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Research Report No 488

Evidence on the effect of Pathways to Work on existing claimants

Helen Bewley, Richard Dorsett and Marisa Ratto

A report of research carried out by Policy Studies Institute on behalf of the
Department for Work and Pensions

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Abbreviations

ADF	Adviser Discretion Fund
BIS	Business Information Systems
CMP	Condition Management Programme
DiD	Difference-in-differences
DWP	Department for Work and Pensions
ESA	Employment and Support Allowance
GMS database	Generalised Matching Service database
IB	Incapacity Benefit
IBPAs	IB Personal Advisers
IFS	Institute for Fiscal Studies
Incapacity benefits	IB or Income Support claimed on the grounds of disability
IS	Income Support. Income Support is a non-contributory, income-assessed benefit available to people who are not required to work.
IWS	In-Work Support
JPP	Job Preparation Premium
JSA	Jobseeker's Allowance
MPH	Mixed Proportional Hazard
NatCen	National Centre for Social Research

NBD	National Benefits Database
NDDP	New Deal for Disabled People
PCA	Personal Capability Assessment
RTWC	Return to Work Credit
WASD	Working Age Statistical Database
WFI	Work Focused Interview

Summary

Background

The Pathways to Work package of reforms ('Pathways', for short) is aimed at encouraging employment among people claiming incapacity benefits. The reforms were piloted for those starting a new claim in three Jobcentre Plus districts in October 2003 and a further four Jobcentre Plus districts in April 2004. In February 2005, a modified version of Pathways was extended to those customers in these same areas who had an existing Incapacity Benefit (IB) claim of up to two years in duration at the time Pathways was introduced locally for new and repeat claimants. Before this time, existing claimants were eligible to participate in Pathways on a voluntary basis, although participation would be mandatory for those who later commenced a new claim. In practice, this meant that those included would have had a claim of roughly one to three years duration at the time of the extension. Furthermore, in April 2006, eligibility was extended to include those with claims of up to six years at the time Pathways was introduced locally for those making a new claim. However, this study is concerned with the initial extension only, i.e. customers with claims of roughly one to three years duration.

The evaluation of Pathways is being carried out by a consortium of research organisations using qualitative and quantitative techniques to examine various aspects of the pilots. This report presents the first results of evaluating the overall effect of the pilots for existing customers. A subsequent report will consider longer-term outcomes and the effect of extending eligibility to those with claims of up to five years. An earlier report (Bewley *et al.*, 2007) presented estimates of the impacts of Pathways for those making a new claim.

Data

The evaluation is based on three linked datasets. The first is survey data for a sample of eligible claimants. These data were collected at least 19 months after Pathways for existing claimants was first piloted. The second dataset is the National Benefits Database (NBD). In addition to supplying the sample used for the survey, the NBD

also provided ongoing information on benefit status which could be used as an outcome in the evaluation. The third dataset is the Pathways evaluation database. This is a database that captures the actions taken by advisers and the progress of all individuals through their Pathways treatment. The three databases were linked using encrypted National Insurance numbers thereby providing a rich combined database with which to explore the evaluation questions.

Methodology

The main evaluation results are based on duration analysis. This is a well-established method of modelling the time until a specific event takes place. For example, the focus in this report is the time until employment entry or the time until benefit exit. Recent methodological developments have established how duration analysis can identify the causal impact of a treatment on subsequent outcomes. The results in this report are based on a simplified version of this approach which can provide robust results under certain assumptions. We offer some justifications for this simplification in this application and some reasons to believe the underlying assumptions may be met.

This choice of modelling approach was driven by the fact that participation in Pathways for existing customers was not immediate, but took some time to be extended to all those eligible. Districts had until April 2006 before all those eligible within the first extension had to be called in for their first Work Focused Interview (WFI) (the start of the Pathways programme). Examination of the data showed that this had been adhered to – there were very few individuals receiving their first WFI after April 2006 – although there were a number of seemingly eligible cases who appeared never to receive a WFI. This may have been due to the flexibility staff have to waive or defer WFIs for customers with severe health/disability problems.

Results

The main evaluation results are as follows:

Employment entry rate

Pathways appeared to increase significantly the rate of employment entry. Since this rate was increased from the point of WFI onwards, the estimated effect 18 months after introduction was greater for those having their WFI early than for those having it later, as the effect had had more time to work through. To illustrate, for those having their WFI within the first six months of introduction, the probability of having entered employment by the 18 month point was increased by about three to four percentage points. For those having their first WFI later than this but within a year of introduction, the corresponding increase was about 1.5 to 2.5 percentage points.

Significant employment effects are still found when consideration is limited to jobs of 30 or more hours per week or 16 or more hours per week, indicating that, for some people at least, Pathways is encouraging a substantial re-engagement with the labour market.

Benefit exit rate

Pathways appeared to increase significantly IB exit. For example, those receiving their WFI in the first six months following the extension of Pathways to existing customers had their probability of having left IB increased by four to five percentage points.

Subgroup analyses

While no statistically significant subgroup variation was detected, this may be due to the lack of statistical power in the results. With this in mind, some consideration is given to the broad pattern of results. This suggests that there may have been stronger effects:

- in April 2004 areas than October 2003 areas;
- for men than for women (albeit marginally);
- for younger claimants than for older claimants;
- for those with children than for those without children;
- for those with a mental health problem than those without a mental health problem.

Pre-extension impact

The analysis also looked at how the initial introduction of Pathways (for new claimants) affected existing customers in the period before February 2005. The results were suggestive of a possible small effect but the estimates were not statistically significant. While it may indeed be the case that some existing customers were affected by the Pathways regime introduced for new claimants, no statistically significant effect was found for the population of existing claimants as a whole.

Conclusion

In sum, the results appear encouraging to the extent that they have identified significant effects on employment entry and benefit exit among a customer group that has been receiving incapacity benefit for some time and so may be viewed as harder to help than new claimants. Some evidence of the extent to which they are hard to help is apparent through examination of the estimated rates of employment entry and benefit exit in the absence of Pathways. These rates are very low, particularly for employment entry. This potentially reinforces the importance of existing customers as a policy priority, (although, for some, the nature of their

health condition may remain an obstacle to employment). It also suggests that any 'deadweight' costs associated with RTWC will be minimal.

A limitation of the analysis is that only the first entry to employment and the first exit from IB are considered. It is of course possible that these transitions are not sustained. A second wave of survey interviews is due to be carried out which will provide outcomes for a period of 33 or more months since February 2005. This will allow a fuller consideration of outcomes, including later transitions away from employment or back onto IB.

A final comment relates to the generalisability of the results. Whether the observed effects are likely to hold if Pathways were rolled out to existing customers in other parts of the country will depend in part on the characteristics of the existing customers in those other areas. However, an additional complication arises from the eligibility criteria for Pathways for existing customers. Specifically, individuals had to have been claiming incapacity benefits for up to two years at the time Pathways was introduced for new claims and these existing claims had to persist until 7 February 2005. In practice this meant that eligible individuals had a claim of roughly 15 to 38 months duration in the October 2003 areas, and roughly 10 to 33 months duration in the April 2004 areas. Were Pathways to be extended to existing customers in additional areas (using the same criteria), claim lengths among those eligible would be different. Those with longer claims would have had more time to volunteer for Pathways. We might therefore expect the existing claimants eventually affected by such an extension to be less likely to leave benefit without help. However, it is not possible to infer from this how effective any such help might be. The results from the planned analysis of the Pathways effect for existing customers with longer claims may be relevant here.

1 Introduction

1.1 The policy background

The Pathways to Work package of reforms ('Pathways', for short) is aimed at encouraging employment among people claiming incapacity benefits; that is, people claiming IB or Income Support (IS) on the grounds of disability. Based on proposals outlined in the 2002 Department for Work and Pensions (DWP) Green Paper *'Pathways to Work: helping people into employment'*, these reforms were introduced on a pilot basis in three Jobcentre Plus districts in October 2003. Four further districts became part of the pilot in April 2004. Since then, Pathways has been rolled out to a further 14 districts to cover one-third of the country. By April 2008, all new incapacity claims in Britain will be eligible for Pathways. The replacement of IB with the Employment Support Allowance (ESA) is scheduled for October 2008. From this point on, Pathways will effectively provide the conditionality aspect of the new benefit.

Pathways was introduced as a response to the large increase in the numbers claiming incapacity benefits. At the time of the 2002 Green Paper, there were roughly 2.7 million claimants; more than the combined total number of unemployed people claiming Jobseeker's Allowance (JSA) and lone parents claiming IS. The overwhelming majority of people starting an incapacity benefits claim expect to work again (Woodward *et al.*, 2003). Many do – in 2004, almost 60 per cent left benefit within a year. However, for those who remain on benefit, the chances of leaving declines markedly – 29 per cent will still be claiming after another eight years (see the 2002 Green Paper for further details). A key aim of Pathways is to intervene early so as to reduce the incidence of prolonged benefit dependency.

The main focus to date has been on new and repeat claimants of incapacity benefits. However, existing claimants – that is, those people who were already claiming incapacity benefits when Pathways was introduced for new claims – were also affected. Initially, this was either on a voluntary basis – existing claimants in those parts of the country where Pathways operates are free to participate should they wish to do so – or due to a change in their circumstances such that they become eligible for mandatory participation. This can happen if existing customers end

their claim and then go on to start a new one or if they continue their IB claim but start a new claim for IS. In February 2005, a mandatory element was introduced on a purely pilot basis for existing customers within the areas that introduced Pathways in October 2003 and April 2004. This only affected people who had been claiming for up to two years in October 2003 and April 2004 respectively. It was extended in April 2006 to include those with claims of up to six years at those times.¹

1.2 The Pathways programme

Pathways operates differently for new claimants and existing claimants. However, there are also a number of similarities. This section begins by describing Pathways for new claimants and then highlights the differences for existing claimants.

Under Pathways, an individual aged between 18 and 60 making a claim for incapacity benefits must attend an initial WFI eight weeks after making their claim. Failure to comply with this requirement can result in benefits sanctions. Most people remaining on incapacity benefits must attend five further WFIs.² There are two groups of people for whom this is not required: those with particularly severe medical conditions and those judged likely to return to work without additional help. However, they can still participate on a voluntary basis. WFIs are carried out by specially trained IB personal advisers (IBPAs).

Participation in all other provision available under Pathways is voluntary. There are several elements:

- The **'Choices'** package offers a range of new and existing programme provision aimed at improving labour market readiness and opportunities. The two main programmes within Choices are the New Deal for Disabled People (NDDP) and the Condition Management Programme (CMP). The CMP is a new initiative, run in collaboration with local health providers, with the aim of helping individuals manage their disability or health condition. Choices can also facilitate access to existing programmes for IB customers such as Work Step, Access to Work and Work Preparation. In addition, customers can be referred to generic programmes such as Work Based Learning for Adults (in England), Training for Work (in Scotland), Programme Centres and Work Trials.
- The **Return to Work Credit** (RTWC) offers customers who find work of at least 16 hours a week a weekly payment of £40 for a year if their gross annual earnings are not more than £15,000.

¹ In Somerset, the programme was extended to the full caseload of existing customers.

² In non-Pathways areas, new incapacity benefits claimants must attend a single WFI.

- **In-Work Support** (IWS) is a programme of provision to complement the support provided by IBPAs and NDDP Job Brokers. It is contracted-out to providers and includes one or more of the following: mentoring, a job coach, occupational health support, in-depth support, financial advice/debt counselling and an aftercare service.
- The **Adviser Discretionary Fund** (ADF) allows IBPAs to make awards of up to £300 per individual to support activities or purchases to increase the chances of finding work.

For existing claimants, there are four major differences. First, while new claimants who are Personal Capability Assessment (PCA) exempt are invited to the first WFI, existing claimants who are PCA exempt need not attend any WFIs. Second, existing claimants must only attend three rather than six WFIs. Third, whereas those commencing a claim may be predicted on the basis of the screening questionnaire to find work within 12 months unassisted, most existing claimants will have already been claiming in excess of a year at the time of their first WFI. Consequently, screening would be largely redundant for existing claimants and is not a feature of the Pathways experience for existing claimants. Fourth, there is an additional voluntary component available:

- The **Job Preparation Premium** (JPP) offers customers who undertake relevant activity that supports a return to work a weekly payment of £20 for up to 26 weeks, on top of other benefits payable.

1.3 The evaluation of Pathways

The evaluation of Pathways is being carried out by a consortium of research organisations led by the Policy Studies Institute and including the Institute for Fiscal Studies, Mathematica Policy Research, the National Centre for Social Research, the Social Policy Research Unit and David Greenberg of the University of Maryland. The evaluation is multi-faceted and involves qualitative analyses, large-scale quantitative surveys, impact analyses, cost-benefit analyses and a literature review of relevant programmes in the USA.

The focus in this report is on the overall impact of Pathways on the labour market outcomes of those individuals within the original seven Jobcentre Plus districts who had an existing claim of up to two years in duration at the time that Pathways was first introduced for new claimants. As noted above, in three of these areas – Renfrewshire, Inverclyde, Argyll and Bute; Bridgend, Rhondda, Cynon and Taff; and Derbyshire – Pathways was introduced in October 2003. In a further four areas – Essex; Gateshead and South Tyneside; East Lancashire; and Somerset – Pathways was introduced in April 2004. In the remainder of this report, we refer to these as the ‘October 2003’ and the ‘April 2004’ areas respectively.

This means that the group we consider in this report satisfy the following criteria:

- October 2003 areas: began a claim between 27 October 2001 and 26 October 2003 that continued until at least 7 February 2005;
- April 2004 areas: began a claim between the 5 April 2002 and 4 April 2004 that continued until at least 7 February 2005.

The specific question addressed in this report is whether, and by how much, the outcomes considered were affected by Pathways. To make causal statements of this kind requires an analytical framework that goes beyond a simple comparison of those eligible for Pathways with those not eligible, and aims instead to estimate explicitly what the outcome of those eligible for Pathways would have been had Pathways not been introduced – the so-called ‘counterfactual’. The difference between the actual and counterfactual outcomes provides the estimate of the effect of Pathways.

The approach followed in Bewley *et al.* (2007) was to estimate the counterfactual outcome for a point in time after the introduction of Pathways as the actual outcome observed in the pilot areas for a point in time prior to the introduction of Pathways, uprated according to the trend in outcomes over the same two periods observed in a set of similar-looking comparison areas. In the current evaluation, it was not appropriate to use this approach due to the way the extension of Pathways to existing claimants was carried out in practice. Specifically, districts had until April 2006 to call in all eligible claimants for their first WFI. This gradual roll-out complicates the evaluation approach since some eligible individuals would not have been affected by Pathways until some considerable time after 7 February 2005. The evaluation approach and the underlying assumptions are discussed in detail in Chapter 4.

The overall evaluation has already resulted in a number of reports. Of particular relevance is the report by Bewley *et al.* (2007) which examined the effect of Pathways on new claimants and suggests that, for people starting a claim, Pathways has a positive effect on encouraging employment, but a smaller long-term impact on benefit receipt. The current report presents the first evidence on the effect of Pathways on existing claimants. Among the population of incapacity benefits claimants as a whole, those who have been claiming for a longer period of time constitute an important group. To give some flavour of this, in February 2007, about three-quarters of all claimants had been claiming for more than two years and half had been claiming for five years or longer.³ Those claiming for longer-periods of time are less likely to exit benefit and so may be harder to help.

³ Figures taken from DWP tabulation tool.

1.4 Report outline

This report unfolds as follows. In Chapter 2, the data on which the evaluation is based are presented and discussed. Chapter 3 then describes the eligible population using these data. The methodology used to move beyond a descriptive analysis to an estimate of the effect of Pathways for existing claimants is set out in Chapter 4. Chapter 5 presents the estimation results for the full population and Chapter 6 considers variations across subgroups. Chapter 7 discusses the results and concludes.

2 Data

2.1 Overview of data used

This evaluation made use of both survey data and two types of administrative data. The advantage of working with survey data is that, since they were collected for the express purpose of understanding the impact of Pathways, they provide information on a rich set of outcomes and a comprehensive range of factors likely to influence the effectiveness of Pathways. With administrative data, fewer background and outcome variables are available. However, administrative data offer the important advantage of maximising the number of cases available for analysis. Furthermore, using administrative data avoids the possibility of non-response and recall biases that may affect survey data.

2.2 The survey data

Survey data were collected with the specific intention of obtaining information on factors likely to influence the effectiveness of Pathways which were not available in the administrative data. The survey data on which the estimation results in this report are based are a random sample of the eligible population, drawn from administrative benefit records (see below). As stated in Chapter 1, this includes those individuals who had a claim of up to two years duration at the time Pathways was introduced for new claimants (that is, claims in the October 2003 areas that began between 27 October 2001 and 26 October 2003 and claims in the April 2004 areas that began between 5 April 2002 and 4 April 2004) and whose claim continued at least until 7 February 2005.

Telephone interviews for this population were carried out over the period August to November 2006. This allowed all those surveyed to be observed at least 18 months after Pathways was first extended to existing customers. The questionnaires used in the surveys collected information on a range of personal characteristics at the time of the interview. Outcomes over the full period from February 2005 up to the time of the survey interview were also observed. This allows a detailed understanding of the changing employment status of the sample. For each month we can distinguish 17 categories of employment status:

- employee;
- self-employed;
- in a work trial;
- in voluntary or unpaid work;
- off work temporarily (for less than 91 days);
- off work for more than 91 days and looking for paid work;
- off work for more than 91 days and doing a vocational or work-related course;
- off work for more than 91 days and on a Government programme or course;
- off work for more than 91 days and doing another education or training course;
- off work for more than 91 days and caring for a sick or disabled adult or child;
- off work for more than 91 days and looking after the home or family;
- off work for more than 91 days and something else;
- inpatient in hospital;
- off sick/health problem was main focus;
- retired;
- claiming benefit;
- complex spell consisting of different things for short periods;
- unable to remember.

