those which arise from differences in the estimation approaches used in the pilot and April 2006 areas and variations between the areas in the delivery of Pathways and the characteristics of incapacity benefits customers which may have shaped the size of its apparent impact in each area.

5.6.1 The sampling frames

The fact that survey respondents in the pilot and April 2006 areas were sampled from different sources could explain why there was more evidence that Pathways had an impact in the pilot areas compared to the April 2006 areas. The analysis which was the focus of the pilot areas report was based on a survey of those who made an enquiry about claiming incapacity benefits. By contrast, survey respondents in the April 2006 areas were drawn from those actually claiming incapacity benefits. The differences in the sampling frames used mean that a proportion of survey respondents in the pilot areas may never have started a claim for incapacity benefits, whereas all survey respondents in the April 2006 areas would have been on incapacity benefits initially. Additional analysis carried out in the pilot areas, but not reported in Bewley *et al.* (2007), showed that when the analysis of survey data in the pilot areas was carried out for only those customers who actually made a claim for incapacity benefits, there was no evidence that Pathways had a statistically significant impact on any of the outcome variables considered. However, it is possible that the failure to detect statistically significant effects was partly due to the smaller number of observations available when limiting the analysis in this way. To address this, DWP staff are using the much larger number of cases available in HM Revenue & Customs (HMRC) data to examine the size of the employment effect from Pathways on those who actually made a claim for incapacity benefits in the pilot areas.

If being told about the requirement to participate in the mandatory elements of Pathways at the time of making an enquiry about claiming incapacity benefits deterred some survey respondents from pursuing their claim, perhaps instead encouraging them to seek work, this would be reflected in the observed impact of Pathways in the pilot areas. Those who were deterred from making a claim for incapacity benefits by hearing about Pathways would not be surveyed in the April 2006 areas, as they did not appear on the sample frame. Also, it was possible for the survey respondents in the pilot areas to find work in the time that elapsed between making an initial enquiry about claiming incapacity benefits and starting a claim for reasons unrelated to Pathways. Therefore, the sample of survey respondents in the pilot areas included people who had a high probability of finding working quickly, whereas this group of survey respondents were excluded

from the April 2006 areas sample. An analysis (by DWP staff) of changes in the flow of customers onto incapacity benefits after the introduction of Pathways is being used to explore these possible reasons for differences in impact between the pilot and April 2006 areas.

5.6.2 The timing of the outcome interviews

As noted in Section 2.3, within the pilot areas, the final outcome interview took place around 19 months after the survey respondent first made an enquiry about claiming incapacity benefits. Within the April 2006 areas, those claiming incapacity benefits were surveyed an average of about 16 months after the start of their claim. The analysis of monthly employment outcomes in the pilot areas suggested that the positive impact of Pathways on being in paid work only became apparent towards the end of the period observed, and was not statistically significant, even at the 10 per cent level, before 19 months. However, the magnitude of the impact appeared to increase gradually over the months following the start of the claim, and stood at 7.1 percentage points in month 16 (at the 12 per cent level of statistical significance). By contrast, in the April 2006 areas, the employment impact in month 16 was only -0.9 percentage points (and was far from being statistically significant, with a p-value of 55 per cent). This suggests that the failure to observe a statistically significant impact from Pathways in month 16 in the April 2006 areas was partly because it had a much smaller impact in these districts compared to the pilot areas, and was not solely due to the shorter observation period.

5.6.3 Delivery differences in the pilot and April 2006 areas

A further possibility was that there were differences between the pilot and April 2006 areas in how Pathways was implemented which determined its effectiveness in moving customers into work. These may have been due to variations in the resources provided to support the implementation of Pathways. If the amount, or type, of support available to roll-out Pathways differed between the pilot and April 2006 areas, this may have explained why there were apparent divergences in its effectiveness at each stage of implementation.

5.6.4 Differences in the characteristics of incapacity benefits customers in the pilot and April 2006 areas

There is a margin of error around any estimate of the impact of a programme when it is based on sampling from a population. Drawing samples from the population of the pilot or April 2006 areas provides an estimate of the impact of Pathways on the population of either area. However, the standard errors around the estimates indicate that the true impact of Pathways could lie somewhere between the effects observed in the pilot and April 2006 areas[2].

