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Impacts of the Job Retention and Rehabilitation Pilot

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Summary

The Job Retention and Rehabilitation Pilot (JRRP) was a randomised controlled trial designed to test three alternative interventions, all aimed at increasing the return-to-work rate of those off-work sick for six weeks or more. The trial ran from April 2003 for a period of two years, with 2,845 people taking part over that period. This report presents the evidence on the impact of the three interventions, relative to each other and relative to the control group.

The trial ran within six areas of the United Kingdom (UK), and was aimed at people in those areas who were in employment of 16 hours a week or more but who had been off work sick between six and 26 weeks. The trial was brought to the attention of the eligible population via a range of marketing methods, with those interested in taking part being asked to call a central 'Contact Centre'. Through a series of questions those strictly eligible were identified and, using a specially developed 'screening instrument', those considered reasonably unlikely to be able to return to work without intervention were screened-in.

The screened-in group were then randomly allocated to one of four equally sized groups: three intervention groups, and a control group. The three interventions were:

- a workplace intervention, aimed at achieving a return-to-work by addressing issues in the workplace;
- a health intervention, aimed at achieving a return-to-work by addressing the health issues of the individual; and
- a combined intervention, this being a mix of the above two interventions (the appropriate mix per individual being left to the judgement of the intervention provider).

The primary aim, or outcome, for each of the three intervention groups was a return-to-work for a period of at least 13 consecutive weeks, with (for most trial participants) the start of this return-to-work period being no later than the 28th week after first going off sick. This start-week was selected so as to minimise exits from

work onto Incapacity Benefit (IB). Inevitably this meant that, for those entering the trial after a long period of sickness absence, the service providers would have to deliver *short-term* interventions if a successful outcome was to be achieved. To avoid this being an impossibly short period for some people, those entering the trial after 22 weeks of sickness absence could return to work as late as the 32nd week and still qualify as a successful return-to-work.

Alongside the primary outcome measure, data was collected on a range of secondary outcomes, including a range of health outcomes.

As noted above, 2,845 people entered the trial and were randomised, very close to 711 being allocated to each of the four randomisation groups. Data on outcomes was collected by interviewers from the National Centre for Social Research (NatCen). Inevitably some people were never contacted at the time of the 'outcome survey' and others refused to take part. So the final numbers for whom outcome data is available is: 587 for those randomised to the health intervention; 545 for those randomised to the workplace intervention; 571 for those randomised to the combined health and workplace intervention; and 458 for those randomised to the control group. These unequal numbers per group inevitably leads to some concerns that the randomisation groups may not be strictly balanced: to address this a thorough non-response analysis has been carried out and the data has been weighted to help minimise any non-response bias. The details are given in the appendices to this report.

The numbers randomised in the trial fell considerably short of those hoped for. At the planning stage the ambition was to randomise at least 5,400 people, although it was always recognised that predicting take-up for a trial that had to use general marketing strategies rather than direct approaches to individuals would be an impossible task. It is very difficult to pinpoint the reasons for the shortfall: the most likely reason is that only a small percentage of those off-sick ever became aware of the trial, but it is perfectly possible that a proportion of those aware of the trial were put off because the trial was (for very sound reasons) marketed as 'research' rather than a 'service'.

The shortfall in numbers means that, from a statistical viewpoint, the intervention impacts have to be greater than planned for, if the threshold of statistical significance is to be reached. In practice, 44 per cent of the control group returned to work for 13 weeks or more. Had the trial included 5,400 people, a difference of about 4.4 percentage points between the control groups and one of the intervention groups would have been significant at the five per cent significance level. With the smaller numbers the difference has to be at least 6.1 percentage points to qualify. In practice, as is detailed below, we found smaller differences than 4.4 per cent, so there is no obvious evidence that, had the trial been larger, the conclusions would be different.

Characteristics of trial entrants

The 2,845 people who entered the trial were slightly more likely to be women than men (57 per cent female); older on average than the UK labour force; and predominantly white (92 per cent). Four-fifths had formal qualifications of some kind.

The most common health conditions cited were musculo-skeletal (33 per cent) and mental and behavioural (30 per cent). Fourteen per cent of those randomised described their sickness absence as due to an injury.

Around half of trial participants were in public sector jobs, a far higher percentage than the UK labour force as a whole. This 'bias' is most likely attributable to the marketing strategies of the trial intervention providers, some of whom actively targeted the public sector. There is no evidence that this bias has affected the trial results.

Pathways through the trial

Withdrawal from the trial

Overall, five per cent of participants who were randomised to one of the three intervention groups withdrew from the trial before their initial consent interview with the service provider. This percentage was roughly equal across the three intervention groups.

A further ten per cent withdrew after this interview but before receiving an intervention, the percentage being particularly high for those randomised to the workplace intervention (at 16 per cent).

Finally, a further 15 per cent did not formally withdraw, but claimed not to have received any intervention. This percentage was again higher for those randomised to a workplace intervention (at 24 per cent).

So, overall, just 70 per cent of participants randomised to an intervention reported that they actually received an intervention. For the three intervention groups this percentage is: health intervention 78 per cent, workplace intervention 55 per cent, combined intervention 77 per cent. These figures correspond well with the reports from providers on the numbers receiving interventions.

It needs to be borne in mind that some withdrawals will have happened because the participant returned to work and no longer needed assistance. However, the greater drop-out rate for those in the workplace intervention suggests that this intervention was less acceptable to people than the two interventions with a health component.

Type of intervention received

The type of intervention received differed from person to person. For those assigned to the health intervention group the most commonly used interventions were: physiotherapy (36 per cent); complementary therapy (30 per cent); psychotherapy (26 per cent) and referral to a medical specialist (23 per cent). For those assigned to the workplace intervention group the most commonly used interventions were: ergonomic assessment (42 per cent); and employer liaison/mediation a long way behind at 22 per cent.

For those assigned to the combined intervention group, health interventions were more commonly resorted to than workplace interventions (32 per cent receiving physiotherapy, but just 11 per cent receiving an ergonomic assessment and 22 per cent employer liaison/mediation). The most striking difference between the combined intervention and either of the two other interventions is that, under the combined intervention, almost a third (30 per cent) of participants underwent cognitive behavioural therapy (CBT).

The health interventions received depended on the health condition of the participant. Those presenting with a mental health problem were very likely to be offered counselling or CBT; those with a musculo-skeletal condition or an injury would usually be offered physiotherapy or a referral to a health specialist. In contrast, the workplace interventions were far less influenced by the health condition of the participant.

Time per participant

The amount of actual time spent per participant delivering the interventions differed, to a degree, by the intervention type. Calculating a crude 'time spent' per participant, the median time spent on a workplace intervention participant was somewhere between two and four hours. The median for the health intervention was between four and six hours, and for the combined intervention, six to ten hours.

Refusal of interventions

Of those participants who did not withdraw from the trial, 12 per cent said they turned down some of the interventions offered. Interventions most commonly refused were counselling and CBT, contact with the employer, and complementary therapies.

Cross-over between the health and workplace interventions

Considerable efforts were made throughout the trial to avoid blurring of the boundaries between the three interventions, with the health intervention being strictly 'health', and the workplace intervention being strictly 'workplace'. Based on the data recorded by the service providers, around five per cent of those receiving a health intervention received 'workplace' help. Similarly, around seven per cent of those receiving a workplace intervention received help with their health. But in both instances most of the cross-over was advice rather than a physical intervention. These figures are too low to raise doubts about the validity of the comparisons between the intervention groups.

The impact on return to work

As described above, the primary outcome measure for the trial was a return to work of 13 weeks or more. If any of the interventions had had an impact on this outcome then what would have been observed is different return-to-work rates across the four randomisation groups. Furthermore, if any of the interventions had a 'positive impact' then what would be observed is a higher return-to-work rate for this intervention group relative to the control group.

What we found is, in fact, almost identical return-to-work rates for each of the four groups: 44 per cent for the health group; 45 per cent for the workplace group; 44 per cent for the combined intervention group; and 45 per cent for the control group. The differences are certainly not statistically significant, nor would they be had the trial been larger than it is. What this suggests is that none of the three interventions tested were successful in improving the return-to-work rates of those off sick.

We cannot be sure as to why this negative finding has arisen. One possibility is that a 13-week return to work is simply too difficult a target for this population group (who, after all, have been off work for at least six weeks). Further analysis of the data suggests that there may have been a small, but nevertheless positive, impact of the interventions on shorter returns to work (of about six weeks), with around a three percentage point higher return-to-work rate for the three intervention groups relative to the control group. However, given the size of the trial, this is not a large enough difference to count as statistically significant.

Looking across a range of other employment-related outcomes, such as number of weeks in work, number of weeks out of work, receipt of IB, and pay, no impact has been found on any of these.

Looking within sub-groups however, there are a small number of apparent findings although there is some danger here of data-dredging for apparently significant findings. The small sample sizes in most sub-groups makes the task of finding real impacts extremely difficult. Nevertheless, given these caveats, for those who at the start of the trial reported they would be able to do the same job in six months time, it appears that the interventions may have actually reduced the likelihood of a return to work. Similarly for those with mental health problems (59 per cent of the control group returned to work, compared to just 47 per cent of those in one of the intervention groups). In contrast, the interventions may have been most helpful to the minority of those off work sick because of an injury (36 per cent of those in the control group returned to work compared to 55 per cent of those in one of the intervention groups).

The impact on health

The JRRP interventions were not primarily designed to improve the health of participants. However, it was anticipated that improvements in health would be a likely outcome, especially for those randomised to either the health or combined interventions.

Information on health was collected through the Outcome survey and is all self-reported. Indicators collected include: self-assessed general health; the Hospital Anxiety and Depression Scale (HADS); the SF36; and self-assessments of change in health since entering the trial. Data on the use of health services was also collected.

Tests of impact across all these indicators tell broadly the same story: it appears that the JRRP interventions had a modest impact on self-assessments of health (with, for instance, those in the health and combined interventions being slightly (three percentage points) more likely to report their health as being 'much better' by the time of the outcome survey). However the differences are small, and only a few are significant in statistical tests. One of the largest observed impacts is on mild depression, the prevalence of which appears to have been moderately reduced under the interventions (from 25 per cent in the control group to 20 per cent in the intervention groups).

On other areas of possible impact, such as household income and relationship breakdown, no impact has been found.

Future prospects

Chapter 6 of the impact report looks at the future expectations of JRRP participants with regard to employment. This gives some indication of the long-term prospects for those on the trial.

For those who had returned to work at the time of the outcome survey, the near future (up to six months) was predicted to be relatively stable for most trial participants, most of these expecting to stay in the same job. There were no differences by randomisation group in this respect.

For those who had not returned to work at the time of the interview, there was a marked pessimism about future work prospects amongst those randomised to the workplace intervention. For instance, just two per cent of this group said that they could do the same job as they had before going off sick *and* expected to return to work, compared to 13 per cent for the control group, 21 per cent for the health intervention group and 12 per cent for the combined group. It would appear that having help in the workplace that failed (during the lifespan of the trial) means that people conclude they have to move on. The workplace intervention group were rather less pessimistic about their chances of taking up a new job, and were no more likely than those in the other intervention groups to say they would not return to work at all.

Costs

The impact assessment extends in Chapter 7 to consideration of the costs of the pilot as measured by the monetary value of resources that providers and the Department for Work and Pensions (DWP) invested in the different intervention models. Costs are examined over a six-month interval of stable running between January and June

2004 and divided into resource use for each of the four intervention approaches and variations across service providers examined. Centralised costs complete the picture. Separate assessments are provided of resources used to market the service and to spending on evaluation support. The chapter ends by relating social investments in service delivery to the number of clients served, the total months of services provided, and the potential accomplishments of the pilot in terms of successful returns to work.

Participants'experiences and views of JRRP

The final chapter of the impact report gives trial participant views on their participation in the trial. It covers perceptions of the screening and randomisation process; the consent procedures; and attitudes to the interventions received. Overall perceptions about the screening, randomisation and consent were positive. Inevitably those allocated to the control group were the group least happy with their allocation, although the workplace intervention group were also significantly less happy than the health or combined intervention groups.

In line with this, those allocated to the workplace intervention were most likely to say there were services they would have liked to receive that were not offered to them (45 per cent of the workplace group, compared with under 30 per cent for the other two intervention groups). These un-offered services were predominantly medical interventions. In contrast, a minority of those allocated to the health group stated that they would have liked help in the workplace.

Discussion

It is not entirely clear why the JRRP interventions did not impact on employment. Piecing together the evidence from across the whole of the JRRP evaluation, it appears that the most likely explanations for the 'no impact' finding overall are:

- that the interventions offered were not always seen to be appropriate to the clients or to meet their needs fully and that the service providers did not always encourage clients to be proactive and to initiate contact. There is some evidence that, in contrast, those in the control group were prepared to be proactive on their own behalf;
- some of the primary reasons for returning to work, such as concerns about money or job tenure, would be outside of the control of the service providers;
- service providers faced barriers from employers and General Practitioners (GPs) that reduced the probability of their being able to gain a successful return-to-work.

Other possible explanations, such as the high withdrawal rate and the profile of people who entered the trial seem implausible, although it is possible that they made a contribution.

1 Introduction

This is an account of the impact of a randomised controlled trial, the Job Retention and Rehabilitation Pilot (JRRP).

This introductory chapter explains briefly the objectives of JRRP (Section 1.1) and the main features of the trial design (Section 1.2). The methods used to evaluate the trial are described in Section 1.3, followed by an outline of this report in Section 1.6. Section 1.7 describes the characteristics of the trial participants.

JRRP was evaluated by the National Centre for Social Research (NatCen), in collaboration with the Social Policy Research Unit (SPRU) at the University of York, and the Urban Institute (Washington DC).

1.1 Objectives of the Job Retention and Rehabilitation Pilot

The Job Retention and Rehabilitation research trial was developed to test interventions which might decrease length of sickness absence and increase job retention for people with a health condition or impairment. In Great Britain over the last two decades, the number of people receiving incapacity benefits[1] has trebled (House of Commons Work and Pensions Committee 2003a, 2003b), and the number of people claiming such benefits now stands at 2.7 million, involving an expenditure of 16 billion pounds a year (Riddell *et al.*, 2005). Currently 8.7 per cent of the working age population are claiming at least one disability-related benefit (Stanley and Regan, 2003).

The growth in the number of such claimants has been accompanied by growing concerns about the incidence of sickness absence, particularly longer term absences. Workers off sick for long periods are at risk of losing their job or business and many do not work again, leading to claims for incapacity benefits which are often of long duration. When people start to receive these benefits, around 90 per cent say that they expect to return to work, but in fact more than 40 per cent will still be in receipt of these benefits a year later (Department for Work and Pensions (DWP), 2002). Just over 50 per cent of current recipients of incapacity benefits have a claim that has lasted five years or more.

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[1] Such as Incapacity Benefit, Income Support (on the grounds of incapacity) and Severe Disablement Allowance.

Although not all those on certificated sickness absence or incapacity benefits would define themselves as disabled, evidence shows that employment rates fall with the onset of a disability and continue to fall the longer the disability spell lasts (Jenkins and Rigg, 2004). Labour Force Survey (LFS) data show that in Spring 2003, approximately 6.9 million people of working age reported being long-term disabled and approximately 5.4 million declared a work limiting disability (Tibble, 2004). The unemployment rate for disabled people in spring 2004 was about seven per cent compared to an unemployment rate amongst non-disabled people of around four per cent[2] (DWP in-house analysis Labour Force Survey, Spring 2004). Disabled people are very much more likely to be economically inactive, at around 46 per cent compared to approximately 16 per cent of non-disabled people (DWP in-house analysis Labour Force Survey, Spring 2004). Smith and Twomey (2002) report data which shows that households containing a disabled adult are far more likely to be workless (31 per cent) than those which do not (ten per cent).

Such statistics reinforce concern with difficulties in both maintaining employment and improving labour market outcomes for people with health conditions and for disabled people. The Government's concern to prevent long-term incapacity, improve return to work rates for people on sickness absence, and increase their employment retention was the basis for the JRRP.

The purpose of the JRRP trial was to evaluate the impact of intervening early among the target population of people who had been off work due to sickness or disability for six weeks or more and who were at risk of losing their job or business as a result. The pilot aimed to demonstrate whether one of three types of boost to existing services affected the rate of return to work and job retention. The outcome of the pilot will guide future policy priorities.

1.2 Design of the trial

Along with one other recent trial[3], JRRP is unique amongst UK welfare to work initiatives, as it was designed from the start to be run as a research project, with evaluation fully integrated into the design. To ensure the evaluation is as robust as possible, the pilot used random assignment, the first time this had been attempted on a large-scale *voluntary* labour market programme in the UK[4]. The design was also unique in that *three* models of intervention were tested.

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[2] The unemployed are still considered to be economically active.

[3] The Employment Retention and Advancement Scheme (ERAS), another randomised controlled trial which is piloting services for lone parents and long-term unemployed people. Other randomised controlled trials for labour market programmes have either been of smaller scale or for mandatory programmes.

[4] ERAS was launched shortly after JRRP.

The basic features of the trial were as follows:

- the trial was run in six areas of the UK;
- it was aimed at those in employment of 16 hours or more a week who had been off work because of sickness or disability for between six and 26 weeks;
- those interested in taking part volunteered by calling a central Contact Centre;
- those eligible were screened, and only those 'likely' to lose their job were accepted onto the trial;
- those eligible and screened-in were randomised to one of four equally sized groups: a workplace intervention group, a health intervention group, a combined health and workplace intervention, and a control group;
- the impact of the interventions was measured by comparing subsequent return-to-work rates for the four groups (see Chapter 3).

1.2.1 The areas

JRRP was run in Greater Glasgow, Newcastle and North Tyneside, Teesside, Sheffield, Birmingham and West Kent and these six areas were covered by four service providers. The actual areas covered were much larger than the names suggest. For example, the Glasgow area covered not only the city of Glasgow, but extended into surrounding areas, such as Lanarkshire, Dunbartonshire and Renfrewshire. A single provider covered each area, although two service providers each covered two areas. In every area all three interventions were offered. In two areas, one of the interventions was provided by the service provider, with the other two interventions each being provided by a separate organisation through a sub-contracting arrangement.

1.2.2 Eligibility

To be eligible for JRRP several conditions needed to be satisfied. A client must:

- have been employed or self-employed and working for 16 hours a week or more;
- have been off work sick for between six and 26 weeks;
- have been living and working within one of the pilot areas;
- not be within 18 weeks of planned retirement.

To be entered onto the trial, clients had to be both eligible and to be 'screened-in'. The 'screening in' process was designed to identify those with (on average) a greater than 50 per cent chance of losing their job if they received no intervention. In other words, the aim was to screen out those thought likely to be able to return to work without a JRRP intervention.

1.2.3 Marketing

There are no centrally held lists of those absent from work because of sickness or injury, so the eligible population could not be identified easily. Instead, service providers implemented a variety of methods of marketing the pilot, including recruitment via General Practitioners (GPs) and employers, and general advertising (posters, radio, etc.). Potential participants needed to self-refer by calling a Contact Centre or to send their details on a freepost slip (to enable the Contact Centre to call them). In addition, branded Med3 forms (which are used by GPs when completing sick notes for patients) with detachable slips to send to the Contact Centre were used from around the end of June 2004.

1.2.4 Entering the trial and randomisation

To enter the trial, potential clients spoke with the central telephone Contact Centre:

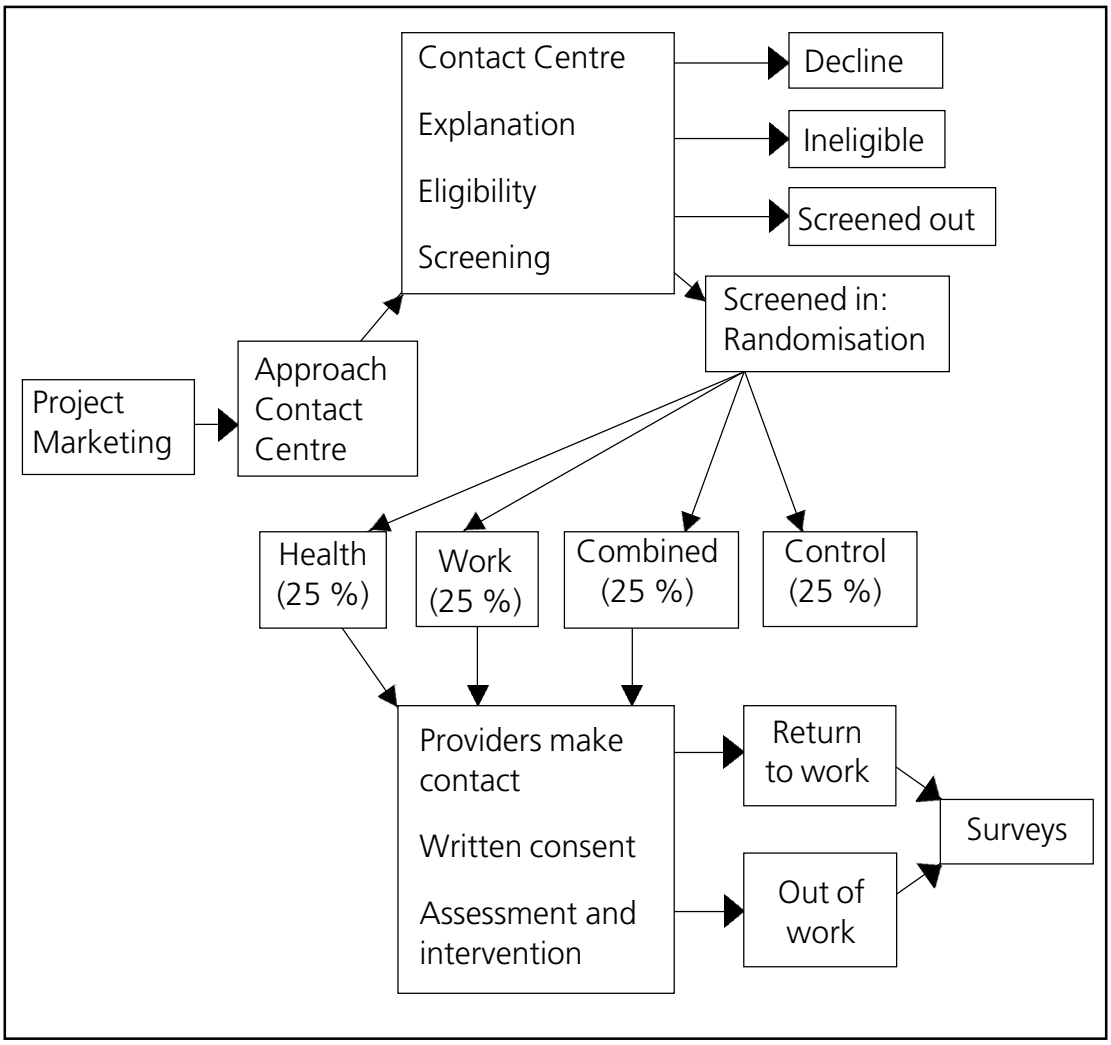
- they were given a brief explanation of the trial;
- their eligibility for the trial was checked;
- those eligible were asked a series of questions from which an 'at risk' score was determined, and those who scored above a threshold value were invited to enter the trial;
- names and addresses of those 'screened-in' who wished to enter the trial were passed to NatCen for randomisation.

Those who were screened-in and agreed to enter the trial were randomised to one of the four groups in equal numbers. The randomisation was carried out using 'block randomisation' separately for each pilot area, which ensured 25 per cent allocation per group, both by area and over time. Randomisation occurred as quickly as possible after clients agreed to enter the trial, the maximum lag aiming to be 48 hours.

Screening and randomisation took place for a period of 21 months in total, from April 2003 to December 2004. During this time, a total of 2,845 were screened and randomised into the JRRP trial. Section 1.7 contains more detail on the characteristics of those recruited to the trial.

The design of the trial and the different pathways that volunteers could take through it is summarised in Figure 1.1 below.

Figure 1.1 JRRP Trial Design



1.2.5 Notifying clients and providers

All clients were notified of the randomisation outcome by post, although those randomised to an intervention were not told at this stage to which of the three groups they had been allocated. To minimise withdrawals, the letters were sent out on the same day as randomisation. Clients were also given a freephone number to call (at NatCen) for further information.

Service providers were notified of anybody allocated to an intervention on the same day as the letter was sent. In most instances, such clients were then invited to an initial face-to-face meeting where they watched a short video that described the randomisation and the written consent procedure. They were then notified of their intervention group, given an explanation of what their intervention might look like, and asked to give written consent to receive interventions. Those giving written consent could then go straight to the assessment stage[5].

[5] Those who refused consent at this stage had no further contact with providers, but were retained in the research sample for the Outcome Survey (see Section 1.3.1).

In two areas, the procedures for health intervention clients were different because the service was being provided by telephone; these clients were sent information about the consent procedures by post and asked to watch the video, sign the consent form and then post it back. However, these procedures changed half-way through the trial to become more similar to other areas. This was because of the higher levels of attrition which seemed to be resulting from this method.

1.2.6 The interventions

Those allocated to an intervention group and giving written consent were assessed and an individual Action Plan was drawn up. The interventions had to be appropriate for the group to which the client was allocated, and had to adhere to the following 'rules':

- there were major differences between the health and workplace interventions (even if there were some common elements);
- elements that featured under one of these interventions for one provider should not be under the other for another provider.

The health intervention was defined in the following way:

- must be delivered away from the workplace;
- must deliver a treatment to the mind or body of the recipient;
- must not contact or seek to influence the employer or the workplace;
- could not be delivered by an Occupational Health Nurse;
- advice could only be about the health condition and focus on the physical body/ mind.

The workplace intervention was defined in the following way:

- could be delivered in any location;
- must be delivered by an appropriately qualified professional or organisation;
- could involve contact with the recipient's employer;
- must focus on bringing about some degree of change within the individual's workplace environment;
- advice could only be about the workplace or how people work.

The combined intervention could be any or all of the above.

1.2.7 The service providers

The four service providers and the areas they were responsible for are shown in Table 1.1 below.

Table 1.1 JRRP service providers, areas and brand names

Lead organisation	Service name	Area	Area abbreviation
University of Glasgow, Public Health Department	HealthyReturn	Greater Glasgow	GL
Northumbria University	RouteBack	Newcastle & Tyneside Teesside	TYTE
Sheffield Occupational Health Advisory Service (SOHAS)	WorkCare	Sheffield & surrounding district	SH
Human Focus	WorkCare	Birmingham West Kent	BIWK

1.3 The JRRP evaluation

The evaluation of JRRP comprised two main strands: an evaluation of job retention services; and an evaluation of the trial itself. These have been evaluated via an impact assessment, a process evaluation and a research advice component. This report focuses on the findings of the evaluation of the impact of the services themselves, the latter strand having already been evaluated in a previous report (Stratford *et al.* 2005b). The key elements of the evaluation (only the first of which is covered in this report) are described in turn below.

1.3.1 Evaluation design

Impact assessment

The main source of data from which impact was measured was a face-to-face survey of all randomised clients, including the control group. This survey is referred to throughout as the Outcome Survey (OCS).

Return-to-work is the *primary* outcome for the trial and was measured via a work history collected during the OCS which covered what people were doing each week between going off sick and being interviewed (between ten and 11 months later). **A successful outcome is defined as a return to work (to either the same job or a different one) of 16 hours or more for 13 consecutive weeks.** Data was also collected on a large range of secondary outcomes, such as other work outcomes (for example, hours worked per week, attitudes to work); and health outcomes such as self-assessed general health, and the use of health services.