In addition, information was collected on hours worked, monthly take-home pay and benefit status.

2.3 The administrative data

Two sources of administrative data were used in this analysis. The NBD was used to observe individuals' benefit status over time. The Pathways evaluation database captures details of the Pathways experience for all those eligible. Both databases are described in turn below.

2.3.1 National Benefits Database

The NBD is based on periodic scans of live benefits records, dating back to June 1999. IB is scanned every six weeks so NBD provides a snapshot of those claiming IB at six-weekly intervals from 1999 onwards. IS, on the other hand, is scanned every week. Where an individual appears on one scan of the live benefits data but is not found on the next scan, it is assumed that they left benefits in the

intervening period. The date at which they exited benefits is not recorded, so they are randomly assigned an end-date which falls within the two scan dates surrounding the exit. This means that the actual date that an IB spell ended could potentially be up to six weeks before or after the imputed end date. In addition, individuals who were on IB for less than six weeks would not appear in the NBD if this benefit spell started and ended between two scans of the live benefits data.

The NBD provides information on a more limited range of individual characteristics and outcomes than the survey data. With regard to individual characteristics, information on sex and date of birth is generally reliable. Geographical variables are also well-recorded and can be used to identify people living within the pilot areas or, indeed, other specified areas. The real advantage of the NBD in this application, however, is the high quality information it provides on benefit receipt. All major benefits are recorded complete with start dates and approximate end dates. From this it is possible to derive a variable showing whether or not an individual was on IB (or, indeed, any other DWP-administered benefit) at any given point in time from 1999 onwards. For those claiming IB, the nature of their health problem was recorded.

Lastly, since the survey sample was drawn from the NBD, it was possible to link survey respondents to their benefits records.

2.3.2 Pathways evaluation database

As mentioned above, the Pathways evaluation database captures details of the Pathways experience for all those eligible. This database can therefore be used to understand the nature of the treatment received by existing customers. Importantly for the approach followed in this evaluation, information is available on the exempt status of individuals and also on the timing of specific stages of the Pathways process.

Using encrypted National Insurance numbers, the Pathways evaluation database could be linked to both the NBD and the survey sample. The resulting database allows a detailed understanding of the characteristics of the Pathways population, their progress through the Pathways treatment and their eventual outcomes. We turn to a description of this in the following chapter.

3 Description of the pilot population and the Pathways experience

This chapter describes the regional distribution, personal characteristics and employment and benefit history of the eligible population in the pilot areas. As described in Chapter 2, information was gathered in the telephone interviews for a period of around a year and a half after the extension of Pathways to existing customers. We also use information taken from the administrative databases.

3.1 Regional distribution

Table 3.1 shows the distribution of the pilot population by district. Amongst respondents to the survey, a little over two-fifths came from the October 2003 pilot, the remainder from the April 2004 areas. The area breakdown was broadly similar for the population as a whole observed in the NBD. This is a much larger group of people: the survey sample numbers 1,808 individuals compared to the administrative data which show the eligible population to number some 39,408.

Table 3.1 Distribution of pilot population post-intervention by district

Pilot areas	Survey data %	Administrative data %
October 2003		
Bridgend and Rhondda Cynon Taff	14	13
Derbyshire	20	19
Renfrew, Inverclyde, Argyll and Bute	10	10
April 2004		
Essex	26	26
Gateshead and South Tyneside	10	10
Lancashire East	13	15
Somerset	8	8
Base	1,808	39,408

Source: Survey data.

3.2 Personal characteristics

Table 3.2 summarises the personal characteristics of the pilot population using both the survey and administrative data. Due to the more limited range of personal characteristics available in the administrative data, some characteristics are observed only in the survey data. Women constituted 51 per cent of the survey sample, but only 42 per cent of the population represented in the administrative data. Survey respondents were also slightly older on average than those in the administrative data (45 compared to 40 years). Corresponding to this, the proportion of individuals under the age of 30 was much smaller among survey respondents than among the claimant population captured in the administrative data (11 per cent and 18 per cent respectively) while the proportion aged 50 or over was higher (43 per cent in the survey data, 37 per cent in the administrative data).

Respondents to the survey were predominantly white (just four per cent were otherwise) and just over half (55 per cent) were married or had a partner. While 14 per cent had one dependent child, ten per cent had two and five per cent had three or more, the majority (71 per cent) had none. With regard to qualifications, 36 per cent had none while 13 per cent held a degree-level qualification.

Information on the nature of the individual's health problem is taken from the NBD rather than the survey. The main reason for this is that the information taken from the NBD is recorded prior to the introduction of Pathways and so cannot be influenced by the programme itself. This is in contrast to the health information collected in the survey 1½ years after Pathways was extended to existing customers.

The proportion of survey respondents recorded as having a mental or behavioural disorder is slightly lower at 36 per cent than among the full population (41 per cent). A caveat with this finding is that many individuals will have multiple health problems when they make their claim, yet the NBD records only a single condition. Moreover, individuals may develop conditions during the course of their claim such that their original complaint recorded in the NBD becomes less relevant over time.

Table 3.2 Personal characteristics of the pilot area population post-intervention

Personal characteristics	Survey respondents	Full population
Female	51	42
Age:	(average age=45)	(average age=40)
Age<30	11	18
Age 30-39	17	21
Age 40-49	28	24
Age 50+	43	37
Non-white	4	
Partnered	55	
Number of dependent children:		
Zero	71	
One	14	
Two	10	
Three or more	5	
Highest qualification:		
Degree or equivalent	13	
A-level or equivalent	11	
GCSE or equivalent	28	
Other qualifications	13	
No qualifications	36	
Mental health problem	36	41
Base	1,808	39,408

Source: Survey data and NBD.

Among those who were recorded as having a 'mental or behavioural disorder', we can distinguish among different types of conditions. Table 3.3 shows that 'depressive episode' is by far the largest category, accounting for nearly two-thirds of those with a mental health problem.

Table 3.3 Type of mental health problem amongst the pilot population recorded as having a mental or behavioural disorder

Type of mental health problem	%
Alcoholism	3
Depressive episode	64
Drug abuse	2
Mental and behavioural disorders associated with the puerperium	1
Mental disorder not otherwise specified	1
Other anxiety disorders	12
Other neurotic disorders	6
Persistent delusional disorder	0
Pervasive development disorders	0
Phobic anxiety disorders	0
Reaction to severe stress	7
Schizophrenia	1
Specific development disorders of scholastic skills	1
Specific personality disorders	0
Unspecified mental retardation	0
Unspecified nonorganic psychosis	1
Base	653

Source: survey data linked to NBD.

3.3 A description of the outcomes

3.3.1 Monthly employment status

As already mentioned, the survey data allow us to distinguish 17 different employment status. For our analysis we group them in six categories. These are defined as follows (with reference to the survey responses listed in the previous chapter):

1 In work:

- employees;
- self-employed.

2 Unemployed:

- on a work trial;
- voluntary or unpaid work;
- off work temporarily (for less than 91 days);

- off work for more than 91 days and looking for paid work;
- off work for more than 91 days and doing a vocational or work-related course;
- off work for more than 91 days and in a Government programme or course;
- off work for more than 91 days and doing another education or training course.

3 Carer/homeworker:

- off work for more than 91 days and caring for a sick or disabled adult or child;
- off work for more than 91 days and looking after the home or family;
- off work for more than 91 days and something else.

4 Off sick:

- inpatient in hospital;
- off sick/health problem was main focus.

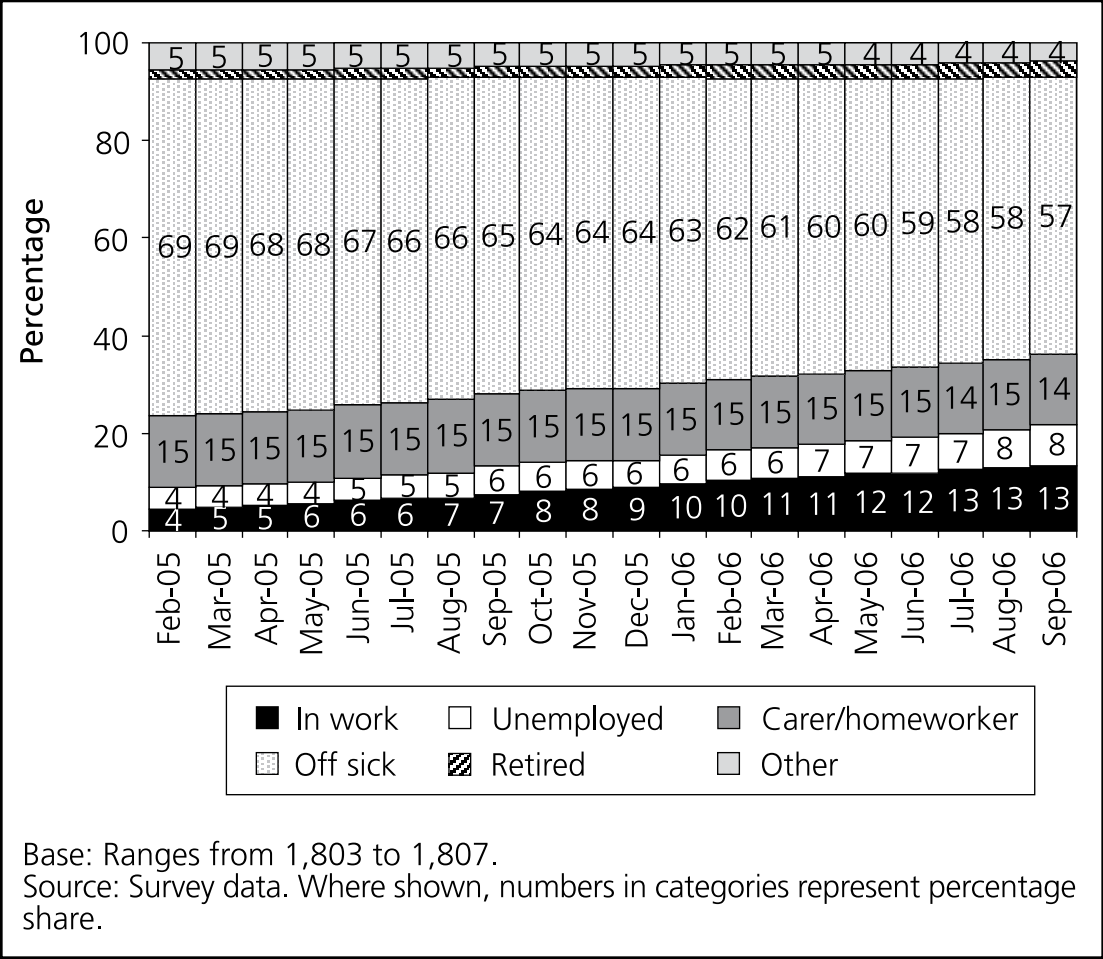
5 Retired.

6 Other.

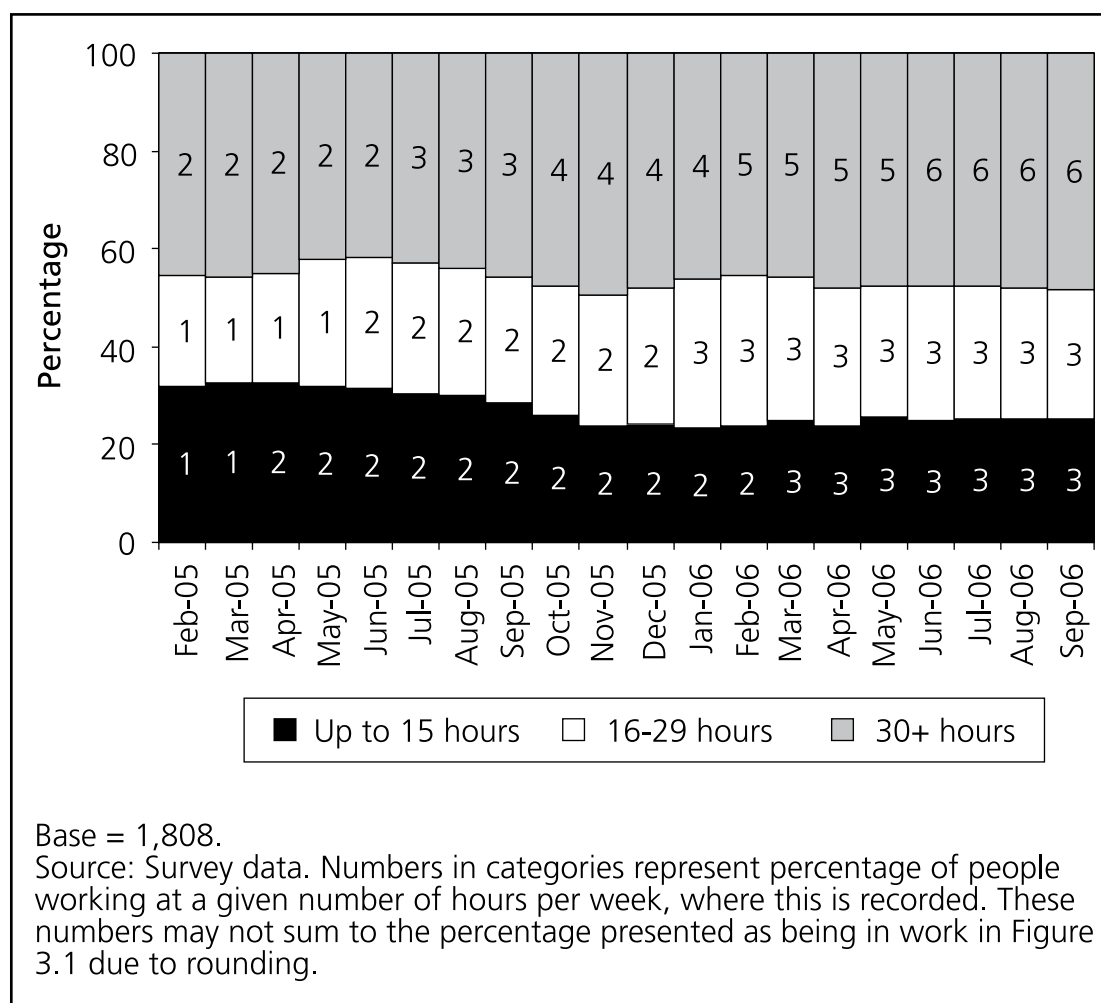
- claiming benefit;
- complex spell consisting of different things for short periods;
- unable to remember.

Figure 3.1 shows the how the employment status of the pilot population changed over time from February 2005 to September 2006. Those 'off-sick' account for the largest proportion throughout the period. However, this declines from its initial level of 69 per cent to its eventual level of 57 per cent. Accounting for much of this fall is the increase in employment. Over the period considered this grew from four per cent to 13 per cent. The proportion unemployed doubled from four per cent to eight per cent. The other categories remained pretty stable over time. In all, the chart shows an increasing level of labour market participation among those who were 'off-sick' when first observed. To provide some context for this, Bewley *et al.* (2007) found that the employment level among those first enquiring about starting an incapacity benefits claim in the Pathways pilot areas grew over the following year and a half to about 35 per cent.

Figure 3.1 Employment status over time



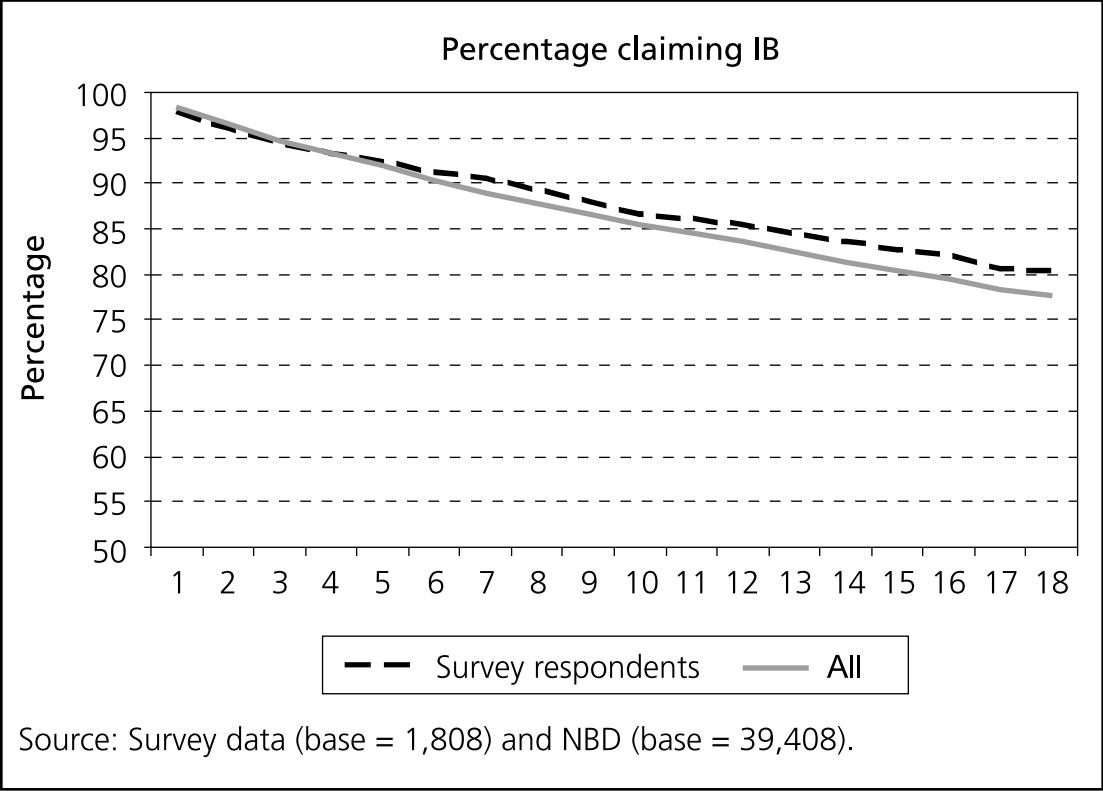
For those in work, we can also see the number of hours worked. Figure 3.2 shows that the proportion of employment accounted for by those working fewer than 16 hours a week has shrunk slightly over time. In light of the previous result, it seems likely that this may be driven more by the increase in the number of people working rather than by an increase in the hours worked by those already in work. The numbers within the bars in Figure 3.2 show the percentage of the survey respondents working at a given level. From this it is clear that there has been an increase in the proportion working less than 16 hours per week (from one per cent to three per cent) but that this has been overshadowed by the increase in the proportion of people working more hours per week; this has grown from three per cent in February 2005 to nine per cent by September 2006.