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[2] Similarly, but less helpfully from the point of view of explaining the discrepancy between the pilot and April 2006 areas, the true impacts of Pathways in the two sets of districts may be even more different.

One factor behind the differences in the apparent impacts of Pathways observed in the pilot and April 2006 areas is that customers may have had a different propensity to participate in the voluntary elements of Pathways, or faced different barriers to work, due to differences in their personal characteristics. For example, the estimates of the proportion of incapacity benefits customers who could be expected to report having a health problem that affected their daily activities, or affected their activities a great deal, without Pathways, showed that self-reported health problems were more common in the pilot areas than in the April 2006 areas. Therefore, Pathways may be more effective in areas where customers have a greater need for assistance and view the support that they are offered as more likely to be helpful. For example, the qualitative study of the CMP indicated that respondents evaluated its likely relevance and potential benefits in their particular situation in deciding whether to participate (Warrener *et al.,* 2009). The Appendix highlights a number of other observed differences in the characteristics of incapacity benefits customers between the pilot and April 2006 areas. It is possible that these shape the propensity for individuals to be assisted by Pathways and their participation in the voluntary elements. In addition, there may be unobserved differences between incapacity benefits customers in the pilot and April 2006 areas which might also determine the effectiveness of Pathways, for example, in the fit between the precise nature of their health problem (or problems) and the type of assistance available to them.

5.6.5 Labour market conditions

Adam *et al.* (2008) concluded that Pathways was more likely to be effective in areas where the past exit rate from incapacity benefits had been relatively low. Analysis of administrative data showed that the expected level of incapacity benefits receipt without Pathways in the April 2006 areas 16 months after the start of the claim for incapacity benefits was lower than in the pilot areas (indicating that the exit rate was higher), which might, in part, explain why Pathways was less effective in the April 2006 areas. However, differences between the pilot and April 2006 areas in the proportion of incapacity benefits customers who could expect to enter work without Pathways were less apparent, suggesting that, in the absence of Pathways, a great proportion of those in the April 2006 areas could be expected to leave incapacity benefits for reasons other than starting work, e.g. moving onto JSA. There was, therefore, little evidence that local labour market conditions explained the apparent differences in the impact of Pathways between the pilot and April 2006 areas.

6 Subgroup analysis

6.1 Introduction

This chapter assesses whether the impact of Pathways on work and self-reported health outcomes varied for incapacity benefits customers with different characteristics. Although there was no evidence that Pathways had a statistically significant impact on these outcomes for incapacity benefits customers in the April 2006 areas as a whole, it is possible that it was effective for particular groups of customers. The statistical significance of any differences in the impact of Pathways between subgroups is also tested.

The subgroups considered in this chapter are men and women, older and younger people and those with and without a mental health condition, mirroring the analysis of the administrative data, presented in Bewley *et al.* (2008). In addition, this chapter also looks at whether the impact of Pathways varied for those with and without dependent children living within the household. Whilst the administrative records also contained information on whether the customer had dependent children, this was not collected reliably for all types of benefit claim, and so it was decided to only use the survey data for this subgroup analysis.

Other studies have suggested that there are differences in the barriers to work faced by some of the subgroups of customers considered in this chapter and so this may affect whether they are able to benefit from Pathways. For example, women tend to take on greater responsibility for domestic work within the home and are more likely than men to seek flexible working arrangements, making it harder for them to return to work after a period on incapacity benefits (Hooker *et al.*, 2007; Speakman and Marchington, 1999). Indeed, lone parents returning to IS after a period in work mentioned problems with the cost and reliability of childcare and difficulties balancing work and childcare responsibilities as reasons for returning to benefits (Riccio *et al.*, 2008). Evidence that Pathways was equally likely to assist women and men, and those with and without dependent children, into work would therefore indicate that it was successful in overcoming some of these barriers.

Previous studies have also found that older people often find it difficult to re-enter the labour market after a spell on benefits. Amongst incapacity benefits customers, older people are more likely to suffer from deteriorating health. They also tend to have less recent experience of employment than younger people (Bailey *et al.*, 2007). Both of these factors make it relatively more difficult for older customers to return to work. Discrimination can also limit the employment and training opportunities of older customers (Metcalf and Meadows, 2006). Besides the fact that it may generally be more difficult for older customers to find work, there is evidence that, for some, the motivation to work diminishes as they near State Pension age (Corden and Nice, 2006). This chapter assesses whether Pathways had a similar impact on older and younger customers, or whether there was a need to provide additional assistance to either group.