The impact assessment also includes a cost analysis to show the return on investment of the funds committed to the pilot intervention.

Process evaluation

The components of this element were:

- a qualitative panel study of clients who were interviewed at regular intervals over a period of six months to collect 'real time' data about their experiences and views of the service;
- a series of focused, research question-led studies which explored:
  - the operation of the service;
  - how people return to work;
  - how GPs work with patients on sick leave;
  - employers policies and practises in dealing with employees on sick leave;
  - how the control group reached their outcomes and how they reacted to being in the trial.

The results from this aspect of the evaluation are reported in a number of separate reports (Mowlem and Lewis, 2004, Nice and Thornton, 2004, Farrell *et al.*, 2006).

Research advice

A key element of the evaluation was to observe the operation of the pilot to ensure that the procedures were working well and to help providers whenever possible on areas that related to the running of the trial (as opposed to delivering the interventions). Three Research Advisers from NatCen were engaged to give guidance to new staff on the consent procedures, talk over data collection and recording issues with providers and provide training. This element also involved a telephone survey conducted to provide an estimate of the deadweight rate of the trial (that is, the rate at which the control group return to work) and to give an early indication of the effectiveness of the screening tool.

The findings from the telephone survey and the research advice activities have been reported elsewhere (Stratford *et al.*, 2005b), and it is not the intention to repeat those findings here.

Evaluation database

At the end of each monthly reporting period, every organisation involved (the Contact Centre, the randomisation team and each service provider), sent an extract of their data to be merged together centrally at ORC[6], the organisation contracted to create and manage the database. The merged extract became the Management Information and Evaluation Database, which contains screening information, details of services received from providers and outcomes for pilot participants.

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[6] There were some difficulties with the extracts sent to ORC. The Contact Centre data extracts did not contain all the necessary data items, and some providers experienced difficulties exporting their data. This was resolved when a new data capture system was set-up by SDA, the organisation contracted to do this.

The Management Information and Evaluation database provides data for some statistics in this report.

Evaluation organisation

The evaluation of JRRP was managed by officials from DWP's Disability and Work Division in consultation with other colleagues from DWP strategy teams, Jobcentre Plus (who managed service delivery), DWP Contract Management Group and the Department of Health (DH). The pilot was supervised by a project management board with officials from DWP, DH, the Health and Safety Executive and the Scottish Executive.

1.4 The datasets used in this report

This report draws on four main datasets:

(i) Screening data: Data collected during the screening from all those randomised.

(ii) MI data: Data recorded by the service providers on their contacts with each trial participant and the interventions received.

(iii) Outcome survey (OCS) data: Data collected on all trial participants (including the control group) at the end of their time with the trial. This data was collected by interviewers face-to-face in people's homes. Participation in the survey was voluntary and not everybody agreed to take part.

(iv) SoSoc data: A telephone survey was carried out with all members of the control group and all those screened out as ineligible. This survey took place before the OCS (the aim being to give an *early* indication of whether the screening tool was effectively screening out those at least risk of losing their jobs.) The SoSoc data is not used directly in the report, but has been used to correct for non-response bias in the OCS. The details are in Appendix A.

1.5 The numbers randomised and the impact detectable

In total, 2,845 people entered the trial and were randomised, very close to 711 being allocated to each of the four randomisation groups. Data on outcomes was collected by interviewers from NatCen. Inevitably some people were never contacted at the time of the 'outcome survey' and others refused to take part. So the final numbers for whom outcome data is available is: 587 for those randomised to the health intervention; 545 for those randomised to the workplace intervention; 571 for those randomised to the combined health and workplace intervention; and 458 for those randomised to the control group. These unequal numbers per group inevitably leads to some concerns that the randomisation groups may not be strictly balanced: to address this a thorough non-response analysis has been carried out and the data has been weighted to help minimise any non-response bias. The details are given in Appendix A.

The numbers randomised in the trial fell considerably short of those hoped for. At the planning stage the ambition was to randomise at least 5,400 people, although it was always recognised that predicting take-up for a trial that had to use general marketing strategies rather than direct approaches to individuals would be an impossible task. It is very difficult to pinpoint the reasons for the shortfall: the most likely reason is that only a small percentage of those off-sick ever became aware of the trial, but it is perfectly possible that a proportion of those aware of the trial were put off because the trial was (for very sound reasons) marketed as 'research' rather than a 'service'.

The shortfall in numbers means that, from a statistical viewpoint, the intervention impacts have to be greater than planned for if the threshold of statistical significance is to be reached. In practice, 44 per cent of the control group returned to work for 13 weeks or more. Had the trial included 5,400 people, a difference of about 4.4 percentage points between the control groups and one of the intervention groups would have been significant at the five per cent significance level. With the smaller numbers the difference has to be at least 6.1 percentage points to qualify. In practice, as is detailed in Chapter 3, we found smaller differences than 4.4 per cent, so there is no obvious evidence that, had the trial been larger, the conclusions would be different.

1.6 Outline of this report; other JRRP publications

This report sets out our findings on the impact of the Job Retention and Rehabilitation (JRR) interventions. The next section (1.7) describes the characteristics of those who joined the trial to provide some background for the rest of the report. Chapter 2 gives an outline of the different pathways through the trial taken by clients, including randomisation, consent, attrition at various stages, the treatments and advice received and the time spent on them. It also considers the extent of crossover between the work and health interventions.

Chapter 3 looks at the impact of the interventions on the primary outcome measure, namely, the return-to-work rate. It also considers several other impacts in relation to work, including the time taken to return and self-assessed impact.

Health impacts are considered in Chapter 4, which looks at changes in both physical and mental health, and the use of health services. This chapter also includes some statistics on JRRP impacts on financial wellbeing and relationships.

The next chapter (5) turns to the future, looking at the expectations of those in work, those still off sick and those who have lost their job. Chapter 6 reports on the level and composition of provider costs.

Chapter 7 expands and updates findings on participants' experiences and views of JRRP, which were the subject of a previous report (Stratford *et al*, 2005a). Clients' feedback on screening, randomisation, consent giving, treatments and advice are given here.

Finally, a discussion of the findings are presented in Chapter 8.

The following outputs from the evaluation have already been published:

- Farrell C, Nice K, Lewis J, and Sainsbury R (2006) *Experiences of the Job Retention and Rehabilitation Pilot*, DWP Research Report 339, London: Department for Work and Pensions.
- Stratford, N., Taylor, R., Legard, R., Natarajan, L., Purdon S. and Shaw, A. (2005b), *The Job Retention and Rehabilitation Pilot: reflections on running a randomised controlled trial*, London: Department for Work and Pensions.
- Stratford, N., Farrell, C., Natarajan, L. and Lewis, J. (2005a), *Taking part in a randomised controlled trial: a participant's eye-view of the Job Retention and Rehabilitation Pilot,* London: Department for Work and Pensions.
- Mowlam, A. and Lewis, J. (2004), *GP's management of patients' sickness absence from work*, London: Department for Work and Pensions.
- Nice, K. and Thornton, P. (2004), *Job Retention and Rehabilitation Pilot: Employers management of sickness absence,* London: DWP Research Report No 227.
- Peters, J., Wilford, J., Macdonald, E., Jackson, A., Pickvance, S., Blank, L. and Craig, D. (2003), *Literature Review of Risk Factors for Job Loss Following Sickness Absence,* London: DWP In-House Report No 122.

1.7 Characteristics of trial entrants

This section describes the characteristics of the JRRP trial entrants, using data from the initial telephone screening interview, supplemented where appropriate by (non-response weighted) data from the OCS. We look first at their demographic profile and health state at the time of screening, and then describe their employment status at the time they went off sick from work. Where possible, comparisons are made with population estimates for those in employment from the LFS winter 2003/04, to put the profile of JRRP trial entrants into a wider context. It should be noted that these figures are not strictly comparable as the LFS covers the whole of the UK, whereas JRRP was piloted in six areas in Scotland and England. Nevertheless, it is informative to know how closely the trial entrants' characteristics conform to those of the working UK population.

Table 1.2 Age and gender of trial entrants (from screening interview) compared to Labour Force Survey data

	Labour Force Survey Screening %	(Winter 2003/04) [7] %
Gender		
Male	43	54
Female	57	46
Base	*2,842*	
Age		
16-17	*	2
18-24	3	12
25-34	17	22
35-49	48	38
50-64 (m) /50-59 (f)	31	22
65+ (m) /60+ (f)	1	4
Base	*2,840*	

As Table 1.2 shows, JRRP trial entrants were more likely to be female (57 per cent), in contrast to the population in employment in the UK, which contains more males (54 per cent). The age distribution was also different, with JRRP entrants being older on average than the working population. Although 14 per cent of UK workers were aged 16-24, only three per cent of trial entrants were drawn from this group. Those aged 35 or older, but below state pension age made up the majority of entrants (79 per cent), a larger proportion than among the population (60 per cent). This is very likely due to the fact that health tends to deteriorate with age.

Most trial entrants were White (92 per cent), with the largest ethnic minority group being Bangladeshi/Pakistani/Indian (three per cent). Two-thirds were married or cohabiting, and 38 per cent had dependants to care for (mostly children). Four-fifths held formal qualifications of some kind, with the highest level held most commonly O level/GCSE/(S)NVQ level 1 or 2 (34 per cent) or AS/A levels/(S)NVQ level 3 (20 per cent). Twenty two per cent held a first/higher degree or equivalent (Table 1.3).

Just over half of the trial entrants had a personal gross annual income of £10,000-£20,000, and a quarter between £20,000 and £30,000. Very few (five per cent) received more than this. It is difficult to say whether this level of income is typical of those in employment. The LFS (winter 2003/04) shows the average gross annual earnings of all full-time employees as being £22,724. The trial entrants appear to have lower earnings than this, but this could be explained by the fact that they did not all work full-time, that earnings may be lower than average in the trial areas, and that income may have been reduced by sickness absence.

[7] This and subsequent Labour Force Survey figures are taken from *Labour Force Survey Quarterly Supplement No. 26*, July 2004.

Table 1.3 Demographic characteristics of trial entrants (from screening interview)

	%		%
Ethnicity		**Highest qualification**	
White	92	O level, GCSE or equivalent	21
Black African	1	A levels, AS levels or equivalent	8
Black Caribbean	2	NVQ Level 1 or 2 or equivalent	13
Bangladeshi/Pakistani/ Indian	3	NVQ Level 3 or equivalent	13
Chinese	*	NVQ Levels 4-5 or equivalent	8
Any other	2	First Degree (eg BA, BSC)	8
Base 2,840		Higher Degree (eg PhD, PGCE)	7
Marital status		Professional Qualifications	3
Single	23	No Qualifications	20
Married/Cohabiting	65	*Base 2,840*	
Separated/Widowed/Divorced	12	**Individual gross annual income band**	
Base 2,841		Under £10,000	18
Dependants to care for at home		£10,000 - £20,000	53
Yes	38	£20,000 - £30,000	23
No	62	Over £30,000	5
Don't know	*	Prefer not to say	1
Base	*2,840*	*Base*	*2,635*

Most trial entrants (as measured by the OCS) owned their own home, either with a mortgage (58 per cent) or outright (15 per cent). Eleven per cent were renting from the council, four per cent from a Housing Association and four per cent privately. Six per cent were living in the home of a relative or friend. Two-thirds were living with a spouse/partner, 26 per cent with their children under 18 and 39 per cent without. Seventeen per cent were living alone, and 11 per cent with others who were not a partner or dependent children. Seven per cent were lone parents.

The health conditions reported by the trial entrants were dominated by just a few types of condition. During the screening interview people were asked '*What would you say is the* ***main*** *problem with your health that is stopping you working*?'. Those who responded to the OCS were asked a similar question: '*At that time when you went off sick on DATE what is the name of the health condition or disability that was keeping you off work*?'. In both cases, answers were recorded verbatim and coded using the International Classification of Diseases (ICD10) code frame.

By far the most common conditions named were musculo-skeletal problems (reported by 33 per cent at both screening and OCS, and mental and behavioural disorders (30 per cent; 31 per cent). Only one other type of condition was common, with 14 per cent at screening and 16 per cent in the OCS mentioning conditions classified as injury, poisoning & certain other consequences of external causes. No other condition was mentioned by more than nine per cent (Table 1.4).

The proportion reporting mental and behavioural disorders is broadly in line with findings of other studies on the prevalence of such disorders among workers. One study found that three in ten employees have a mental health problem in any one year, mainly depression and anxiety (ONS, 1995), and Jenkins and Warman (1993) showed that 27 to 37 per cent of the working population experienced 'minor psychiatric disorders'. Incapacity benefits claimants also have a similar level of mental disorders at 35 per cent (DWP, 2002).

Over half (55 per cent) of trial entrants had experienced anxiety or depression at some time in their lives that caused them to consult their doctor. Around a third (35 per cent) had recently experienced panic attacks.

As would be expected, most trial entrants (80 per cent) were waiting for medical treatment at the time of screening. But this leaves a sizeable minority (19 per cent) who were not.

Table 1.4 Primary health conditions (those keeping volunteers off work) of trial entrants and Outcome Survey respondents at time of screening

	Screening %	Outcome Survey %
Diseases of the musculoskeletal system & connective tissue	33	33
Mental & behavioural disorders	30	31
Injury, poisoning & certain other consequences of external causes	14	16
Symptoms, signs & abnormal clinical & laboratory findings not elsewhere classified	9	5
Diseases of the circulatory system	5	6
Diseases of the nervous system	4	6
Factor influencing health status & contact with health services	4	2
Diseases of the digestive system	2	3
Diseases of the respiratory system	1	2
Neoplasms	2	2
Endocrine, nutritional & metabolic diseases	1	2
Diseases of the genito-urinary system	1	2
Certain infectious & parasitic diseases	1	1
Diseases of the eye & adnexa	1	1
Diseases of the ear and mastoid process	1	1
Diseases of the skin & subcutaneous tissue	1	1
Diseases of blood & blood-forming organs & certain disorders involving immune mechanism	*	1
Congenital malformations, deformations & chromosomal abnormalities	*	*
Unweighted base (all respondents)	*2,845*	*2,161*

Note: Columns do not sum to 100 as more than one health condition could be given

The primary health conditions reported by trial entrants at screening are summarised in Table 1.5 below. This table also shows that female entrants were more likely to mention mental and behavioural disorders (34 per cent) than men (25 per cent). Male entrants, on the other hand, were more likely to report injury etc. (17 per cent compared with ten per cent of women). Those who were single or separated were also more likely to mention mental and behavioural disorders (36 per cent and 45 per cent respectively), whilst married entrants had the lowest levels (26 per cent). Health conditions also varied according to income with the highest income group (£30,000 or more per annum) reporting the highest levels of mental/behavioural disorders (39 per cent compared to 24 per cent of those earning less than £10,000) and the lowest levels of musculo-skeletal problems (20 per cent compared to 41 per cent of the lowest income group).

Table 1.5 Primary health condition at screening, by gender

	Male %	Female %	Total %
Mental & behavioural with any other(s)	25	34	30
Musculo-skeletal with any other(s) (not including mental)	34	31	33
Injury, poisoning with any other(s) (not mental/musculo-skeletal)	17	10	13
Other condition(s) only	22	24	23
Unweighted base (all randomised)	*1,225*	*1,617*	*2,842*

Trial entrants were also asked whether they had any other health problems besides the ones which were keeping them off work. The most prevalent secondary health conditions were musculo-skeletal problems, circulatory diseases, mental and behavioural disorders and respiratory problems, but none of these affected more than nine per cent (Table 1.6).

The proportion saying they did not have any other conditions was higher at the OCS (82 per cent) than at screening (61 per cent). This is probably due to recall being better at the time of screening. That interview was conducted soon after going off sick and so these less salient secondary conditions were more likely to have been recalled then than by the time of the OCS some months later.

The aim of JRRP was to intervene early in the period of sickness absence. Volunteers were eligible to join the trial between six and 26 weeks after going off sick. Most entered towards the start of that period, with 58 per cent joining after six to 12 weeks, and 27 per cent between 13 and 19 weeks of sick leave. Only 15 per cent joined in the last few weeks of eligibility.

Table 1.6 Secondary health conditions (those NOT keeping volunteers off work) of trial entrants and Outcome Survey respondents at time of screening

	Outcome Screening %	Survey %
None	61	82
Diseases of the musculo-skeletal system & connective tissue	9	6
Diseases of the circulatory system	7	4
Mental & behavioural disorders	6	4
Diseases of the respiratory system	6	3
Symptoms, signs & abnormal clinical & laboratory findings not elsewhere classified	3	1
Diseases of the digestive system	3	2
Endocrine, nutritional & metabolic diseases	4	2
Injury, poisoning & certain other consequences of external causes	2	1
Diseases of the nervous system	3	1
Factor influencing health status & contact with health services	1	*
Neoplasms	1	1
Diseases of the genito-urinary system	1	1
Certain infectious & parasitic diseases	1	*
Diseases of the eye & adnexa	1	*
Diseases of the ear and mastoid process	1	*
Diseases of the skin & subcutaneous tissue	1	1
Diseases of blood & blood-forming organs & certain disorders involving immune mechanism	1	*
Congenital malformations, deformations & chromosomal abnormalities	-	*
Unweighted base (all respondents)	*2,845*	*2,161*

Note: Columns do not sum to 100 as more than one health condition could be given

Most trial entrants were working full-time before they went off sick, with 57 per cent working between 30-39 hours a week and 25 per cent 40 or more hours. Eighteen per cent worked between 16 and 29 hours. The great majority (95 per cent) were permanent employees, with only two per cent employed on a fixed term contract and a further two per cent being self-employed (Table 1.7). The proportion of self-employed entrants was much lower than among the UK population in work (13 per cent according to the LFS). This may be due to lower levels of self-employment in the trial areas, or lower prevalence of sickness absence among the self-employed, or it could indicate a failure to reach and/or attract this group onto the trial.

Table 1.7 Employment status of trial entrants (from screening interview)

	Screening %	Labour Force Survey (Winter 2003/04) %
Permanent	95	81
Self-employed	2	13
Fixed-term	2	2
Casual	*	3
Government supported training/employment	N/a	*
Unpaid family workers	N/a	*
Unweighted base	*2,841*	

The trial entrants were drawn from all occupational sectors, as shown in Table 1.8. Workers from some sectors were more prevalent than others, with one in six engaged in associate professional and technical work, and one in seven in each of the administrative and secretarial, and personal service sectors. Relatively few were working in sales and customer service (six per cent) or were managers and senior officials (seven per cent). This last sector was under represented among trial entrants compared to the UK population in work (of whom 15 per cent work in this sector according to the LFS). Conversely, trial entrants were more likely to be in personal service jobs (14 per cent) than the population (eight per cent). Again, these differences could be due to the trial marketing being more or less likely to reach and appeal to certain groups. The differences between the trial areas and the UK as a whole, as well as differing levels of sickness absence between different occupational sectors, could also have been factors.

The prevalence of different (primary) health conditions varied greatly between occupational groups. Mental and behavioural disorders were most common among professional workers (47 per cent) and managers (43 per cent), and least prevalent among those working in skilled trades (ten per cent), process, plant and machine operatives (15 per cent) and elementary occupations (16 per cent). Conversely, these latter three groups were more likely to report musculo-skeletal complaints (41 to 44 per cent) and injury (17 to 24 per cent) than professional workers (18 per cent musculo-skeletal and eight per cent injury) or managers (23 per cent and eight per cent).

Table 1.8 Standard Occupational Classification of trial entrants' pre-sickness absence jobs (from screening interview)

	Screening %	Labour Force Survey (Winter 2003/04) %
Managers and senior officials	7	15
Professional	9	13
Associate professional and technical	17	14
Administrative and secretarial	14	13
Skilled trades	9	12
Personal service	14	8
Sales and customer service	6	8
Process, plant and machine operatives	12	8
Elementary	12	12
Unweighted base	*2,829*	

All major industrial sectors were represented among trial entrants, but there was a considerable concentration of public administration, education & health workers, which accounted for almost half (49 per cent) of entrants' pre-sick leave employment (Table 1.9). This is a much greater proportion than among the UK working population (28 per cent). Consequently, other sectors are under represented among trial entrants compared to the population, specifically retail, distribution, hotels & catering (11 per cent; 20 per cent), banking, finance & business services (ten per cent; 16 per cent), and construction (four per cent; eight per cent).

Some of these differences could again be due to the lack of geographical comparability between these two sources, or to higher sickness rates among public sector workers. However this could not explain such a large difference in its entirety. Most of the difference will be due to the types of employers who were targeted in the marketing of the trial.

There were also large differences in the health conditions reported by workers in different sectors. Public administration and banking/finance both had the highest levels of mental and behavioural disorders (both 36 per cent), and construction the lowest (ten per cent). Levels of musculo-skeletal disorders were highest among construction (44 per cent) and retail/distribution workers (42 per cent).

Table 1.9 Standard Industrial Classification of trial entrants' pre-sickness absence jobs and whether employer is a private company (from screening interview)

	Screening %	Labour Force Survey (Winter 2003/04) %
Agriculture & fishing	1	1
Energy & water	1	1
Manufacturing	11	14
Construction	4	8
Retail, distribution, hotels & catering	11	20
Transport & communications	9	7
Banking, finance & business services	10	16
Public administration, education & health	49	28
Other services	4	6
Base	*2,838*	
Employer is private company	43	76
Employer is **not** private company	53	24
Base	*2,839*	

Most trial entrants said at screening that they liked their job (84 per cent). Only ten per cent did not and the remaining seven per cent could not say. Somewhat fewer said that their supervisor or manager was understanding about their health problems although this was still a majority (65 per cent). Eighteen per cent said that this person was not understanding and 17 per cent declined to say.

Mental and behavioural disorders were far more prevalent among those who did not like their job (of whom 58 per cent mentioned this as a primary condition) or did not know (65 per cent), than among those who did like it (25 per cent). These disorders were also more common among those who felt that their manager was not understanding (52 per cent, compared to 24 per cent of those who had an understanding manager).

Most trial entrants had had a very stable working life. When asked during the OCS interview to chose a statement from a card which best summed up their experience between leaving school or college and now, 88 per cent said that they had spent most of this time in steady jobs (Table 1.10). A small proportion (four per cent) had spent a lot of their adult life looking after their family or home, and three per cent had been in and out of work several times. Only one per cent had spent a lot of time out of work because of a health condition. This strongly suggests that for most respondents, taking time off work due to ill-health was a fairly recent event and not one that had characterised the majority of their working life. This conclusion is strengthened by the fact that the average (mean) length of time that OCS respondents had held their pre-sickness absence job was ten years.

Table 1.10 Summary of JRRP Outcome Survey respondents' working life

	Outcome Survey %
I have…	
… spent most of my working life in steady jobs	88
… spent most of my working life self-employed	1
… mainly done casual or short term work	1
… spent a lot of time out of work because of a health condition	1
… spent more time unemployed than in work	*
… spent a lot of my adult life looking after family or the home	4
… spent a lot of my adult life caring for a sick or disabled adult/child	1
… been in and out of work several times	3
None of these apply to me	1
Unweighted base (all respondents)	*2,160*

2 Pathways through the trial

This chapter describes the type of interventions received by those allocated to one of the three intervention groups. It divides naturally into two main sections: Section 2.1 looks at those who received no interventions at all because they withdrew from the trial; Section 2.2 looks at the type of interventions received by those staying with the trial. The extent to which people got interventions inappropriate for the group they had been assigned to is considered in Section 2.3.

The data for this chapter comes from two sources: the Outcome Survey (OCS) of participants and the Management Information database (MI) kept by the intervention providers. Information on withdrawals has been derived from the OCS. This gives rather more information than the MI system, especially about the reasons for withdrawal, and the two sources do not contradict each other, so concentrating on the richer data source seems preferable. Information on the nature of the interventions received is derived from the MI data. Participants were asked about their interventions as part of the OCS, but inevitably this is prone to considerable error with participants misremembering and mislabelling their interventions.

The MI data had to be edited before it could be used for statistical purposes. To reduce the scale of the editing task a random sub-sample of cases were selected. The data from this sample has been grossed back to the whole trial numbers for reporting purposes.

2.1 Withdrawal from the trial

Overall, five per cent of participants in the three intervention groups withdrew from the trial before attending the consent interview and ten per cent withdrew once they had had the consent interview.

Those in the workplace group were significantly more likely to withdraw, particularly after the consent interview (Table 2.1). Participants are unlikely to have known which intervention group they were in before the consent interview because the notification letter did not specify and provider staff were briefed not to divulge this until the interview. Thus it seems that, having given consent, once participants learnt

which group they were in, this was more likely to prompt drop-out among the workplace group than either of the other groups. This had been anticipated during the trial development (which is the reason that participants were not told about their group until face-to-face with provider staff who could then help to dispel doubts about the workplace treatments). However, it is clear that this strategy was not completely successful in preventing differential withdrawal.

Table 2.1 Rates of withdrawal from the JRRP trial, by intervention group

	Health %	Workplace %	Combined %	Total %
Withdrew before consent interview	3	6	5	5
Withdrew after consent but before treatment	7	16	7	10
Weighted base	*700*	*705*	*705*	*2,110*
Unweighted base	*578*	*540*	*564*	*1,682*

Levels of withdrawal after the consent interview were particularly high for those in the workplace group with musculo-skeletal conditions (23 per cent) or injury (21 per cent). Anecdotal evidence from providers and the Contact Centre suggests that withdrawal from the workplace group was more likely because many clients were expecting or hoping to receive health treatments. This interpretation is supported by the reasons given for withdrawal by OCS respondents. Workplace participants were more likely to withdraw because they did not like the treatments offered (15 per cent) than either the health (five per cent) or combined groups (two per cent). However, the most common reason given for withdrawing (mentioned by 22 per cent overall) was that the provider did not contact them or did not offer any help. This was a more common reason for withdrawal among workplace clients (27 per cent) than among combined intervention (14 per cent) participants (Table 2.2).

Table 2.2 Reasons given by Outcome Survey respondents for withdrawing from the JRRP trial, by intervention group

	Health %	Workplace %	Combined %	Total %
Contact not made by provider	19	27	14	22
Returned/about to return to work	17	12	20	15
Had other treatment organised	21	7	22	14
Not well enough to return to work	11	12	14	12
Didn't like the treatment offered	5	15	2	9
Thought was going to get better anyway	4	8	9	7
Not well enough to attend meetings	3	2	5	3
Decided don't want to return to work	3	1	5	2
Caring responsibilities	4	-	2	1
Given external advice not to continue with treatment	2	-	-	*
Other	16	20	14	18
Weighted base	*68*	*150*	*80*	*298*
Unweighted base	*57*	*110*	*63*	*230*

Over and above the withdrawals, a further 15 per cent of participants claimed not to have withdrawn yet to have not received an intervention, again the highest percentage being in the workplace group (Table 2.3). Overall, this gives 25 per cent of trial participants claiming not to have received any intervention.