Figure 3.2 Number of hours worked, for those in work

3.3.2 Monthly benefit status

The administrative data allow us to observe the proportion of those in the pilot areas claiming IB in the months following the extension of Pathways to existing claimants. Figure 3.3 shows this for both the pilot population as a whole and the survey respondents. For the full population, there is a steady decrease in the proportion claiming IB over the 18 month period. Ninety-eight per cent were claiming IB one month after the intervention, whilst 78 per cent were still claiming 18 months later. For survey respondents, the decline was quite similar. By the end of the 18 month period 80 per cent were still claiming IB. Overall, there is a slower rate of exit than for those starting a new claim: Bewley *et al.* (2007) show that only half of those starting a new claim were still receiving IB 18 months later.

Figure 3.3 Benefit status by month since 7 February 2005



3.3.3 Monthly earnings

It is also informative to consider monthly earnings. Table 3.4 gives the average monthly take-home pay from February 2005 onwards for those in work at that time. Since these averages are calculated for only those people in work, the bases are generally small (although this becomes less of a problem as time goes on and the number of people in work increases). Nevertheless, the estimates show an overall upward trend over time, in keeping with the increase in hours mentioned above, and average about £650 per month across the entire period.

Table 3.4 Monthly take-home pay

Month	Monthly take-home pay	
	£	Base
February 2005	644	83
March 2005	625	88
April 2005	625	93
May 2005	616	100
June 2005	622	109
July 2005	633	113
August 2005	628	116
September 2005	646	128
October 2005	650	135
November 2005	651	144
December 2005	644	145
January 2006	654	158
February 2006	655	168
March 2006	672	176
April 2006	673	177
May 2006	685	189
June 2006	685	193
July 2006	686	204
August 2006	690	209
September 2006	682	211

Source: Survey data.

3.3.4 Health

The telephone interviews collected information on the health condition of respondents. Individuals were asked if they had, at the time of the interview, a health condition or disability that affected their everyday activities and whether it limited those activities 'a great deal'. Respondents were also asked how their health had changed since February 2005. The results, presented in Table 3.5 show that most respondents (93 per cent) reported that they still had a health condition or disability at the time of the interview and that 60 per cent had a health condition or disability that affected their ability to go about their everyday activities 'a great deal'. In line with this, fewer than half of all respondents reported reasonably good health at the time of the interview and only ten per cent had seen a general improvement since February 2005.

Table 3.5 Self-reported health condition

Self-reported health condition	%
Health condition or disability at time of interview	93
Health condition that affects everyday activities ‘a great deal’	60
Base	1,808
Health at time of interview:	
– very good, good or fair	45
– bad	38
– very bad	15
Base	1,756
Health since 7 February 2005:	
– getting better	10
– getting worse	36
– stayed about the same	25
– changeable	30
Base	1,741

Source: Survey data.

3.4 Details of the Pathways experience

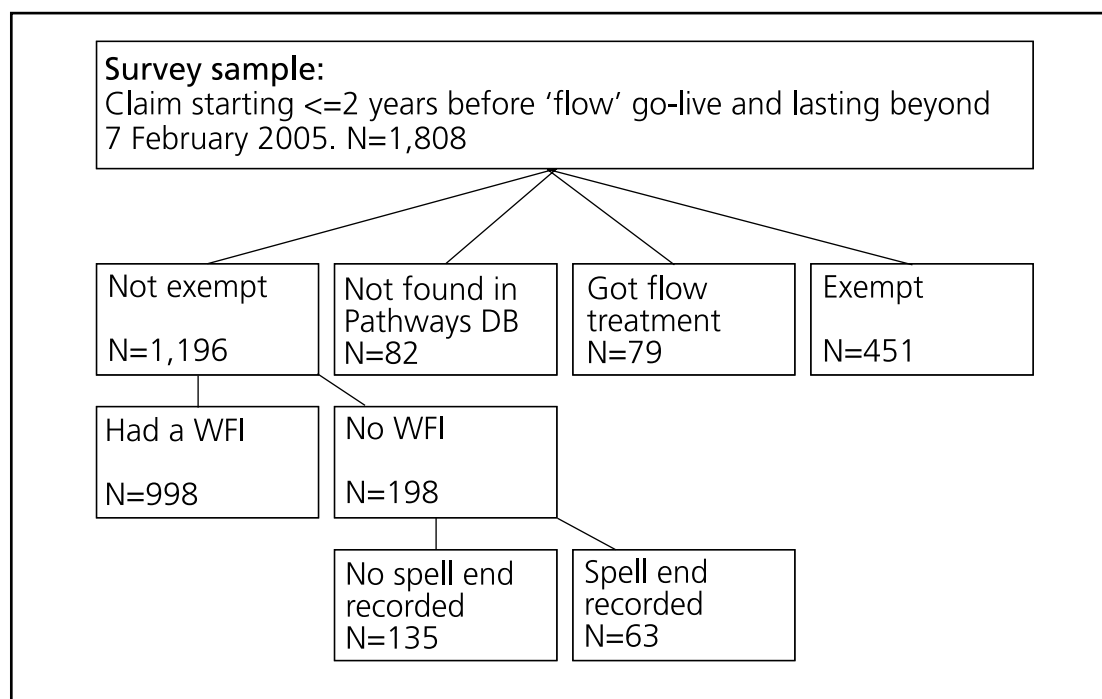
In this section, an overview of the Pathways experience is provided using the Pathways evaluation database linked to the survey data. We begin by examining in more detail the respondent sample in order to see which individuals are directly affected by the extension of Pathways to existing claimants. This is depicted in Figure 3.4. The top box in the figure shows the survey sample of 1,808 respondents on which the preceding descriptive analysis has been based. This is made up of those individuals in the original seven pilot areas with an existing claim of up to two years duration at the time Pathways was introduced locally for new claimants which continued until at least 7 February 2005. Of these, 451 people (a quarter of all those potentially eligible) were exempt from mandatory treatment. A further 79 participated in Pathways as if they were commencing a new claim. This will include people who volunteered to participate plus those for whom participation became mandatory by virtue of starting a new IB or IS claim.

The remaining two boxes on the second row are highlighted in blue to draw attention to the fact that these people represent the sample on which the later estimates of the effect of the extension of Pathways to existing customers are based. The largest category is made up of those who are not exempt and so should be exposed to the full Pathways treatment. This accounts for 1,196 people.

A smaller number (82) are not found at all in the Pathways database. They are kept in the estimation sample since the reason for their non-identification is not clear.⁴

Of those not exempt, most (998) received at least one WFI. Of the remaining 198 who are not recorded as receiving a WFI, 63 are shown as having ended their spell. These are people whose spell ended before they received their WFI, perhaps as they found work.⁵ However, there are 135 instances of people who remain on IB yet are not recorded as having received a WFI.

Figure 3.4 Details of the respondent sample



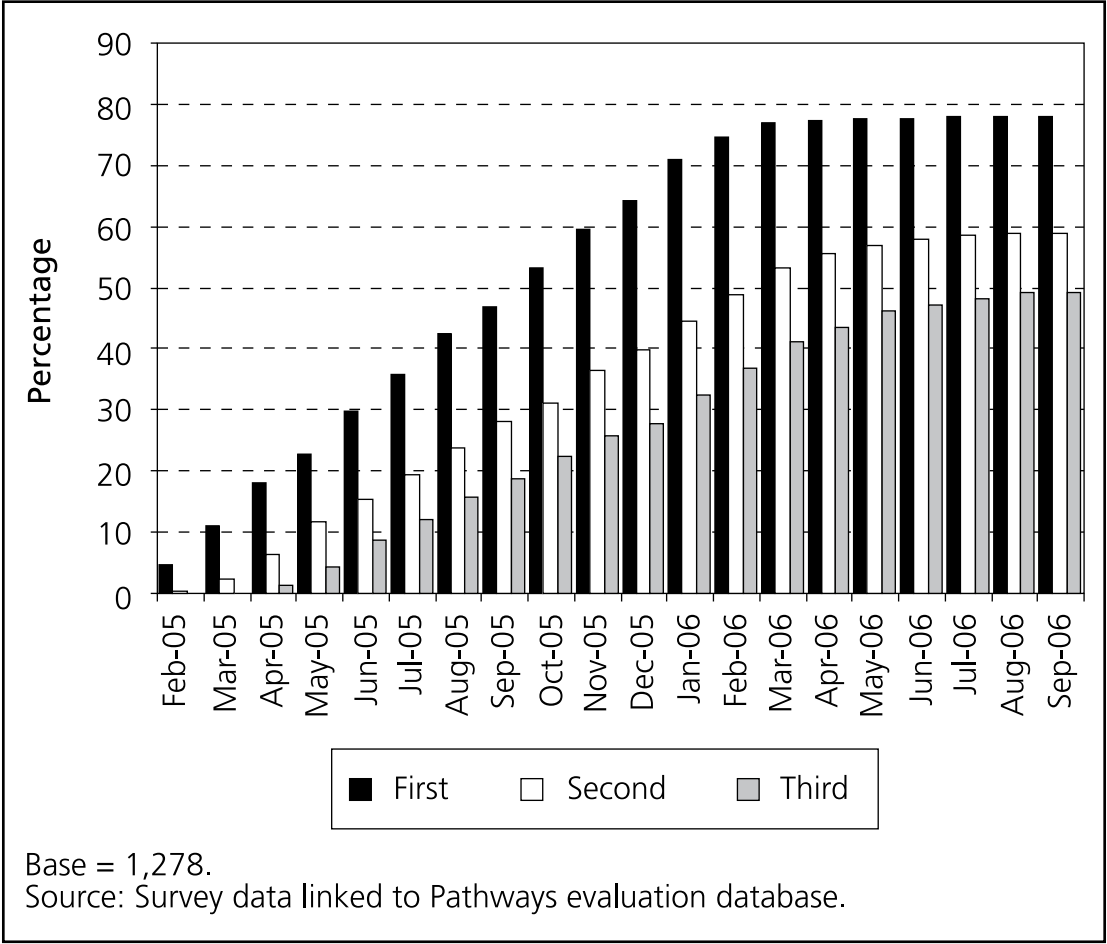
A key point in understanding these numbers is that districts were allowed a period of time before all eligible existing claimants had to have had their first WFI. Although the extension to existing customers formally took place on 7 February 2005, districts had until April 2006 to administer this first WFI to everyone. This was in recognition of the fact that there was a sizeable caseload to clear.

⁴ Information provided by DWP suggested two main explanations for these 82 individuals not being found in the Pathways database. First, customers may have appeared on the scan identifying seemingly eligible customers but later removed by districts since they were found not to be eligible. Second, there may have been an error with the scan such that some eligible cases were missed.

⁵ It is possible that in some cases the need to attend a WFI was sufficient in itself to prompt an exit from benefit.

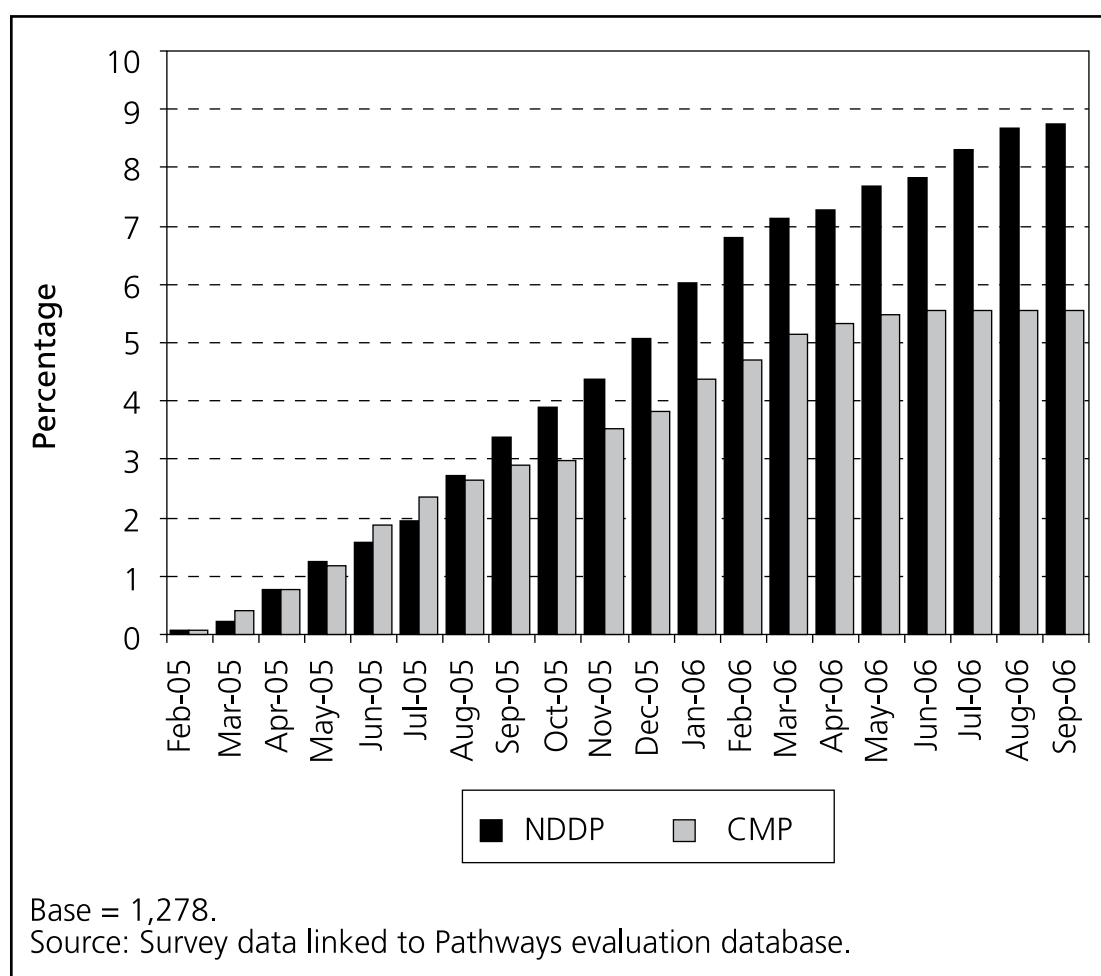
Figure 3.5 below provides an insight into how the WFIs were administered in practice. For each month, three charts are shown depicting, respectively, the proportion of the seemingly eligible existing customers to have received their first, second or third WFI by this time. A number of points are worth highlighting. First, not everyone receives a WFI. This is to be expected and has been touched upon already; those leaving IB before their WFI takes place will clearly not receive one. However, some unanswered questions remain as to why some individuals are not found in the Pathways database and why some people without a recorded spell end do not have a WFI. Second, there is an increase over time in the proportion having received their first WFI but this increase ceases after April 2006. This indicates that, for those individuals who received a first WFI, the WFI took place within the intended period of time. Third, the proportion of individuals receiving two or three WFIs is noticeably smaller than the proportion receiving at least one WFI. While this is true by definition, the size of the difference is interesting, as is the fact that growth in the proportions does appear to reach a plateau in both cases towards the end of the period. By September 2006, 78 per cent of the eligible cases in the sample had had their first WFI, 59 per cent had had their second and 49 per cent had had their third.

Figure 3.5 Proportion having WFI, by month



It is also interesting to examine the take up of the two main Choices programmes – NDDP and CMP. Figure 3.6 shows the proportion starting both programmes grows such that by September 2006 nearly nine per cent of eligible existing customers had started on NDDP and a smaller number, about 5.5 per cent, had started CMP.

Figure 3.6 Proportion entering NDDP and CMP, by month



4 Methodology

Two evaluation approaches were used. The first – difference-in-differences (DiD) – is the same approach used in Bewley *et al.* (2007). This was originally intended to be the only evaluation approach but the complications raised by the fact that districts had a period of 14 months within which to administer at least the first WFI to all those eligible meant that an alternative technique based on duration analysis was chosen. In fact, DiD was only used to consider how the introduction of Pathways for those **starting** a claim affected existing customers. The results of most interest in this report – the effect of the extension of Pathways to existing claimants – are based on duration analysis. This chapter provides an overview of DiD and the duration analysis approach. Given the familiarity with DiD and the fact that the duration analysis results are more central to the main research questions, the primary focus is on the latter approach.

4.1 Difference-in-Differences

DiD is a standard evaluation technique (see, for example, Heckman *et al.*, 1999) so its properties are not discussed in detail here. However, the broad approach is to compare an outcome for individuals in the pilot areas **before** Pathways was introduced with outcomes for individuals in non-pilot areas at the same time and to see how this relationship changes **after** Pathways was implemented. The intuition behind this is that, in the absence of Pathways one might expect the relationship between individuals in pilot and non-pilot areas to remain constant. If this does not turn out to be the case, any change can, under certain assumptions, be interpreted as the effect of Pathways.