Finally, a large proportion of incapacity benefits customers have a mental health condition (approximately two-fifths of the total). In fact, this proportion rose from 26 per cent in 1996 to 41 per cent in 2006, highlighting the need for Pathways to offer support to those with a mental or behavioural disorder as well as those with physical disabilities (Black, 2008). For this reason, the impact of Pathways on customers with a mental health condition is also considered in this chapter.

The reduced sample sizes which result from analysing the impact of any programme on subgroups of customers, rather than on all those eligible, make it more difficult to detect statistically significant results. Although this also affects the ability to observe statistically significant impacts in the analysis of administrative data, this problem is more likely to arise in the current analysis, based on survey data, due to the much smaller sample sizes. Consequently, finding that the impact of Pathways was not statistically significant for particular subgroups does not mean that it had no effect on them. Rather, it is only possible to conclude with certainty that the impact was too small to be observed within the available sample.

It is also important to note that the analysis carried out in the pilot areas did not take into account differences in the compositions of subgroups. Even if Pathways appeared to have a greater effect on some groups of customers than others in the pilot areas, this difference may not have been due directly to the characteristic used to categorise the subgroup. For example, the subgroup analysis in the pilot areas showed that Pathways seemed to have stronger employment effects for women than for men. However, this may have been because the combined characteristics of women (who on average have a different set of characteristics to men) meant that they were more likely to be affected by Pathways. Thus, any observed variation in the impact of Pathways on men and women in the pilot areas may have been due to differences in the average characteristics of either group, rather than gender alone. The subgroup analysis carried out in the April 2006 areas assessed the statistical significance of apparent differences in the impact of Pathways between groups of customers, and so formally tested apparent differences in the impact of Pathways between subgroups, improving on the methods used to identify possible differences in the pilot areas.

6.2 The impact of Pathways by gender

There was no evidence that the impact of Pathways on the likelihood of being in paid work 16 months after starting the claim for incapacity benefits varied between the genders within the April 2006 areas. Table 6.1 also shows that there was no evidence that Pathways had a statistically significant impact on either men or women on the main measure of being in paid work in the April 2006 areas. Within the pilot areas, Pathways increased the proportion of women in paid work around 19 months after their initial enquiry about claiming incapacity benefits while no such effect was found for men.

Table 6.1 Estimate of the impact of Pathways on outcomes at time of interview, by gender

	Impact estimate	P-value	Base	Sample size
Men				
In paid work, any hours	-1.0	65	25.8	11,634
Health problem affects day-to-day activities	2.4	20	71.1	11,634
Health problem affects day-to-day activities a great deal	0.9	70	43.0	11,634
Women				
In paid work, any hours	-1.0	28	25.9	11,634
Health problem affects day-to-day activities	-2.9	37	78.1	11,634
Health problem affects day-to-day activities a great deal	0.2	96	41.9	11,634

Notes: Based on weighted survey data. ***=statistically significant at the 1 per cent level; **=statistically significant at the 5 per cent level; *=statistically significant at the 10 per cent level.

Pathways appeared to be more effective for women than men in reducing the likelihood that they reported that they had a health problem which affected their day-to-day activities by the time of the survey interview in the April 2006 areas. This difference in impact, of 5.4 percentage points, was statistically significant at the 5 per cent level.

Although there was a difference between the genders in the impact of Pathways on the incidence of self-reported health problems in the April 2006 areas, it was not possible to actually observe a statistically significant impact from Pathways on the self-reported health of either group around 16 months after the start of their claim for incapacity benefits (Table 6.1). By contrast, in the pilot areas, Pathways reduced the proportion of men who reported that they had a health problem which affected their daily activities a great deal around 19 months after they first enquired about claiming incapacity benefits.

6.3 The impact of Pathways by age

There was no evidence that the impact of Pathways on being in paid work at the time of the survey interview varied by age in the April 2006 areas. Also, Pathways did not have a statistically significant impact on the likelihood of either age group having entered paid work 16 months after the start of their claim for incapacity benefits (Table 6.2). In the pilot areas, Pathways raised the proportion of those under 50 who were in paid work around 19 months after their enquiry about claiming incapacity benefits (at the 10 per cent level of statistical significance), but did not have a statistically significant impact on those aged 50 or more.