Table 2.3 'No intervention' rates based on the OCS, by intervention group

	Health %	Workplace %	Combined %	Total %
Withdrew before consent interview	3	6	5	5
Withdrew after consent interview, but before treatment	7	16	7	10
Did not withdraw but no intervention received	11	24	11	15
Total	21	46	23	25
Weighted base	*700*	*705*	*705*	*2,110*
Unweighted base	*578*	*540*	*564*	*1,682*

The MI data gives alternative estimates of withdrawals, but with 'withdrawals' only being recorded as either 'no intervention or assessment' cases, or 'assessment only' cases. Nevertheless, in aggregate, the figures tally closely to the OCS data, if 'assessment only' cases are assumed to be 'no intervention'. Based on the MI data, 21 per cent of participants received nothing, and a further seven per cent only received an assessment. The figures by intervention group are shown in Table 2.4.

Table 2.4 'No intervention' rates based on the MI data, by intervention group

	Health %	Workplace %	Combined %	Total %
No intervention/no assessment	19	31	14	21
Assessment only	3	11	8	7
Total	22	42	22	29
Weighted base	*710*	*711*	*713*	*2,134*
Unweighted base	*424*	*425*	*310*	*1,159*

Table 2.5 gives the same figures as Table 2.4 but divided by the self-reported main health condition of the participant. It appears from this that the unpopularity of the workplace intervention was particularly high for those with either a musculo-skeletal problem or off work because of an injury, with half of people from these two groups getting no further than the assessment if they were assigned to the workplace intervention. Those with a mental health condition were more likely to take-up the workplace intervention.

Table 2.5 'No intervention', by intervention group and health condition

	Mental/ behavioural (with other) %	Musculo-skeletal (with other except mental) %	Injury (with other except mental/musculo-skeletal) %	Other condition only %
Health group				
No intervention	24	12	19	22
Assessment only	2	3	2	3
Total	25	14	21	25
Weighted base	*236*	*230*	*103*	*134*
Unweighted base	*142*	*137*	*65*	*76*
Workplace group				
No intervention	21	39	39	29
Assessment only	13	13	11	9
Total	34	51	50	37
Weighted base	*220*	*224*	*70*	*186*
Unweighted base	*134*	*133*	*42*	*110*
Combined group				
No intervention	12	16	18	9
Assessment only	3	15	6	7
Total	16	31	24	17
Weighted base	*210*	*233*	*117*	*138*
Unweighted base	*98*	*98*	*50*	*59*

2.2 Treatments received

In this section we turn attention to the types of services and advice that Job Retention and Rehabilitation (JRR) participants received from the service providers. It focuses on those who, according to the MI data, were at least assessed for an intervention. (As Table 2.4 showed) this covers 81 per cent of those assigned to the health intervention, 69 per cent of those assigned to the workplace intervention; and 86 per cent of those assigned to the combined intervention.

2.2.1 Types of treatment and advice received

Table 2.6 shows the percentage of people receiving particular types of intervention in the three intervention groups. For example, for those assigned to the health intervention who did not withdraw before assessment, 36 per cent received at least one physiotherapy session.

For those assigned to the health intervention group the most commonly used interventions were: physiotherapy (36 per cent); complementary therapy (30 per cent); psychotherapy (26 per cent) and referral to a medical specialist (23 per cent). For those assigned to the workplace intervention group the most commonly used interventions were: ergonomic assessment (42 per cent); and employer liaison/ mediation a long way behind at 22 per cent.

For those assigned to the combined intervention group, health interventions were more common than workplace interventions (32 per cent receiving physiotherapy, but just 11 per cent receiving an ergonomic assessment and 22 per cent employer liaison/mediation). The most striking difference between the combined intervention and either of the two other interventions is that, under the combined intervention, almost a third (30 per cent) of participants underwent cognitive behavioural therapy (CBT).

The table includes a number of interventions that fall under the heading of 'advice'. Relatively few participants only received advice (two per cent of those in the health intervention group; 11 per cent of those in the workplace group; and four per cent of those in the combined group). In presenting these figures we are *not* suggesting that only receiving advice is an inappropriate intervention: we are simply pointing out that this was relatively rare irrespective of its efficacy.

Table 2.6 Type of intervention received, by intervention group

	Health %	Workplace %	Combined %
Physiotherapy	36.3	-	31.8
Therapeutic exercise	16.7	-	13.1
Counselling	16.9	7.7	17.9
CBT	13.4	0.8	29.6
Psychotherapy	26.1		5.5
Referral to consultant/specialist/surgeon	23.2	2.4	23.2
Complimentary or alternative therapy	29.6	-	18.6
Other health intervention	19.3	3.2	27.1
Graduated return-to-work	1.2	8.1	7.5
Equipment bought	0.7	3.8	1.8
Employer liaison/mediation	-	21.9	22.0
Ergonomic assessment	-	42.4	11.4
Other work-related treatment	0.7	11.3	16.7
Advice – how to return to work	-	14.6	17.7
Advice – how to improve health	8.7	0.8	10.4
Advice – benefits/debt/finance	4.7	13.6	15.5
Advice – other	21.1	46.8	46.1
Weighted base	*573*	*494*	*615*
Unweighted base	*347*	*297*	*273*

The exact interventions received differed from participant to participant, with the service providers making judgements as to the most appropriate intervention based on the characteristics of individuals. Given that one of the key factors in this decision was the health status of the individual, some indication of the extent of variation in treatments can be gained by looking at the profile of interventions by health conditions. Tables 2.6a to 2.6d do this, taking the four main health conditions to be: mental health; musculo-skeletal; injury and 'other'.

Looking across these four tables several things become apparent:

- the interventions offered to those in the workplace group do not differ greatly by health condition, which suggests that the decision to, say, offer an ergonomic assessment was probably made on grounds other than health status;
- there are, as would be expected, quite considerable differences in the type of health interventions offered by health condition. Those with a mental health condition were very likely to be offered counselling, or CBT; those with a musculo-skeletal condition or an injury would be far more likely to be offered physiotherapy or a referral to a health specialist.

Table 2.6a Type of intervention received – those with a mental health condition

	Health %	Workplace %	Combined %
Physiotherapy	12.2	-	10.4
Therapeutic exercise	10.0	-	10.1
Counselling	44.4	12.7	38.3
CBT	30.6	-	53.8
Psychotherapy	23.9	-	13.7
Referral to consultant/specialist/surgeon	11.6	2.3	12.4
Complimentary or alternative therapy	37.3	-	21.3
Other health intervention	26.6	8.1	38.0
Graduated return-to-work	0.6	6.9	8.1
Equipment bought	-	1.2	1.1
Employer liaison/mediation	-	22.5	23.5
Ergonomic assessment	-	37.0	5.9
Other work-related treatment	1.1	11.5	18.4
Advice – how to return to work	-	16.2	17.8
Advice – how to improve health	8.9	2.3	9.0
Advice – benefits/debt/finance	5.5	8.1	16.6
Advice – other	18.9	43.9	44.1
Weighted base	*179*	*173*	*184*
Unweighted base	*110*	*105*	*89*

Table 2.6b Type of intervention received – those with a musculo-skeletal condition

	Health %	Workplace %	Combined %
Physiotherapy	54.2	-	38.0
Therapeutic exercise	26.0	-	21.7
Counselling	2.0	2.2	3.2
CBT	3.0	1.5	22.0
Psychotherapy	24.1	-	-
Referral to consultant/specialist/surgeon	34.9	1.5	34.5
Complimentary or alternative therapy	27.1	-	15.8
Other health intervention	17.7	1.5	26.8
Graduated return-to-work	0.5	10.9	7.8
Equipment bought	1.5	6.6	2.1
Employer liaison/mediation	-	24.8	21.0
Ergonomic assessment	-	40.9	14.3
Other work-related treatment	1.0	9.5	16.4

Table 2.6b Continued

	Health %	Workplace %	Combined %
Advice – how to return to work	-	9.5	22.8
Advice – how to improve health	13.3	-	15.3
Advice – benefits/debt/finance	5.4	19.7	15.8
Advice – other	20.2	40.8	45.9
Weighted base	*203*	*137*	*195*
Unweighted base	*110*	*105*	*89*

Table 2.6c Type of intervention received – those with an injury

	Health %	Workplace %	Combined %
Physiotherapy	67.4	-	61.3
Therapeutic exercise	14.4	-	10.3
Counselling	1.2	4.6	13.1
CBT	6.0	-	12.5
Psychotherapy	30.2	-	3.5
Referral to consultant/specialist/surgeon	25.3	-	31.6
Complimentary or alternative therapy	16.9	-	13.7
Other health intervention	16.9	-	27.1
Graduated return-to-work	3.6	4.6	5.5
Equipment bought	1.2	4.6	3.1
Employer liaison/mediation	-	13.9	35.3
Ergonomic assessment	-	48.9	10.0
Other work-related treatment	-	9.3	10.0
Advice – how to return to work	-	18.6	9.0
Advice – how to improve health	1.2	-	11.3
Advice – benefits/debt/finance	2.4	4.6	18.9
Advice – other	26.5	62.7	49.1
Weighted base	*83*	*43*	*97*
Unweighted base	*53*	*25*	*43*

Table 2.6d Type of intervention received – those with 'other' condition

	Health %	Workplace %	Combined %
Physiotherapy	19.2	-	31.2
Therapeutic exercise	12.5	-	7.9
Counselling	11.5	8.3	16.4
CBT	10.6	1.5	19.8
Psychotherapy	31.7	-	4.2
Referral to consultant/specialist/surgeon	19.2	4.5	17.4
Complimentary or alternative therapy	30.8	-	22.3
Other health intervention	12.5	-	14.9
Graduated return-to-work	1.9	8.3	8.5
Equipment bought	-	4.5	1.6
Employer liaison/mediation	-	21.0	10.9
Ergonomic assessment	-	48.9	14.8
Other work-related treatment	-	14.3	19.1
Advice – how to return to work	-	15.8	15.6
Advice – how to improve health	5.8	-	5.3
Advice – benefits/debt/finance	3.8	16.5	12.7
Advice – other	23.1	50.3	46.8
Weighted base	*104*	*133*	*125*
Unweighted base	60	79	53

To further add flesh to the descriptions of the interventions received by individuals, the box below describes the interventions received by a random sample of nine participants: three from each intervention group. The nine were selected entirely at random and not because they illustrate any particular points. The information provided on each case is a combination of 'background' data collected during the screening interview and the MI data.

Client 1 – Health intervention

Joined the trial with stress after having been off work for 10 weeks. Was waiting for treatment. She had experienced bullying at work and had lost confidence: manager was not understanding about absence. Worked more than 16 hours per week but not full-time.

Contact made and consent given not much longer than a week after being randomised. Two actions were assessed as appropriate. First was an offer of three months gym membership for fitness and wellbeing which was obtained within a week. The second action was to assess the client for stress management therapy. The assessment was made a month after the plan was agreed. Two

weeks after the assessment the client returned to work and a further two weeks later five sessions of stress management therapy began, which were delivered over a month and a half. The client was discharged from the trial once she had reached 13 weeks in work (4.5 months after randomisation).

Client 2 – Health intervention

When joined trial the client had been off work for 11 weeks with a broken leg. Relationship with managers at work was not judged to have deteriorated. Worked full-time hours.

Contact made and consented within a few days. Over next two months had consultation and home assessment that led to two physiotherapy sessions. Had two months of sparse contact with some contact difficulties. Client got back in touch for a review after a further 2.5 months of no contact (it being unclear whether provider or client had not wanted the contact) and more physiotherapy was given (14 sessions over 3.5 months), with a final session provided six weeks later after a progress review. Client returned to work a month later and, although there were difficulties keeping in touch, contact was made with the client each month for the next three months. Contact ended 19 months after randomisation.

Client 3 – Health intervention

Client had been off work for 13 weeks with a depressive episode. Also reported loss of confidence. Relationship with manager was judged 'OK'. Worked 27 hours per week.

Contact made after a week and consent collected after a further week. A core assessment and mental health assessment were carried out within a few days of consent. The client received depression and anxiety management sessions for the first 2.5 months before being given 14 sessions of CBT over 5.5 months. Subsequently the CBT sessions were reduced to once a month for three months, during which the client returned to work. The client was discharged from the trial once they had reached 13 weeks in work (13 months after randomisation).

Client 4 – Workplace intervention

Client had been off work for 7 weeks with abdominal pain. Worked full-time hours. Waiting for treatment but in chronic pain. Relationship with manager was judged to be 'OK'.

Contact was made the same day as randomisation and consent collected the following day. Two actions were planned. The first was a mentoring assessment,

including benefit advice, which was delivered two weeks after consent. As a result a vocational assessment was arranged for a week later to discuss the type of work the client wanted to do and advice was subsequently given to apply for Access to Work. The other action agreed during the first meeting was a workplace assessment. This assessment was conducted six weeks after consent, a few days after a meeting took place between the client, case manager and employer. Equipment was provided over the following two months as a result of the assessment. Regular email contact was maintained throughout until discharge, which happened once the client had reached 13 weeks in work (five months after randomisation).

Client 5 – Workplace intervention

Client was self-employed, working more than 'average' full-time hours per week and off work for 12 weeks with Crohn's disease. Not waiting for treatment, health stable but had mobility problems.

Contact made and consent collected within a few days of randomisation. Same day as consent the client received a consultation with the occupational health physician to check that trial treatments wouldn't put the client at risk and they returned to work the same day. A month later the client received a return to work assessment. Contact was maintained by monthly phone call or letter beyond the point that the client had reached 13 weeks in work, until they were discharged nine months after randomisation.

Client 6 – Workplace intervention

Client was in full-time work but had been off for nine weeks with epilepsy. Relationship with manager was judged 'OK' but client feared that work could do harm.

Contact made about a week after randomisation and consent was collected a few days after that. A core assessment was carried out at the same time as the consent meeting. Two worksite visits took place: one immediately and then a further visit two weeks later. Employer stated that client could not return to work, and provider than lost contact with the client for about two months. About three months after consent debt and benefit advice was given (covering housing benefit, disability living allowance appeal and general financial situation). This advice and other general support was delivered face-to-face or over the phone with contact on roughly a weekly basis. During this period, about eleven months after randomisation, the client started a gradual return to work and was supported by three visits to the workplace by their case manager. The client returned to normal duties three months after the gradual return. Contact was maintained until the 13 weeks return to work appeared likely, about a month before the trial ended (16 months after randomisation).

Client 7 – Combined intervention

Client was in full-time work but had been off sick for six weeks with work-related stress. Relationship with manager was rated poor.

Contact was made the day following randomisation and consent collected a week later. A baseline evaluation was performed three weeks after that and a short intensive group rehabilitation programme was recommended. Nearly two weeks after the evaluation the rehab programme started. The client attended for two weeks (visiting the provider four days a week). The following week included a further day of rehab and a return to work meeting. The subsequent week included an individual session and a final group rehab day. Over the next month the client had weekly contact with the provider for reviews: the first two being face-to-face then over the phone. Contact after that reduced to monthly. Return to work outcome was not recorded by the provider. Significant contact ended seven months after randomisation although the client was not discharged for a further 2.5 months.

Client 8 – Combined intervention

Client was in full-time work but had been off work sick for 12 weeks with anxiety over bereavement. Relationship with manager was judged to be good.

Contact after randomisation was made immediately and consent collected a week later. Assessment suggested some alternative therapy (Thought Field therapy). Two sessions were provided in the first month after consent, a further session was carried out in the following month, and two final sessions 3.5 months after consent. A review was conducted over the phone between therapy sessions. The client had not returned to work by the end of the trial when they were discharged (four months after randomisation).

Client 9 – Combined intervention

Client was in full-time work but had been off work sick for 13 weeks with pain in hand/wrist/arm. Average relationship with manager but doesn't like work.

Client was contacted immediately after randomisation and consent collected within a week. Assessment with physiotherapist was carried out two days after consent and exercise through Pilates and physiotherapy sessions recommended. A week after the assessment the first of four weekly physiotherapy sessions started, followed by two fortnightly sessions in the following month. During this second month client took part in a Pilates session weekly. The Pilates continued weekly in months three – six and monthly reviews were carried out over the phone during this time. Five further physiotherapy

sessions took place in months five and six. No further treatments were offered, but the additional monthly reviews were conducted over the phone for the following two months before the client was discharged nine months after randomisation. The client returned to work three weeks after being discharged.

2.2.2 The time spent on treatment

The service providers were asked to record roughly how long each *contact* or intervention with a participant took[8]. Adding the estimates across all contacts gives a crude indication, per participant, of the *total* time the whole intervention took. Table 2.7 gives the distribution by intervention group.

Table 2.7 Length of time support took, by intervention group

	Health %	Workplace %	Combined %	Total %
Less than one hour	5	3	0	2
1 hour, less than 2	8	15	9	10
2 hours, less than 4	22	51	16	28
4 hours, less than 6	21	15	14	17
6 hours, less than 10	21	11	22	18
10 hours, less than 50	21	4	34	21
50 or more hours	3	0	6	3
Weighted base	*574*	*493*	*614*	*1,681*
Unweighted base	*347*	*297*	*273*	*917*

The median time for those in the health intervention group is between four and six hours; for those in the workplace intervention group is between two and four hours, and for those in the combined intervention group is between six and ten hours. In other words, the combined intervention was the most intensive in terms of time, followed by the health intervention. Notably, 40 per cent of those in the combined intervention received interventions taking ten or more hours to deliver; the percentages receiving this amount of intervention was considerably fewer for the other two interventions (24 per cent for the health intervention group and just four per cent for the workplace group).

The relative time taken for each intervention corresponds loosely with the relative costs of the different interventions (see Chapter 6).

[8] Only banded times were recorded (under 15 minutes; 15-30 minutes; 30-60 minutes; one-two hours; two or more hours). To generate a total a 'mid-point' for each band was assumed: seven minutes; 22 minutes; 45 minutes; 90 minutes; 210 minutes.

2.2.3 Treatments refused

Not all of the interventions were acceptable to participants. From the OCS we find that, among those who did not withdraw before or at consent, 12 per cent of participants said they turned down one or more services. This percentage does not differ between the intervention groups. The most commonly-refused treatments were, unsurprisingly, the most commonly-offered: 23 per cent of those who turned something down refused counselling or CBT, 18 per cent refused physiotherapy, 15 per cent refused to allow the provider to contact their employer at all, and ten per cent turned down complementary therapies.

2.2.4 Extent of cross-over

One of the major difficulties service providers faced in undertaking the trial was that the three interventions had to be kept distinct, with none of those in the health intervention group receiving workplace interventions, and none of those in the workplace intervention group receiving health interventions. (Those in the combined intervention group could, of course, receive both.)

An exercise was undertaken to check whether, according the MI data, there was any evidence of cross-over or contamination between the health and workplace interventions. If there was evidence of widespread effects this would have affected the interpretation of the findings for individual intervention groups and the interpretation of the relative impact of the three interventions.

In practice very little evidence of cross-over was found. An estimated five per cent of people allocated to the health intervention received help that was 'workplace' help, but most of this was simply advice rather than actual help. Similarly about seven per cent of those allocated to the workplace intervention received help with their health, but again this was almost entirely cases of advice rather than treatment. These findings broadly tally with what individual participants recalled of their intervention during the OCS.

3 The impact of the interventions on return to work

The Job Retention and Rehabilitation Pilot (JRRP) was designed as a four-way randomised controlled trial to give robust scientific evidence on the impact of Job Retention and Rehabilitation (JRR) services, primarily on return to work rates. A distinction was made at the planning stage between the main, or *primary,* outcome and *secondary* outcomes, the primary outcome being a return to full-time work for a period of at least 13 weeks *and* with that return happening during a specified 'reference period' for the trial. With small differences in definition (detailed below), the providers of JRR services used as a working assumption that a 'successful outcome' for the trial would be a return to work of this duration. A precise definition of the primary outcome measure is given in Section 3.1 below.

Alongside data on the primary outcome measure, a range of secondary outcome data was also collected, on the assumption that JRR would very likely have broader impacts than simply return to work. These secondary outcome measures fall into three main groups: other work related outcomes (such as the time taken to return to work, and entries onto benefits); health outcomes; and 'other' outcomes (such as financial outcomes, and impact on relationships). In this chapter we report on all the work and benefit outcomes. The subsequent chapter deals with health and 'other' outcomes.

The analysis set out in this chapter and the subsequent chapter suggests that the JRR services provided in the trial **did not significantly improve outcomes for participants.** The key section on the primary outcome is Section 3.3.1. Given this perhaps surprising finding, we have presented as many statistics as we would have presented had an impact been found (so that all the evidence is published), but after the initial discussion of this chapter on the primary outcome we have kept the commentary fairly short.

3.1 The primary outcome measure

The 'rules' for the primary outcome measure (a 13-week return to full-time work) adopted for the impact analysis were:

- the 13 weeks had to be 13 consecutive weeks[9];
- the return-to-work had to be to full-time hours (that is more than 16 hours a week). Holidays from full-time work were counted as 'full-time' work;
- for those who were off sick between six and 22 weeks at the time they entered the trial, the 13 week return to work had to have occurred at or before **42** weeks after they went off sick; for those who were off sick between 23 and 26 weeks at the time they entered the trial, the 13 week return to work had to have occurred at or before **46** weeks after they went off sick.

The rationale for the last 'rule' was somewhat complicated. Initially, 42 weeks was set as the 'reference period' for all trial entrants, on the grounds that at 26 weeks off-sick people become eligible for Incapacity Benefit (IB), so a reasonable target for service providers would be to attempt to get people back to work before, or at worst, very soon after the 26 week point. With a 42 week definition, the latest entry into work that could be recorded as a successful outcome would be return to work in the 29th week after first going off sick.

Having set this definition, service providers then argued that for people entering the trial after having been off sick for between 23 and 26 weeks, it would be unrealistic to expect they could get people back to work by their 29th week. So for this small percentage of trial entrants (seven per cent of the total) the end-point was set four weeks later at 46 weeks.

The service providers were informed of how the primary outcome was to be measured in the trial impact assessment, but since their payment was linked to successful outcomes, a very precise definition of 'success' was applied. In particular no more than five days sickness absence was allowed during the 13 week period. However the 13 week period did not have to occur during the reference period to qualify for an outcome payment.

3.2 The measurement of impact

Data on outcomes (including the primary outcome measure) was collected through the outcome survey (OCS). In principle, the *randomisation* of trial entrants into the four groups should mean that impact can be assessed by simply comparing the rates

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[9] For some weeks, trial participants did a mix of things. To uniquely code each week, the following hierarchical rule was adopted: if *any* time was spent in ft work the week was coded as 'ft work'; otherwise if any time was spent in pt work the week was coded as 'pt work'; ; otherwise if any time was spent off sick the week was coded as 'off sick'; otherwise if any time was spent on leave the week was coded as 'leave'; otherwise the week was coded as 'out of work'.

of return to work in each of the four groups. In practice, because the OCS was voluntary, some trial entrants did not choose to take part in the survey and, as a consequence, a proportion of outcome data is missing per group. Furthermore, the response rate differed by group, from 83 per cent in the health intervention group to 65 per cent in the control group.

The simplest assumption to make is that, in each of the four groups, those who did not respond to the survey experience the same outcomes, on average, as those that do respond. However, we had *some* evidence from the data that this may not be the case. For example we found that, across all the intervention groups, those aged under 30 were less likely to respond to the OCS than older trial participants: if outcomes are age-related, then the higher than average loss of the younger groups would affect the trial findings.

Given this evidence we have weighted the data per group, so that, as far as we are able to judge, the outcomes estimates we give per group are unbiased. Appendix A describes how these weights were calculated and tables are included showing how the weights change the primary outcome estimates. To summarise, the weights make some small differences to the outcome estimates, but the conclusions about impact are not affected.

3.3 The impact of JRRP on the primary outcome measure

3.3.1 Return-to-work of thirteen or more weeks

Table 3.1 shows the percentage of trial participants in each of the four randomisation groups with a successful return to work of 13 weeks or more (defined as in Section 3.1 above). The figures suggest that the trial JRR services were **not** successful in improving return-to-work rates, the return-to-work rates being no higher in the three intervention groups than in the control group. (In all four groups, the return to work rates are very close to 45 per cent.)

The differences in the rates are in fact so small (the difference between the largest and the smallest being just 1.6 per cent) statistical testing of the differences is clearly unnecessary. Nevertheless, we have throughout the impact chapters calculated two chi-squared statistics per comparison: the first being a test of the difference between the control group and the three intervention groups combined, and the second being a test of difference across all four groups[10]. For outcome variables defined on an interval scale we have used an ANOVA test rather than a chi-squared test.

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[10] The four-way test is rather conservative (in the sense that it treats all four groups equally, in which case a very different outcome estimate for the control group can easily be 'lost'. Hence the two-way test. Had we found there to be an impact, the obvious third test would have been a test between the three intervention groups. Given that no impact has been found, this third test has been excluded.

Table 3.1 Percentage returning to full-time work for a spell of at least 13 weeks, by randomisation group

	Health %	Workplace %	Combined %	All intervention groups %	Control %	Total %	P-value for 2-way comparison	P-value for 4- way comparison
13 week spell of ft work	43.5	45.1	44.4	44.4	44.7	44.4	0.89	0.95
Weighted base	*710*	*712*	*713*	*2,135*	*710*	*2,845*		
Unweighted base	*587*	*545*	*571*	*1,703*	*458*	*2,161*		

We cannot be sure as to why this negative finding has arisen. The high withdrawal/ no intervention rates reported on in the last chapter may be part of the answer, but this should only have dampened the impact not reduced it to zero. Another possibility is that the 13 week period was simply too difficult a target for this population group (who, after all, have been off work sick for at least six weeks). The rest of this section considers other employment related outcomes that allow for this possibility. A more general discussion of the possible explanations is included in Chapter 8.

3.3.2 The timing of the return-to-work

One possibility is that, even with no impact on overall return to work rates, the interventions *could* have helped people to return to work *earlier*. Table 3.2 tests this by looking at the number of weeks that elapsed between randomisation and the (first) 13-week return to work period per trial participant. No large differences are observed so this hypothesis appears to be false.

Table 3.2 Timing of return to full-time work for a spell of at least 13 weeks, by randomisation group (weeks after randomisation)

	Health %	Workplace %	Combined %	All intervention groups %	Control %	Total %	P-value for 2-way comparison	P-value for 4- way comparison
Weeks after randomisation							0.60	0.38
Less than 10 weeks	1.7	3.7	1.8	2.4	3.0	2.6		
10-14 weeks	6.9	8.3	6.7	7.3	9.0	7.7		
15-19 weeks	10.6	8.3	9.6	9.5	8.4	9.2		
20-24 weeks	10.6	10.0	13.5	11.3	12.1	11.5		
25 or more weeks	13.8	15.0	12.8	13.8	12.1	13.4		
No return within reference period	56.5	54.7	55.6	55.6	55.4	55.6		
Weighted base	*710*	*712*	*713*	*2,135*	*710*	*2,845*		
Unweighted base	*587*	*545*	*571*	*1,703*	*458*	*2,161*		

3.3.3 Shorter returns to work

Having failed to identify an impact on returns to work of 13 weeks or more (either in terms of prevalence or timing), an alternative hypothesis is that the interventions *may* have got people back to work but that the 13 week *continuous* period with no sick leave may have been unrealistically long for people who, prior to entering the trial, had at least six weeks off sick. Table 3.3 looks at two shorter intervals: two weeks and six weeks.

This table suggests there *may* have been a modest impact of the interventions on shorter returns to work (the difference between the intervention groups combined and the control group being just over three per cent for the six week spell.) The difference is nevertheless, small and the sample sizes of the trial are too small to allow us to say whether this is a genuine impact or not (the difference is certainly not statistically significant).