In this particular application, DiD is complicated by the fact that eligible individuals were gradually called in for their WFIs over the period February 2005 to April 2006. In the analysis of new claims reported in Bewley *et al.* (2007), there was a definite change in what was required of new claimants in pilot areas following the introduction of Pathways. With existing customers this is less the case since for some individuals it will take some time before they participate in their first WFI. This affects what DiD can estimate. Specifically, it means that it becomes possible only to estimate the effect of Pathways eligibility rather than Pathways

treatment. Consider, for example, outcomes six months after the policy was introduced. At this time, fewer than half of those eligible had received their first WFI. Consequently, it is impossible to interpret any resulting DiD estimate as the effect on six-month outcomes of having participated in Pathways since the majority had not participated by this stage.⁶

Another problem with DiD in this application is that individuals observed in the period before Pathways was extended to existing customers might have been affected by the introduction – in either October 2003 or April 2004, depending on location – of Pathways for new claimants. As mentioned previously, existing customers were free to participate on a voluntary basis from the time Pathways was first rolled out for new claims. Furthermore, existing customers who went on to begin a new incapacity benefits spell before February 2005 would be regarded as new claimants and have to participate in Pathways. Were the effects of such participation to reduce following the extension of Pathways to existing claimants (as might seem plausible – those who previously would have volunteered are now required to participate), the DiD would underestimate the effect of the mandatory Pathways for existing customers.

However, this complication also raises an opportunity. Since the introduction of Pathways for new and repeat claimants suddenly enabled existing claimants to volunteer – and compelled those starting a new claim to participate – we can use DiD to obtain an estimate of the effect of Pathways for new and repeat claimants on existing claimants.⁷

To do this, those individuals who would have been eligible for Pathways for existing customers had it been introduced two years earlier were identified. This translates into the following:

- October 2003 areas (and their comparison areas⁸): those starting an IB claim between 27 October 1999 and 26 October 2001 that continued at least until 7 February 2003;
- April 2004 areas (and their comparison areas): those starting an IB claim between 5 April 2000 and 4 April 2002 that continued at least until 7 February 2003.

⁶ Note that it is not possible to simply gross up the six-month impact by dividing by the proportion who had been treated since the order in which individuals are called in for their WFI may not be random.

⁷ It is also possible that Pathways may have had an impact even for people not receiving the Pathways service: Pathways-related publicity might have caused more people to seek a return to work; individuals may have been affected by changing attitudes of employers; and individuals looking for employment may have received more knowledgeable advice from Jobcentre Plus.

⁸ The comparison areas were identified as similar to the pilot areas on the basis of the economic and social characteristics in the 2001 Census. These are the same comparison areas as are used in Bewley *et al.* (2007).

Similarly, those individuals who would have been eligible had it been introduced four years earlier were identified:

- October 2003 areas (and their comparison areas): those starting an IB claim between 27 October 1997 and 26 October 1999 that continued at least until 7 February 2001;
- April 2004 areas (and their comparison areas): those starting an IB claim between 5 April 1998 and 4 April 2000 that continued at least until 7 February 2001.

The samples described above can be used as the basis for a DiD analysis. To see how this might work, consider the October 2003 areas. With DiD, we assume the relationship between those in the pilot areas and those in the comparison areas with regard to a particular outcome should remain stable unless something disrupts it. So in this case, the relationship among those starting a claim that lasted until February 2003 should be similar to that among those starting a claim that lasted until February 2001. If we consider outcomes, say, three months after this point, the lack of a significant effect would provide evidence supporting the stability of this relationship. Since Pathways was introduced in October 2003 for new and repeat claimants, we might expect the relationship to change beyond this point. That is, October 2003 falls some eight months after February 2003 so the sudden appearance of significant effects after this point is likely to be attributable to the effect of introducing Pathways for those making a new claim.

4.2 Duration analysis

The key results in this report are derived using duration analysis. Recent developments in the econometrics literature have shown how duration analysis can be used to identify the causal effect of a time-varying treatment on subsequent outcomes. While the formal exposition is presented in Abbring and Van den Berg (2003), here we attempt to set out the broad intuition and provide some of the background findings that guided the eventual approach taken.

The aim of duration analysis is to understand the nature of transitions from an initial state. For example, in this report, there is interest in the transitions (or 'exits') away from IB. The central concept in duration analysis is the 'hazard rate'. Loosely, this can be viewed as the probability of an exit occurring at a particular time given that it has not already occurred. Where the hazard rate declines as the length of time in the initial state grows, exits are said to be (negatively) duration dependent. Such duration dependence is fairly common in labour market processes. For example, it is already generally acknowledged that exits from IB are concentrated towards the start of a spell and that the longer somebody remains on IB, the less likely an exit becomes.

The most popular approach to duration modelling is to use the so-called proportional hazards specification. Under this interpretation, there are two components of the hazard rate. The first, the baseline hazard, captures the extent to which the

hazard rate changes over time. The second is the systematic part of the hazard rate. This shows how the rate of exits varies according to various factors, such as the characteristics of the individual. The term 'proportional hazard' reflects the property that the hazard rate for somebody with a certain characteristic is proportionate at all times to that for somebody with a different characteristic.

A generalisation of this approach is the mixed proportional hazard (MPH) model. Under this specification, the hazard rate differs not just according to those factors included in the systematic part of the hazard but also according to an unobserved factor unique to each individual. While the unobserved factor cannot be given an explicit interpretation, it is obvious that there may well be important characteristics that affect exits, but which are usually not observed. For example, it may be that those who are highly motivated to work are more likely to exit from IB. It is rare to have reliable information on individuals' motivation when estimating empirical models. However, the MPH model can capture unspecified individual effects by allowing for this additional unobserved individual factor.

Included in the systematic part of the hazard rate might be characteristics that vary over time. The important factor for evaluation purposes is the indicator of whether or not the individual has received the treatment in question. To see how this might work in practice, consider again using duration models to examine exits from IB in our sample of existing claimants. Since the sample is made up of people who have remained on benefit until 7 February 2005, exits from IB are only possible after this time. As discussed already, most individuals did not attend their WFI until some time after 7 February 2005. The evaluation interest is in how the hazard rate changes once an individual receives the Pathways treatment. Since the first stage of the treatment is the initial WFI, including a variable in the systematic part of the hazard that captures the timing of the first WFI (that is, a variable that takes a value of zero for the part of the spell corresponding to the period before the first WFI and a value of one thereafter) can tell us the extent to which starting Pathways increases exits from IB. Duration analysis offers a means of allowing the hazard rate to change from the point of first WFI onwards.

The results presented in Chapters 5 and 6 use a straightforward proportional hazards specification, since tests of the more general MPH model showed the unobserved heterogeneity term not to be significant for both exits from IB and exits into employment.⁹

The assumption underpinning this approach is that the timing of treatment (in this case, the timing of the WFI) is not determined by some unobserved factor that might also affect the hazard rate. There are good reasons for believing this to be the case. First, existing claimants will have had little if any prior contact with Jobcentre Plus so there is no reason to suppose staff have any additional

⁹ These results obtained when it was assumed that the unobserved heterogeneity term had a normal distribution and also when the distribution was left unspecified but approximated by a discrete distribution.

knowledge of them beyond what exists in the administrative records used for this evaluation. Consequently, even if they had wanted to, it seems unlikely that advisers could prioritise WFIs on any basis that could not be controlled during estimation. Second, the initial preparation of the lists of customers to call in for a WFI was often carried out by administrative support staff with even less potential for knowledge of individual cases and, moreover, no obvious motivation to prioritise particular categories of individuals.

Unlike the DiD approach discussed above, the duration models do not require comparison area samples. Instead, they are based on the survey sample of eligible existing customers discussed in the previous chapter. The estimates controlled for the effect of a range of observed characteristics including:

- sex;
- age;
- partner;
- type of health problem;
- dependent children;
- housing tenure;
- driving licence;
- access to a vehicle;
- literacy or numeracy problems;
- qualifications.

While it remains possible that individuals could systematically resist attending their WFI according to some unobserved characteristic, it is worth bearing in mind that the existing customers who make up the estimation sample had claims lasting a minimum of ten months by the time Pathways was extended to them in February 2005. By this time, many of those who would have left IB quickly had already done so and we might imagine that those remaining on IB were a more homogeneous group with regard to their probability of leaving IB.

If, however, the assumption that the timing of the WFI is not determined by some unobserved factor that might also affect the hazard rate does not hold, the dummy variable indicating the timing of treatment will capture, at least in part, the effect of this unobserved factor, rather than just the effect of treatment. For example, imagine if those who, in some unobserved way, were most job-ready tended to receive their WFI sooner than those who were less job-ready. This would mean that the approach set out above would provide estimates that conflate the true effect of WFI with the effect of being more job-ready. This is the standard econometric selection problem. In this case, estimates can be obtained by estimating an MPH model of time to first WFI alongside an MPH model of the outcome of interest (IB exits, for example) and allowing for the unobserved factors across the two

models to be correlated. This can control for the effect of unobserved factors on the timing of the first WFI.

However, estimation of this joint model is more complicated and makes greater demands on the data. In practice, it was not possible to use this more general approach. Attempts to do so failed to achieve robust results. While the reason for this is not fully clear, it is common for models of this type to encounter such problems. Abbring and Van den Berg (2003) suggest that it can help if more than one spell is observed. With this in mind, we hope that when further data become available, the chances of successfully applying this approach will increase.

5 Results

This main aim of this chapter is to present the estimated effects of Pathways for existing customers on employment entry and benefit exit.¹⁰ However, as discussed in the previous chapter, we also provide some evidence on how existing customers were affected by the introduction of Pathways for new and repeat customers.

5.1 The effect of Pathways on employment entry

At the time Pathways was extended to existing customers on a mandatory basis in February 2005, most of those customers were not in work. The focus in this section is on the extent to which Pathways affected movements into employment.

The estimation results are shown in Figure 5.1. Since this is a format that will be used a number of times in this report, we begin by carefully describing what it represents. The upper graph plots survival curves for our estimation sample. The survival curve, in this case, depicts the probability of remaining non-employed over time. Estimates of the time until employment entry are based only on those not employed at the start of the observation period. Consequently, by definition, everybody is observed to be non-employed at February 2005. As time goes on, some individuals find work and this is reflected by the survival curve sloping downwards. The uppermost line in the graph (labelled 'Counterfactual') provides an estimate of how long individuals would remain non-employed in the absence of Pathways. From this it is clear that the rate of exits is very slow: 18 months after February 2005, it is estimated that 97.2 per cent of the one to two year existing customers would not have found employment.

The other lines in the upper graph show how these estimated survival rates vary among those receiving a WFI. Since having a WFI is estimated to increase the hazard rate from the time of the WFI onwards, those having a WFI sooner after February 2005 will benefit more quickly than those having a WFI later. The other lines in the graph show how the survival rates would look for those having a WFI three, six, nine and 12 months after February 2005. These lines all fall more steeply than the counterfactual line, reflecting the fact that having a WFI increases

¹⁰ The results underlying the charts presented in this chapter show the effect of the first WFI to be statistically significant at conventional levels for all outcomes considered.

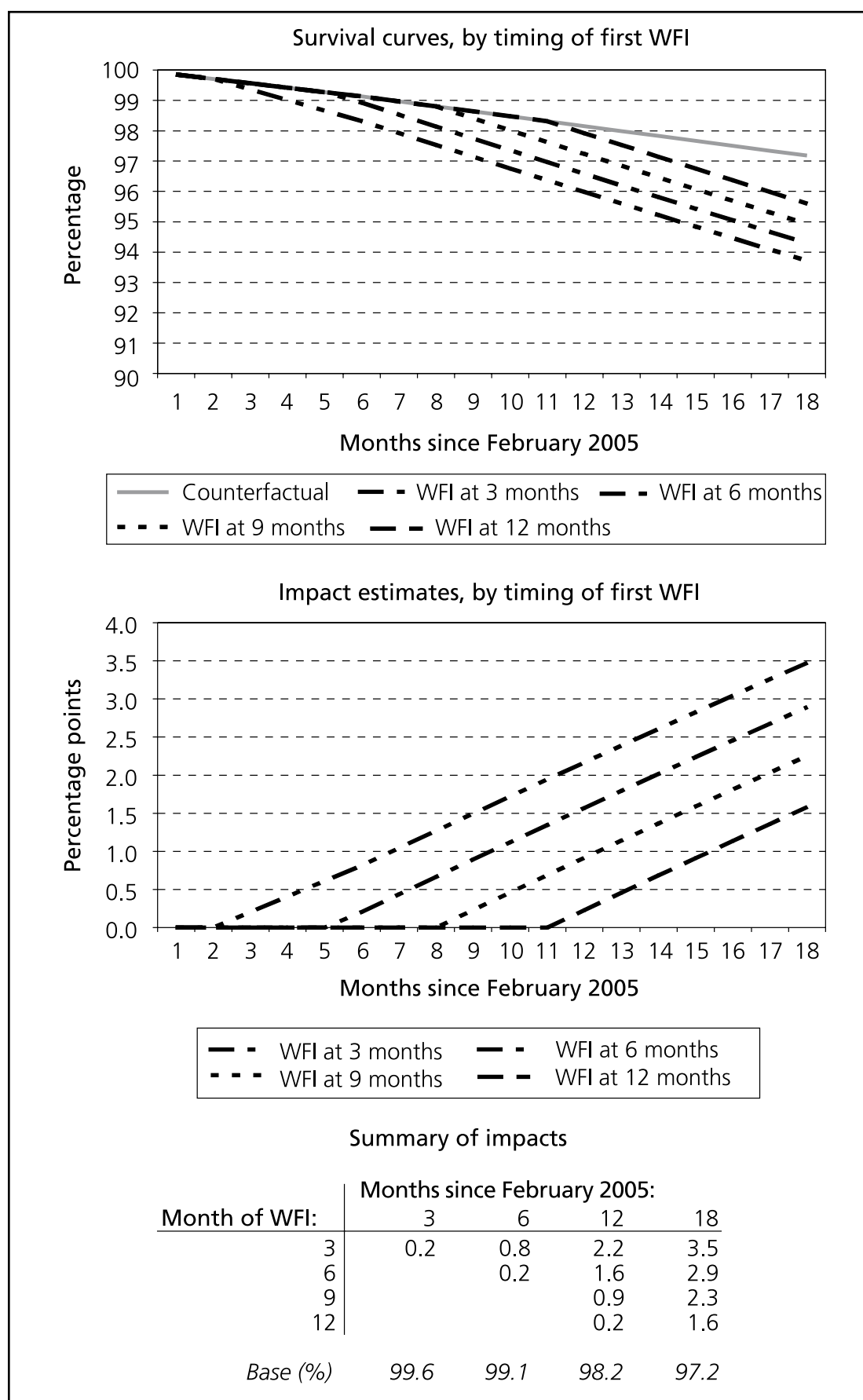
the probability of finding work at any given time. Furthermore, in line with the earlier reasoning, the lines fall most steeply for those having their WFI soonest. To provide some quantification for this, an estimated 93.7 per cent of those having a WFI three months after Pathways was introduced for existing customers would still be non-employed 18 months after the Pathways introduction, compared to 95.6 per cent of those having a WFI 12 months after Pathways introduction.

The estimated effect of Pathways on employment entry is calculated as the difference between the predicted counterfactual survival curve and the predicted survival curve for an individual having a WFI at a particular time. For example, using the figures cited above, the counterfactual proportion predicted to still be non-employed 18 months after February 2005 is 97.2 per cent and for those having a WFI three months after Pathways was introduced it is 93.7 per cent. The difference between these figures – 3.5 percentage points – is the estimated effect of having a WFI three months after the Pathways introduction on employment entry within 18 months of Pathways introduction.¹¹

The lower graph side depicts these estimated impacts. For example, the uppermost line corresponds to those having a WFI three months after Pathways introduction. The impacts before the month of the first WFI are zero by definition and then increase over time beyond this point, reaching the level of 3.5 percentage points 18 months after February 2005. For those having their first WFI later than this, the effects are correspondingly smaller.

To provide a convenient quantification of the impacts in the lower graph, a summary table of impacts is also included in Figure 5.1. This table gives the estimated impacts for those having their WFI three, six, nine or 12 months after February 2005 on the probability of having found work three, six, 12 or 18 months after February 2005. We have already seen that the 18 month effect for those having a WFI three months after February 2005 is 3.5 percentage points. This table shows how the estimated effect grows over time and also how it compares to those having their WFI at a later time. For those having a WFI in month six, the estimated effect is 2.9 percentage points, for those having a WFI in month nine, the estimated effect is 2.3 percentage points and for those having their first WFI in month 12, the estimated effect is 1.6 percentage points. The last row in the table (labelled 'Base') quantifies the counterfactual levels appearing in the upper graph.

¹¹ Not that the lines in the graph are drawn for an individual who had been non-employed for 30 months at February 2005. This is close to the median non-employment spell of 32 months.

Figure 5.1 The effect of Pathways on employment entry

It should be noted that the estimated effect of having a WFI is to cause a proportionate increase in the rate of employment entry. The size of this effect is similar regardless of when the WFI actually occurs.¹² That those having a WFI early appear more likely to have entered employment by month 18 than those having a WFI at a later point is just a reflection of the fact that the WFI effect will have been present for a longer period of time for the former group than for the latter group; we would expect the impacts to grow over time for the latter group also.

We can also examine the time taken to enter employment of 30 or more hours per week. The estimation results are summarised in Figure 5.2. The survival curves in the upper graph show a lower rate of entry into employment at this level than when considering employment as a whole. The lower chart and summary table indicate that the estimated effects are also smaller. For example, for those having their first WFI in the third month after Pathways was made mandatory for existing customers, the estimated effect was to reduce the probability of remaining out of full-time work at month 18 from 98.9 per cent to 97.7 per cent – an impact of 1.2 percentage points.

Figure 5.3 considers instead the effect on entry to jobs of 16 or more hours per week. The estimated effects fall somewhere between the overall employment effects presented in Figure 5.1 and the effects on employment of 30 or more hours per week presented in Figure 5.2.

¹² This property reflects the assumption in the estimated model that the effect of the first WFI does not vary according to how early in the spell it takes place.