Table 6.2 Estimate of the impact of Pathways on outcomes at time of interview, by age

	Impact estimate	P-value	Base	Sample size
Under 50				
In paid work, any hours	-1.6	38	26.7	11,634
Health problem affects day-to-day activities	1.7	32	70.3	11,634
Health problem affects day-to-day activities a great deal	1.3	53	40.1	11,634
Aged 50 or more				
In paid work, any hours	0.8	83	23.5	11,634
Health problem affects day-to-day activities	-4.2	19	85.7	11,634
Health problem affects day-to-day activities a great deal	-1.6	71	50.1	11,634

Notes: Based on weighted survey data. ***=statistically significant at the 1 per cent level; **=statistically significant at the 5 per cent level; *=statistically significant at the 10 per cent level.

Within the April 2006 areas Pathways was more effective in reducing the likelihood of reporting a health problem which affected daily activities amongst older customers compared to those under the age of 50. There was a statistically significant difference in impact of 5.9 percentage points between the two age groups.

Although there was a difference between the age groups in the impact of Pathways on self-reported health, Pathways did not actually have a statistically significant impact on the self-reported health of either those under the age of 50, or those aged 50 or more, in the April 2006 areas. Within the pilot areas, Pathways reduced the proportion of those under the age of 50 who reported a severely-limiting health problem around 19 months after making an enquiry about claiming incapacity benefits, but did not have a statistically significant impact on those aged 50 or more.

6.4 The impact of Pathways by the type of health condition

There was also no evidence that the impact of Pathways on the likelihood of being in paid work by the time of survey interview varied between those with and without a mental health condition in the April 2006 areas. Also, Table 6.3 shows that, within the April 2006 areas, Pathways did not have a statistically significant impact on the likelihood of either group being in paid work by this point. By contrast, in the pilot areas, Pathways increased the likelihood of those without a mental or behavioural disorder being in paid work around 19 months after they first enquired about claiming incapacity benefits, although this finding was only statistically significant at the 10 per cent level. There was no evidence that Pathways had a similar impact on those with a mental health condition in the pilot areas.

Table 6.3 Estimate of the impact of Pathways on outcomes at time of interview, by mental health

	Impact estimate	P-value	Base	Sample size
No recorded mental or behavioural disorder				
In paid work, any hours	-1.1	61	32.4	11,634
Health problem affects day-to-day activities	-1.0	58	68.3	11,634
Health problem affects day-to-day activities a great deal	0.2	91	37.0	11,634
Mental or behavioural disorder				
In paid work, any hours	-0.9	81	16.6	11,634
Health problem affects day-to-day activities	1.9	59	82.9	11,634
Health problem affects day-to-day activities a great deal	1.1	81	51.0	11,634

Notes: Based on weighted survey data. ***=statistically significant at the 1 per cent level; **=statistically significant at the 5 per cent level; *=statistically significant at the 10 per cent level.

There was no evidence that the impact of Pathways on either of the measures of self-reported health varied by the nature of the customer's health condition in the April 2006 areas. In addition, Pathways did not have a statistically significant impact on the self-reported health of either those with, or without, a mental or behavioural disorder (Table 6.3). Within the pilot areas, Pathways was associated with a reduction in the proportion of those without a mental or behavioural disorder who said that they had a health problem which affected their day-to-day activities a great deal around 19 months after they first enquired about claiming incapacity benefits. There was less evidence that this was the case for those with a mental health condition.

6.5 The impact of Pathways by the presence of dependent children

Within the April 2006 areas there was no evidence that Pathways was more effective in increasing the likelihood that those either with, or without, dependent children were in paid work around 16 months after the start of their qualifying claim. Also, Table 6.4 indicates that, Pathways did not have a statistically significant impact on this outcome for either group. This contrasts with the evidence from the pilot areas that Pathways had a statistically significant and positive impact on the probability of those with dependent children being in paid work around 19 months after making an enquiry about claiming incapacity benefits.