Table 3.3 Percentage returning to full-time work for a spell of at least two weeks and six weeks, by randomisation group

	Health %	Workplace %	Combined %	All intervention groups %	Control %	Total %	P-value for 2-way comparison	P-value for 4- way comparison
Two week spell of ft work	61.5	61.4	62.1	61.7	59.3	61.1	0.33	0.80
Six week spell of ft work	55.7	56.4	56.5	56.2	53.0	55.4	0.14	0.62
Weighted base	*710*	*712*	*713*	*2,135*	*710*	*2,845*		
Unweighted base	*587*	*545*	*571*	*1,703*	*458*	*2,161*		

3.3.4 The numbers in work at the end of the reference period

Our final hypothesis on returns-to-work is that: perhaps the interventions were successful but returns-to-work for the 'additional' cases (that is, those who wouldn't have returned to work had they been in the control group) occurred too late in the reference period to register as a successful outcome. If this had happened then we may not have observed a 13+ week return to work for the additional cases. This, if true, *might* then partly explain our failure to observe an impact. However, if this hypothesis was true, we would expect, at a minimum, to observe more people in work in the last week of the reference period for the intervention groups than the control group. Table 3.4 gives the figures.

There is some (albeit not statistically significant) evidence that, by the end of the reference period, marginally more of those randomised to an intervention were in work than those randomised to the control group. This *is* consistent with a small and late impact: whether or not it is correct to interpret it as such is, of course, disputable. Certainly there seems to be no means, within the trial, of determining whether this is a genuine finding.

Table 3.4 Percentage in either full-time work or on holiday in reference week, by randomisation group

	Health %	Workplace %	Combined %	All intervention groups %	Control %	Total %	P-value for 2-way comparison	P-value for 4- way comparison
% in work in reference week	55.9	56.3	57.1	56.4	53.3	55.7	0.23	0.66
Weighted base	*710*	*712*	*713*	*2,135*	*710*	*2,845*		
Unweighted base	*587*	*545*	*571*	*1,703*	*458*	*2,161*		

3.4 Return to work impacts for sub-groups

In this section we consider whether the finding of no *overall* impact of the interventions on return-to-work rates holds true across sub-groups of trial entrants. The rationale for looking at sub-groups when there is a 'no-impact' finding overall is that it is possible that the interventions could have helped some groups to return to work whilst creating barriers for others.

The sub-groups considered are:

- *Sex of trial entrant*
- *Age*

  Classified into three groups: 17-34; 35-49; 50 plus.

- *Number of weeks off sick before entering the trial*

  Classified into three groups: 6-12 weeks; 13-19 weeks; 20-26 weeks.

- *Whether works for a private or public company*
- *Computed risk score at time of screening*

  Where risk is 'the estimated risk of losing current job'. Divided into tertiles – the highest risk tertile being those thought to be most at risk of losing their job.

- *Self-assessment (at screening) of ability to do the same job in six months time*

  This is based on a question in the screening questionnaire that asked 'Do you believe that from the standpoint of your health you will be able to do your present job in six months time?'. The responses accepted were: 'Yes', 'No', and Don't know'.

- *Self-reported primary health condition at time of screening*

  Divided into four mutually exclusive groups: Mental/behavioural (with any other conditions); Musculo-skeletal (no mental health conditions); injury/poisoning (and not one of the preceding two groups); any other.

- *How trial entrant self-assessed the physical demands of their job*

  Divided into two groups: Very/fairly physically demanding; Not very/not at all physically demanding.

- *Manual/non-manual social class.*

  A binary split based on social class where I, II and IIINM have been labelled 'non-manual' and IIIM, IV, V as manual.

- *Organisation size*

  The size of organisation the participant is/was employed by at the time they joined the trial, divided into two groups: less that 250 employees; 250 or more employees. This is based on the self-report of numbers by the participant.

These same sub-groups are used throughout this report. The choice of variables from which to create sub-groups is somewhat arbitrary. The final list is based on a selection of possible variables for which:

- the sub-groups have large enough sample sizes for at least moderately large impacts to be detected;
- there is some expectation that impacts may have been different in at least some of the sub-groups.

Table 3.16 at the end of the chapter shows the primary outcome measure for all these groups.

Looking across Table 3.16 it is apparent that return-to-work rates do differ by the type of trial entrant (with, for example, a 56 per cent return-to-work rate for those entering the trial after less than 13 weeks of sick leave, compared to 34 per cent for those off sick between 13 and 19 weeks, and just 19 per cent for those off sick for 20 or more weeks). By and large, the *patterns* of return-to-work rates are as anticipated. However, across all the groups we, almost uniformly, find there to have been no impact of the interventions in changing these rates. The three intervention groups are very similar to the control group throughout.

There are just two exceptions. Firstly, for those who stated during the screening interview that they would be able to do the same job in six months time,

randomisation to an intervention group appears to actually have been detrimental. For this sub-group, which represents about 40 per cent of all trial participants, the return-to-work rate for the control group was 66 per cent, compared to 54 per cent for the intervention groups. This negative impact is then 'balanced' by a (non-statistically significant) positive impact on those less sanguine about their ability to return to the same job.

The second exception is for self-reported primary health condition. Here we find that those who reported a mental health condition as their primary reason for being off work appear to be *less* likely to return to work if offered an intervention (47 per cent for the three intervention groups combined, compared to 59 per cent for the control group). This finding is statistically significant (p=0.02 for the 2-way control v. intervention comparison) so is *likely* to be a genuine impact finding, although there is a risk of it simply being that more people with a mental health problem who were able to get back to work on their own were allocated to the control group. If a genuine impact however it suggests that the JRR interventions *reduced* the likelihood of a person off work with a mental health problem returning to work. Given that the mental health group is a large proportion of all participants (30 per cent) this raises serious issues about the usefulness of the interventions.

In contrast, for those whose primary health condition is best described as an 'injury or poisoning' (the assumption being that the former is vastly predominate), there is evidence that the interventions are very helpful in getting people back to work, and, in particular that the interventions with workplace components are particularly helpful. For this group of trial entrants, just 36 per cent of those allocated to the control group returned to work, compared to 49 per cent for those allocated to the health intervention, 60 per cent of those allocated to the workplace intervention and 57 per cent of those allocated to the combined health and workplace intervention. The p-value for the 2-way comparison was 0.005. Note however that just 14 per cent of all trial entrants presented with an injury. Even assuming the large positive impact is genuine, it would not represent very many 'additional' returns-to-work.

For trial participants with musculo-skeletal or 'other' conditions, the interventions appear to have made no impact (either positively or negatively).

There is a danger, of course, that in a trial that demonstrates little or no overall impact, too much emphasis may be placed on isolated findings. So, although we believe the findings for those self-assessing they can return to the same job, and for those with mental health problems or an injury, are probably genuine, we should stress that, it *may* just be statistical 'noise'.

The possible explanations for the sub-group findings are discussed in Chapter 8.

3.5 The impact of JRRP on secondary work outcome measures

In this section we turn attention to a broader range of work-related outcomes. These divide into two main categories of outcome: a series of work-related outcomes that are measured on *all* those randomised, followed by a series of outcomes that are dependent upon the trial participant's employment status at the time of the outcome survey interview.

3.5.1 The total number of weeks in full-time work

Table 3.5 shows the number of weeks in either full-time work or on holiday during the reference period, irrespective of whether these weeks were interspersed with weeks off sick or weeks out of paid work. No significant differences are observed.

Table 3.5 Number of weeks in full-time work or on holiday from paid work during reference period

	Health %	Workplace %	Combined %	All intervention groups %	Control %	Total %	P-value for 2-way comparison	P-value for 4- way comparison
Number of weeks							0.23	0.88
1 – 5 weeks	7.1	5.7	6.7	6.1	7.2	6.7		
6 - 9 weeks	5.4	5.7	6.1	5.7	5.0	5.5		
10 -15 weeks	12.1	11.4	11.2	11.6	8.8	10.8		
16 -19 weeks	11.1	10.9	10.9	10.8	9.0	10.3		
20 or more weeks	27.3	28.8	28.8	28.4	30.9	29.1		
No return within reference period	37.0	37.4	36.3	37.0	39.4	37.6		
Average number of weeks	11.1	11.6	11.3	11.3	11.4	11.3	0.97	0.92
Weighted base	*710*	*712*	*713*	*2,135*	*710*	*2,845*		
Unweighted base	*587*	*545*	*571*	*1,703*	*458*	*2,161*		

3.5.2 Number of weeks in any work (including part-time work)

Table 3.6 uses an expanded definition of 'work' that includes part-time work (that is, work of less than 16 hours a week) as well as full-time work. Table 3.7 considers weeks in part-time work in isolation.

Both of these tables show a marginally significant impact, although it is not easy to identify exactly which part of the tables is driving the overall p-values. The second of the tables suggests that those randomised to an intervention group were *slightly* more likely to do some weeks in part-time work than were the control group, the greatest impact being on the combined intervention group. Again, we would warn against over-interpreting such a small impact, especially give that the p-value for the chi-squared statistics are so close to 0.05. But, if genuine, this may suggest that the JRR providers were successful, in a small percentage of cases, in returning people to a spell of *part-time* work[11].

Table 3.6 Number of weeks in any work during reference period

	Health %	Workplace %	Combined %	All intervention groups %	Control %	Total %	P-value for 2-way comparison	P-value for 4- way comparison
Number of weeks							0.03	0.31
1 – 5 weeks	6.3	6.3	6.3	6.3	7.5	6.6		
6 - 9 weeks	6.6	4.3	5.4	5.4	5.8	5.5		
10 -15 weeks	13.1	12.5	13.1	12.9	8.5	11.8		
16 -19 weeks	11.8	11.0	10.6	11.1	8.0	10.4		
20 or more weeks	29.2	31.9	31.6	30.9	33.5	31.6		
No return within reference period	32.9	34.0	33.0	33.3	36.6	34.1		
Average number of weeks	12.0	12.6	12.3	12.3	12.1	12.2	0.76	0.81
Weighted base	*710*	*712*	*713*	*2,135*	*710*	*2,845*		
Unweighted base	*587*	*545*	*571*	*1,703*	*458*	*2,161*		

[11] A statistical test simply comparing the percentages who do *any* part-time work gives a 2-way comparison p-value of 0.006.

Table 3.7 Number of weeks in part-time work during reference period

	Health %	Workplace %	Combined %	All intervention groups %	Control %	Total %	P-value for 2-way comparison	P-value for 4- way comparison
Number of weeks							0.03	0.02
1 – 5 weeks	5.5	4.8	8.6	6.3	3.8	5.7		
6 - 9 weeks	3.2	2.4	1.1	2.2	2.3	2.2		
10 -15 weeks	2.1	1.8	2.1	2.0	0.2	1.6		
16 -19 weeks	0.3	0.2	0.5	0.3	0.4	0.4		
20 or more weeks	0.5	1.1	0.7	0.8	0.6	0.7		
No return within reference period	88.4	89.7	86.9	88.4	92.6	89.4		
Average number of weeks	0.8	0.9	0.8	0.8	0.6	0.8	0.17	0.55
Weighted base	*710*	*712*	*713*	*2,135*	*710*	*2,845*		
Unweighted base	*587*	*545*	*571*	*1,703*	*458*	*2,161*		

3.5.3 Percentage out of paid work/percentage changing employers

Overall, 17 per cent of trial participants experienced at least one week out of paid work during the trial reference period (that is, neither at work nor on sick leave). As Table 3.8 shows however, this percentage did not differ significantly by randomisation group.

Table 3.8 Any time 'out of work' during reference period, by randomisation group

	Health %	Workplace %	Combined %	All intervention groups %	Control %	Total %	P-value for 2-way comparison	P-value for 4- way comparison
% with a spell out of work	18.1	16.1	18.0	17.4	15.6	17.0	0.35	0.59
Weighted base	*710*	*712*	*713*	*2,135*	*710*	*2,845*		
Unweighted base	*587*	*545*	*571*	*1,703*	*458*	*2,161*		

One area we anticipated the JRR interventions *might* have impacted on is the percentage of people who change employers, with a valid hypothesis being that the workplace (and combined) interventions would be more successful than the control group and health interventions in helping people retain their job with their existing employer. The figures of Table 3.9 suggest this is probably not the case, with very similar rates of staying with the same employer for all randomisation groups.

Table 3.9 Employer changes, by randomisation group

	Health %	Workplace %	Combined %	All intervention groups %	Control %	Total %	P-value for 2-way comparison	P-value for 4- way comparison
Not in work at end of reference period	16.5	13.7	15.5	15.3	12.6	14.6	0.16	0.33
Same employer	73.7	77.8	76.4	76.0	76.6	76.1		
Different employer	9.8	8.5	8.0	8.8	10.7	9.3		
Weighted base	*710*	*712*	*713*	*2,135*	*710*	*2,845*		
Unweighted base	*587*	*545*	*571*	*1,703*	*458*	*2,161*		

3.5.4 Receipt of Incapacity Benefit

The OCS did not collect full details of benefit receipt during the reference period, but a question was included that allowed us to estimate whether *any* time was spent on IB between randomisation and the interview. The duration of receipt cannot be derived. Self-reports of benefits are, inevitably, error-prone so the figures of Table 3.10 should not be assumed to be 100 per cent accurate. Even so, they suggest that the three JRR interventions were not successful in preventing entries to IB, the rates of IB receipt being, if anything, marginally higher in the intervention groups than in the control group.

Table 3.10 Any time on IB (self-report), by randomisation group

	Health %	Workplace %	Combined %	All intervention groups %	Control %	Total %	P-value for 2-way comparison	P-value for 4- way comparison
% on IB	31.7	32.2	28.6	30.8	29.2	30.4	0.48	0.52
Weighted base	*710*	*712*	*713*	*2,135*	*710*	*2,845*		
Unweighted base	*587*	*545*	*571*	*1,703*	*458*	*2,161*		

3.5.5 Analysis by sub-groups

Tables 3.17 to 3.20 at the end of this chapter repeat a number of the tables shown above for sub-groups of trial participants.

There are very few significant impacts in these tables. The few there are are all associated with the sub-groups identified earlier as possibly showing impacts on the primary outcome measure: that is, those stating that they could return to the same job, those off work because of a mental health condition, and those off work because of an injury.

One finding that is noteworthy is that those off work because of a mental health problem were significantly more likely to have changed their employer if they were in the control group (21 per cent of the control group, compared to 12 per cent for the three intervention groups). This perhaps suggests that the JRR providers persuaded people from this group to stay with the same employer, whereas, left to their own devices, at least a percentage would opt to change jobs. This might go some way to explaining the apparently negative impact of the interventions on this group of participants.

3.5.6 Impact on within-job outcomes

In this section we look at potential impacts on within-work outcomes for those who, at the time of the OCS, had returned to work. In principle this type of analysis is problematic within the context of an RCT, because those returning to work will be a different subset within each randomisation group and strict comparability is lost. However, given the lack of an overall impact, it is reasonably safe to assume the 'return-to-work' subgroups do not differ by randomisation group and are still broadly comparable.

Three tables are presented below on 'in-work' outcomes: average hours worked; gross pay (in the week before the OCS interview); and (as a crude measure of job satisfaction[12]) whether the interviewee 'likes their job'. For none of these is a significant impact observed: Average hours were close to 34 for all groups; gross pay was close to £330 for all groups; and the percentage saying they liked their job was close to 83 per cent for all groups.

Table 3.11 Average hours worked in week before interview (average for those in work)

	Health	Workplace	Combined	All intervention groups	Control	Total	P-value for 2-way comparison	P-value for 4- way comparison
Average hours worked	33.5	34.5	35.4	34.4	34.0	34.3	0.57	0.24
Standard deviation	13.4	12.0	13.1	12.8	11.2	12.5		
Weighted base	*438*	*436*	*447*	*1,321*	*418*	*1,739*		
Unweighted base	*362*	*334*	*356*	*1,052*	*266*	*1,318*		

[12] A number of other indicators of job satisfaction were collected, but none are significantly different by randomisation group.

Table 3.12 Gross pay in week before interview (average for those in work)

	Health	Workplace	Combined	All intervention groups	Control	Total	P-value for 2-way comparison	P-value for 4- way comparison
Average gross pay (£)	325	331	324	327	335	329	0.49	0.86
Standard deviation	176	176	164	172	170	172		
Weighted base	*372*	*381*	*393*	*1,146*	*382*	*1,528*		
Unweighted base	*308*	*291*	*312*	*911*	*243*	*1,154*		

Table 3.13 Whether like current job (for those in work in week before interview)

	Health %	Workplace %	Combined %	All intervention groups %	Control %	Total %	P-value for 2-way comparison	P-value for 4- way comparison
% 'yes'	85.1	82.0	83.1	83.4	82.2	83.1	0.63	0.74
Weighted base	*381*	*389*	*397*	*1,168*	*377*	*1,545*		
Unweighted base	*314*	*298*	*315*	*927*	*239*	*1,166*		

3.5.7 Prospects for those still off sick at time of interview

Finally, Table 3.14 looks at the sub-group of people still off sick at the time of the OCS interview, but still with a contract of employment[13]. These trial participants were asked how long they believed their job would be kept open for them. Once again the differences by randomisation group are not significant, but there is a 'suggestion' in the table that the control group were more likely to be in the dark about their future prospects (64 per cent claiming they did not know how long their job would be kept open, compared to 58 per cent for the three intervention groups combined). This implies that being in one of the intervention groups *may* have helped people to maintain a dialogue with their employers.

[13] As with the comparisons for those still in work, the fact that JRR interventions do not appear to have impacted on return-to-work rates suggests that the composition of those off-sick in each randomisation group should be *similar*, and hence comparable. In practice, the control group has less people who had mental health problems at the start of the trial so the comparison is not entirely fair.

Table 3.14 Length of time job will be held open (those off sick at time of interview)

	Health %	Workplace %	Combined %	All intervention groups %	Control %	Total %	P-value for 2-way comparison	P-value for 4- way comparison
Up to 1 month	8.8	9.6	6.7	8.4	5.7	7.7	0.82	0.79
Up to 2-3 months	12.3	7.3	8.6	9.3	6.7	8.5		
Up to 4-5 months	-	3.0	0.9	1.4	1.7	1.5		
Up to six months	4.1	2.1	1.9	2.7	1.9	2.4		
More than six months	5.3	4.3	5.9	5.1	6.5	5.5		
Indefinitely	12.4	15.6	17.6	15.2	13.1	14.6		
Don't know	57.1	58.1	58.5	57.9	64.4	59.7		
Weighted base	*148*	*170*	*143*	*460*	*179*	*640*		
Unweighted base	*124*	*131*	*117*	*372*	*119*	*491*		

3.6 Self-assessed impact of the trial

It is of interest to contrast the impact as measured by comparing the four randomisation groups with impact as self-assessed by those offered an intervention. During the OCS those who were in one of the three intervention groups *and* had returned to work, were asked to reflect on the extent to which the JRR services had helped with that return. The three possible responses were: '(The return to work was) Something that would have happened at that time anyhow'; 'Something that would have happened later'; and 'Something that would have been unlikely to happen at all without the JRR help'. (In retrospect, it may have been an error not to include an option of 'Something that would have happened earlier'.)

The percentages giving each of the three responses are shown in Table 3.15. The most striking finding is that only 16 per cent of those randomised to an intervention and returning to work thought that the JRR services had made an absolute difference. This is perhaps surprisingly low, given the personalised interventions offered. On the other hand, it is perhaps high given we have not found JRR to have had an impact on the return to work rate.

However this finding is interpreted, one other thing the table demonstrates very clearly is that, even though the combined and health interventions were (objectively) no more successful than the workplace intervention in getting people back to work, people *perceived* these two interventions to be more successful.

Table 3.15 Self-assessment of impact (for those who returned to work)

	Health %	Workplace %	Combined %	Total %
Returning to work is...				
Something that would have done at that time anyhow	42.3	68.1	41.3	50.5
Something that would have done later	38.6	22.9	37.8	33.1
Something that would have been unlikely to do at all without the JRR help	19.2	9.0	20.9	16.4
Weighted base	*465*	*466*	*472*	*1,403*
Unweighted base	*383*	*358*	*375*	*1,116*

Of course Table 3.15 does not cast any doubt on the impact estimates derived from the comparison with the control group. The fact that the self-assessment of impact does not square with the RCT findings does not, in any way, undermine the RCT results. One of the reasons self-assessment of impact was included in the outcome survey was precisely to test whether individuals could, on average, give a reliable measure of a programme impact. Based on our findings here, the answer is a qualified 'no': participants in JRR over-exaggerated the impact but, arguably, only modestly. But, of more concern, the over-exaggeration was not equal across all groups: those groups where the interventions were more palatable to participants (see Chapter 7) were more prone to exaggeration of impacts. This suggests that self-assessed impacts of well-liked programmes should be treated with considerable caution.

It should be mentioned that the OCS included several more questions on the self-perceived impacts of the interventions over and above the one presented here. These give a very similar story so have been excluded.

Table 3.16 Percentage returning to full-time work for a spell of at least 13 weeks, by randomisation group

	Average weighted sample size per randomisation group %	Health %	Workplace %	Combined %	All intervention groups %	Control %	Total %	P-value for 2-way comparison	P-value for 4-way comparison
Gender									
Men	302	44.3	44.5	43.5	44.1	41.5	43.4	0.49	0.91
Women	409	43.0	45.6	45.1	44.6	47.0	45.2	0.47	0.79
Age									
17-34	138	50.2	47.2	42.6	46.7	45.8	46.5	0.87	0.75
35-49	344	45.2	47.2	46.5	46.3	45.4	46.1	0.78	0.97
50+	229	37.6	40.4	42.2	40.0	42.9	40.8	0.54	0.74
Number of weeks off sick before entering the trial									
6-12 weeks	405	56.9	56.2	55.8	56.3	56.7	56.4	0.89	0.99
13-19 weeks	191	33.1	34.9	35.4	34.5	33.9	34.3	0.92	0.98
20-26 weeks	115	15.5	17.1	19.9	17.4	23.8	19.2	0.16	0.47
Employer type									
Private company	303	42.0	44.0	40.8	42.3	36.9	41.0	0.17	0.49
Public	384	44.6	45.7	47.7	46.0	50.1	47.1	0.22	0.57
Computed risk score at time of screening									
Highest risk tertile	237	35.3	36.5	39.5	37.2	37.9	37.4	0.87	0.85
Middle tertile	238	37.2	36.8	42.2	38.7	37.1	38.3	0.71	0.70
Lowest risk tertile	236	57.2	60.6	52.0	56.7	61.3	57.8	0.29	0.27

continued

Table 3.16 Continued

	Average weighted sample size per randomisation group %	Health %	Workplace %	Combined %	All intervention groups %	Control %	Total %	P-value for 2-way comparison	P-value for 4-way comparison
Self-assessment at screening of ability to do same job in six months time									
Yes	276	54.5	54.2	52.9	53.9	65.5	56.6	0.005	0.05
No	99	38.5	35.0	31.5	34.8	27.0	32.6	0.20	0.46
Don't know	336	35.9	39.6	41.4	38.9	34.8	37.9	0.25	0.40
Self-reported primary health condition at time of screening									
Mental/behavioural (with any other conditions)	211	46.1	46.4	49.5	47.4	58.7	49.9	0.02	0.11
Musculoskeletal (no mental health conditions)	229	42.5	43.4	37.5	41.1	42.3	41.4	0.82	0.71
Injury, poisoning (no mental health/musculoskeletal)	96	49.0	60.1	56.8	55.0	36.0	50.1	0.005	0.02
Other conditions	166	38.8	39.5	37.9	38.9	36.3	38.2	0.58	0.96
Social class									
Non-manual	405	47.4	48.5	48.1	48.0	53.6	49.3	0.10	0.42
Manual	304	38.7	40.3	39.1	39.4	34.5	38.0	0.17	0.56
Self-assessed physical demands of job									
Very/fairly physically demanding	468	38.6	43.8	44.5	42.4	40.6	41.9	0.55	0.36
Not very/not at all physically demanding	203	56.9	49.8	48.7	51.9	57.8	53.1	0.24	0.27
Size of employer									
Less than 250 employees	241	38.3	44.4	42.8	41.7	42.8	42.0	0.76	0.67
250+ employees	470	46.3	45.5	45.2	45.7	45.6	45.7	0.97	0.99

Table 3.17 Average number of weeks in full-time work, by randomisation group

	Average weighted sample size per randomisation group %	Health %	Workplace %	Combined %	All intervention groups %	Control %	Total %	P-value for 2-way comparison	P-value for 4-way comparison
Gender									
Men	302	11.4	12.3	11.6	11.8	11.0	11.6	0.37	0.65
Women	409	11.7	12.2	12.3	12.1	12.5	12.2	0.60	0.87
Age									
17-34	138	13.5	11.9	11.5	12.3	11.6	12.1	0.55	0.54
35-49	344	11.9	12.8	12.6	12.4	12.3	12.4	0.84	0.82
50+	229	10.2	11.7	11.5	11.1	11.5	11.2	0.72	0.59
Number of weeks off sick before entering the trial									
6-12 weeks	405	14.7	15.4	15.2	15.1	15.5	15.2	0.63	0.89
13-19 weeks	191	9.0	9.0	9.2	9.1	8.8	9.0	0.70	0.98
20-26 weeks	115	5.1	4.9	5.7	5.2	5.2	5.2	0.97	0.90
Employer type									
Private company	303	11.1	12.2	11.2	11.5	10.4	11.2	0.22	0.41
Public	384	11.9	12.3	12.8	12.3	12.9	12.5	0.42	0.68
Computed risk score at time of screening									
Highest risk tertile	237	10.0	10.1	10.3	10.2	10.6	10.3	0.65	0.97
Middle tertile	238	10.2	10.6	11.2	10.7	9.4	10.3	0.14	0.39
Lowest risk tertile	236	14.4	15.8	14.7	14.9	16.3	15.3	0.19	0.35

continued

Table 3.17 Continued

	Average weighted sample size per randomisation group %	Health %	Workplace %	Combined %	All intervention groups %	Control %	Total %	P-value for 2-way comparison	P-value for 4-way comparison
Self-assessment at screening of ability to do same job in six months time									
Yes	276	13.8	14.3	14.4	14.2	17.2	14.9	0.001	0.01
No	99	10.7	9.1	8.7	9.5	7.9	9.0	0.26	0.44
Don't know	336	10.1	11.3	11.1	10.8	9.2	10.4	0.04	0.10
Self-reported primary health condition at time of screening									
Mental/behavioural (with any other conditions)	211	12.5	12.2	13.3	12.7	14.8	13.2	0.05	0.18
Musculoskeletal (no mental health conditions)	229	11.0	12.2	10.1	11.1	12.0	11.3	0.36	0.30
Injury, poisoning (no mental health/musculoskeletal)	96	13.3	15.6	14.4	14.3	9.3	13.0	0.001	0.004
Other conditions	166	10.2	11.1	11.2	10.8	9.6	10.5	0.27	0.62
Social class									
Non-manual	405	12.6	13.2	12.7	12.8	13.5	13.0	0.37	0.71
Manual	304	10.3	10.9	11.1	10.8	10.0	10.6	0.35	0.70
Self-assessed physical demands of job									
Very/fairly physically demanding	468	10.5	12.5	12.0	11.7	11.1	11.5	0.41	0.11
Not very/not at all physically demanding	203	14.7	12.5	13.3	13.5	14.8	13.7	0.22	0.19
Size of employer									
Less than 250 employees	241	10.0	11.4	11.3	10.8	11.5	11.0	0.47	0.52
250+ employees	470	11.8	11.9	11.5	11.8	11.5	11.7	0.70	0.95