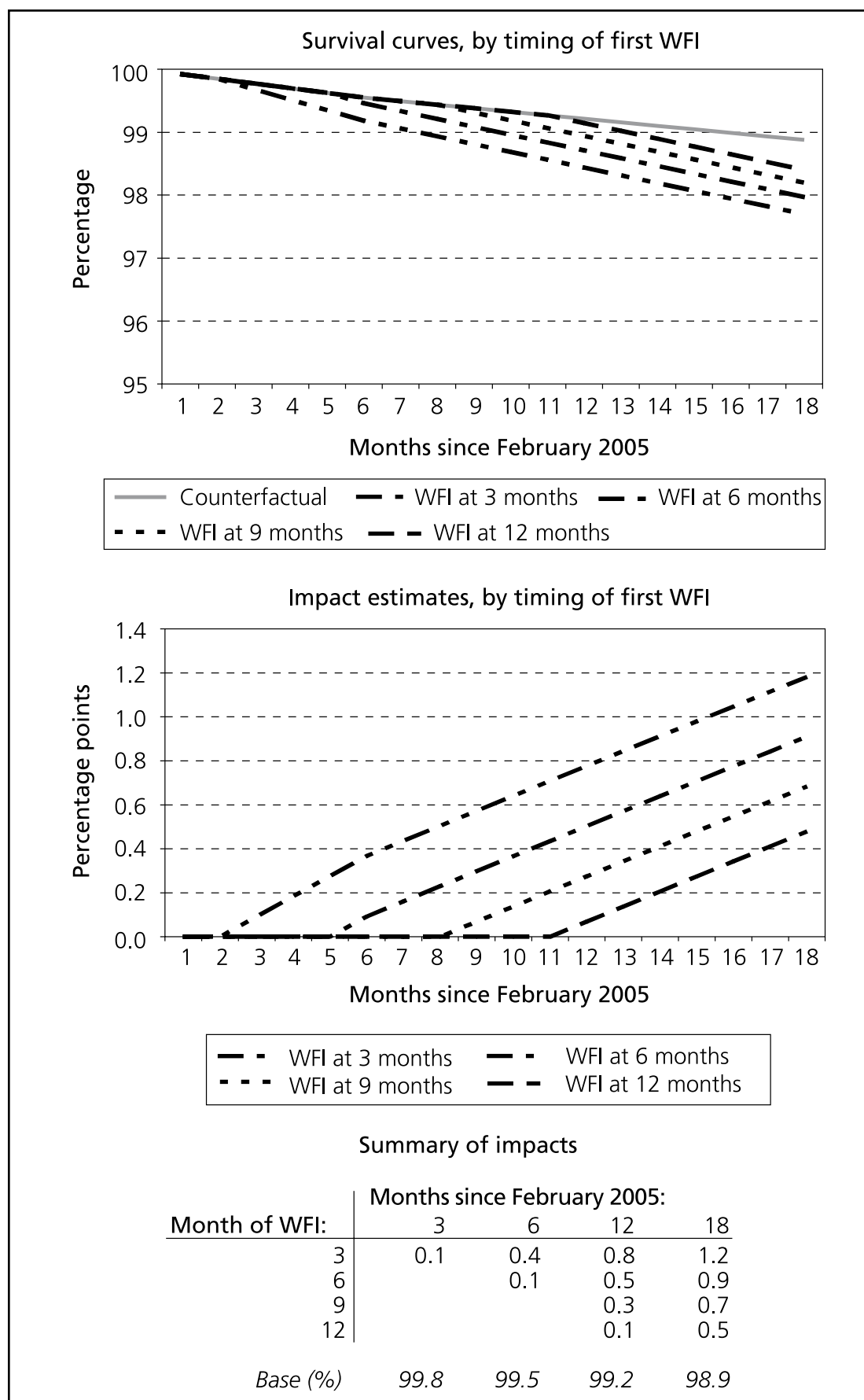
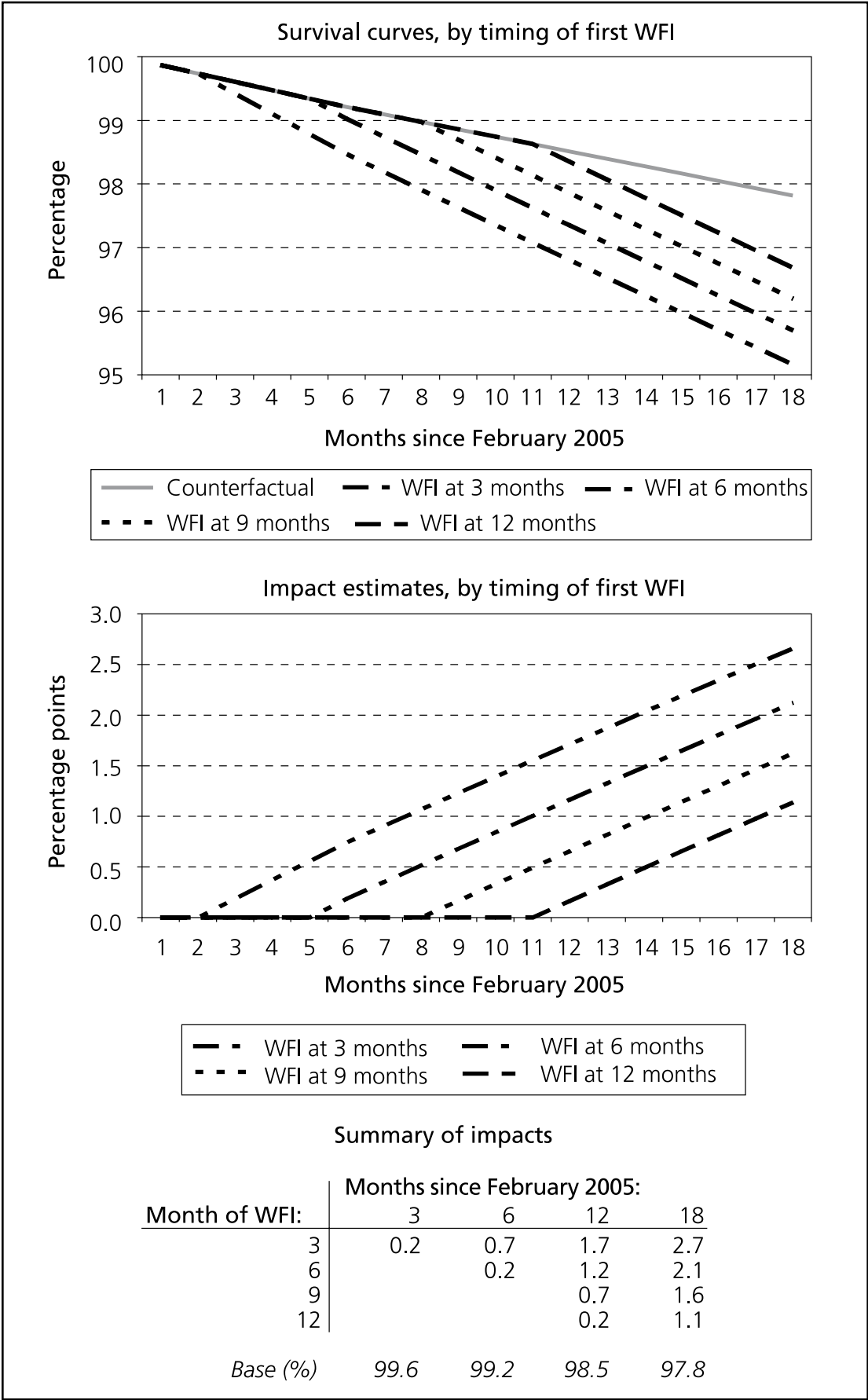
Figure 5.2 The effect of Pathways on 30+ hours employment entry

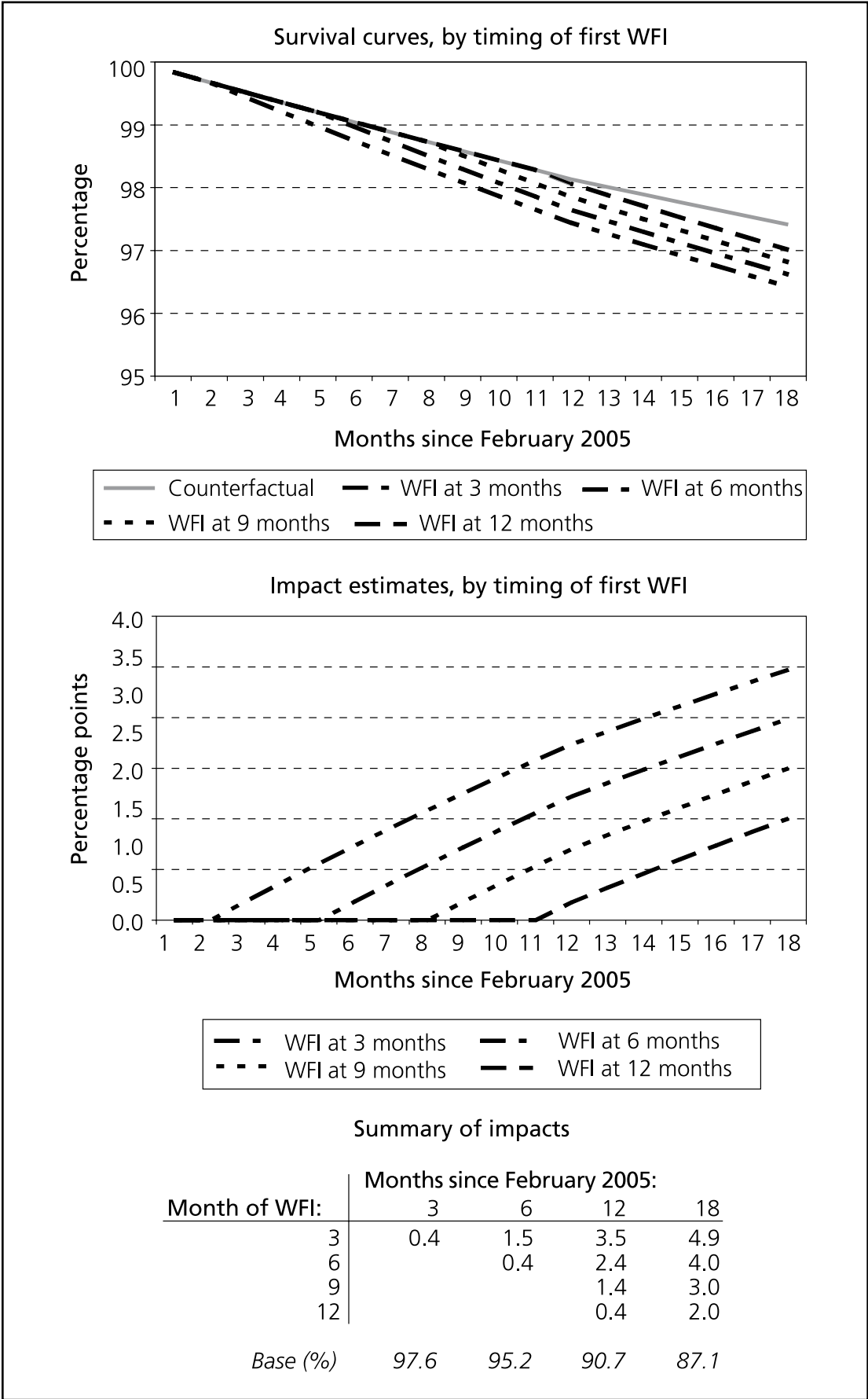
Figure 5.3 The effect of Pathways on 16+ hours employment entry



5.2 The effect of Pathways on Incapacity Benefit exit

Figure 5.4 shows the effect of Pathways on increasing the rate of exit from IB. The survival curves in the upper chart show the rate of exit from IB to be greater than the rate of entry into employment. At the 18 month point, it is predicted that, in the absence of mandatory Pathways for existing customers, 87.1 per cent of the eligible population would still be claiming IB. Comparing this to the 97.5 per cent who would be predicted to remain non-employed suggests that many of the IB exits are likely to be to a destination other than employment. The impacts are also slightly larger. For those having their first WFI in month three, the results suggest the effect is to reduce the 18 month outcome from 87.1 per cent to 82.1 per cent. This translates (after accounting for rounding) to an effect of 4.9 percentage points. For those not having their first WFI until month 12, the impact at month 18 is 2.0 percentage points.

Figure 5.4 The effect of Pathways on IB exit



5.3 The effect on existing claimants of introducing Pathways for new claimants

In this final section, attention turns to the consideration of what effect the introduction of Pathways, for those making a new claim, might have had on individuals that had an existing claim. For reasons that will become clear, this analysis is presented separately for the October 2003 areas and the April 2004 areas. The results are based on the NBD and so the estimated effects relate to the full population rather than a sample of survey respondents.

5.3.1 October 2003 areas

Figure 5.5 shows the estimated effect in the October 2003 areas on the probability of being a claimant of IB in each of the 18 months following February 2003.¹³ The solid line traces out the evolution of the effect as longer-term outcomes are considered. The surrounding dashed lines give the confidence interval for the estimated effect. Where the dashed lines span the x-axis, the estimated effect is viewed as statistically insignificant at the conventional level; that is, the probability of the observed effect arising purely by chance is one in 20 or more.

As discussed in Chapter 4, these outcomes are estimated using DiD and, as such, require two cohorts of claimants:

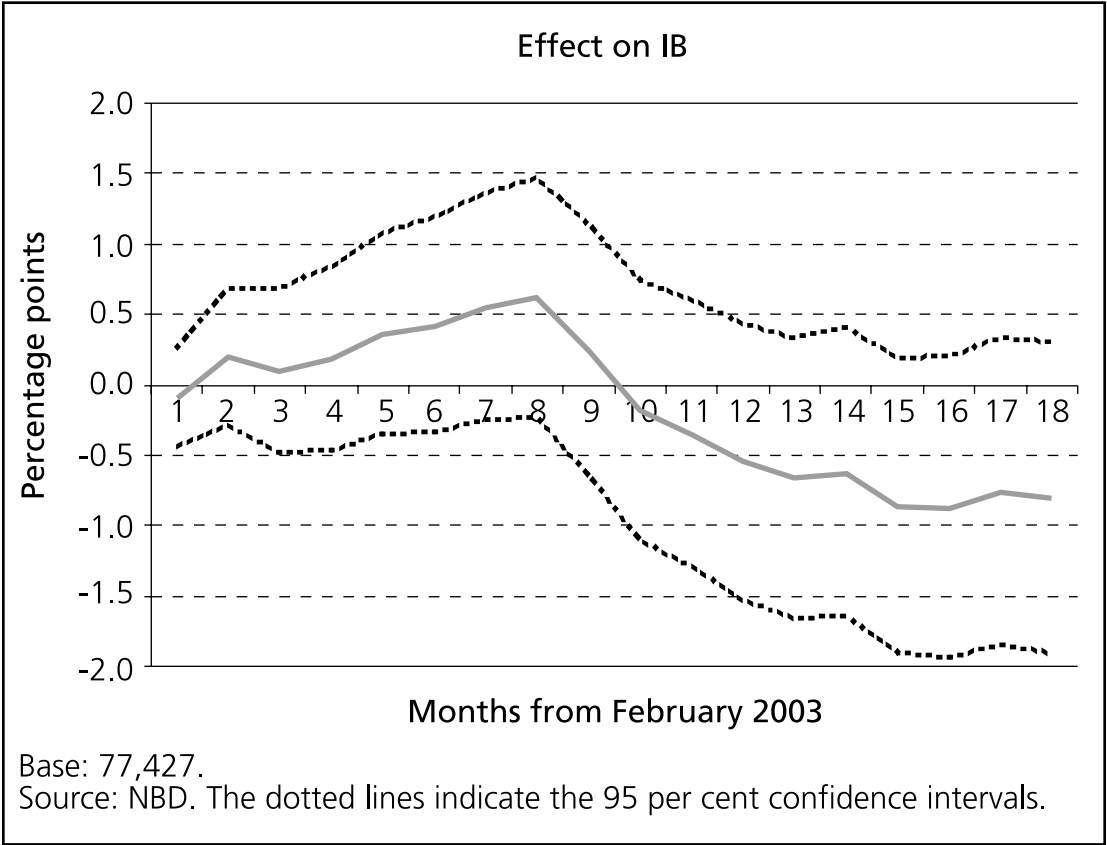
- those starting their IB claim in the two years prior to October 1999 and remaining on IB until 7 February 2001;
- those starting their IB claim in the two years prior to October 2001 and remaining on IB until 7 February 2003.

The estimated effect indicates the extent to which the relationship between those in the pilot areas and those in the comparison areas remains stable across the two cohorts of individuals considered with regard to IB claims. We begin the detailed inspection of Figure 5.5 by considering outcomes shortly after February 2003. The estimates here are small, peaking at a little over half a percentage point eight months after February 2003. The outcomes beyond this point relate to the period of time after Pathways was introduced for those making a new claim. It is apparent that, while the estimated effects remain insignificant, there is a marked change in its direction. This suggests that the probability of claiming among the later cohort of individuals is reduced relative to the earlier cohort. The inference is that this change in direction is brought about by the introduction of Pathways for new claimants reducing the probability of some existing claimants remaining on IB.

¹³ The estimated effects control for the following characteristics: sex, age, whether the individual was recorded as having a mental health problem, IB claim history and JSA claim history.

The fact that the estimated effects in months one to eight are all small and statistically insignificant provides some support for believing the estimated effects for later months to be reliable.¹⁴ Clearly, the effects on outcomes that post-date the time new claimants became subject to the Pathways regime are also insignificant. However, this is not surprising since those existing claimants volunteering for the support provided under Pathways or who are otherwise directly affected by it account for only a minority of all existing claimants. Consequently, although it is perfectly possible that the effect is in fact significant for those who participate, the DiD results relate to the one to two year existing claimants as a whole and, across this larger group, the results for the participants are not dramatic enough to register.