Table 6.4 Estimate of the impact of Pathways on outcomes at time of interview, by presence of dependent children

	Impact estimate	P-value	Base	Sample size
No dependent children in household				
In paid work, any hours	-1.6	39	26.0	11,634
Health problem affects day-to-day activities	-0.2	92	76.3	11,634
Health problem affects day-to-day activities a great deal	1.5	48	43.4	11,634
Dependent children in household				
In paid work, any hours	0.8	85	25.4	11,634
Health problem affects day-to-day activities	0.9	80	68.9	11,634
Health problem affects day-to-day activities a great deal	-1.7	70	40.6	11,634

Notes: Based on weighted survey data. ***=statistically significant at the 1 per cent level; **=statistically significant at the 5 per cent level; *=statistically significant at the 10 per cent level.

There was also no evidence of a statistically significant difference between those with and without dependent children in the impact of Pathways on self-reported health around 16 months after the start of the qualifying claim in the April 2006 areas. Furthermore, there was no evidence that Pathways had a statistically significant impact on the incidence of self-reported health problems by either group. Within the pilot areas, Pathways reduced the likelihood that those with dependent children reported health problems which limited their daily activity, whilst also reducing the proportion of those without dependent children who said that their health problem affected their day-to-day activities a great deal around 19 months after making an enquiry about claiming incapacity benefits.

6.6 Summary

The statistical significance of apparent differences in the impact of Pathways between subgroups of customers was not tested in the pilot areas. However, in this report, as well estimating the impact of Pathways on each group, the statistical significance of differences in the impact of Pathways on particular subgroups of incapacity benefits customers was assessed. This meant that it gave a clear indication of the significance of apparent differences between subgroups in the impact of Pathways.

Within the April 2006 areas, Pathways was more effective for women than men in reducing the incidence of self-reported health problems which affected everyday activities (a difference of 5.4 percentage points) 16 months after the start of the qualifying claim. Also, it produced a reduction of an additional 5.9 percentage points in the incidence of self-reported health problems amongst those aged 50 or more compared to younger customers. However, although there was evidence of variation in the effect of Pathways between some subgroups of customers, its impact on individual groups did not attain statistical significance. By contrast, in the pilot areas, Pathways was found to have a statistically significant impact on particular subgroups of customers.

The apparent differences in Pathways' impact on individual subgroups of incapacity benefits customers between the April 2006 areas and the pilot areas are likely to reflect, in part, variations in the characteristics of incapacity benefits customers between areas. They may also reflect differences in implementation, as mentioned in Chapter 5.

7 Conclusions

The aim of Pathways to Work is to assist incapacity benefits customers off benefits and into work. As the likelihood of returning to work decreases with the length of time spent on benefits, Pathways seeks to ensure that customers receive support in the early months following the start of their claim.

Pathways appeared to be effective in moving incapacity benefits customers into work in those areas where it was originally piloted, but there was interest in whether it would continue to have a positive impact as it was extended to a wider range of areas. This report has considered this question by assessing the impact of Pathways in the areas where it was introduced in April 2006 using surveys of incapacity benefits customers in these districts and a set of similar comparison areas.

Within the April 2006 areas, there was no evidence that Pathways had an impact on the proportion of incapacity benefits customers in paid work around 16 months after the start of their qualifying claim. There was also no evidence that Pathways had an impact on the likelihood of customers working 16 or more, or 30 or more, hours a week, or on their earnings at this same point in time. In addition, the analysis in the April 2006 areas found that Pathways did not appear to affect whether incapacity benefits customers reported limiting health problems around 16 months after the start of their qualifying claim.

By comparison, the analysis of survey data in the pilot areas showed that Pathways was associated with an increase of 7.4 percentage points in the probability of incapacity benefits customers being in paid work around 19 months after making an enquiry about claiming incapacity benefits. This finding was statistically significant at the 10 per cent level. In addition, in the pilot areas, Pathways reduced the proportion of incapacity benefits customers who said that they had a health problem which affected their day-to-day activities 'a great deal' by 10.8 percentage points. However, Pathways did not have a statistically significant impact on the likelihood of customers being in paid work of 30 or more, or 16 or more, hours a week, earnings, or reporting a less severe health problem in either the pilot, or the April 2006 areas.

As well as looking at the overall effect of Pathways, this report considered whether the impact of Pathways differed between particular subgroups of incapacity benefits customers. No significant differences were found when considering the effect on employment, but Pathways appeared to be more effective for women than men in reducing the incidence of self-reported health problems in the April 2006 areas. It also produced a reduction in the incidence of self-reported health problems which affected everyday activities amongst those aged 50 or more 16 months after the start of the qualifying claim compared to those under the age of 50. However, there was no evidence that the impact of Pathways on work or self-reported health differed between customers with mental health conditions and those with physical problems, or between those with dependent children and those without, in the April 2006 areas.