Table 3.18 Percentage with a spell out of work, by randomisation group

	Average weighted sample size per randomisation group %	Health %	Workplace %	Combined %	All intervention groups %	Control %	Total %	P-value for 2-way comparison	P-value for 4-way comparison
Gender									
Men	302	24.5	19.7	21.3	21.8	20.6	21.5	0.70	0.64
Women	409	13.5	13.5	15.4	14.1	11.9	13.6	0.33	0.68
Age									
17-34	138	21.5	22.4	24.2	22.7	13.2	20.2	0.03	0.16
35-49	344	14.7	12.7	14.0	13.8	15.5	14.2	0.45	0.81
50+	229	20.9	17.4	20.4	19.6	17.3	19.1	0.50	0.74
Number of weeks off sick before entering the trial									
6-12 weeks	405	16.3	15.7	16.7	16.2	15.0	15.9	0.58	0.93
13-19 weeks	191	19.1	11.6	19.2	16.8	20.4	17.7	0.37	0.20
20-26 weeks	115	22.7	25.2	20.2	22.7	10.7	19.4	0.01	0.07
Employer type									
Private company	303	23.7	23.9	25.6	24.4	23.4	24.2	0.75	0.94
Public	384	13.8	10.0	12.0	11.9	9.4	11.3	0.22	0.35
Computed risk score at time of screening									
Highest risk tertile	237	21.4	20.8	20.8	21.0	18.8	20.5	0.54	0.93
Middle tertile	238	18.6	15.7	19.2	17.8	15.4	17.1	0.41	0.68
Lowest risk tertile	236	14.7	12.1	13.6	13.5	12.7	13.3	0.86	0.91

continued

Table 3.18 Continued

	Average weighted sample size per randomisation group %	Health %	Workplace %	Combined %	All intervention groups %	Control %	Total %	P-value for 2-way comparison	P-value for 4-way comparison
Self-assessment at screening of ability to do same job in six months time									
Yes	276	14.4	12.7	15.0	14.0	10.6	13.2	0.20	0.51
No	99	26.2	25.6	31.8	28.2	26.5	27.7	0.73	0.80
Don't know	336	19.1	16.8	15.9	17.3	15.9	16.9	0.62	0.75
Self-reported primary health condition at time of screening									
Mental/behavioural (with any other conditions)	211	19.3	18.5	16.4	18.0	11.1	16.5	0.05	0.23
Musculoskeletal (no mental health conditions)	229	16.9	19.3	19.8	18.6	16.2	18.0	0.48	0.76
Injury, poisoning (no mental health/musculoskeletal)	96	14.1	11.4	13.9	13.3	19.7	15.0	0.18	0.57
Other conditions	166	20.8	12.2	21.2	17.3	17.7	17.4	0.95	0.18
Social class									
Non-manual	405	15.1	13.5	14.9	14.5	10.4	13.6	0.08	0.34
Manual	304	21.8	19.9	22.3	21.4	21.7	21.4	0.87	0.92
Self-assessed physical demands of job									
Very/fairly physically demanding	468	19.5	16.7	18.0	18.1	17.4	17.9	0.77	0.81
Not very/not at all physically demanding	203	14.2	14.5	15.8	14.8	11.3	14.0	0.36	0.80
Size of employer									
Less than 250 employees	241	21.4	22.5	23.3	22.4	17.2	21.0	0.12	0.47
250+ employees	470	16.4	13.3	15.2	14.9	14.8	14.9	0.99	0.74

Table 3.19 Percentage changing employer, by randomisation group

	Average weighted sample size per randomisation group %	Health %	Workplace %	Combined %	All intervention groups %	Control %	Total %	P-value for 2-way comparison	P-value for 4-way comparison
Gender									
Men	302	9.9	11.9	9.0	10.2	10.2	10.2	0.97	0.78
Women	409	9.7	6.0	7.3	7.7	11.1	8.6	0.08	0.13
Age									
17-34	138	19.7	12.1	12.2	14.6	14.5	14.6	0.99	0.35
35-49	344	9.0	8.6	7.9	8.5	12.2	9.4	0.08	0.37
50+	229	5.5	5.8	5.9	5.8	6.3	5.9	0.79	0.99
Number of weeks off sick before entering the trial									
6-12 weeks	405	12.1	11.4	11.1	11.5	15.3	12.4	0.09	0.39
13-19 weeks	191	7.4	4.8	4.7	5.6	5.6	5.6	1.0	0.73
20-26 weeks	115	5.9	2.9	3.3	4.1	4.3	4.2	0.91	0.80
Employer type									
Private company	303	13.4	12.4	11.9	12.6	11.3	12.3	0.58	0.90
Public	384	7.0	5.1	5.1	5.7	8.8	6.5	0.06	0.19
Computed risk score at time of screening									
Highest risk tertile	237	11.2	8.3	7.4	8.9	12.1	9.7	0.27	0.45
Middle tertile	238	6.9	7.6	8.1	7.5	7.8	7.6	0.89	0.98
Lowest risk tertile	236	11.2	9.5	8.7	9.8	13.1	10.5	0.26	0.58

continued

Table 3.19 Continued

	Average weighted sample size per randomisation group %	Health %	Workplace %	Combined %	All intervention groups %	Control %	Total %	P-value for 2-way comparison	P-value for 4-way comparison
Self-assessment at screening of ability to do same job in six months time									
Yes	276	9.4	9.0	6.4	8.3	14.2	9.7	0.02	0.09
No	99	12.1	14.6	12.9	13.1	15.6	13.8	0.62	0.91
Don't know	336	9.5	6.5	7.8	8.0	6.6	7.6	0.49	0.53
Self-reported primary health condition at time of screening									
Mental/behavioural (with any other conditions)	211	11.0	15.2	9.2	11.7	21.4	13.9	0.003	0.01
Musculoskeletal (no mental health conditions)	229	10.0	4.8	7.2	7.4	6.8	7.2	0.78	0.33
Injury, poisoning (no mental health/musculoskeletal)	96	14.2	7.6	9.1	10.4	9.9	10.3	0.81	0.51
Other conditions	166	5.4	5.6	6.4	4.9	4.9	5.5	0.65	0.91
Social class									
Non-manual	405	10.1	8.3	5.8	8.0	10.0	8.5	0.34	0.19
Manual	304	9.5	8.9	11.2	9.9	11.6	10.4	0.45	0.75
Self-assessed physical demands of job									
Very/fairly physically demanding	468	9.2	8.4	10.2	9.3	10.7	9.7	0.41	0.67
Not very/not at all physically demanding	203	10.5	9.1	3.3	7.9	11.6	8.7	0.18	0.09
Size of employer									
Less than 250 employees	241	11.2	11.3	11.3	11.3	16.3	12.6	0.07	0.40
250+ employees	470	9.0	7.3	6.3	7.5	7.7	7.6	0.96	0.60

Table 3.20 Percentage in receipt of IB, by randomisation group

	Average weighted sample size per randomisation group %	Health %	Workplace %	Combined %	All intervention groups %	Control %	Total %	P-value for 2-way comparison	P-value for 4-way comparison
Gender									
Men	302	30.7	32.1	30.4	31.1	29.7	30.7	0.70	0.95
Women	409	32.4	32.2	27.2	30.6	28.7	30.2	0.55	0.42
Age									
17-34	138	21.6	38.7	24.6	28.7	25.1	27.7	0.47	0.04
35-49	344	32.4	32.0	29.3	31.3	29.1	30.7	0.53	0.79
50+	229	35.7	28.1	29.7	31.3	31.9	31.4	0.87	0.47
Number of weeks off sick before entering the trial									
6-12 weeks	405	22.9	26.3	22.6	24.0	20.0	23.0	0.15	0.31
13-19 weeks	191	40.9	40.0	32.4	37.5	34.3	36.7	0.52	0.44
20-26 weeks	115	50.8	45.0	45.4	47.1	54.8	49.2	0.26	0.58
Employer type									
Private company	303	30.0	32.2	32.5	31.5	35.7	32.6	0.25	0.63
Public	384	33.8	32.4	26.2	30.7	25.0	29.3	0.08	0.06
Computed risk score at time of screening									
Highest risk tertile	237	37.4	41.4	33.4	37.3	36.5	37.1	0.89	0.48
Middle tertile	238	38.8	35.4	28.7	34.3	30.4	33.2	0.36	0.19
Lowest risk tertile	236	19.5	20.7	23.2	21.1	19.9	20.8	0.780.87	

continued

Table 3.20 Continued

	Average weighted sample size per randomisation group %	Health %	Workplace %	Combined %	All intervention groups %	Control %	Total %	P-value for 2-way comparison	P-value for 4-way comparison
Self-assessment at screening of ability to do same job in six months time									
Yes	276	22.7	24.2	21.0	22.7	17.7	21.5	0.16	0.48
No	99	33.4	39.2	36.2	36.2	42.7	38.0	0.30	0.66
Don't know	336	38.6	37.6	32.7	36.3	33.7	35.7	0.48	0.46
Self-reported primary health condition at time of screening									
Mental/behavioural (with any other conditions)	211	29.0	26.9	23.8	26.5	22.3	25.5	0.35	0.58
Musculoskeletal (no mental health conditions)	229	37.5	35.7	34.8	36.0	30.9	34.7	0.22	0.62
Injury, poisoning (no mental health/musculoskeletal)	96	24.4	16.6	20.3	20.7	28.8	22.8	0.17	0.36
Other conditions	166	30.2	40.3	32.9	35.2	34.7	35.1	0.90	0.42
Social class									
Non-manual	405	29.0	29.8	26.6	28.4	24.7	27.6	0.24	0.53
Manual	304	35.1	35.8	31.9	34.3	34.4	34.3	0.99	0.85
Self-assessed physical demands of job									
Very/fairly physically demanding	468	36.2	33.4	29.5	32.9	31.5	32.5	0.61	0.26
Not very/not at all physically demanding	203	22.4	29.5	25.7	26.0	21.8	25.1	0.30	0.31
Size of employer									
Less than 250 employees	241	31.8	31.6	29.2	30.8	29.6	30.5	0.80	0.95
250+ employees	470	31.7	32.4	28.3	30.8	29.1	30.4	0.56	0.58

4 The impact of the interventions on health

In this chapter we turn from work-related outcomes to impacts on health. Although the Job Retention and Rehabilitation Pilot (JRRP) was not primarily designed to improve the health of participants, it was expected that this would be a likely outcome, especially for those randomised to either the 'health' or 'combined health and workplace' intervention groups.

In measuring health outcomes we are dependent on self-reports of health at the time of the Outcome Survey (OCS). The main measures collected were:

- self-assessed general health (that is, current health on a five point scale ranging from 'excellent' to 'poor');
- the Hospital Anxiety and Depression Scale (HADS);
- the SF36 (Short Form 36);
- self-assessment of whether the trial participants still had the health condition that caused their sickness absence; and
- self-assessment of whether the participant's health had improved or worsened since entering the trial.

The details of each of these is set out in the relevant section below.

In addition, the OCS included questions on the use of health services in the four-week period before the interview. Differences in health service usage by randomisation group (at a time when the Job Retention and Rehabilitation (JRR) intervention would in almost all cases be finished) gives our only objective (that is, not self-assessed) health outcome measure.

Inevitably, the different measures of health reported on this chapter are non-independent: in many ways they are simply alternative ways of capturing very similar information. For this reason, we would not expect to observe an impact on one health outcome measure that was not replicated on most (if not all) of the others. We have, nevertheless, presented all the outcome measures in tables, so that health researchers have figures on the JRRP impacts for their preferred health measure.

4.1 Self-assessed general health

Table 4.1 shows the five-scale self-assessed general health measure, by randomisation group. The p-values shown at the right hand side of the table show a, by now familiar, tale: the JRR interventions did *not* have a significant impact, relative to the control group. Since some of the differences are as large as five percentage points (for instance, those in the health and combined groups showed a five percentage point advantage over the control group in terms of 'good' health), the lack of statistical significance *might* be attributable to small sample sizes. If this was the case, then, based on the observed percentages, the health and combined interventions leads to slightly better self-assessments of health than the control group. Without a larger trial however it is impossible to state whether this is a genuine impact or not.

Table 4.1 Self-assessed general health, by randomisation group

	Health %	Workplace %	Combined %	All intervention groups %	Control %	Total %	P-value for 2-way comparison	P-value for 4- way comparison
Self-assessed health							0.14	0.13
Excellent	3.2	2.7	3.6	3.2	4.5	3.5		
Very good	15.9	13.8	17.3	15.7	14.6	15.4		
Good	30.2	26.1	28.7	28.3	24.6	27.4		
Fair	34.3	35.7	34.1	34.7	39.0	35.7		
Poor	16.4	21.8	16.4	18.2	17.3	18.0		
Weighted base	*708*	*709*	*712*	*2,130*	*707*	*2,837*		
Unweighted base	*586*	*543*	*570*	*1,699*	*457*	*2,156*		

Table 4.14 (at the end of the chapter) shows the percentage of people with 'excellent, very good, or good' health for a series of sub-groups. A small number of sub-groups show a significant difference by randomisation group although there are no clear patterns. In all cases the interventions increased the reporting of good health. The sub-groups affected were:

- those working for a private company;
- those assessed at the start of the trial as being at most risk of losing their job;
- (perhaps surprisingly given the negative impact on return-to-work rates) those presenting with a mental health problem;
- those presenting with an injury;
- those working for organisations with 250+ employees.

4.2 The Hospital Anxiety and Depression Scale

The HADS comprises a series of 14 statements describing experiences over the past week, relevant to generalised anxiety or depression. Reactions to the 14 statements are scored and combined into two scales: anxiety and depression.

The two scales have a minimum score of zero and a maximum of 21. These are combined into standard ranges: normal 0-7, mild 8-10, moderate 11-15, and severe 16-21. A score of 11 or higher on either scale indicates the *probable* presence of a mood disorder[14].

Tables 4.2 and 4.3 show the standard ranges for the two scales by randomisation group.

Table 4.2 HAD anxiety scores, by randomisation group

	Health %	Workplace %	Combined %	All intervention groups %	Control %	Total %	P-value for 2-way comparison	P-value for 4- way comparison
HAD anxiety score							0.54	0.87
0-7	43.2	42.2	41.3	42.2	39.9	41.6		
8-10	20.5	18.7	20.4	19.9	19.1	19.7		
11-15	26.2	26.2	26.6	26.3	27.4	26.6		
16-21	10.1	12.9	12.9	11.6	13.6	12.1		
Weighted base	*690*	*691*	*691*	*2,072*	*700*	*2,772*		
Unweighted base	*571*	*529*	*553*	*1,653*	*453*	*2,106*		

Table 4.3 HAD depression scores, by randomisation group

	Health %	Workplace %	Combined %	All intervention groups %	Control %	Total %	P-value for 2-way comparison	P-value for 4- way comparison
HAD depression score							0.01	0.15
0-7	58.5	56.7	58.1	57.8	51.3	56.1		
8-10	19.5	19.3	20.2	19.7	25.4	21.1		
11-15	18.4	18.4	17.4	18.1	17.6	17.9		
16-21	3.6	5.5	4.3	4.5	5.7	4.8		
Weighted base	*690*	*693*	*692*	*2,076*	*700*	*2,776*		
Unweighted base	*571*	*531*	*554*	*1,656*	*453*	*2,109*		

[14] Disorders can only be diagnosed by clinical professionals and the presence of a high score is only indicative of the presence of the symptoms of an emotional disorder.

There are no significant differences between the randomisation groups in terms of the anxiety scores. For depression however, there does appear to have been a modest trial impact, with those in the control group being assigned more 8-10 (mild depression) scores and less 0-7 (normal) scores than those in the intervention groups. For scores of 11 or more however (which is the 'problem indicator') there are only very small (non-significant) differences between the randomisation groups.

Tables 4.15 and 4.16 at the end of the chapter show the prevalence of scores of 11 or more for sub-groups (for the anxiety and depression scores respectively). Very few differences by randomisation group are statistically significant.

4.3 The SF36

The SF36 question module comprises 36 statements that interviewees are asked to respond to, based on their feelings over the previous four weeks. The responses for an individual are then scored and combined into eight separate scales. Each scale runs from a minimum of 0 to a maximum of 100, with a lower score indicating worse health. The eight scales, together with a description of how to interpret a score of 0 and 100 respectively, is set out below:

Concept	Score = 100	Score = 0
Physical functioning	Performs all types of physical activities, including the most vigorous, without limitations due to health.	Limited a lot in performing all physical activities, including bathing or dressing, due to health.
Role – physical	No problems with work or other daily activities as a result of physical pain.	Problems with work or other daily activities as a result of physical pain.
Role – Emotional	No problems with work or other daily activities as a result of emotional problems.	Problems with work or other daily activities as a result of emotional problems.
Energy/fatigue	Feels full of pep and energy all the time.	Feels tired and worn out all the time.
Mental Health	Feels peaceful, happy and calm all of the time.	Feelings of nervousness and depression all the time.
Social Functioning	Performs normal social activities.	Extreme and frequent interference with normal social activities.
Bodily pain	No pain or limitations due to pain.	Very severe and extremely limiting pain.
General Health	Evaluates personal health as excellent.	Evaluates personal health as poor and believes it is likely to get worse.

Table 4.4 sets out the mean score for each of the eight SF36 scales, together with its standard deviation.

Table 4.4 SF36 scores, by randomisation group

	Health	Workplace	Combined	All intervention groups	Control	Total	P-value for 2-way comparison	P-value for 4- way comparison
Physical functioning								
Mean	62.7	64.0	64.2	63.6	60.9	62.0	0.08	0.27
Standard deviation	31.0	30.4	30.4	30.6	30.8	30.7		
Role – physical								
Mean	42.8	40.0	41.9	41.6	38.4	40.8	0.13	0.32
Standard deviation	43.2	42.5	42.3	42.7	40.9	42.2		
Role – emotional								
Mean	54.2	52.8	52.8	53.2	49.9	52.4	0.12	0.44
Standard deviation	42.6	43.9	43.1	43.2	43.4	43.3		
Energy/fatigue								
Mean	42.0	40.7	42.5	41.7	38.8	41.0	0.01	0.04
Standard deviation	23.3	22.6	23.2	23.0	22.4	22.9		
Mental health								
Mean	60.3	56.6	59.4	58.8	56.6	58.2	0.06	0.01
Standard deviation	22.5	23.2	22.7	22.8	22.9	22.9		
Social functioning								
Mean	57.8	53.5	57.6	56.3	54.3	55.8	0.18	0.04
Standard deviation	30.1	31.0	30.7	30.6	30.0	30.5		
Bodily pain								
Mean	56.0	54.7	56.8	55.8	52.9	55.1	0.06	0.18
Standard deviation	31.2	30.6	31.3	31.0	30.6	30.9		
General health								
Mean	49.8	47.0	50.4	49.1	46.7	48.5	0.03	0.01
Standard deviation	22.6	22.1	23.9	22.9	20.9	22.4		
Weighted base	*690*	*693*	*695*	*2,078*	*700*	*2,778*		
Unweighted base	*571*	*531*	*556*	*1,658*	*453*	*2,111*		

* Bases differ by score slightly because of item non-response.

Across all the SF-36 scales those allocated to the interventions report slightly better health than those in the control group, some of the differences being statistically significant. The comparisons are not independent, so finding several significant differences does not reduce the probability of drawing false conclusions, but the general sense is that the interventions somewhat improved self-reports of health. By

and large, those allocated to the health or combined intervention groups fared marginally better than those in the workplace intervention. For instance, on average, the scores on energy/fatigue were three points higher for the intervention groups than for the control group, the difference being greatest for those allocated to the health and combined groups.

4.4 Persistence of original condition and changes in health

As part of the OCS, trial participants were asked to assess whether, since entering the trial, their original health condition (that is, the main condition for which they went off sick) still persisted, and whether, compared to one year ago, their health had improved or worsened.

Tables 4.5 and 4.6 set out the statistics based on these two questions by randomisation group.

Slightly more of the control group (at 79 per cent) than the intervention groups (at 76 per cent) reported still having their original condition at the time of the outcome survey interview, although, once again, the difference is not statistically significant. Consistent with this 'finding', for 'change in health' there is some evidence (again non-significant on a chi-squared test) that those randomised to either the health or combined intervention were more likely to say their health had become 'much better' over the course of the last year.

Table 4.5 Persistence of original condition, by randomisation group

	Health %	Workplace %	Combined %	All intervention groups %	Control %	Total %	P-value for 2-way comparison	P-value for 4- way comparison
							0.26	0.25
Still have conditions	73.4	77.5	76.9	75.9	79.4	76.8		
Have none of conditions	17.2	15.3	16.7	16.4	13.9	15.8		
Still have some conditions	9.5	7.2	6.3	7.7	6.7	7.4		
Weighted base	*705*	*707*	*704*	*2,116*	*707*	*2,822*		
Unweighted base	*583*	*541*	*564*	*1,688*	*456*	*2,144*		

Table 4.6 Change in health (relative to one year previous), by randomisation group

	Health %	Workplace %	Combined %	All intervention groups %	Control %	Total %	P-value for 2-way comparison	P-value for 4- way comparison
							0.11	0.32
Much better	22.3	19.7	23.4	21.8	16.8	20.5		
Somewhat better	24.0	23.7	25.1	24.3	23.5	24.1		
About the same	18.5	19.0	19.9	19.1	21.8	19.8		
Somewhat worse	20.6	22.1	20.0	20.9	22.6	21.3		
Much worse	14.6	15.5	11.6	13.9	15.3	14.3		
Weighted base	*708*	*708*	*712*	*2,128*	*707*	*2,835*		
Unweighted base	*586*	*542*	*570*	*1,698*	*457*	*2,155*		

To summarise the findings across the range of self-assessed health measures, it appears that the JRR interventions had a modest impact on self-assessments of health, with the health and combined interventions having the greatest impact. Nevertheless, the observed impact on some measures is too small to be demonstrated to be genuine using statistical tests. One of the largest observed impacts is on mild depression (the prevalence of which seems to have been moderately reduced under the interventions).

The story between health and work outcomes seems broadly consistent: that is, a modest impact on health outcomes and little or no impact on work outcomes. If the assumption is made that individuals will only return to work if they *feel* better about their health, the two findings tally.

4.5 Use of health services

Finally, statistics are given below on the use of health services by randomisation group. Three indicators of usage are given: (one or more) consultations with a General Practitioner (GP) in the four week period before the OCS interview; (one or more) consultations with another clinician (practice nurse, district nurse, physiotherapist, occupational therapist, community psychiatric nurse, or 'other clinician') over the same four week period; and hospital attendance over the same period. Hospital attendance is divided into three categories: (one or more) inpatient stays during the four week period; if no inpatient stays then (one or more) day patient attendances; and, if neither an inpatient or a day patient, (one or more) out patient attendances. A period of just four weeks is used to avoid much of the observed differences being attributable to ongoing JRR (health or combined) interventions rather than to trial outcomes[15].

[15] During the interventions we would expect higher uses of health services by those in the health and combined intervention groups. So any observed differences during the interventions would be more likely to be a treatment effect than an impact.

Across these indicators there are only small and non-significant differences between the randomisation groups.

Table 4.7 Percentage consulting a GP, or other clinician, within the previous four weeks, by randomisation group

	Health %	Workplace %	Combined %	All intervention groups %	Control %	Total %	P-value for 2-way comparison	P-value for 4- way comparison
Consulting a GP	52.9	56.4	53.3	54.2	53.0	53.9	0.63	0.61
Consulting other clinician	39.4	43.1	38.8	40.4	41.0	40.6	0.79	0.48
Weighted base	*710*	*709*	*712*	*2,131*	*710*	*2,841*		
Unweighted base	*587*	*543*	*570*	*1,700*	*458*	*2,158*		

Table 4.8 Hospital attendance in the previous four weeks, by randomisation group

	Health %	Workplace %	Combined %	All intervention groups %	Control %	Total %	P-value for 2-way comparison	P-value for 4- way comparison
							0.57	0.46
In patient	2.9	1.9	2.6	2.5	2.2	2.4		
Day patient	6.4	3.8	3.8	4.7	5.6	4.9		
Out patient	4.4	5.0	4.0	4.5	3.3	4.2		
None	86.4	89.3	89.5	88.4	88.9	88.5		
Weighted base	*710*	*709*	*712*	*2,131*	*710*	*2,841*		
Unweighted base	*587*	*543*	*570*	*1,700*	*458*	*2,158*		

4.6 Impacts on household finance and relationships

In this short, final section on impacts, we consider the impact on JRRP on two more areas: household finances and family relationships.

Household finances were not captured quantitatively in the OCS, but a short series of questions were included asking about self-perceived changes in household savings and finance since going off sick. Having an impact on finances and savings was by no means a primary objective of the JRR providers but it is possible that impacts might have occurred as a indirect result of the interventions.

In terms of relationships, the single hypothesis we look at in this report is whether JRR interventions help to prevent marital breakdown (the assumption being that a prolonged period off sick would add stress to many relationships).

4.6.1 Household finances

The three tables below (Tables 4.9 to 4.11) show three indicators of 'financial health': changes in saving since went off sick; how well currently managing financially; and changes in the household financial situation since going off sick. For each of these indicators there are no significant differences between the control and intervention groups (or between the three intervention groups). This is, of course, hardly surprising given the lack on an impact on work-related outcomes – but it does help to complete the picture.

Table 4.9 Changes in savings since going off sick, by randomisation group

	Health %	Workplace %	Combined %	All intervention groups %	Control %	Total %	P-value for 2-way comparison	P-value for 4- way comparison
Change in savings							0.69	0.88
No savings when went off sick and still have none	26.4	24.8	23.8	25.0	22.1	24.3		
Had savings but now all spent	18.5	18.1	18.2	18.3	18.8	18.4		
Most of the savings have been spent	13.3	15.6	15.8	14.9	16.8	15.4		
Some of the savings have been spent	22.5	20.9	21.8	21.7	21.2	21.6		
Still have about the same savings	18.6	18.5	18.8	18.7	20.1	19.0		
Now have more savings	0.7	2.1	1.6	1.5	1.0	1.4		
Weighted base	*710*	*712*	*713*	*2,135*	*710*	*2,845*		
Unweighted base	*587*	*545*	*571*	*1,703*	*458*	*2,161*		

Table 4.10 How well managing financially, by randomisation group

	Health %	Workplace %	Combined %	All intervention groups %	Control %	Total %	P-value for 2-way comparison	P-value for 4- way comparison
How well managing							0.49	0.94
Living comfortably	15.3	16.0	15.8	15.7	16.9	16.0		
Doing alright	26.3	27.0	29.4	27.6	27.1	27.4		
Just about getting by	34.7	33.1	32.8	33.5	31.7	33.1		
Finding it quite difficult	14.1	14.8	13.5	14.1	12.9	13.8		
Finding it very difficult	9.7	9.1	8.6	9.1	11.4	9.7		
Weighted base	*710*	*712*	*713*	*2,135*	*710*	*2,845*		
Unweighted base	*587*	*545*	*571*	*1,703*	*458*	*2,161*		

Table 4.11 Changes in financial situation since going off sick, by randomisation group

	Health %	Workplace %	Combined %	All intervention groups %	Control %	Total %	P-value for 2-way comparison	P-value for 4- way comparison
Change in financial situation							0.39	0.22
Much better off financially now	1.1	2.3	2.0	1.8	2.6	2.0		
A bit better off	9.1	6.8	7.8	7.9	6.8	7.6		
About the same	37.5	33.7	40.0	37.1	33.9	36.3		
A bit worse off	21.6	26.9	22.6	23.7	25.2	24.1		
Much worse off	30.6	30.3	27.6	29.5	31.5	30.0		
Weighted base	*710*	*712*	*713*	*2,135*	*710*	*2,845*		
Unweighted base	*587*	*545*	*571*	*1,703*	*458*	*2,161*		

4.6.2 Marital status

The final two tables show marital status (Table 4.12) and changes in marital status since entering the trial (Table 4.13) by randomisation group. There are no significant differences between the groups, and there is certainly no evidence that the interventions had any impact on relationship breakdown (either positively or negatively): there are only very small differences in the percentages moving from married/cohabiting at screening to 'not' at the time of the OCS.