Figure 5.5 Impact of Pathways for new and repeat claimants on one to two year existing claimants, October 2003 areas



¹⁴ Note, this need not necessarily be the case. Tests reported in Bewley *et al.* (2007) suggested that in the period immediately before the introduction of Pathways there was some evidence of an anticipation effect in the pilot areas. If some of the flow were receiving something similar to the Pathways treatment before the actual intervention date, it is possible that this was also the case amongst those existing customers who chose to volunteer for Pathways.

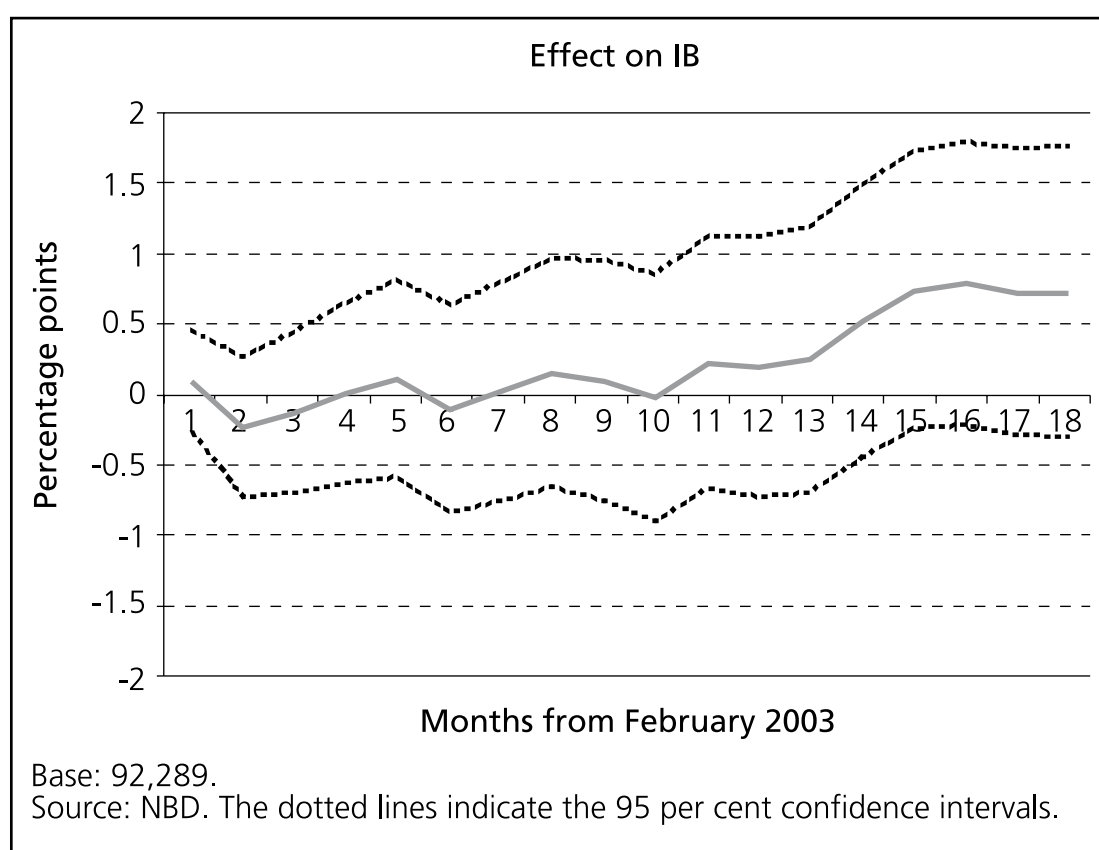
5.3.2 April 2004 areas

In the April 2004 areas we might expect to see a change in the estimated effect from month 14 onwards (since April 2004 falls 14 months after February 2003). The two cohorts used as the basis for the DiD estimates in this case are:

- those starting their IB claim in the two years prior to April 2000 and remaining on IB until 7 February 2001;
- those starting their IB claim in the two years prior to April 2002 and remaining on IB until 7 February 2003.

Figure 5.6 shows that, as with the October 2004 areas, none of the estimated effects was statistically significant. However, unlike the October 2004 areas, there was no evidence of the introduction of Pathways for new and repeat claimants reducing the probability of some existing claimants remaining on IB.

Figure 5.6 Impact of Pathways for new and repeat claimants on one to two year existing claimants, April 2004 areas



5.3.3 A comment on the DiD estimates

The results presented in Figure 5.5 and Figure 5.6 are best viewed as indicative rather than definitive. As mentioned above, the DiD estimates relate to the full population considered rather than the fraction of existing claimants directly affected by Pathways. It is possible that significant effects for those directly affected are

simply overshadowed by the lack of an effect among those – the majority – not directly affected. In view of this, it seems reasonable to give more interpretation to the estimated effects than would normally be justified by their low levels of statistical significance. This is particularly the case for the October 2003 areas where there the estimated effect changes quite noticeably in November 2003.¹⁵

¹⁵ Since Pathways for new and repeat claimants was introduced towards the end of the month in these areas (27 October 2003), it is from November onwards that one might expect an effect to be discernible.

6 Subgroup analysis

In this chapter, the extent to which the estimated effects vary according to the characteristics of claimants is considered. This variation was estimated by interacting the impact with the characteristic in question. The results in this chapter should be taken as indicative rather than definitive since the interaction terms were never found to be statistically significant. However, this may simply reflect the sample sizes being too small to be able to detect significant variations across characteristics, rather than there necessarily being no significant differences across subgroups within the population. With this proviso in mind, it is reasonable to give some consideration to the question of variation in the effectiveness of Pathways across different members of the eligible population. The findings are taken as providing some evidence of which population subgroups are likely to be most affected by Pathways. The precise size of these effects is not considered in detail.

6.1 Effects of Pathways by date of pilot

The first distinction considered is that of the October 2003 areas compared to the April 2004 areas. This is relevant to consider in two regards: First, Bewley *et al.* (2007) concentrated primarily on the April 2004 areas since pre-programme tests suggested that the estimates for the October 2003 areas were likely to be biased. Hence, considering the effects for the two phases of pilot areas separately allows direct comparisons to be made. Second, the two types of area differ in the length of time on benefit at the time Pathways was extended to existing customers. For the October 2003 areas, the eligible population had an incapacity benefits claim of at least 15 months in February 2005. For the April 2004 areas, the shortest claim was ten months at this time. This means that, on average, the WFI took place earlier in the claim for customers in the April 2004 areas than for customers in the October 2003 areas.

The estimation results are presented in Figure 6.1. For compactness, all the subgroup results in this chapter are presented in a different format from that in Chapter 5. Specifically, the survival curves and table of summary statistics are presented for both subgroups. The upper chart shows the survival curves for the October 2003 areas and the lower chart shows the survival curves for the April

2004 areas. In both cases, the counterfactuals – what exits would look like in the absence of Pathways – are rather similar. The estimates suggest that, in both cases, about 97 per cent of individuals would still remain non-employed 18 months after February 2005. However, the estimated impacts differ, with the rate of entry into employment increased more among those in the April areas.

The effect on IB exit is presented in Figure 6.2. Here, the difference is more noticeable. Again, it is in the April 2004 areas that the effect of Pathways appears to be greater.

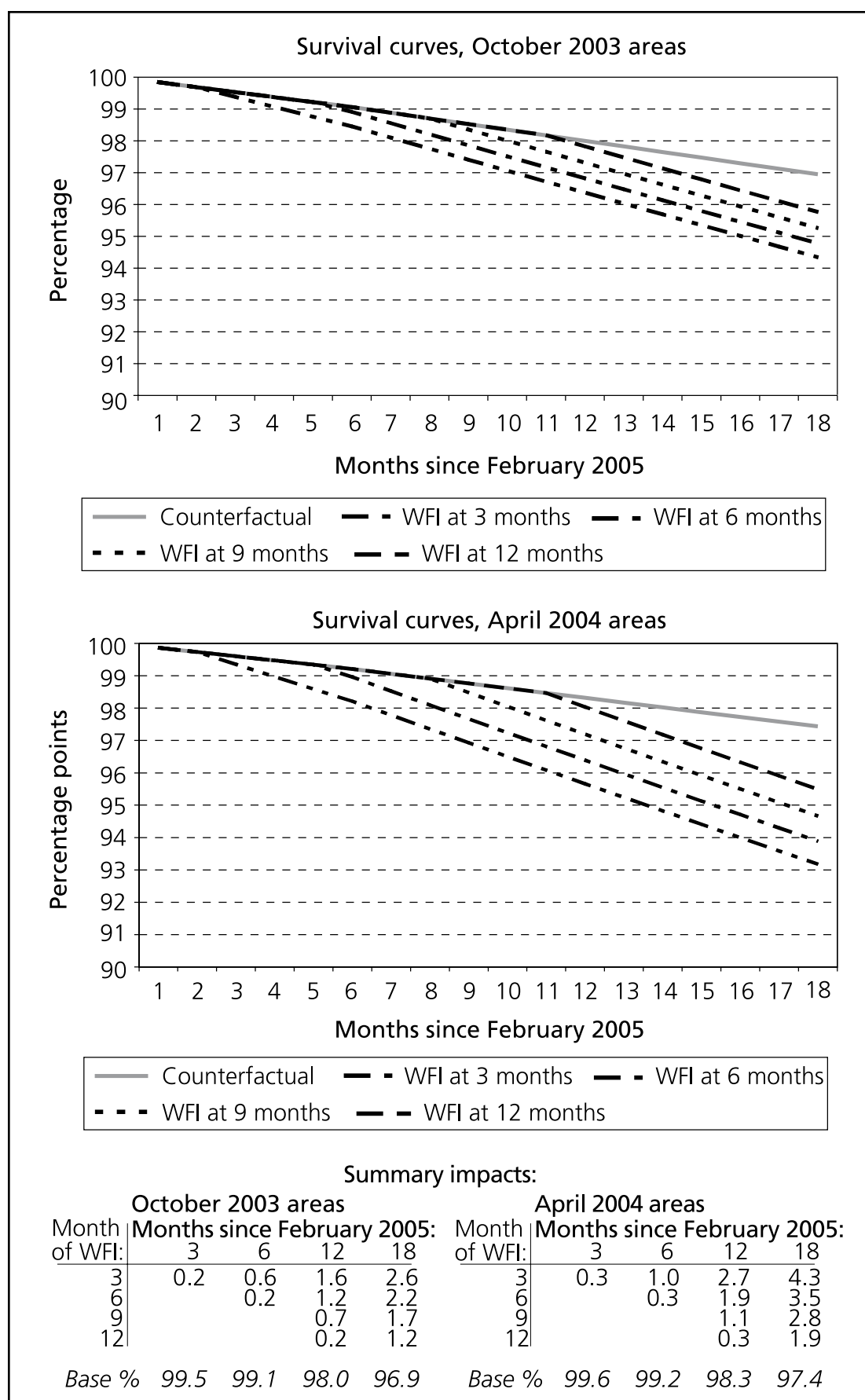
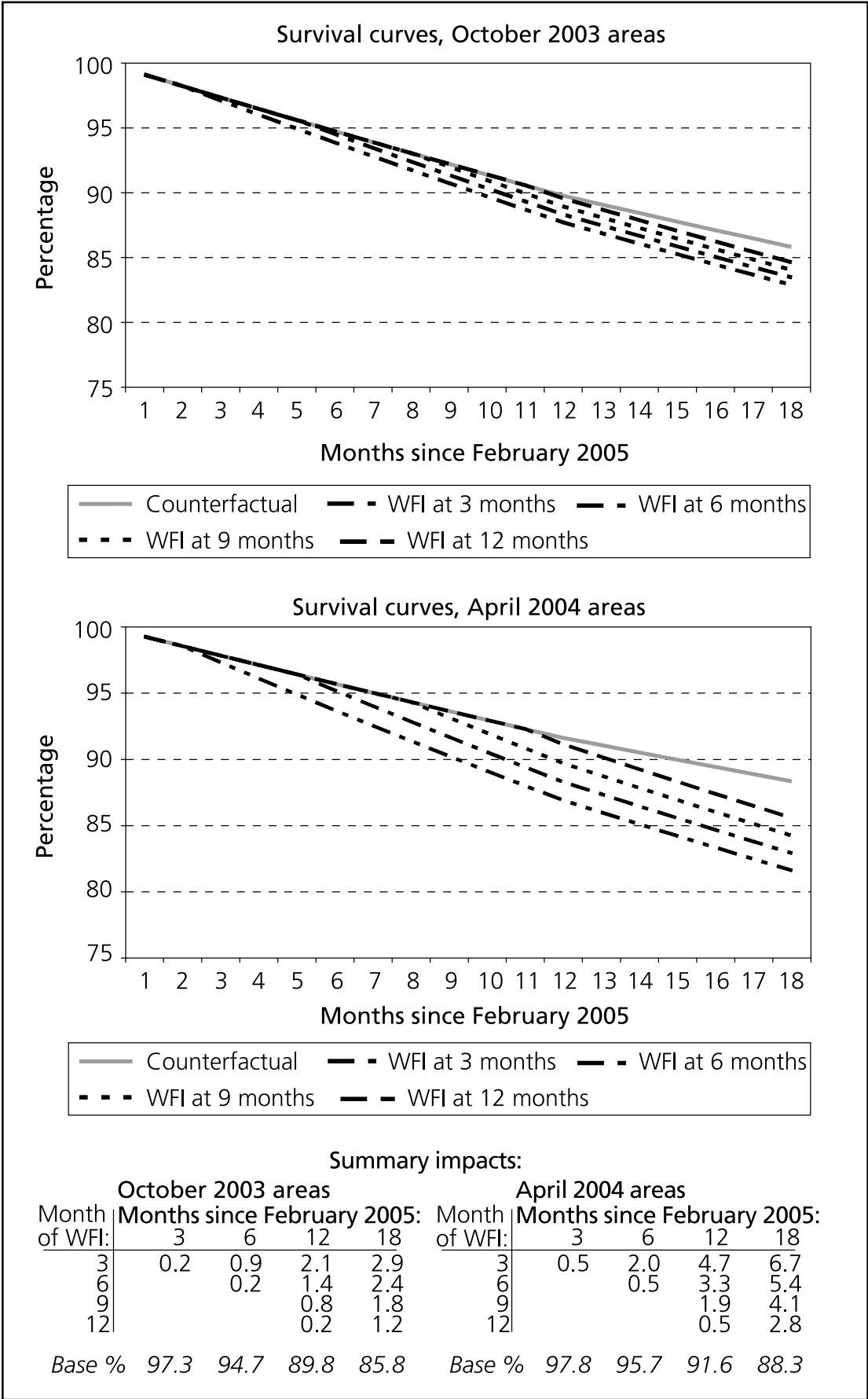
Figure 6.1 Effect of Pathways on employment entry, by area

Figure 6.2 Effect of Pathways on IB exit, by area



6.2 Effects of Pathways, by sex

Figure 6.3 shows how the effects on employment differ for women and men. The differences are not particularly striking. The counterfactual survival curves are very similar and although the impacts for men are slightly larger than for women, these differences are not particularly notable.

The effects on IB exit are presented in Figure 6.4. Again, the pattern of exits looks fairly similar for women and men.

Overall, there is little to suggest that the effect of Pathways on employment entry or IB exit differs for women and men. This is somewhat in contrast to the results in Bewley *et al.* (2007) which suggested a stronger employment effect for women than for men.