Although there was evidence that Pathways was more effective for some subgroups of customers than others, it did not have a statistically significant impact on any of the individual subgroups in the April 2006 areas. By contrast, within the pilot areas, Pathways did have a statistically significant impact on some of these subgroups.

Chapter 5 discussed a number of possible explanations for the divergence between the pilot and April 2006 areas in the impact of Pathways observed in the survey data. These can be summarised as follows:

- Differences which arise from the choice of sampling frame. The sampling frame used in the pilot areas meant that the impacts could be expected to capture any deterrent effect from Pathways, whereas this would be missed in the April 2006 areas.
- Variations between areas in the characteristics of incapacity benefits customers and their propensity to participate in the voluntary elements of Pathways, or in local labour market conditions.
- Differences in the timing of the final outcome interview in the pilot and April 2006 areas.
- Differences in the way in which Pathways was implemented in particular areas, and in the resources devoted to delivery.

Some of these suggested reasons for the differences observed between the pilot and April 2006 areas appear to be stronger than others. For example, there was evidence that the employment impact emerged over time in the pilot areas, so that even before month 19 there were signs that Pathways had a positive employment impact (albeit one that was not statistically significant). The fact that the employment impact in the April 2006 areas was so far short of attaining statistical significance and weakly negative, rather than clearly positive, suggests that the slight differences in the timing of the survey interviews in the pilot and April 2006 areas are unlikely to explain much of the difference in impacts in each set of areas. There was also little evidence that differences in labour market conditions explained the variation in the impact of Pathways between the pilot and April

2006 areas. By contrast, differences in the way that Pathways was implemented or resourced between the pilot and April 2006 areas may be an important source of variation. Likewise, differences between the pilot and April 2006 areas in the observed and unobserved characteristics of customers and their participation in the voluntary elements of Pathways may influence its effectiveness.

Further research into the relative contribution of each of these factors to the apparent divergence in the impact of Pathways between the pilot and April 2006 areas might give a better indication of the effectiveness of Pathways across different sites. There are a number of avenues which could be pursued in relation to each of the limitations to the analysis suggested above:

- Depending on the availability of data, an analysis of the proportion of all enquiries about claiming incapacity benefits which resulted in a claim being made, before and after the introduction of Pathways, could indicate whether Pathways did indeed reduce the proportion of potential customers who actually made a claim for incapacity benefits. An alternative approach is to look at changes in the flow of customers onto incapacity benefits after the introduction of Pathways.
- An analysis of the resources available to implement Pathways in the pilot and April 2006 Jobcentre Plus districts might indicate whether this was likely to be a factor in differences in the observed effectiveness of Pathways.
- Examining whether take-up of the voluntary elements of Pathways varied between areas might suggest whether differences in the impact of Pathways between the pilot and April 2006 areas were due to differences in participation. This might also look at whether participation rates varied between subgroups of customers.
- Assessing the impact of Pathways over a longer period of time in both the pilot and April 2006 areas would show whether a positive impact from Pathways on work and self-reported health emerged at a later point in the April 2006 areas.

Appendix Characteristics of customers starting a claim for incapacity benefits after Pathways was introduced locally

A.1 Introduction

This appendix provides a description of the geographical distribution and personal characteristics of those customers in the April 2006 areas who started a claim for incapacity benefits between 1 August and 30 November 2006; that is, after Pathways was introduced locally. It also compares the characteristics of survey respondents in the April 2006 areas with those in the pilot areas. Within the pilot areas, the survey samples were drawn from two different sources, and so it was not possible to derive weights. As a result, just as in Chapter 3, this appendix considers the similarities in the characteristics of incapacity benefits customers in the pilot and April 2006 areas using unweighted data.

A.2 Geographical distribution

Table A.1 shows the distribution of incapacity benefits customers in the April 2006 areas within each Jobcentre Plus district. Customers were fairly evenly distributed across districts. The proportion of incapacity benefits customers within each area ranged from 15 per cent in South Yorkshire and South West Wales, to 19 per cent in the Manchester Central area. Almost 22,000 individuals started a claim for incapacity benefits across these six districts between 1 August 2006 and 30 November 2006. The distribution of survey respondents across the April 2006 areas was broadly similar to the distribution found in the administrative data, although there was a slight under-representation of customers from Manchester Central.