Table 4.12 Marital status at the time of the OCS, by randomisation group

	Health %	Workplace %	Combined %	All intervention groups %	Control %	Total %	P-value for 2-way comparison	P-value for 4- way comparison
Marital status							0.23	0.66
Single	25.3	26.0	22.8	24.7	19.8	23.5		
Marred and living with spouse	52.3	53.0	54.2	53.2	55.6	53.8		
Married and separated	5.8	4.0	5.0	4.9	5.7	5.1		
Divorced	14.7	14.4	15.6	14.9	16.3	15.2		
Widowed	1.9	2.6	2.5	2.3	2.6	2.4		
Weighted base	*710*	*712*	*713*	*2,135*	*710*	*2,845*		
Unweighted base	*587*	*545*	*571*	*1,703*	*458*	*2,161*		

Table 4.13 Change in marital status between screening and OCS, by randomisation group

	Health %	Workplace %	Combined %	All intervention groups %	Control %	Total %	P-value for 2-way comparison	P-value for 4- way comparison
Marital status							0.43	0.62
Not married/ cohabiting at either date	32.2	30.4	32.7	31.7	30.3	31.4		
Not married/ cohabiting at screening, are now	2.5	2.2	2.4	2.4	3.6	2.7		
Married/cohabiting at screening, not now	3.3	4.1	1.9	3.1	3.2	3.1		
Married/cohabiting then and now	62.0	63.4	63.0	62.8	62.9	62.8		
Weighted base	*710*	*712*	*713*	*2,135*	*710*	*2,845*		
Unweighted base	*587*	*545*	*571*	*1,703*	*458*	*2,161*		

Table 4.14 Percentage with excellent, very good or good health, by randomisation group

	Average weighted sample size per randomisation group %	Health %	Workplace %	Combined %	All intervention groups %	Control %	Total %	P-value for 2-way comparison	P-value for 4-way comparison
Gender									
Men	300	55.6	42.3	51.8	49.9	49.3	49.8	0.88	0.04
Women	409	44.7	42.8	47.8	45.1	39.7	43.7	0.09	0.20
Age									
17-34	137	59.3	42.8	57.2	52.7	43.7	50.4	0.10	0.02
35-49	343	49.2	43.3	47.3	46.6	43.6	45.8	0.41	0.46
50+	229	44.1	41.2	48.7	44.8	44.0	44.6	0.81	0.57
Number of weeks off sick before entering the trial									
6-12 weeks	404	51.4	46.9	54.5	50.8	49.2	50.4	0.62	0.25
13-19 weeks	190	51.7	41.2	44.4	45.8	39.9	44.3	0.20	0.17
20-26 weeks	115	38.6	27.2	41.4	35.9	32.4	35.0	0.51	0.24
Employer type									
Private company	302	52.0	42.8	53.8	49.4	39.6	47.0	0.01	0.00
Public	383	46.2	42.6	47.0	45.3	46.5	45.6	0.73	0.71
Computed risk score at time of screening									
Highest risk tertile	236	42.0	38.0	50.8	43.8	34.6	41.7	0.03	0.01
Middle tertile	237	47.8	38.2	40.1	42.0	39.8	41.4	0.58	0.27
Lowest risk tertile	236	57.6	50.6	57.6	55.2	57.9	55.8	0.55	0.40

continued

Table 4.14 Continued

	Average weighted sample size per randomisation group %	Health %	Workplace %	Combined %	All intervention groups %	Control %	Total %	P-value for 2-way comparison	P-value for 4-way comparison
Self-assessment at screening of ability to do same job in six months time									
Yes	276	58.8	48.4	57.5	54.8	55.9	55.0	0.74	0.12
No	98	42.9	37.8	45.2	42.3	40.5	41.8	0.82	0.85
Don't know	334	43.1	38.6	44.2	42.0	35.6	40.4	0.08	0.18
Self-reported primary health condition at time of screening									
Mental/behavioural (with any other conditions)	210	61.1	49.8	53.4	54.8	45.6	52.7	0.05	0.04
Musculoskeletal (no mental health conditions)	229	44.9	36.3	40.6	40.7	43.6	41.5	0.49	0.42
Injury, poisoning (no mental health/musculoskeletal)	96	60.6	66.6	67.6	65.0	49.0	60.8	0.01	0.07
Other conditions	165	32.4	31.9	43.2	35.2	37.9	35.9	0.55	0.23
Social class									
Non-manual	404	49.8	41.8	49.7	47.1	42.9	46.1	0.21	0.08
Manual	303	49.1	43.2	49.4	47.3	44.6	46.5	0.48	0.43
Self-assessed physical demands of job									
Very/fairly physically demanding	466	46.2	40.6	49.9	45.8	43.3	45.1	0.41	0.09
Not very/not at all physically demanding	202	55.5	46.6	49.0	50.3	46.4	49.5	0.40	0.32
Size of employer									
Less than 250 employees	241	42.0	45.1	45.6	44.2	45.2	44.4	0.83	0.89
250+ employees	470	53.2	41.4	51.7	48.6	43.0	47.2	0.06	0.001

Table 4.15 Percentage with HAD anxiety score of 11+, by randomisation group

	Average weighted sample size per randomisation group %	Health %	Workplace %	Combined %	All intervention groups %	Control %	Total %	P-value for 2-way comparison	P-value for 4-way comparison
Gender									
Men	293	33.8	38.2	37.4	36.5	40.0	37.4	0.35	0.59
Women	401	38.1	39.8	38.9	38.9	41.8	39.7	0.37	0.80
Age									
17-34	134	34.1	46.8	43.3	41.5	48.8	43.4	0.17	0.14
35-49	337	37.0	36.8	35.0	36.3	39.5	37.1	0.35	0.76
50+	223	36.8	37.8	40.3	38.3	38.4	38.3	0.98	0.93
Number of weeks off sick before entering the trial									
6-12 weeks	396	31.2	36.3	33.5	33.7	40.0	35.2	0.05	0.12
13-19 weeks	186	36.7	42.4	45.3	41.5	42.5	41.8	0.79	0.52
20-26 weeks	112	53.2	45.6	42.1	47.2	42.2	45.8	0.40	0.44
Employer type									
Private company	295	34.3	40.0	40.3	38.2	45.8	40.0	0.04	0.11
Public	376	37.2	38.5	36.4	37.4	36.6	37.2	0.83	0.94
Computed risk score at time of screening									
Highest risk tertile	232	42.2	41.3	40.4	41.3	49.9	43.4	0.04	0.26
Middle tertile	231	36.8	41.5	41.3	39.9	42.5	40.6	0.51	0.71
Lowest risk tertile	231	30.2	35.0	32.8	32.7	30.1	32.1	0.56	0.72

continued

Table 4.15 Continued

	Average weighted sample size per randomisation group %	Health %	Workplace %	Combined %	All intervention groups %	Control %	Total %	P-value for 2-way comparison	P-value for 4-way comparison
Self-assessment at screening of ability to do same job in six months time									
Yes	270	35.1	32.5	32.1	33.2	34.5	33.5	0.74	0.88
No	95	35.8	35.9	47.2	40.2	46.7	42.1	0.27	0.31
Don't know	328	37.6	45.7	40.6	41.3	44.0	42.0	0.45	0.24
Self-reported primary health condition at time of screening									
Mental/behavioural (with any other conditions)	207	51.0	58.8	46.1	51.8	57.0	53.0	0.29	0.09
Musculoskeletal (no mental health conditions)	222	27.5	32.1	30.4	30.0	32.0	30.5	0.63	0.79
Injury, poisoning (no mental health/musculoskeletal)	95	26.5	21.0	35.2	28.4	34.8	30.1	0.26	0.20
Other conditions	160	35.0	33.9	39.7	35.8	38.3	36.5	0.65	0.78
Social class									
Non-manual	398	36.6	39.5	41.4	39.2	42.2	39.9	0.37	0.50
Manual	294	35.9	38.9	33.9	36.3	39.5	37.1	0.36	0.56
Self-assessed physical demands of job									
Very/fairly physically demanding	461	37.3	37.7	36.7	37.2	41.2	38.3	0.19	0.61
Not very/not at all physically demanding	201	33.1	38.6	43.3	38.1	42.2	39.0	0.37	0.25
Size of employer									
Less than 250 employees	241	34.2	37.8	40.9	37.6	36.1	37.2	0.73	0.60
250+ employees	470	37.4	39.8	36.9	38.1	43.6	39.4	0.07	0.27

Table 4.16 Percentage with HAD depression score of 11+, by randomisation group

	Average weighted sample size per randomisation group %	Health %	Workplace %	Combined %	All intervention groups %	Control %	Total %	P-value for 2-way comparison	P-value for 4-way comparison
Gender									
Men	293	21.5	23.3	22.1	22.3	22.3	22.3	0.97	0.98
Women	401	22.4	24.5	21.5	22.8	24.0	23.1	0.63	0.78
Age									
17-34	134	19.2	26.3	20.2	22.1	20.0	21.5	0.70	0.51
35-49	337	23.7	23.1	25.8	24.2	25.5	24.5	0.65	0.85
50+	223	21.3	23.8	16.6	20.5	21.9	20.8	0.65	0.40
Number of weeks off sick before entering the trial									
6-12 weeks	396	21.1	18.5	20.2	19.9	22.4	20.5	0.31	0.65
13-19 weeks	186	18.5	25.6	24.5	22.9	24.3	23.2	0.75	0.52
20-26 weeks	112	30.6	43.9	22.3	32.0	24.5	29.9	0.20	0.01
Employer type									
Private company	295	24.6	24.5	23.7	24.3	23.5	24.1	0.80	0.98
Public	376	19.7	23.2	20.5	21.1	22.8	21.5	0.52	0.68
Computed risk score at time of screening									
Highest risk tertile	232	25.4	24.1	21.8	23.7	30.7	25.4	0.08	0.30
Middle tertile	231	25.0	24.9	23.6	24.5	22.2	23.9	0.50	0.89
Lowest risk tertile	231	16.0	23.0	19.8	19.6	17.0	19.0	0.47	0.32

continued

Table 4.16 Continued

	Average weighted sample size per randomisation group %	Health %	Workplace %	Combined %	All intervention groups %	Control %	Total %	P-value for 2-way comparison	P-value for 4-way comparison
Self-assessment at screening of ability to do same job in six months time									
Yes	270	17.3	19.6	15.6	17.5	19.6	18.0	0.53	0.64
No	95	20.5	26.3	29.6	25.7	27.9	26.3	0.64	0.66
Don't know	328	26.3	27.2	24.5	26.0	24.7	25.7	0.69	0.87
Self-reported primary health condition at time of screening									
Mental/behavioural (with any other conditions)	207	27.0	32.9	24.6	28.0	32.7	29.1	0.26	0.25
Musculoskeletal (no mental health conditions)	222	19.0	20.9	19.5	19.8	18.4	19.4	0.66	0.92
Injury, poisoning (no mental health/musculoskeletal)	95	18.5	11.1	21.3	17.6	23.9	19.2	0.24	0.35
Other conditions	160	22.5	24.0	20.9	22.7	20.7	22.2	0.63	0.89
Social class									
Non-manual	398	20.1	22.6	25.6	22.8	22.3	22.7	0.85	0.41
Manual	294	24.6	26.1	16.3	22.4	24.5	23.0	0.49	0.06
Self-assessed physical demands of job									
Very/fairly physically demanding	461	22.1	21.8	20.6	21.5	22.6	21.8	0.67	0.92
Not very/not at all physically demanding	201	22.8	25.7	26.2	24.9	26.1	25.2	0.74	0.86
Size of employer									
Less than 250 employees	241	18.0	20.1	25.0	21.1	22.1	21.4	0.75	0.41
250+ employees	470	24.1	25.7	20.1	23.3	24.0	23.5	0.78	0.37

5 Future prospects

This chapter considers the future expectations of the outcome survey (OCS) respondents with regard to employment. Section 5.1 outlines their activity at the time of interview to provide the background for Section 5.2, which looks at the expectations for the future of those who had returned to work and Section 5.3, which examines the expectations of those still off sick or out of work.

There is some evidence that trial entrants' expectations at the time of screening did accurately predict their future to some extent, although naturally, the relationship is not perfect. Focusing on OCS respondents, 71 per cent of those who thought at screening that they would be able to do their present job in six months time had actually returned to work by the OCS interview. This compared to 56 per cent among those who said they did not know, and 49 per cent among those who had not thought they would be able to. Thus of those who expressed an opinion one way or the other, two-thirds accurately predicted their future with regard to returning to work.

These findings confirm that there is value in examining participants expectations at the time of the OCS interview, since if the Job Retention and Rehabilitation Pilot (JRRP) had had any impact on these expectations, this might translate into longer-term impacts on employment.

5.1 Current activity

By the time of the OCS interview, 58 per cent of respondents had returned to work full-time (16 or more hours per week), and three per cent part-time (15 or fewer hours per week). Nearly a quarter (23 per cent) were still off work sick, and 16 per cent were no longer in work at all. There were no significant differences in current activity between the four intervention and control groups (Table 5.1), or between the intervention groups and the control group.

Table 5.1 Activity at time of OCS interview, by randomisation group

	Health %	Workplace %	Combined %	All intervention groups %	Control %	Total %
Working 16 hours or more per week	58	59	59	59	56	58
Working less than 16 hours per week	4	2	4	3	3	3
Still off sick	22	25	21	22	26	23
Not in work at all	17	14	16	16	15	16
Weighted base	*710*	*712*	*713*	*2,135*	*709*	*2,844*
Unweighted base	*587*	*545*	*571*	*1,703*	*458*	*2,161*

5.2 Expectations of returnees

This section focuses on those who had returned to work (for any number of hours per week) by the time of the OCS interview, considering first whether they had returned to the same job as before, and whether those who were doing a different job expected to return to the same job eventually. Next, the expectations of all those in work regarding their employment over the next month and next six months are examined.

5.2.1 Returning to the same job

Of those who had returned to work, 71 per cent were doing the same type of work with the same employer as they had been at the time they went off sick from work. Six per cent were doing the same sort of work with a different employer. Thirteen per cent were in a different job with the same employer, and 11 per cent had changed both their type of work and their employer.

The intervention group made no difference to the likelihood of going back to the same job and/or employer. There were no significant differences either between the four groups, or between the intervention groups and the control group (see Table 5.2).

Table 5.2 Whether working in same kind of work and/or same employer at time of OCS interview, by randomisation group

	Health %	Workplace %	Combined %	All intervention groups %	Control %	Total %
Same type of work, same employer	72	70	71	71	68	70
Different type of work, same employer	10	15	15	13	12	13
Same type of work, different employer	5	6	5	5	7	6
Different type of work, different employer	12	9	9	10	13	11
Weighted base	*438*	*437*	*445*	*1,319*	*418*	*1,738*
Unweighted base	*362*	*334*	*354*	*1,050*	*266*	*1,316*

More important was the length of time off sick before joining the trial – those off longest (20-26 weeks) were more likely to be in a different job with the same employer and less likely to be with a different employer. The type of employer also made a difference, with those in private firms more likely to be in a different job with a different employer (17 per cent) than those in the public sector (six per cent). The latter were more likely to be with the same employer, either in the same job (74 per cent compared to 66 per cent of private sector workers), or doing a different job (16 per cent, ten per cent). Older people were also much more likely to be in the same job with the same employer (76 per cent of 50-66 year-olds, compared with 60 per cent of 17-34 year-olds). Occupation made a difference, with manual workers more likely to be in a different job and employer (15 per cent compared with eight per cent of non-manual workers).

There is further evidence that many participants are able to predict their future in terms of work. Just over three-quarters (76 per cent) of those who said at screening that they would be able to return to their present job in six months had indeed gone back to the same job and employer. This figure was 44 per cent among those who had not expected to be able to return.

Those who had *not* yet returned to their previous type of work were asked whether they thought they could do the same type of work now, and 38 per cent said they could (Table 5.3). The control group were less likely to say that they *could* do the same sort of work now (30 per cent) than any of the intervention groups (40-41 per cent), but this difference was not significant (because of the small sample sizes).

Those with the lowest screening risk scores (i.e. at lowest risk of losing their job) were significantly more likely to think they could return to the same sort of work. Just over half (52 per cent) were of this opinion, compared to 31 per cent of those with the highest risk. This is consistent with the screening tool's intention to identify those at

risk of losing their job as those who think they cannot return to the same type of work are presumably at higher risk. Similarly, those who had said they could return to their present job at screening were more likely to think they could do the same job now (53 per cent) than those who had not (34 per cent) or did not know (28 per cent).

The primary health condition mentioned at screening was also linked to whether respondents felt they could do the same job now. Those with musculo-skeletal conditions or injury/poisoning were much less likely to say they could now do the same kind of work (25 per cent; 24 per cent) than those with mental/behavioural disorders (56 per cent). Those whose job was physically demanding were also less likely to feel they could still do that job (32 per cent compared with 52 per cent of those whose job was not physically demanding).

The ability to do their previous job did not necessarily translate into an expectation to go back; although overall, 38 per cent of those who had returned to a different type of work said that they could do the same sort of work now, only 18 per cent expected to go back to it in the future. This did not differ significantly between the intervention and control groups.

It seems that almost a quarter (24 per cent) of those who had changed their type of work were happy to continue with this even though they were, in theory, capable of going back to their previous work. Nearly half (46 per cent) could neither do their previous job nor had any expectation of returning to it. The control group were more likely to say this (56 per cent) than the intervention groups (43 per cent) but this difference was not statistically significant (Table 5.3).

Those whose primary complaint was injury/poisoning were significantly more likely to expect to return to the same sort of work (31 per cent) than those with either mental health (16 per cent) or musculo-skeletal disorders (11 per cent), perhaps because they were expecting the injury to heal sufficiently to allow this.

Around a third (32 per cent) of those doing different work who were expecting to return to their previous work thought that this would happen in around three months time or less and the same percentage thought it would take six months to a year. One in ten did not expect this to happen for a year or more.

Table 5.3 Ability to and expectations of returning to previous type of work among returnees who had not done so by time of the OCS interview

	Health %	Workplace %	Combined %	All intervention groups %	Control %	Total %
Could do same sort of work *now*	40	41	41	41	30	38
Expects to go back to same sort work *in future*	14	21	22	19	15	18
Weighted base	*99*	*107*	*107*	*312*	*105*	*418*
Unweighted base	*83*	*78*	*86*	*247*	*66*	*313*
Can do same work, expects to return	9	9	14	11	7	10
Cannot do same work, expects to return	5	8	8	7	8	7
Can do same work, doesn't expect to return	30	25	20	25	19	24
Cannot do same work, doesn't expect to return	42	42	45	43	56	46
DK if can do same work/expect to return	14	17	14	15	10	14
Weighted base	*93*	*106*	*103*	*301*	*103*	*405*
Unweighted base	*78*	*78*	*82*	*238*	*64*	*302*

The most common reason for not expecting to return to the same sort of work as before (among those who had returned to different work) was their health condition, either because it made that sort of work difficult to do (26 per cent) or because the condition would return or worsen (nine per cent). The nature of the work itself was also a common theme, with 16 per cent saying that the work was not satisfying, 13 per cent that it was too physically demanding and ten per cent that it was too stressful (see Table 5.4).

Table 5.4 Reasons why not expecting to return to previous type of work among returnees who had not done so by time of the OCS interview

	%
Health condition makes current type of work difficult	26
Current type of work not satisfying	16
The work is too physically demanding	13
The work is too stressful	10
Health condition would come back/get worse	9
The job does not fit training/qualifications	9
I don't like my current employer	5
The hours are unsuitable	3
The pay is not sufficient	2
Other answer	16
Weighted base	*285*
Unweighted base	*212*

5.2.2 Changes expected in one and six months' time

Most of those who had returned to work by the time of the OCS interview did not expect any changes to their job or employer in either one (81 per cent) or six month's (76 per cent) time. Twelve per cent said they would be looking for a different type of work in one month's time and 14 per cent in six months. Eleven per cent would be looking for a different employer in one month and 13 per cent in six months' time.

The health intervention group were significantly less likely to expect to look for a different type of work in a month's time (nine per cent) than the combined group (15 per cent), but there was no difference between the three intervention groups and the control group. In six months, the workplace group were more likely to expect to look for a different type of work (18 per cent) than either the combined (12 per cent) or control group (11 per cent), but again, there was no difference between the three intervention groups and the control group.

Older respondents were less likely to be expecting change. Eighteen per cent of 17-34 year-olds expected to be looking for different work in six months, and 19 per cent for a different employer, compared with eight per cent each for 50-66 year-olds. Those with mental or behavioural disorders were more likely to expect change.

The reasons for expecting to change job or employer tended to focus on dissatisfaction with the job itself, rather than problems caused by ill-health. So among those expecting to be looking for something different in a month, 23 per cent were not satisfied with the type of work, and one in ten each mentioned disliking their employer, expecting to lose their job or unsuitable hours. Insufficient pay, stress or too many physical demands were each mentioned by five per cent. The reasons given in relation to six months' time were very similar (Table 5.5).

Table 5.5 Reasons for expecting to change jobs and/or employer in one and six months' time, among those who had returned to work at OCS interview

	One month %	Six months %
Current type of work not satisfying	23	27
I don't like my current employer	12	11
The job is ending (redundancy/fixed term)	11	10
The hours are unsuitable	9	6
Health condition makes current type of work difficult	5	8
The work is too physically demanding	5	5
The work is too stressful	5	4
The pay is not sufficient	5	5
The job does not fit training/qualifications	3	4
Health condition would come back/get worse	2	2
I would like more responsibility	2	1
Other answer	27	26
Weighted base	*305*	*339*
Unweighted base	*232*	*259*

It appears that the working conditions for a substantial minority of those who had returned to work were in a state of flux, most likely because they were expecting to resume the responsibilities and hours of their pre-sick leave jobs. Just under half of those who had returned to work were expecting one or more aspects of their job to change in the next month. Most commonly, they were expecting an increase in responsibilities (19 per cent), different responsibilities (15 per cent), increased pay (15 per cent) or hours (nine per cent), or that the type of work would change (14 per cent). Slightly more were expecting changes in six months' time (Table 5.6).

There were no differences in expectations for either one or six months' time between any of the four intervention/control groups or between the three intervention groups and the control group. However, younger respondents expected more change over both time horizons. Only 32 per cent of 17-34 year-olds were expecting **no** changes in six months, compared with 55 per cent of 50-66 year-olds. Those with mental health disorders were more likely to think their type of work would change in six months (21 per cent) than those with an injury (14 per cent) and non-manual workers were more likely to be expecting changes than manual workers.

Table 5.6 Expected changes in their job in one and six months' time, among those who had returned to work at OCS interview

	One month %	Six months %
Responsibilities will increase	19	22
Pay will increase	15	23
Responsibilities will be of a different type	15	17
Type of work will change	14	19
Hours will increase	9	10
Physical demands will increase	9	10
Employer will change	6	11
Pay will decrease	4	5
Hours will decrease	4	5
Physical demands will decrease	3	4
Responsibilities will decrease	2	2
None of these	57	46
Don't know	1	3
Weighted base	*1,738*	*1,737*
Unweighted base	*1,317*	*1,316*

5.3 Expectations of those still off sick or no longer in work

Among those who were still off work sick at the time of the OCS interview, around two-fifths (41 per cent) knew how long their job would be held open for them. Their intervention group made no difference to this, but those working for a private company were significantly less likely to know (34 per cent compared with 46 per cent of public sector workers). Non-manual workers were also more likely to have this knowledge (45 per cent) than those in manual jobs (36 per cent), but this difference just fails to reach statistical significance.

Of those who knew how long their job would be held open, the most common answer was indefinitely (35 per cent). Almost one in five (19 per cent) said it was open only for up to one month and a similar proportion (21 per cent) for up to two or three months. Fourteen per cent expected their job to be open for more than six months, but not indefinitely. The length of time the job was going to be held open did not vary according to intervention or control group. Those judged by the screening to have the highest risk of losing their job seemed to have the least favourable arrangements, with only 29 per cent having their job held open indefinitely (compared with 43 per cent of those with the lowest risk). Although this difference was not quite statistically significant, it does make sense that the longer the job is held open, the lower the risk of losing it.

Most (78 per cent) of those who were on sick leave at the time of the OCS interview had been absent the whole time since they first went off sick from work, and this did not differ between the intervention and control groups. Those who had been off sick longer at the time of screening were significantly more likely to have spent the whole of this period on sick leave (89 per cent of those off for 20-26 weeks, compared with 71 per cent of those absent for 6-12 weeks). Older respondents were also more likely to have spent all of this period on sick leave, as were those with mental disorders (83 per cent), musculo-skeletal problems (80 per cent), or injury (81 per cent), compared with those with other conditions (70 per cent).

Around one-third (31 per cent) of those still on sick leave said that they could do the same sort of work now as they were doing before they went off sick, and half were expecting to return. Combining their answers, it is clear that most of those who could still do the same work were also expecting to return. Only two per cent overall said that they could do the same work, but were not expecting to return (Table 5.7). There were no significant differences between the four intervention/control groups or between the three intervention groups and the control group in views on whether they could do their job now, or in expectations to return to it in the future.

The proportions saying they could either do the same work now (21 per cent) or expected to return to it in the future (23 per cent) were lower for those not in work. Over half (54 per cent) of those out of work could neither do the same work now nor expected to return to it, compared to 31 per cent of those still off sick.

Among those no longer in work, the workplace group were much more likely to say that they could neither do the same type of work nor expected to return to it (65 per cent) than the health (43 per cent), control (51 per cent) or combined groups (57 per cent). The biggest contrast was between the workplace and health groups – only two per cent of the workplace group both could do the same work now and expected to return, compared with 21 per cent of the health group (Table 5.7). However, when the three intervention groups are combined, they do not differ significantly from the control group.

Among those still off sick, those employed in the public sector were more likely to say that they could do the same work now and expected to return (33 per cent) than those working for private companies (19 per cent). Among those not in work, the risk score assigned at screening was linked to expectations. Those with the lowest risk (of losing their job) were most likely to say they could do the same work and expected to return to it (19 per cent), compared to only five per cent of those with the highest scores.