Figure 6.3 Effect of Pathways on employment entry, by sex

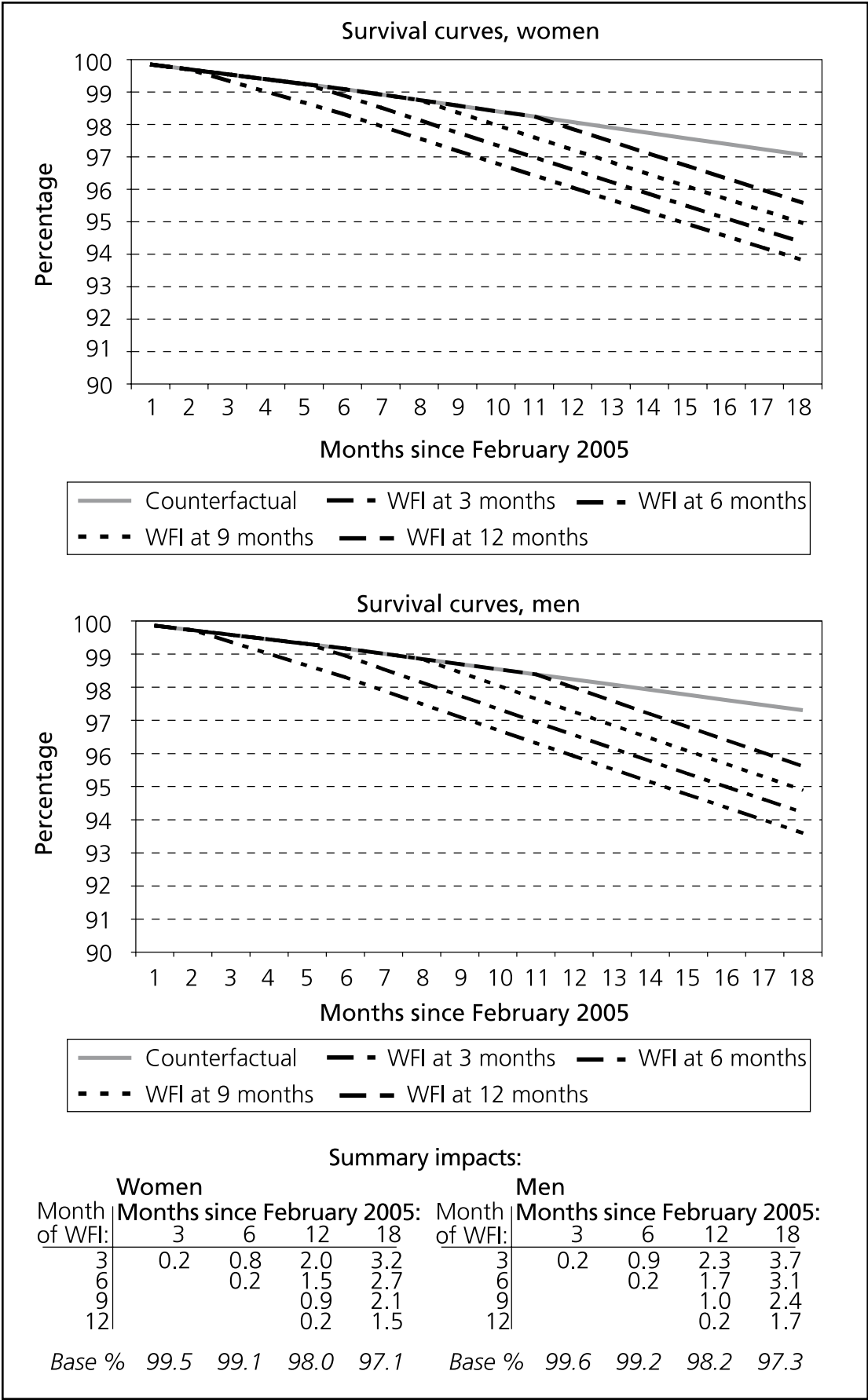
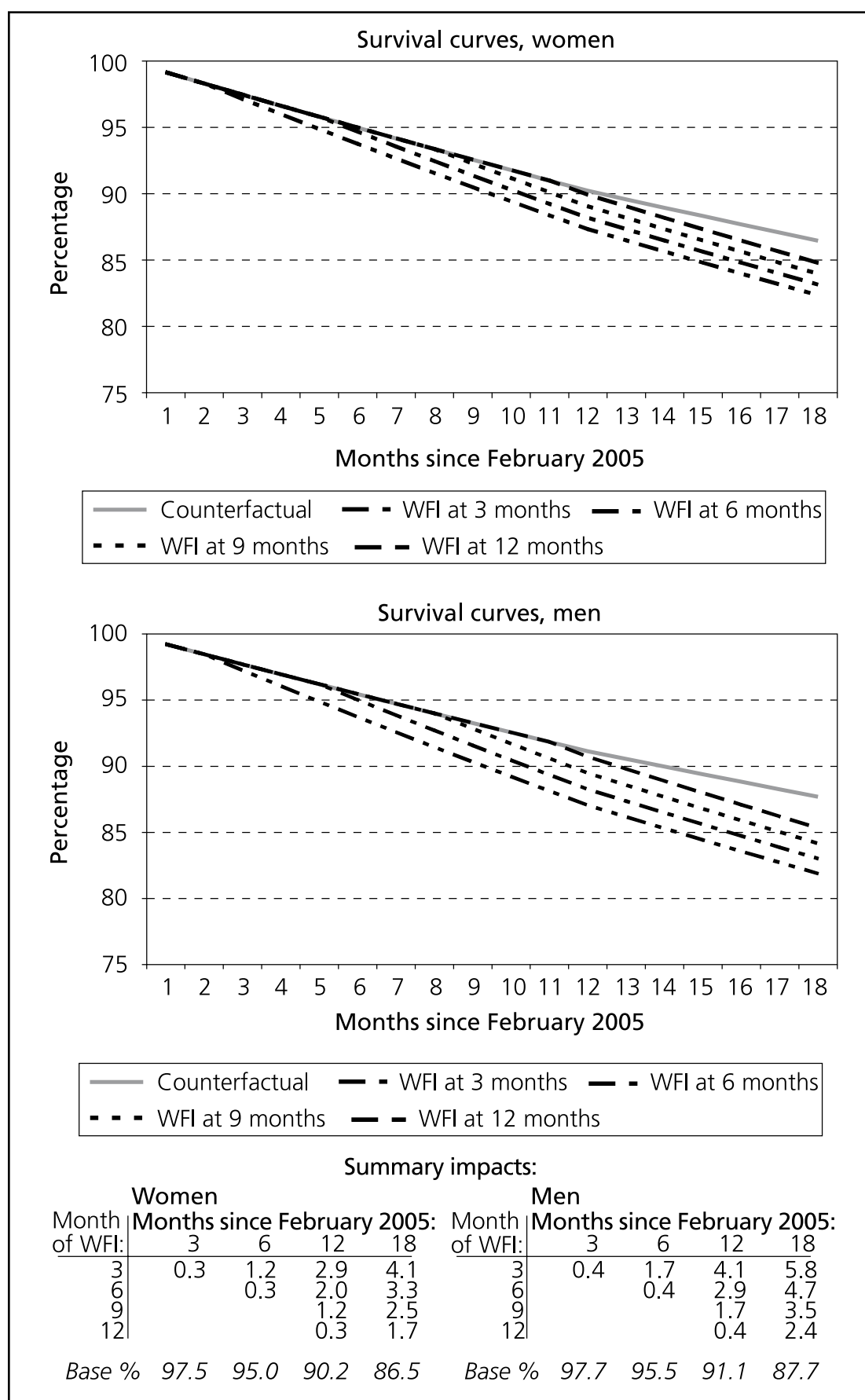


Figure 6.4 Effect of Pathways on IB exit, by sex

6.3 Effects of Pathways, by age

This section examines the extent to which the estimated effects vary according to the age of the claimant. Figure 6.5 shows that, in the absence of Pathways, those customers under the age of 50 would be only slightly more likely than those aged 50 or over to enter employment. However, the employment effects for the younger customers are considerably greater than for the older customers. This is consistent with the finding in Bewley *et al.* (2007).

A similar overall pattern is evident when considering IB exits. There is little difference to speak of when considering the counterfactual but the Pathways effect is noticeably larger for younger customers.

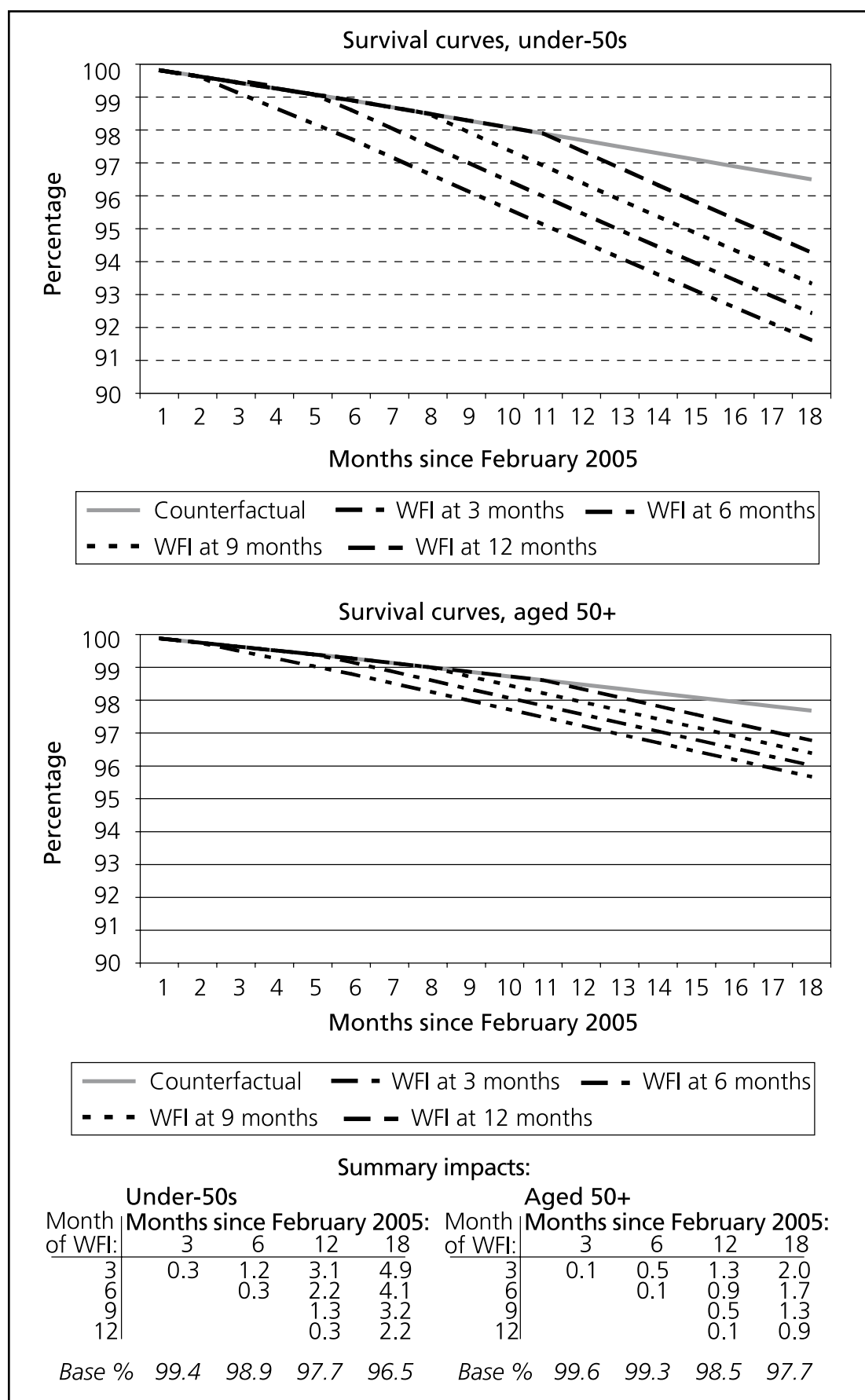
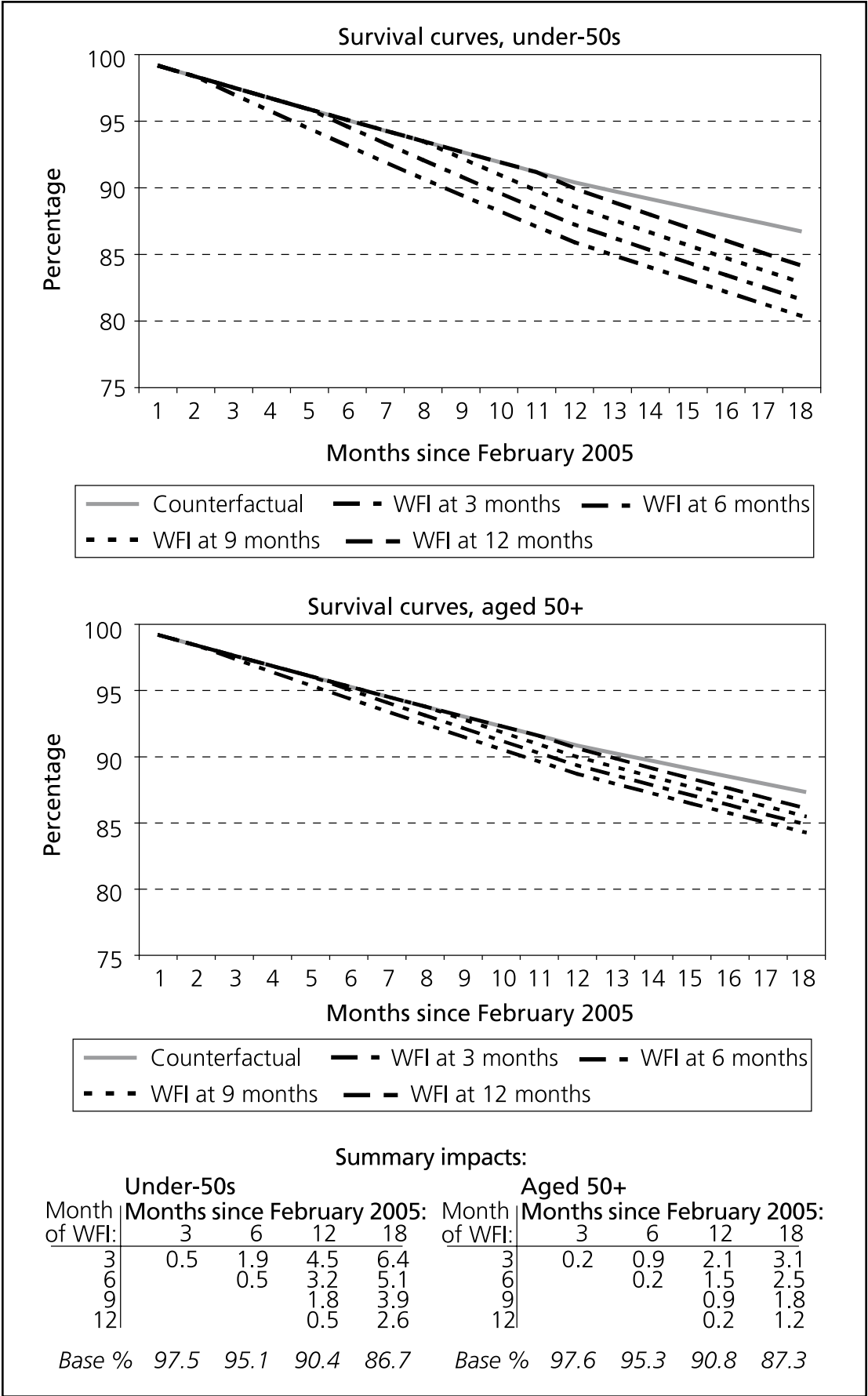
Figure 6.5 Effect of Pathways on employment entry, by age

Figure 6.6 Effect of Pathways on IB exit, by age



6.4 Effects of Pathways, by presence of dependent children

An interesting result in Bewley *et al.* (2007) was that the effect of Pathways was greater for those with dependent children than for those without. There is some evidence in this evaluation of a similar pattern.

Figure 6.7 shows that, while the counterfactual rate of employment entry was slightly lower among those with children than it was for those without children, the effect of Pathways on encouraging movement in employment was somewhat greater. However, it is when considering IB exits that the difference is more noticeable. Again, the counterfactual rate of IB exit was a little lower for those with children than for those without but now the estimated impact of Pathways is considerably greater for those with children than for those without.

Figure 6.7 Effect of Pathways on employment entry, by dependent children

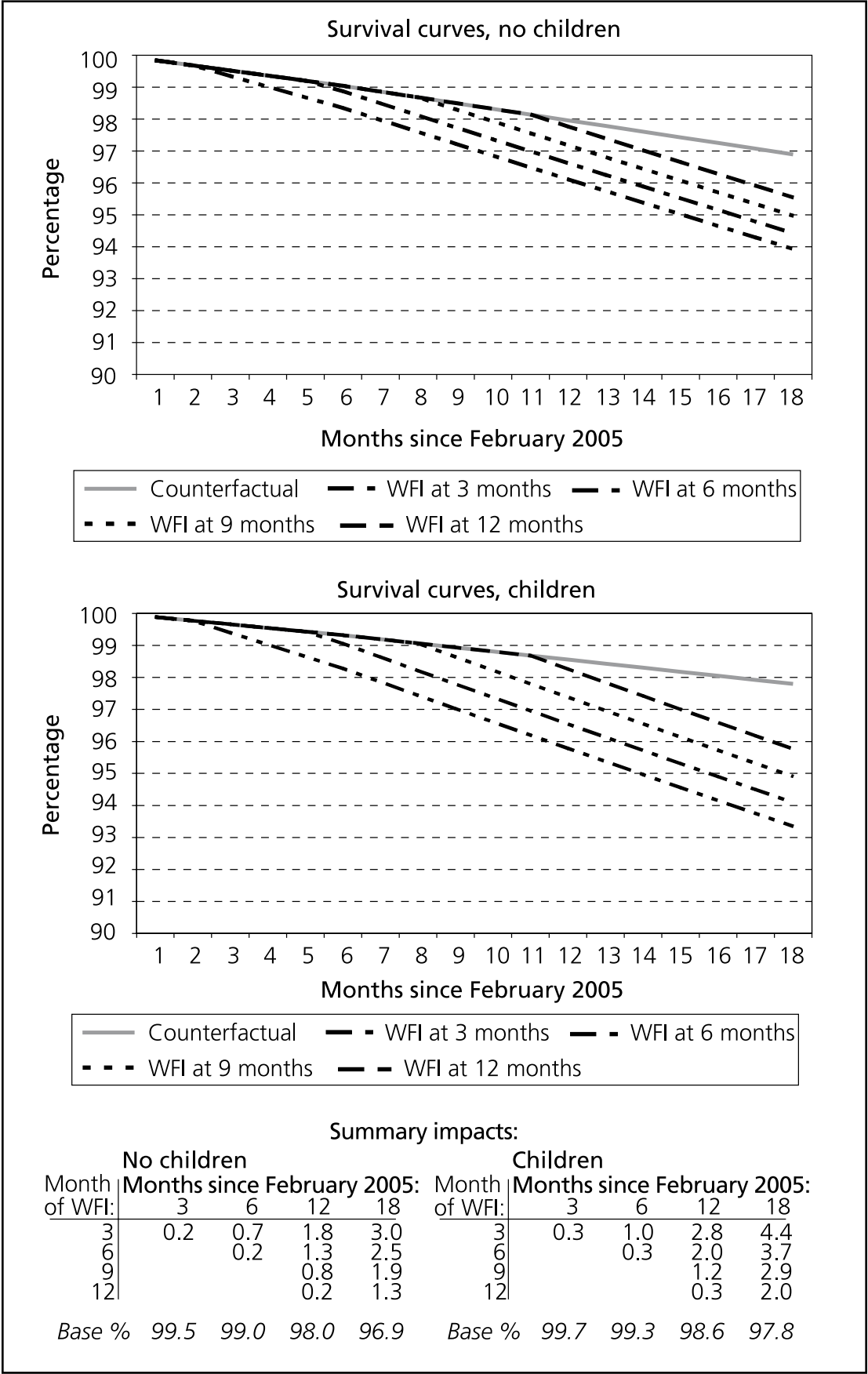
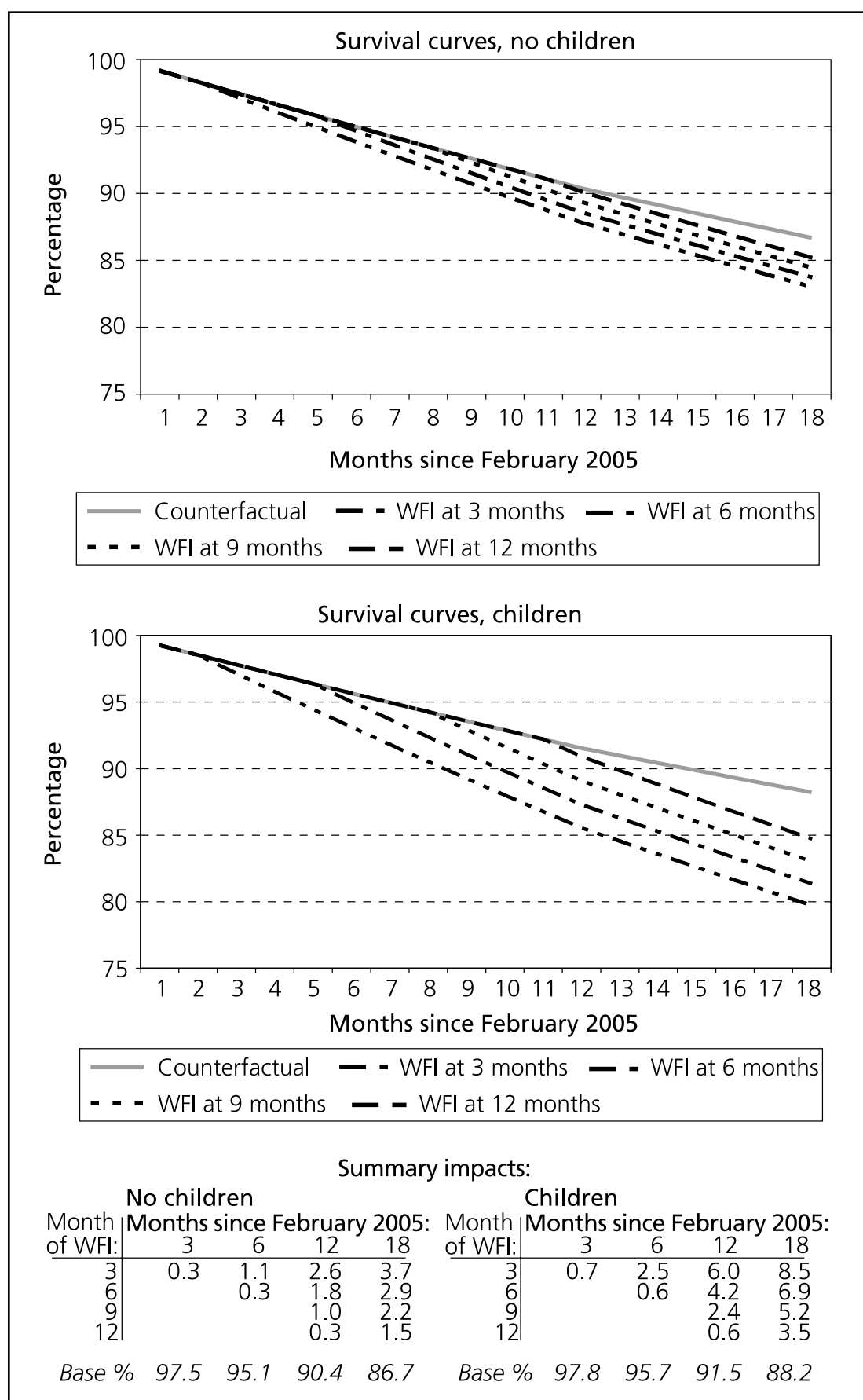