Table A.1 Distribution of claims for incapacity benefits across Jobcentre Plus districts – April 2006 areas

	Incapacity benefits customers (%)	
District	**Administrative data**	**Survey data**
South Yorkshire	15	17
South Tyne and Wear Valley	18	19
Lanarkshire and East Dunbartonshire	17	16
Inner Mersey	17	16
Manchester Central	19	16
South West Wales	15	17
Base	*21,839*	*2,780*

Notes: Based on unweighted data.

A.3 Personal characteristics

Table A.2 summarises the characteristics of individuals eligible for Pathways in the April 2006 areas, using unweighted survey data. A very similar proportion of survey respondents were female in the pilot and April 2006 areas (47 per cent and 48 per cent respectively). The age profile of survey respondents was also fairly similar in the pilot and April 2006 areas. On average, incapacity benefits customers in the pilot areas were aged 43 at the start of their qualifying claim, and 41 in the April 2006 areas. Compared to the April 2006 areas, a smaller proportion of customers in the pilot areas were aged 18-29 (16 per cent compared to 22 per cent), whilst a larger proportion of those in the pilot areas were aged 50 or more (38 per cent compared to 32 per cent). However, the proportions in the 30-39 and 40-49 age groups in the pilot and April 2006 areas were identical.

Table A.2 Personal characteristics of the post-intervention cohort

	Incapacity benefits customers (%)	
Personal characteristics	**April 2006 areas**	**Pilot areas**
Female	48	47
Age (mean)	41	43
18-29	22	16
30-39	19	19
40-49	27	27
50-59	32	38
Non-white	5	3
Married or living as married	44	52
Number of dependent children		
0	73	76
1	14	10
2	9	10
3 or more	4	5
Highest qualification		
Degree or equivalent	15	14
A-level or equivalent	16	6
GCSE or equivalent	29	35
Other qualification	5	6
No qualification	35	40
Sample size	2,780	1,957

Notes: Based on unweighted survey data. Pilot areas figures from Table 3.2 of Bewley *et al.* (2007).

Compared to the pilot areas, a larger proportion of survey respondents in the April 2006 areas did not describe themselves as white. Only 3 per cent of customers in the pilot areas said that they were not white, compared to 5 per cent of those in the April 2006 areas. Within the April 2006 areas, a smaller proportion of customers were married or living as married compared to the pilot areas (44 per cent and 52 per cent respectively). However, a slightly larger proportion had dependent children, at around 27 per cent, compared to 25 per cent in the pilot areas.

Whilst a similar proportion of survey respondents in the pilot and April 2006 areas were educated to degree level (14 per cent and 15 per cent respectively), a much smaller proportion of those in the pilot areas reported that their highest academic or vocational qualification was at A-level standard (6 per cent compared to 16 per cent in the April 2006 areas). It seemed that this was explained by a larger proportion of those in the pilot areas having no, or only low-level, qualifications, as 75 per cent of those in the pilot areas had no qualifications, or only those at GCSE level or below, compared to 69 per cent of those in the April 2006 areas. A similar proportion of those in the pilot and April 2006 areas held qualifications that could not be assigned to one of the four levels (6 per cent and 5 per cent respectively).

A.4 Summary

This appendix has explored the characteristics of a sample of incapacity benefits customers who became subject to Pathways in April 2006, based on their survey responses. There were some differences in the personal characteristics of survey respondents between the pilot and April 2006 areas. The gender composition of respondents in the pilot and April 2006 areas was almost identical, and the proportion aged between 30 and 49 was very similar in the pilot and April 2006 areas. However, those aged 50 or more made up a greater proportion of the total in the pilot areas, whilst a smaller proportion were under the age of 30 compared to the April 2006 areas. There were also some signs that survey respondents in the April 2006 areas were less likely to be white than those in the pilot areas. Customers in the April 2006 areas were less likely to be married or living as married compared to those in the pilot areas, whilst a slightly larger proportion had dependent children. Finally, survey respondents in the April 2006 areas held higher level qualifications than those in the pilot areas.

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