Table 5.7 Ability and expectations of returning to previous type of work, by activity at time of the OCS interview, and intervention group

	Still off sick	Not in work				
	Total %	Health %	Workplace %	Combined %	Control %	Total %
Could do same sort of work *now*	31	29	11	19	23	21
Expects to go back to same sort of work *in the future*	50	36	9	23	23	23
Weighted base	*632*	*110*	*94*	*111*	*103*	*418*
Unweighted base	*486*	*90*	*71*	*87*	*67*	*315*
Can do same work, expects to return	26	21	2	12	13	12
Cannot do same work, expects to return	22	13	5	9	11	10
Can do same work, does not expect to return	2	8	6	6	5	7
Cannot do same work, does not expect to return	31	43	65	57	51	54
DK if expect to return	19	16	21	16	21	18
Weighted base	*633*	*110*	*95*	*109*	*103*	*418*
Unweighted base	*486*	*90*	*71*	*87*	*67*	*315*

Both those off sick and not in work were more optimistic if they had said at screening that they would be able to do their present job in six months time. For example, among those still off sick, 35 per cent could now do the same work and expected to return and 25 per cent expected to return even though they could not do the work at the moment. This compares to 20 per cent and 13 per cent of those who had answered in the negative at screening.

Older respondents were less likely to say they could do their job and less optimistic about their chances of returning, both among those still off sick and those who were no longer in work. Those with a physically demanding job were also less likely to be able to do the job and expect to return (20 per cent of those off sick and nine per cent of those not in work) than those with a less physical job (38 per cent and 25 per cent respectively).

Health condition also made a difference to whether or not respondents felt able to do the same work as before. Among those off sick, people with mental or behavioural disorders were about twice as likely to say that they could still do the same work and expected to return (44 per cent) as those with musculo-skeletal problems (23 per cent) or injury etc. (20 per cent). A similar pattern was seen among those not in work (Table 5.8).

Table 5.8 Percentage of OCS respondents saying they could do the same sort of work now as before going off sick, by current activity and main health condition at screening

	Mental/ behavioural (with others) %	Musculo-skeletal (with others except mental) %	Injury/ poisoning (with others except mental/ musculo-skeletal) %	Other conditions only %	Total %
Still off sick	44	23	20	32	31
Weighted base	*172*	*224*	*76*	*178*	*650*
Unweighted base	*135*	*174*	*60*	*131*	*500*
	%	%	%	%	%
Not in work	33	10	27	19	21
Weighted base	*115*	*154*	*47*	*118*	*434*
Unweighted base	*90*	*117*	*35*	*87*	*329*

Among those who were expecting to go back to their previous type of work, those who were still off sick were expecting to return sooner than those now out of work. Over half (56 per cent) of those off sick thought they would return within three months or less, compared with 33 per cent of those out of work. Intervention group made no difference to expectations for either group.

The main reason given by both those still off sick (48 per cent) and those out of work (56 per cent) for not expecting to return to their previous type of work was that their health condition would make this difficult (Table 5.9). Thus it seems that health was a more prominent barrier to returning to the same type of work for those who had not returned to work at all than it was for those who had already returned to different work (see previous section). The reasons were not affected by intervention group.

Table 5.9 Reasons not expecting to return to previous type of work, by current activity

	Still off sick %	Not in work %
Health condition makes current type of work difficult	48	56
The work is too physically demanding	18	13
Health condition would come back/ get worse	13	5
The work is too stressful	11	12
I don't like my current employer	1	3
That type of work not satisfying	1	3
That type of work unavailable	1	4
The pay is not sufficient	-	-
The hours are unsuitable	-	2
Would like more responsibility	-	1
Company has folded	-	1
Other answer	10	9
Weighted base	*209*	*251*
Unweighted base	*162*	*191*

Those not expecting to return to their previous type of work were asked whether they expected to go back to work at all in the future. Most were expecting to, but this was higher among those who were still off sick (77 per cent) than those out of work (67 per cent). Intervention group was not linked to expectations, but for both those off sick and out of work, age made a big difference. One hundred per cent of both groups aged 17-34 expected to return to work in the future, compared with 60 per cent of those off sick aged 50-66 and 47 per cent of this age group not in work.

Among those not in work (and not expecting to return to their previous work), those with mental health conditions were more likely to expect to return to work at all (88 per cent) than those with muculo-skeletal problems (55 per cent) or other conditions only (60 per cent). Those with physically demanding jobs were also less likely to expect to return (61 per cent) than those with less demanding occupations (81 per cent).

For the majority of those who were not expecting to return, their health was the reason for this, mentioned by 71 per cent of those still off sick and 82 per cent of those not in work.

Table 5.10 summarises the expectations regarding returning to work of those still off sick or out of work. The two groups differ significantly with those still on sick leave much more likely to expect to go back to the same type of work in the next few months (27 per cent) than those not in work (seven per cent). The latter are more likely to expect to go back to different work over a longer time scale or not to expect to return at all. Those who have lost their jobs are clearly much further from the labour market than those whose jobs are still open.

Among those still on sick leave, their intervention group makes no difference to expectations summarised in this way. However, for those not in work, workplace group members seem to be further away from going back to work as fewer are expecting to return to the same job or within a shorter space of time. When the three intervention groups are combined, they do not differ significantly from the control group.

Respondents who were not in work were asked to what extent they were engaged in looking for paid work. Overall, 29 per cent said they were looking at present, and this was not affected by intervention group. Men were more likely to be looking (35 per cent) than women (24 per cent) and younger respondents more likely than older ones. Those who had worked in the public sector (38 per cent) had a higher rate of job-search than private sector workers (18 per cent). Health condition also made a difference as those with mental health conditions were more likely to be looking (38 per cent) than those with musculo-skeletal problems (23 per cent). Those who had had a physical job were also less likely to be looking for work.

Table 5.10 Summary of expectations of those still off sick and not in work

	Still off sick	Not in work				
	Total %	Health %	Workplace %	Combined %	Control %	Total %
Expecting to...						
...return to same work 1-3 months	27	11	2	8	7	7
...return to same work 6+ months	9	13	4	10	10	9
...return to same work dk/depends when	12	8	2	4	7	5
...return to different work 1-3 months	14	18	15	18	17	17
...return to different work 6+ months	11	17	30	18	15	20
...return to different work dk/depends when	12	8	13	19	12	13
...not return to work at all	6	18	16	11	17	15
...don't know if will return to work at all	10	8	18	12	15	13
Weighted base	*666*	*120*	*100*	*114*	*106*	*441*
Unweighted base	*510*	*97*	*76*	*91*	*69*	*333*

6 Costs

This chapter builds a picture of the costs of providing Job Retention and Rehabilitation Pilot (JRRP) services, as measured by the monetary value of resources that providers and the Department for Work and Pensions (DWP) invested in the four intervention models. The goal is to quantify in pounds the value of all the resources used in service delivery for a defined set of clients, as well as itemise the costs of marketing the service and bringing clients into the programme. Over the period that the trial ran, the four service providers invested a great diversity of resources in provision of the service to trial entrants. A representative 'slice' of their cost experience, from the six-month interval of stable running between January and June 2004, is examined here. The story this tells about provider operations and the level of social investment needed to deliver JRRP-type services will be valuable to policy makers in formulating future policies and programmes in this area.

The chapter begins by explaining the 'return on investment' approach to assessing the worth of any social intervention and indicating how this translates to the JRRP intervention (see Section 6.1). Next, we present the framework used to examine costs and outline the different cost components considered (see Section 6.2). Figures are then presented on costs of service delivery by intervention model and, separately, expenditures by the providers on marketing and evaluation support (see Section 6.3). A subsequent section (see Section 6.4) examines how costs divide between labour and non-labour inputs and between in-house and outsourced resources. The centralised costs of the intervention are described in Section 6.5, and the chapter concludes by relating service delivery costs to the number of clients served, total months of services provided, and accomplishments of the pilot in terms of its primary policy goal, successful return-to-work outcomes (see Section 6.6). Appendix B describes in detail the cost information used for the analysis and how it was collected from the JRRP service providers and DWP Jobcentre Plus staff.

6.1 Return on investment and the importance of cost outcomes

Economic costs matter to the success of any social policy. More money spent (i.e. more resources invested) may enhance what an intervention accomplishes and

it undoubtedly raises the 'price' of a programme that society hopes to recover through the benefits it generates. The ultimate yardstick of whether society gains from an active labour market policy is the return realised from that investment. In economic terms, the relationship between resources invested and benefits obtained is best measured using cost-benefit analysis, a tool that compares the social benefits of any intervention measured in pounds to the social costs of that initiative also measured in pounds. For JRRP, the largest intended benefits are a higher return-to-work rate and enhanced participant earnings, while the largest cost arises in procuring the skilled labour and other inputs needed to deliver the service. The hope is that benefits exceed costs once all the economic consequences of a policy, both gains and losses, are translated into monetary units and compared.

The appropriate measure to use for this purpose, for both benefits and costs, is the difference between observed outcomes for the pilot and what those outcomes would have been absent the JRRP intervention. For the major client benefits and many of the costs the additionality caused by the intervention is measured by the difference between what happens to individuals randomised into the intervention and those placed in the control group – i.e. by the estimated *impact* of the pilot. From earlier chapters we know that the JRRP pilot produced only extremely small impacts in domains pertinent to social benefit, such as increased earnings. In particular it did not noticeably increase the return-to-work rate of any intervention group, health, workplace, or combined. Since it is obvious from figures presented below that substantial resources were invested in delivering the service 'net benefits' of the pilot – benefits minus costs – must have been negative. This implies that, in economic terms, the interventions tested in the JRRP trial did not produce sufficient value to justify their costs. Sadly, no in-depth examination of individual benefits and costs is needed to firmly establish this conclusion.

However, it remains important to understand the costs incurred in delivering the intervention, for several reasons. The first is simple accountability: the Government deserves to know how the funds it provided to the providers translated into resources invested in service delivery. Second, it may be that other active labour market policies targeted on off-sick workers will be considered in the future, hoping to find one that does have positive impacts on employment. What it costs to deliver such interventions in general will figure importantly in those debates and decisions, a level of resource investment best measured by providers' actual costs rather than the number of pounds DWP issued as payment to the providers over the course of the pilot.

A third consideration is the *relative costs* of the three different intervention models: does an approach that combines health and workplace assistance cost appreciably more than assistance strategies that employ just one of these two elements?; which of the two specialised approaches is most costly to implement, workplace or health? There is also something to be learned by examining *how* providers brought together different inputs to create services for each of the distinct intervention models – how much money was devoted to labour inputs as opposed to equipment and supplies?;

what share of resources was supplied internally within the organisation and what share was outsourced from vendors? Finally, did resource use and costs align fairly closely among the four different provider organisations involved in the pilot, or were there important variations – the latter implying that 'best practice' strategies for attaining the return-to-work goal are quite varied among provider organisations and hence likely still in their formative stages.

It is important to keep in mind when considering costs from the pilot experience that JRRP was indeed a pilot. We would not expect an ongoing programme delivering similar services to a similar population to function in tight alignment with what the RCT entailed operationally and in resource terms. For one thing, the pilot was a randomised field trial established for research purposes, implying greater costs for client outreach (since prospective participants were not told which intervention model they would receive, or even whether they would get any assistance at all), intake (due to the special procedures used to guard against contamination of the experiment and explain the trial nature of the service to clients), and possibly service delivery (since provider organisations for an ongoing programme likely would be asked to operate only a single intervention model rather than three interventions in parallel, something that left each operating at a smaller scale and put heavier demands on project managers and case manager supervisors, two factors likely to increase costs). Efforts providers put into supporting the evaluation, such as explaining their operations to researchers and helping to collect client data for the evaluation team, clearly do not reflect costs one would expect in an ongoing programme. For these reasons, both marketing costs and evaluation costs are reported separately from the costs of service delivery. Even service delivery costs may not generalise to future efforts of this sort following a more complete 'bedding in' of the service delivery process. This may be the case particularly because of the lower-than-expected scale of provider operations even during the January to June 2004 period, due to slow intake. Costs need to be interpreted in light of the difficulties encountered reaching the planned and resourced scale of client caseloads even in the relatively mature stage of the pilot in 2004.

6.2 Framework for analysis

Subject to all of these caveats, the goal of the cost analysis is to provide information on the full costs of service provision during a period of stable operations, and to do so in a way that is as comparable as possible across service providers and the three intervention models. In carrying out the research, the first step in this process was to identify a period of time in which costs could be reliably measured – the 'standard running period' described below. A series of discrete categories of costs were then established to aid in data collection, better understand total costs, and examine how providers combined different types of resources – e.g. labour, equipment, supplies – to create the different intervention models.

6.2.1 The 'standard running' period

To best inform policy, the costs analysed should, as much as possible, reflect the standard costs of running a JRRP service on an ongoing basis. The criteria used in deciding the best period for which to collect data were, therefore, that it should encompass a stable period of operations and that all relevant data would be available for the period. The period of time that best fit these criteria was the six months from January 2004 to June 2004, an interval starting nine months after the trial was launched in April 2003 and ending six months before wind-down began in January 2005. The factors considered in deciding that this six-month period was the most appropriate interval were as follows.

From discussions with service providers it was clear that the initial period of service provision entailed extra costs for a set-up phase. This had been anticipated and in practice was deemed to include costs sunk into acquiring accommodation and the recruitment of staff, as well as other one off purchases, such as software, which would be used throughout the whole trial.

Each service provider reported that during the first months of the trial their staff were providing services to a caseload of clients which was less than had been anticipated in setting up their operations. This was due to a combination of the uncertainty about the size of the client base in the first place and the marketing taking time to reach its full recruitment potential as would be expected from any campaign. Considering that the rates of enrolment might be different for each provider it was even more important that a suitably long period of time was left between the start of the trial and the cost data collection period in each instance.

In respect of the lower than anticipated number of clients during the set-up phase, we knew there would be low levels of enrolment in relation to the resources allocated to that period. This meant that the cost per client was expected to be higher for that period than for the rest of the running of the trial, and higher than one would expect in an ongoing service perhaps throughout the trial. The first nine months of the pilot were found to include particularly high levels of set-up costs and low levels of clients. These 'set-up' months prior to January 2004 were therefore not considered for inclusion in the 'standard running' period.

The rest of the period of operations could have been suitable for data collection, and a minimum of four to six months needed to obtain meaningful measures. Accounting records are likely to contain considerable month by month variations in 'money out the door' that do not tie closely with client flow and the scope of services delivered in any particular one or two month period. Over a longer interval, these fluctuations were expected to even out – with six months felt to be the most assured duration for neutralising any transitory ups and downs.

From this point, it was decided that only the first six months of stable operations would be included in data collection. The reasons for this were practical as well as methodological. It was important to collect resource and cost information from service providers while they were still operating – i.e. prior to the end of pilot operations – since after that time the providers would no longer exist and the

appropriate staff would not be available to complete cost data proforma. Similarly, the data had to be verified[16] and research queries resolved while appropriate staff were still available to inform that process.

In the final months of operations the services would be winding down and we anticipated that there would possibly be a reduction of staff and facilities, or a change in the ratio of clients to staff and other aspects of capacity. The effects of wind-down on the costs per client would have been similar to those of the set-up period, distorting the picture of real costs under a period of stable operations. Within the six months of standard running from January to June 2004 , services had not begun to wind down; indeed, they were still six months away from the start of wind-down in January 2005. While the second half of 2004 might have reflected further bedding in of the service, there were concerns that the effects of wind-down might begin before the end of the year (e.g. staff giving notice early) and that data collection beginning in early 2005 would still be ongoing when provider personnel essential to obtaining accurate information – project managers and finance officers – left their positions.

Still, it is important to remember that even the January to June 2004 interval may have been subject to unusually high service delivery costs per client because of the potentially lingering effects of the initial build-up of staff and resources above the needed capacity. While providers made clear that much less excess capacity remained by this point (due to growing caseloads and streamlining of staffing and operations), some elements may have remained.

6.2.2 The range of costs covered

As described earlier we needed to ensure that the data on costs was comprehensive for the standard running period. This is best accomplished by breaking out the major types of resources used by providers into separate reporting categories, to assure that nothing is omitted and give analysts the ability to judge the reasonableness of reported costs by comparing one category to another. The categories were defined according to a paradigm of service provision to cover all costs, as:

1. full labour costs for all staff working within the JRRP unit;
2. labour costs for management and other staff supporting the pilot from outside the JRRP unit;
3. non-labour costs for office space, furnishings, equipment, and operating expenses and materials, excluding outsourced resources;
4. outsourced services purchased from consultants and subcontractors;
5. no cost or reduced cost services and support contributed to JRRP from community sources.

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[16] This included: cross-item and cross provider comparisons for completeness of data; range checks; and a matching exercise to our knowledge of service provision from visits to service provider units. See Appendix B for details.

Details of the items covered by each of these reporting categories are given in Appendix B along with proforma and instructions used to collect the data.

Individual providers also incurred costs to market the service and support the evaluation. Rather than ask the providers to report each of the above cost items net of (i.e. having subtracted out the cost of) resources used in marketing and evaluation support to focus on service delivery costs, it was judged safer to push for exhaustive reporting of all five categories of expenditure before then separately reporting resources used to support marketing and evaluation. This created two more 'sheets' for the proforma used to gather expenditure information:

6 marketing costs;

7 costs induced by the evaluation.

Item by item information was required on these two sheets just as for the first five, and for each item providers were asked whether it had been included in the broader totals reported on sheets 1 through 5. Those that had were then subtracted from the sheet 1 through 5 aggregates to obtain spending for service delivery alone. This approach also allows us to examine how large the resource requirements were for outreach and evaluation support once the pilot was into a stable running period.

Service providers detailed all of their costs for these seven categories from January to June 2004. The categories appear to have worked well for reporting purposes, particularly given the thorough written instructions and opportunities for questions and clarifications provided with them. Almost all categories proved important and seems to have been grasped well by the respondents, though few costs were found in the fifth category concerning donated or reduced-cost resources received from the community.

6.2.3 Regrouping costs to analyse provider expenditures

The various reporting categories were then regrouped to examine how providers approached specific resource utilisation decisions. First, labour costs were all gathered in one place, for all internal and contracted staff working directly on any part of service delivery over the period, including management, administration, case co-ordination and clinical staff. Figures were based on full payroll costs for internal staff, including salaries prorated to the number of hours worked on the project and non-salary payroll costs such as fringe benefits and employer contributions to pensions and government schemes.

'Non-labour costs' constituted the remainder of direct service delivery costs exclusive of marketing and evaluation support. These were diverse and broadly speaking covered costs of accommodation, office space furnishings, equipment and supplies, tests and other discrete services contracted out, and incidental expenses. Accommodation covered rent, council rates, insurance and utilities, as well as management and out-fit of the building where applicable. All content of the office space including any electronic goods, stationary and the like, equipment and

medical supplies were included in the costs counted. Items with a useful life longer than six months, including items purchased prior to January 2004 but still in use, had their costs allocated evenly by month and six month's worth included. Catering, postage, supervision, hospitality, training and travel costs that were charged to JRRP between January and June 2004 and not on the payroll were included under incidental expenses.

'Out-sourced services' were isolated to examine the balance between in-house and external resources in delivering each of the three interventions. Labour and non-labour costs were combined for this purpose. Out-sourced services included items purchased from vendors (e.g. therapeutic treatments) and labour costs for subcontractors and consultants outside the main provider organisation.[17] They also included fees to recruitment agencies and non-resident IT specialists. Everything else used to deliver services, exclusive of marketing and evaluation costs, constituted 'in-house' resources – primarily staff labour and materials and supplies provided by the parent organisation. If outside organisations gave time or resources to assist the trial in either operations or service provision at no costs or a reduced price, the real costs – i.e. the market valuation – of the donated portion were counted as part of the out-sourced cost total. In practice only one consortium received such a donation and the total value/cost went solely to marketing.

The final two categories were 'marketing' and 'costs induced by the evaluation'. These were itemised to complete the picture of all costs and as a check that these types of costs were not included under the other categories. The marketing costs – which often consisted of mailing supplies and display stands – were amortised to just the six months of the reporting period. Costs induced by the evaluation aspect of the trial covered instances where staff spent time on tasks supporting the JRRP research (e.g. data collection, explanation of trail procedures), or where they had attended meetings with evaluation staff including any related travel.

6.3 Providers' investment in the interventions over six months of 'standard running'

All the costs of service delivery, exclusive of marketing and evaluation support, were itemised as belonging to either the health model , the workplace model, or the combined intervention model, or the proportion of these items spent on each of the intervention models stipulated. Using this information, the total cost of service delivery over the six-month reporting period was determined for each of the intervention models.

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[17] ATOS and First Assist, the organisations providing workplace and health interventions for the Human Focus consortium, were not considered 'outside the main provider organisation' for this purpose since they were an intrinsic part of that team.

6.3.1 Costs of service delivery by intervention model

In total the amount spent on service provision by all four providers together over six months was £1,179,837, or just under £200,000 per month. As we shall see later in the chapter, this translates into £1,403 per client, a relatively modest investment in client advice and treatments which may have contributed to the lack of impacts found in previous chapters. This reflects considerable variation by provider, with the highest-spending provider spending nearly twice the amount of the lowest-spending: just over £400,000 over six months (£67,000 per month) compared to a bit more than £210,000 over six months (£35,000 per month). Costs by intervention model and provider, for the full six-month period, are shown in Table 6.1, where the providers have been anonymised through generic references as Provider 1, 2, 3 or 4.

Table 6.1 Total pounds spent, January – June 2004, by intervention model and provider

	Health	Workplace	Combined	All intervention models
Provider 1	£19,041	£40,412	£248,573	£308,026
Provider 2	£130,260	£106,145	£164,621	£401,026
Provider 3	£91,726	£75,157	£91,519	£258,402
Provider 4	£73,982	£41,780	£96,620	£212,382
Average of all providers	£78,752	£65,874	£150,333	£294,959

On average providers spent most over the six-month period on the combined model (£150,333 per provider) and least on the workplace model (£65,874 per provider). The trial design allocated equal numbers of clients to the different intervention models. The cost for the health model per provider was closer to that of the workplace model (£78,752), and the sum of these two approaches cost less – £144,626 – than the combined model all on its own. This suggests that the combined model delivered as much health-focused assistance and as much workplace assistance as the individual models that specialised in these areas. While we have not looked yet at how the money was spent, nor checked administrative records documenting services received for individual clients, it is possible that the combined model doubled the resource intensity of the specialised models by applying *both* the full health intervention and the full workplace intervention to a single set of clients.[18] That being the case, it is particularly disappointing that impacts were no greater for this stepped-up strategy than its individual pieces (though one might have predicted that if neither the workplace intervention nor the health intervention had any effect on employment retention, nor would their sum even when both are applied in full measure). As noted below, spending per client for the combined model was £2,125 (see Section 6.6.2).

[18] This statement reflects that equal numbers of clients were served under each of the three models.

The figures just cited reflect the experience of the average provider in allocating funds between the three service models. They hide the wide range in relative spending on the different models by individual providers. As can be seen in the exhibit, one provider (1) expended almost all of its resources on the combined model, with the £248,573 invested there constituting over 80 per cent of the total even though (as with all providers) an equal number of clients was assigned to each intervention model. In contrast, the other providers spent 35 to 45 per cent of their resources on the combined model, more than the 33 per cent that would have occurred with absolutely uniform spending per client but not a lot more. So the hypothesis that the combined model, in resource terms, represented the sum of the other two models is refuted in most instances, though provider 4 comes close to fitting that pattern with nearly half its funds (45 per cent) allocated to the combined approach.

The cost of the workplace model was lower than the health model for three of the four providers. Workplace services may have cost less per client to provide since they did not involve the types of sensitive technical equipment (e.g. MRI scanning) that health services may entail. Within the workplace model the difference between providers was less marked than it was within the other two models. This again is perhaps not surprising, since highly expensive medical procedures – available to both the other models – create the greatest potential for costs to vary across providers should utilisation of these services vary a good deal.

6.3.2 Expenditures on marketing and evaluation support

The providers also spent a good deal of money on activities other than service delivery in the January to June 2004 stable running period. We do not feel that these costs, for marketing the service and supporting the research component of the trial, project meaningfully when contemplating the possible costs of an ongoing programme to deliver JRRP-type services. Certainly the research costs would not apply at all, and marketing costs could be quite different for reasons discussed elsewhere in this chapter. Still, the ratio of these activities to the core service delivery efforts of the providers, in monetary terms, is of some interest.

Table 6.2. shows the total amounts spent on service provision, marketing and evaluation for each intervention model, averaged across providers.[19] The ratio of marketing costs to service delivery costs, and of evaluation costs to service delivery cost, is also shown along side the pound amounts. The average costs of marketing and evaluation were low relative to service provision costs, with a ratio of about 1/8 in each case (0.124 for marketing, 0.132 for evaluation). This was expected since in the main resources for marketing were spent centrally by DWP and most resources for the evaluation consumed by the contracted research team. Still, these figures show that the individual provider organisations made important contributions to

[19] Marketing costs have been reduced to three-quarters of their reported levels throughout this analysis to remove the costs of recruiting control group members.

selling and studying the pilot during the period of stable operations. Likely, these costs were even higher in earlier months of the trial, though we have no measures of provider expenditures prior to January 2004.

Table 6.2 Marketing and evaluation spending by the average provider relative to service delivery costs, January – June 2004, by intervention model

	Health	Workplace	Combined	All intervention models
Service Delivery Costs	£78,752	£65,874	£150,333	£294,959
Marketing Spending*	£12,215	£12,215	£12,215	£36,645
Marketing/Service Delivery	0.155	0.185	0.081	0.124
Evaluation Spending	£12,997	£12,997	£12,997	£38,991
Evaluation/Service Delivery	0.165	0.197	0.086	0.132

* Figures shown for marketing are three-quarters those reported by providers, removing resources needed to recruit members of the control group.

Table 6.2 also shows the costs of marketing and evaluation support broken down by model. The costs of marketing and evaluation are split evenly across the three models. This is because the interventions were not 'sold' by model in the advertising, but as an overall package of return to work services for people off sick from work. Similarly, evaluation costs were not specific to any service model; all parts of the research involved all three models equally and therefore any costs incurred by the providers for this purpose have been distributed evenly across models.

6.4 Mix of inputs used by providers for the different intervention models

Returning to the costs of service delivery, the different providers had the opportunity to mix in-house resources with outsourced services in delivery the interventions, and to combine labour hours and other inputs in varying combinations. Each of the providers did this somewhat differently. Important variations also arose across the health, workplace, and combined intervention models. We examine first the use of labour and non-labour resources, then turn to in-house provision versus outsourcing as ways to obtain these resources.

6.4.1 Labour versus non-labour inputs

Detailed reporting of costs by type allows us to examine the amounts spent on labour and non-labour resources for each provider and each of the intervention models. Labour costs included both internal staff costs and contracted-out services that involved primarily professional time rather than materials or technology. So, for example, where services from an IT consultant or cognitive behavioural therapist were purchased from the outside, these are classified as labour costs. Non-labour

cost are all other costs not so classified, excluding marketing costs and resources that went toward supporting the evaluation. Outsourced therapeutic equipment and worksite accommodations are examples of items classified as non-labour, since they involve primarily the procurement of materials and technology rather than professional services.

As can be seen from Table 6.3, most costs of service provision were labour costs, 63 per cent overall. The other 37 per cent of the costs were for materials and other non-labour inputs.

Table 6.3 Labour and non-labour spending on service delivery, January – June 2004, percentage by intervention model

	Health	Workplace	Combined	All intervention models
Labour	65%	74%	58%	63%
Non-Labour	35%	26%	42%	37%
All Service Delivery Costs	100%	100%	100%	100%

Service delivery was labour intensive for all of the interventions to varying degrees. The workplace approach spent the highest proportion on labour, nearly three in every four pounds. Next most labour intense was the health model, with two out of three pounds spent on personnel inputs. Somewhat over half of all spending for the combined model went to labour inputs. As previously stated, we had particularly expected health service costs to include expensive medical equipment and diagnostic tests, leading to a larger share spent on non-labour costs. This proved the case compared to the workplace model but not the combined intervention. This is consistent with earlier analyses showing the combined model to have delivered a substantial amount of health-related services as well.