Figure 6.8 Effect of Pathways on IB exit, by dependent children

6.5 Effects of Pathways, by nature of health problem

The final distinction considered is between those recorded in the NBD as having a mental health problem and those not recorded as having a mental health problem. Bewley *et al.* (2007) found that, for new and repeat claimants, it was among those without a mental health problem that the strongest effects were found. In fact, no employment effects were evident for those with a mental health problem.

The results in this evaluation are summarised in Figures 6.9 and 6.10. There is no evidence of the employment effect being concentrated among those without a mental health problem. If anything, the employment effects are larger for those with a mental health problem. With regard to IB exit, the effects for individuals with mental health problems are considerably larger than those for individuals without mental health problems.

Figure 6.9 Effect of Pathways on employment entry, by health problem

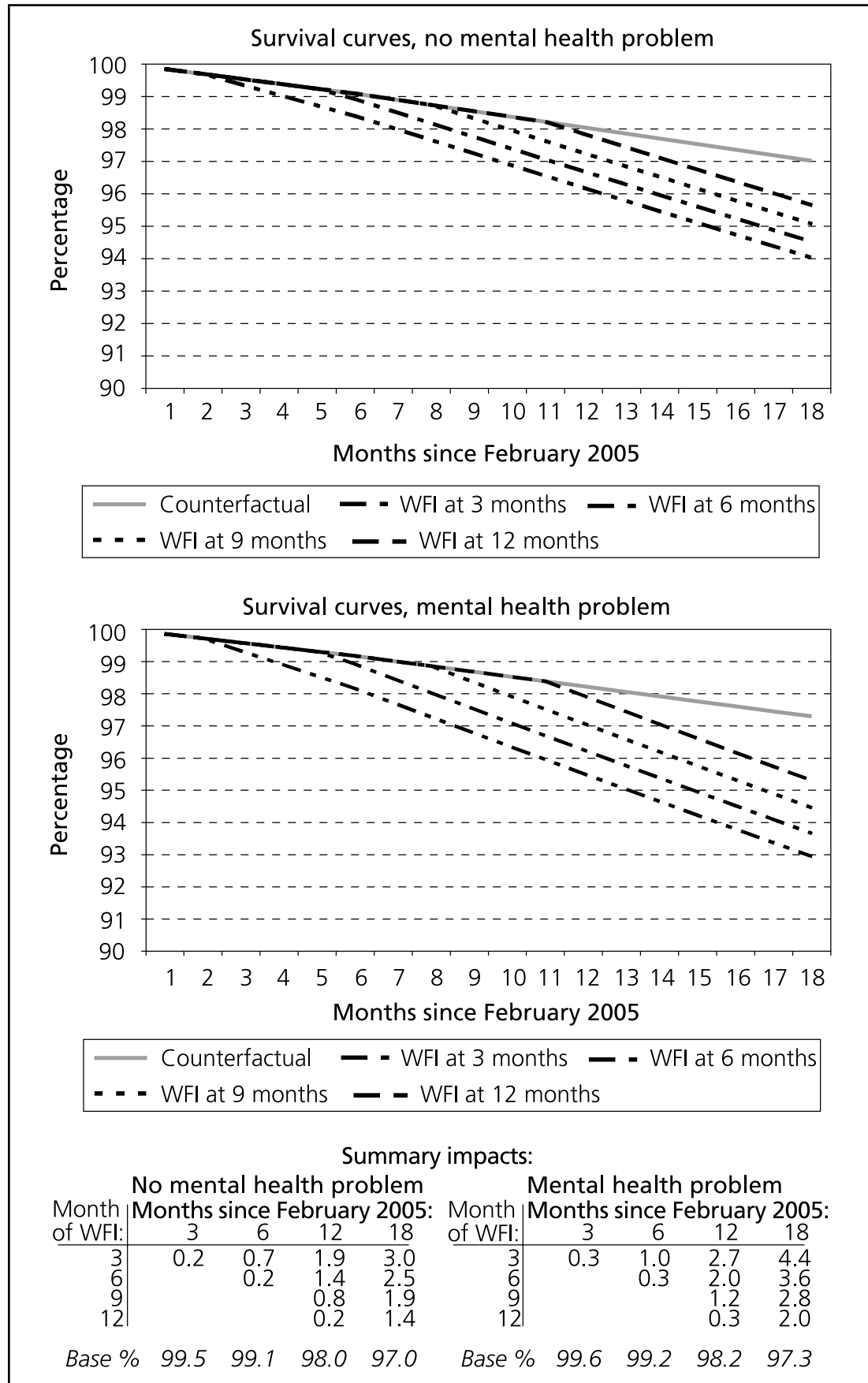
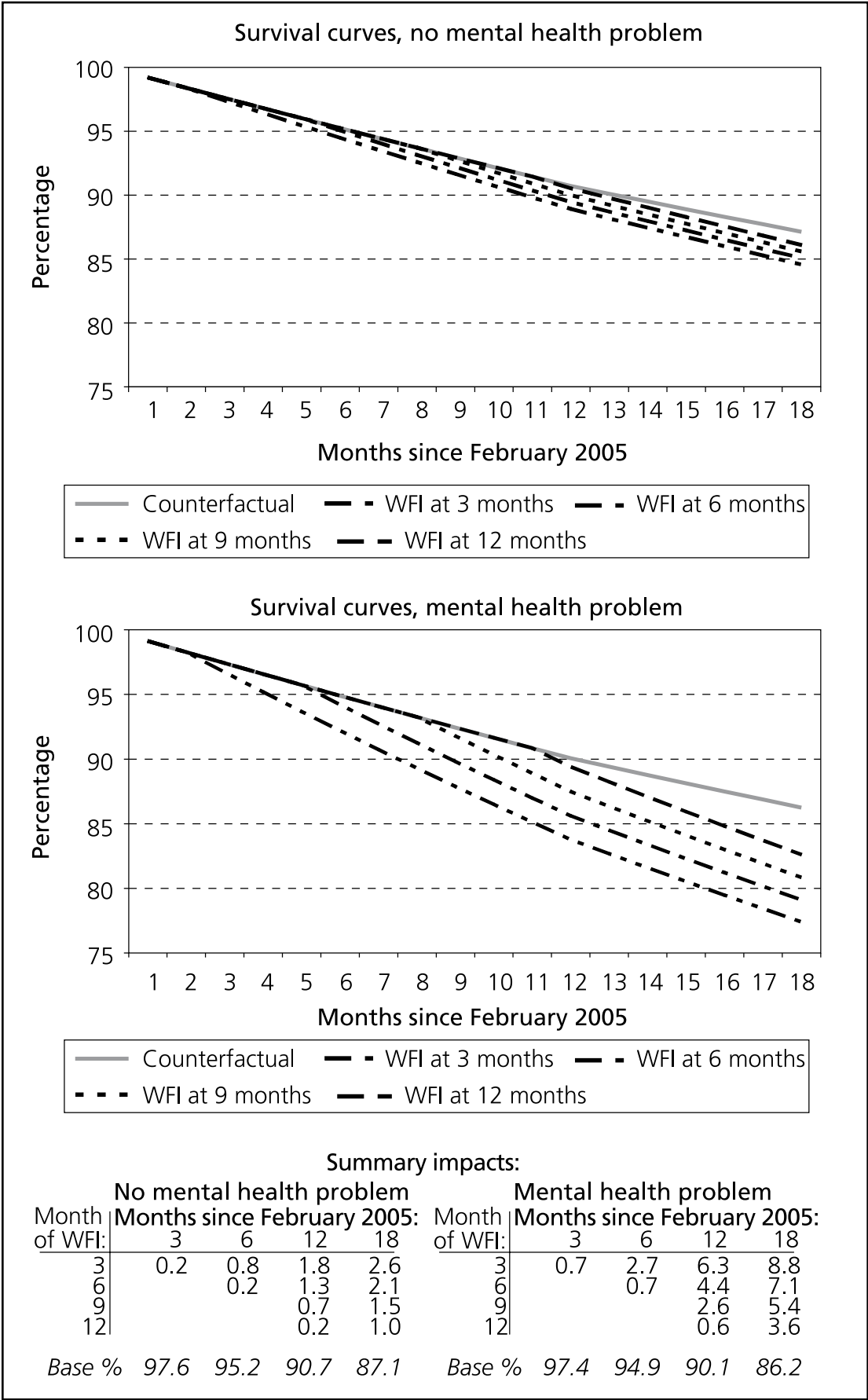


Figure 6.10 Effect of Pathways on IB exit, by health problem



7 Discussion and conclusion

The Pathways to Work package of reforms ('Pathways' for short) is aimed at encouraging employment among people claiming incapacity benefits. The reforms were introduced for new claims on a pilot basis in three Jobcentre Plus districts in October 2003. Four further districts became part of the pilot in April 2004. Within these seven pilot areas, in February 2005, a modified version of Pathways was extended to those customers who had an existing incapacity benefits claim of up to two years in duration at the time Pathways was introduced locally for new claimants. Before this time, existing claimants were eligible to participate in Pathways on a voluntary basis. In cases where existing customers had commenced a new claim, participation in Pathways would be mandatory.

This report presents the results of an evaluation of the overall effect of Pathways on those claimants who became eligible for mandatory participation in Pathways under the February 2005 extension to existing customers. The key results in the evaluation are based on three linked datasets. The first is survey data for a sample of eligible claimants. These data were collected at least 19 months after Pathways for existing claimants was first piloted. The second is the NBD. In addition to supplying the sample used for the survey, the NBD also provided ongoing information on benefit status which could be used as an outcome in the evaluation. The third is the Pathways evaluation database. This is a database that captures the actions taken by advisers and the progress of all individuals through their Pathways treatment. The three databases were linked using encrypted national insurance numbers, thereby providing a rich combined database with which to explore the evaluation questions.

The main approach used to estimate the effect of Pathways for this customer group is duration analysis. This was used as an evaluation technique since it offers a means of addressing the fact that eligible individuals did not immediately participate in Pathways but instead it took some time to be called in for the first WFI. Duration analysis has at its core the concept of a hazard rate – the probability of exiting IB, say, at a given time for those who have not already exited. The effect of Pathways is estimated as the change in that hazard rate following participation in a WFI. The estimated effect does not identify which element of Pathways might have been driving any observed change; in this regard, it is the overall effect of Pathways that is considered rather than the effect of specific components.

Pilot areas had until April 2006 to administer the first WFI to all eligible customers and the information available in the Pathways evaluation database showed all those receiving at least one WFI had done so by this time. The results suggest that Pathways significantly increased the rate of employment entry and IB exit from the point of first WFI onwards. Consequently, since those having their first WFI relatively soon after February 2005 will have had higher rates for a longer period of time than those having the first WFI later in this period, the former are estimated to be more likely than the latter to have found work or left IB within the time period considered. To give some feel for this, those receiving their WFI in the first six months following the extension of Pathways to existing customers had their probability of having entered employment within 18 months of the Pathways extension increased by about three to four percentage points and the probability of having left IB increased by about four to five percentage points. Significant employment effects are still found when consideration is limited to jobs of 30 or more hours per week or 16 or more hours per week, indicating that, for some people at least, Pathways is encouraging a substantial re-engagement with the labour market.

There is also some evidence of variation across subgroups within the population. While no statistically significant subgroup variation was detected, this is possibly due to the lack of statistical power in the results. This means that interpreting the results as suggesting that there is no variation across subgroups may be over-conservative and instead the results should be taken as indicating that any possible subgroup variation was insufficiently large to register as statistically significant. With this in mind, the subgroup results were taken to be indicative of possible patterns rather than as providing precise estimates. Seen in this light, the broad pattern of results suggested that there were stronger effects:

- in April 2004 areas than October 2003 areas;
- for men than for women (albeit marginally);
- for younger claimants than for older claimants;
- for those with children than for those without children;
- for those with a mental health problem than those without a mental health problem.

Mostly, the subgroup variations were more marked for exits from IB than for entry into employment.

Lastly, the analysis has looked at the effect on existing customers of the introduction of Pathways for those making a new claim. It is possible that this might have an effect due either to an existing customer choosing to volunteer or an existing customer starting a new claim for some reason. While the results appeared to detect an effect, this was not sufficient to register as statistically significant. While it may be true that the introduction of Pathways for those making a new claim has a significant effect on those directly affected by it, among the existing customers as a whole, no statistically significant effect was found.

In sum, the results appear encouraging to the extent that they have identified significant effects on employment entry and benefit exit among a customer group that has been receiving IB for some time and so may be viewed as harder to help than new claimants. Some evidence of the extent to which they are hard to help is apparent through examination of the estimated rates of employment entry and benefit exit in the absence of Pathways. These rates are very low, particularly for employment entry. This potentially reinforces the importance of existing customers as a policy priority, (although, for some, the nature of their health condition may remain an obstacle to employment). It also suggests that any 'deadweight' costs associated with RTWC will be minimal.

A limitation of the analysis is that only the first entry to employment and the first exit from IB are considered. It is of course possible that these transitions are not sustained. A second wave of survey interviews is due to be carried out which will provide outcomes for a period of 33 or more months since February 2005. This will allow a fuller consideration of outcomes, including later transitions away from employment or back onto IB.

A final comment relates to the generalisability of the results. The important finding from this evaluation is that the Pathways approach can have a significant impact on existing customers. Whether the observed effects are likely to hold if Pathways were rolled out to existing customers in other parts of the country will depend, in part, on the characteristics of the existing customers in those other areas. However, an additional complication arises from the very specific eligibility criteria for Pathways for existing customers. Specifically, individuals had to have been claiming IB for up to two years at the time Pathways was first introduced and these existing claims had to persist until 7 February 2005. This meant that in the October 2003 areas, eligible individuals had a claim of at least 15 months duration and in the April 2004 areas, eligible individuals had a claim of at least ten months duration. Were Pathways to be extended to existing customers in additional areas within Britain, claim lengths among those eligible would be different. Those with longer claims would have had more time to volunteer for Pathways so we might expect those who had not done so to be less likely to leave benefit without help. However, it is not possible to infer from this how effective any such help might be. The results from the planned analysis of the Pathways effect for existing customers with longer claims may be relevant here.

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