When expressed in pounds, the amount providers say they spent on labour tracks well with the amount of support, in hours, clients reported receiving from each of the intervention models. For the average provider, Table 6.4 shows labour spending for each model during the six-month cost reporting period along with hours of support (workplace and health support combined) per client received by participants in each model as reported on the OCS. The health model's labour costs for service delivery in pounds constituted almost exactly the same percentage of all labour costs as did its hours of client support, 27 versus 28 per cent. The workplace model spent somewhat more on labour than its share of support hours would suggest (26 versus 19 per cent) and the combined model somewhat less (47 versus 53 per cent).

Table 6.4 Allocation of labour costs (for service delivery) and hours of support per client for the different intervention models

	Health	Workplace	Combined	All intervention models
Labour costs	£50,970	£48,455	£86,640	£186,065
Per cent by model	27%	26%	47%	100%
Hours of support per client	13.9	9.4	26.3	49.6
Per cent by model	28%	19%	53%	100%

The labour/non-labour mix is remarkably similar for all but one of the individual providers, with percentages of labour between 72 and 77 per cent of all service delivery costs in three instances (not shown in tables). Provider 1, however, produced its services incurring just 32 per cent of all costs on labour. This results from being unusual in both labour and non-labour resource use; its labour costs in pounds are well below those of the next lowest provider (and less than one-third those of the most labour-intensive provider) and its non-labour expenditures more than twice as high as all others. The labour/non-labour balance is most unusual for the health intervention (just 20 per cent labour) but tilts heavily toward non-labour for all three interventions. The reasons for this emphasis are unclear.

6.4.2 In-house provision versus outsourcing

The providers also itemised costs in a way that allows us to distinguish between resources accessed internally within the organisations and those purchased from outside vendors.[20] So, for example, cognitive therapy services were sometimes purchased from external sources while other providers included cognitive therapists as part of their internal staff. Other resources that sometimes came from within the provider organisation and in other instances were procured through outsourcing included physiotherapy, therapeutic equipment , IT support, and staff training.

Table 6.5 shows that the great majority of resources used for service delivery were procured in-house, three of every four pounds overall and four out of every five pounds for the workplace and combined interventions. Consistent with its use of costly medical procedures, a somewhat lower share of pounds for the health intervention were spent in-house, and fully one in three paid out to external suppliers. This heavy reliance on internal resources was to be expected; each provider set up a service provision unit within its organisation to house most of the staff who would contribute to pilot and to serve as a venue for delivering interventions where feasible. Some of the outsourced costs went to obtaining services involving specialised equipment off site (e.g. MRI scans) while another portion paid for labour inputs that were not part of the skill base of the in-house JRRP unit (e.g. occupational physicians).

[20] Resources obtained internally at ATOS and First Assist, the organisations providing workplace and health interventions for the Human Focus consortium, were considered internal costs for this purpose.

Table 6.5 In-house and outsourced resources used for service delivery, January – June 2004, percentage by source and intervention model

	Health	Workplace	Combined	All intervention models
In-house	67%	79%	79%	76%
Outsourced	33%	21%	21%	24%
All service delivery costs	100%	100%	100%	100%

When the in-house versus outsourced mix is examined for each separate provider (not shown in the tables) the picture is similar across providers. Most resources come from within the organisations involved, from 66 to 86 per cent depending on the provider. The provider most dependent on external suppliers tilted particularly in that direction in delivering the combined service, with 39 per cent of the resources coming from outside the organisation. The provider with the greatest reliance on internal resources also evidenced this tendency most strikingly for the combined intervention, obtaining 91 per cent of all inputs in-house.

6.5 Centralised costs of the intervention

As well as the costs service providers incurred themselves, resources provided centrally were essential to bringing clients into the pilot and serving them. These additional costs need to be considered for the full financial picture of the intervention to become evident, a first step toward approximating what a JRRP-like programme would cost if rolled out nationally. Four elements are involved, and have been reported to the evaluation team by DWP:

- £150,874 over six months to run the telephone contact centre that screened potential participants from all provider sites and dealt with follow-up inquiries from clients;
- £40,293 in Jobcentre Plus staff costs over that same period to oversee the intervention, primarily used (by the time stable running had been reached) for contract oversight;
- £5,769 in Jobcentre Plus travel expenses incurred in the course of contract administration, principally to make monthly visits to each of the provider organisations;
- £180,000 in marketing expenses used to promote the pilot through centralised means during its stable running phase.

Overall, £376,936 is estimated to have been spent by the Department on these centralised functions between 1 January and 30 June 2004. If marketing costs are removed, as was done above for figures on provider expenditures, and one-quarter of contact centre costs are attributed to the need to enrol a control group and also

removed, enrolment and service delivery for roughly 840 clients (see discussion of per-client costs below) entailed a total investment of £1,339,055: £1,179,837 by providers and £159,218 centrally.

In practice, if a JRRP-like service were to be rolled out the as a national programme there would be certain practical differences from the pilot that would affect the level of centralised costs. The pilot itself was a research trial in which very particular eligibility criteria were applied, including verification that home and work addresses are within the pilot's operating areas. In a national service the number of questions asked for this and other purposes would be reduced and there might also be economies of scale in marketing and centralised intake which would further lower the costs of central functions. For example, marketing costs presumably would decline on a per client basis when *all* eligible clients who seek services are enrolled in the programme, rather than just three in four as during the pilot (due to the creation of an unserved control group comprising one-fourth of all study subjects). This would reduce marketing costs for both providers and DWP by approximately 25 per cent reduction and bring the full costs of outreach, enrolment, and service delivery to over six months to £1,474,055.

6.6 Spending per unit of input and output

The overriding question for a return-on-investment assessment of JRRP is whether the level of expenditure just documented can be justified by the results produced by the pilot intervention. Spending per unit of output – where 'output' constitutes something of value to society – can be defined in several ways:

- pounds spent for each client served;
- pounds spent for each month of JRRP services provided;
- amount expended for every successful return to work achieved; and
- amount spent for each *added* return to work achieved compared to what would have happened without the intervention.

This final section of the chapter takes the measure of these factors. As noted at the beginning, the ultimate yardstick of what society gains from any active labour market policy – a cost-benefit analysis comparing social benefits to social costs – became unnecessary in the absence of evidence of benefits when measured as *additional* returns to work achieved and movements onto benefit averted. In the absence of a quantifiable impact in these areas, the costs of service delivery cannot be seen in relation to its benefits since there were none of the latter. However, policy is still informed by looking at costs in relation to outputs based on the four measures listed above, bearing in mind again that these may not reflect long-run steady state for an ongoing national programme if some amount of 'bedding in' and/or excess capacity costs remained in play during the stable running reporting period.

6.6.1 Computing the number of clients and active client months represented by the cost data

We begin by looking at costs in relation to the number of people taken onto the caseload during the six-month steady running interval and the total number of client-months of service delivered over that period (i.e. the number of clients actually served during each month of the interval added up to a total for six months). Since the pilot programme had a diverse range of service types within each intervention model, the different types of assistance offered to clients are assessed as a whole service. This is described as a unit of activity and allows meaningful assertions about the costs of the delivery for very varied caseloads based solely on the scale of operations assumed.

Costs incurred in the January to June 2004 period and clients served over that interval do not line up easily, yet must be related if costs per client and per successful return to work are to be calculated. The difficulty is that some of the clients served in this six-month window will have entered the trial prior to January 2004, while services after January will in some instances extend beyond the June 2004 cut-off of the cost data. To get past these limitations, we assume that the funds expended in the six-month window to deliver services to (i) new trail entrants plus (ii) clients enrolled previously but still served in January 2004 and beyond equal the amount needed to serve just the new entrants over their *full stay* in the programme. This assumption is valid if the amount spent on new entrants *after* June 2004 equals the amount spent on the individuals carried forward *into* the cost measurement period from late 2003. The most important requirement for this to be the case is that the *number and timing* of trial entries during the consecutive six-month periods July-December 2003 and January-June 2004 be roughly the same. It is also necessary that the nature and duration of the services provided by the pilot remained similar for both cohorts of clients. We were able to confirm the former correspondence using enrolment figures from the two periods broken down by provider and model,[21] and have reason to think that the latter will be approximately true in the stable running period chosen for the cost analysis.

Total active client months during the January-June 2004 period are in theory a more accurate portrayal of the amount of services delivered, rather than the count of the number of individual clients served. The duration of pilot involvement – the number of months during which JRRP services are received – will no doubt differ somewhat among providers and between intervention models. Presumably, the resources needed to deliver employment retention services scale up or down according to the length of time a client draws of the programme's support. We can count the number of clients actively receiving services during each month of the January-June 2004 period, by provider and intervention model, using provider records of when each

[21] That is, the number of clients each provider enrolled into its different intervention models in the January-June 2004 period roughly equalled the corresponding number for the July-December 2003 period.

assigned client consented to have her/his services begin and the subsequent date at which her/his services ended.[22] These monthly totals were then summed across six months to get the total months of client services represented by the cost data.

6.6.2 Cost per client and per active client month

As noted earlier, the model-level breakdown of clients is a precise three-way split, since the randomisation assigned one in four people to each model (and the fourth to the control group). For each model, 316 people were randomised during the January-June 2004 period. In total, there were 841 individuals assigned to a treatment group who consented to be part of the study for the three models combined. Dividing this number into the £1,179,837 spent on service delivery over this period, the average cost per client of the JRRP intervention was £1,403. As shown in Table 6.6, this figure was substantially higher for the combined model, £2,125 (£601,334 divided by 283 consenting clients). Consistent with the overall spending levels examined above, cost per client for service delivery was much lower for the health model, £1,098 (£315,009 divided by 287 consenting clients), and lower still for the workplace model, £972 (£263,495 divided by 271 consenting clients). We know from earlier analysis that the substantially higher cost of serving clients in the combined intervention resulted from a near doubling of case manager support hours delivered and a heavier than usual reliance on non-labour inputs including expensive medical tests and procedures.

Table 6.6 Provider spending per client for service delivery, January – June 2004, by intervention model

	Health	Workplace	Combined	All intervention models
Spending per client consenting to inclusion	£1,098	£972	£2,125	£1,403

The same pattern is evidenced when we divide service delivery costs by months of active client service over the January-June 2004 period. Table 6.7 shows the result of this calculation, along with the number of active client months for each of the intervention models and overall. Because the typical client consenting to inclusion in the study spent about 5.8 months actively receiving services between January and June 2004, provider spending per active month is about one-sixth the overall spending for each client. Consistent with the amount of money spent on each model, participation was somewhat shorter for workplace clients than for any other group and longest for combined clients. This resulted in an average cost for provider service delivery of £247 per active case month for the three interventions combined, with substantially higher costs for the combined model (£354) and lower costs for the health model (£191) and the workplace model (£183).

[22] No months were counted for clients assigned to the intervention samples who never consented to the research trial's rules and hence never received any services.

Table 6.7 Provider spending per active client month for service delivery, January – June 2004, by intervention model

	Health	Workplace	Combined	All intervention models
Spending per active client month	£191	£183	£354	£247
Active client months	1,645	1,442	1,699	4,786

As with costs of service precision overall, we do not know to what extent these per-client and per-month costs were pushed upward by continued 'bedding in' and capacity rescaling of the service, though they may have been. The average cost per client within each of the intervention models varied widely across providers. The range was greatest for the health intervention, from £198 to £1,994 per client depending on the provider, as shown in Table 6.8. Service delivery costs per client were almost always lower than this for the workplace intervention (with Provider 1 the exception) and higher for the combined model (with Provider 3 the exception). The provider with the lowest per client costs overall, Provider 1, also had the greatest variation in per client costs across models, delivering both the lowest-cost intervention of any provider and model (£198 per client for the health model) and the single most expensive intervention (£2,536 per client for the combined model).

Table 6.8 Provider spending for service delivery per client consenting to inclusion, January – June 2004, by intervention model and provider

	Health	Workplace	Combined	All intervention models
Provider 1	£198	£454	£2,536	£1,088
Provider 2	£1,670	£1,434	£2,166	£1,759
Provider 3	£1,994	£1,634	£1,907	£1,807
Provider 4	£1,156	£674	£1,584	£1,136

6.6.3 Cost per successful return to work

As discussed earlier, traditional cost-benefit analyses combine information on the benefits of an intervention with the associated costs from a social perspective. The emphasis in these tallies of gains and losses depends on the primary policy objectives of the intervention. The primary objectives for JRRP were to increase return to full-time work (for a spell of at least 13 weeks) and decrease dependence on IB.[23] While a complete cost-benefit analysis has proven unnecessary, the same emphasis

[23] It is possible that the JRRP had impacts in other areas beyond employment and benefit programme participation, though given the intent of the intervention, the development of cost-effective measures relative to other policy goals is likely limited.

could be used to develop a 'cost-effectiveness analysis' focused on these same outcomes. This analysis would measure JRRP's cost-effectiveness at producing successful returns to work by dividing the providers' service delivery costs reported above by the number of returns-to-work, and the number of *additional* returns-to-work, resulting from the intervention. Such measures would be calculated for the pilot programme overall and for the specific intervention types.

However, in the context of other evaluation findings the cost-effectiveness of JRRP for both return to work and IB participation cannot be defined, because the trial did not produce any meaningful impacts in these areas. If anything, the impact findings for all intervention models taken together suggest that the intervention produced 'negative benefits', since fewer members of the treatment group than of the control group met the employment goal and more were enrolled in Incapacity Benefit (IB). For example, although the difference was statistically insignificant, this comparison showed a decline in the share successfully returning to work of 0.3 of a percentage point, from 44.7 per cent for the control group to 44.4 per cent for the combined intervention group (see Table 3.1 in Chapter 3), while the impacts on IB participation show a 1.6 percentage point increase from 29.2 per cent to 30.8 per cent (see Tables 3.10 in Chapter 3). Because there was no measurable progress toward the pilot's goals in the overall sample, the per unit cost-effectiveness of the intervention as a whole – i.e. how much was spent for each unit of progress – is undefined.

A more narrow cost-effectiveness measure could be constructed for the portion of the intervention for which measured impacts were favourable if statistically insignificant, as is true for employment outcomes of those in the workplace intervention and IB outcomes for those in the combined intervention. However, the negligible size of those gains is quickly dwarfed by the costs of the intervention.

For example, the comparison of treatment and control group outcomes for the workplace intervention suggests a slightly positive impact on employment: a 0.4 percentage point increase in full-time work for 13 weeks or more from 44.7 per cent to 45.1 per cent (see Table 3.1 in Chapter 3). When translated into numbers of individuals returning to work, this suggests that workplace assistance resulted in approximately three more people returning to full time work (from a sample of 712 workplace intervention clients), while costing £593,808[24] (if, as estimated above, £834 were spent on each of the 712 clients). Another way to look at this is to project 321 successful returns to work in the workplace intervention

[24] In making this comparison, one could ask whether members of the control group might have received substantial return-to-work assistance from other sources, services that also had a social cost that in part offsets the substantial costs of the trial;. Since no other form of systematic aid exists in the U.K. for off-sick workers, and with control group members reporting low levels of participation in training programmes and other types of work supports (from the Outcome Survey), this seems unlikely.

group (45.1 per cent of 712) of which 318 were deadweight (44.7 per cent of 712, the number projected to return to work had none of the group received the intervention). The 321 successful outcomes cost £593,808, about £1,850 per job. In three such instances this money made the difference, and paying £1,850 for each of these added jobs might be a worthwhile social investment. But to achieve those gains, £588,300 had to be spent on clients who would have returned to work anyway (£1,850 times 318). When translated into the number of active client months involved, the 721 workplace clients spent over 3,200 months receiving services based on estimates provided earlier, or nearly 1,100 months for each job added – more than 90 years of services. Results requiring this level of effort clearly could not yield a favourable return on investment for society, even in a somewhat more mature and capacity-streamlined service delivery system that might characterise an ongoing national programme.

More generally, an intervention that overall did not produce any meaningful gains for the two primary outcomes of interest to DWP, return to work and avoidance of IB, yields cost-effectiveness measures that are either undefined or confirm that JRRP services as implemented in the pilot were an exceedingly poor investment. From a cost-benefit perspective, we know without calculating the figures that any benefits achieved were very small relative to social costs.

7 Participants' experiences and views of JRRP

This chapter provides feedback from clients taking part in the two surveys about their experiences and opinions about taking part in the Job Retention and Rehabilitation Pilot (JRRP) trial. Section 7.1 covers screening and randomisation, Section 7.2 the consent process and Section 7.3 the treatments and advice received. The aim is to update with final data and expand on a previous report on this topic, which used preliminary Outcome Survey (OCS) data (Stratford *et al.*, 2005).

7.1 Screening and randomisation

This section explores clients' reactions to being screened by the Contact Centre when they volunteered to join the trial, including their recall of and views on the explanation they were given. It also considers their understanding of the randomisation process and their reactions to being allocated to one of the four groups.

7.1.1 Adequacy of explanation given at screening

The survey findings reported in this section are based on an amalgamation of data from the two surveys (the OCS and SoSOC)[25]. Most randomised volunteers (97 per cent) recalled having phoned the Contact Centre to join the trial. Most of those who remembered this contact also remembered being given an explanation of the project (96 per cent) and said that the explanation was clear and easy to understand (89 per cent). Overall four per cent found the explanation confusing and seven per cent said it was partly clear/partly confusing. Most (88 per cent) of those who remembered getting an explanation of the project said that it was clear that there

[25] All those in the control group were approached for SoSOC. Those who responded were asked, among other things, about their experience of screening and being randomised. All controls (except for a few who refused re-contact) were subsequently approached for the OCS. If they had already completed SoSOC, they were not asked these questions again. For the control group, the data is from SoSOC if the respondent completed this survey and from the OCS if they did not. For the intervention groups, the data is all from the OCS.

was a chance that they might not receive any extra help. One in ten (nine per cent) would have liked more information about the project.

There is evidence that having been allocated to the control group affected respondents' recall or perception of the screening process. Slightly fewer remembered the screening call or explanation, and of those who did, a higher proportion found the explanation confusing (seven per cent of controls, compared to three per cent of the intervention groups). The proportion wanting more information was much higher for controls (14 per cent) than for the intervention groups (six per cent). The most likely reason for these differences is that the intervention groups' answers were affected by further explanations of the trial from providers.

Table 7.1 Percentage saying yes to questions about the adequacy of explanation of the trial (from OCS & SoSOC), by intervention group

When you heard the explanation of the project...	Health %	Workplace %	Combined %	Control %	Total %
...was the explanation clear & easy to understand?	90	90	90	85	89
...was it clear that there was a chance you might NOT receive any extra help to return to work?	89	87	86	89	88
...did you think you would be eligible for the service?	71	75	73	73	73
...were you given all the information that you wanted?	94	94	92	85	91
...did you think that the types of services offered would help you get back to work?	85	79	86	80	83
Weighted base	*668-670*	*645-646*	*661-663*	*598-623*	*2,572-2,599*
Unweighted base	*552*	*495*	*530*	*510-532*	*2,087-2,109*

7.1.2 Awareness, understanding of and reactions to randomisation process

Once screened-in by the Contact Centre, details of volunteers were sent to the National Centre for Social Research (NatCen) to be randomised into one of the four groups. Volunteers were sent a letter informing them of the outcome, and most respondents remembered receiving this letter (91 per cent).

At this stage, volunteers were only told whether they were in an intervention group (i.e. not which of the three groups) or the control group. As might be expected, those allocated to the control group were on the whole, quite disappointed about this. Asked to rate from 0 (very disappointed) to ten (very happy) how they had felt when they had found out which group they were in, the mean score given by this group (combining data from both surveys) was just 3.0. Over a third (37 per cent) gave the most disappointed score of zero.

By contrast, those assigned to the intervention groups felt much happier about their group when they found out which one they were in (which usually happened when they first met with the provider). The mean score was highest for those in the combined group (8.8). Indeed, 57 per cent of those assigned to this group gave the maximum score of 10. Those in the health intervention were a little less happy about this (mean score 8.1), with fewer giving the maximum score (40 per cent). Among the intervention groups, workplace clients were the least happy about their group (a mean score of 5.6), and only 14 per cent gave a score of 10. However, the average score was still significantly higher than that given by the control group.

The nature of their health condition influenced how people felt about their group assignment. Those with musculo-skeletal conditions were particularly disappointed to be allocated to the workplace group (with a mean score of 4.79), whereas those with mental health problems were significantly happier with this (6.24). However those with mental health problems were significantly less happy with a health group allocation (7.4) than were those with any other health condition (8.24 to 8.44). Those with an injury were less disappointed with being allocated to the control group (3.95) than were those with any other type of condition. Health condition made no difference to the reactions of the combined group to their allocation.

Table 7.2 Mean happiness-disappointment score at intervention group assignment, by intervention group and health condition

	Mental/ behavioural (with other)	Musculo-skeletal (with other except mental)	Injury (with other except mental/musculo-skeletal)	Other condition only
Health	7.4	8.44	8.24	8.3
Weighted base	*173*	*186*	*79*	*126*
Unweighted base	*136*	*159*	*70*	*102*
Workplace	6.24	4.79	5.8	5.54
Weighted base	*163*	*151*	*53*	*151*
Unweighted base	*131*	*116*	*39*	*117*
Combined	8.75	8.83	8.95	8.8
Weighted base	*183*	*181*	*85*	*101*
Unweighted base	*149*	*146*	*68*	*79*
Control	2.58	3.12	3.95	3.06
Weighted base	*177*	*216*	*82*	*140*
Unweighted base	*151*	*185*	*70*	*120*

There was a large degree of uncertainty among OCS respondents as to how they had been put into their group. Fifty-one per cent knew that it had been a random assignment, but 35 per cent were unsure how it had been chosen and 11 per cent thought that the service provider staff had chosen it for them. Interestingly, the workplace group was significantly more likely to realise that it had been chosen randomly (61 per cent) than either of the other groups (48 per cent of the health and 45 per cent of the combined groups). Women, public sector, non-manual workers, younger respondents, and those without a musculo-skeletal problem or injury were all more likely to realise that the allocation was random.

7.2 Consent

The first meeting between clients and service providers usually involved: watching a video about the randomisation process; a consent procedure involving gaining written consent to take part in the trial, to allow providers access to medical records, to permit the transfer of personal details between different members of the JRRP consortium, and to take part in the various research elements; an assessment; and the design and agreement of an action plan.

Most OCS respondents had this first meeting face-to-face at the provider's premises (75 per cent). For 12 per cent, this was conducted over the telephone, eight per cent had the meeting in their own home and one per cent somewhere else. The remaining five per cent said that they withdrew before this first meeting. Most (76 per cent) did not have any practical difficulties with travelling to the meeting. However, 13 per cent had problems getting to the venue, five per cent had problems with the cost of transport and four per cent with getting into the building. Not surprisingly, those with an injury or musculo-skeletal condition were more likely to have transport or access problems.

This meeting most commonly took place within two weeks after respondents phoned the Contact Centre to join the project. Of those who did not withdraw from the service before the meeting, 29 per cent had it within one week and 49 per cent between one and two weeks. Fifteen per cent did not have the meeting until after a gap of three to four weeks, three per cent waited five weeks or longer, and five per cent could not remember how long they waited. The workplace group were more likely to recall a delay with 25 per cent waiting three or more weeks, compared to 14 per cent of the health group and 15 per cent of the combined group.

An important part of this first consent interview was the showing of a ten-minute video, which explained the research trial and the client's role within it. Most OCS respondents (88 per cent) remembered being offered the video to watch, and of these, 97 per cent had watched it. Most found it clear and easy to understand (88 per cent), and only four per cent found it confusing to any extent.

7.2.1 Awareness of the intervention groups

One of the purposes of the initial interview was to tell clients for the first time to which of the three intervention groups they had been assigned. The letter sent to inform them they were in the group that would receive extra services did not specify which group they were in, to minimise withdrawals for those who did not like their assigned group. Of those OCS respondents who did not withdraw from the service before the consent interview, 79 per cent recalled being told which type of service they would receive at this interview (workplace, health or a combination of the two). Eleven per cent said that they were told about this on another occasion, and six per cent that they were never told about this.

Among those who did recall being told which group they were in, about eight in ten accurately named their group, although a sizeable minority did not. About one in ten of all groups were not sure which one they were in. Seven per cent of workplace and five per cent of health group respondents thought they were in the combined group. Six per cent of those in the combined group thought they were in the health group.

Table 7.3 Intervention group OCS respondents thought they were in, by actual group

Actual group:	Health %	Workplace %	Combined %	Total %
Group according to respondent:				
Health	83	2	6	31
Workplace	1	79	1	26
Combined	5	7	83	32
Not sure/can't remember	11	13	10	11
Unweighted base	*528*	*467*	*502*	*1,497*
Weighted base	*639*	*603*	*625*	*1,867*

7.2.2 Consent procedure

As one of the purposes of this initial meeting was to gain written consent, it is reassuring that almost all OCS respondents who attended (90 per cent) recalled, when prompted, discussing giving their consent to take part.

Almost all (95 per cent) of those OCS respondents who attended the initial interview gave their consent to join the trial at this time. Three per cent declined. Of those who agreed to join, 94 per cent recalled signing a form to give their consent to take part. Two per cent said they did not sign a form and four per cent could not remember.

The most common reason given for deciding to take part at this stage was to get back to work (43 per cent). Thirty-nine per cent said that it was to get general help or support, ten per cent to get medical treatment or counselling, and six per cent simply

to get better. The workplace group were less likely to say that they joined to get better or to get medical treatment, but this is probably due to their group allocation influencing their recall of their original motivation.

It was very clear to people that participation in the trial was voluntary and that they could withdraw at any time. Most (89 per cent) OCS respondents who gave consent realised that they did not have to do so if they did not want to, although nine per cent thought they had to continue at this stage and two per cent did not know.

7.2.3 Assessments

Most OCS respondents recalled discussing their health (94 per cent) and work (89 per cent) at the initial interview. Almost as many recalled discussing the services or treatment they might get, but far fewer (15 per cent) discussed the issue of benefits or tax credits. This is likely to be because not all providers offered help with these issues. The intervention group did not make a large difference to the topics that respondents remembered discussing. Most respondents (92 per cent) were happy with the topics covered and did not have any outstanding issues that they would have liked to discuss at the interview. Eight per cent felt that there were things they did not get the opportunity to discuss, the most common being benefits and tax credits (28 per cent), and more explanation of the services/treatments they would get (27 per cent).

Table 7.4 Topics discussed at the initial consent interview with service providers, by intervention group (from Outcome Survey)

	Health %	Workplace %	Combined %	Total %
My health	94	92	96	94
Giving my consent to take part	90	91	91	90
My work	84	91	93	89
Services or treatments I might get	86	79	86	84
Benefits/Tax Credits	12	16	16	15
Personal life and issues	4	5	5	4
Can't remember	1	1	-	1
Health care previously received	1	*	*	*
Training	*	*	1	*
Transport	*	-	1	*
Other issues	2	4	3	3
Nothing was discussed	1	1	1	1
Unweighted base	*556*	*503*	*529*	*1,588*
Weighted base	*672*	*655*	*661*	*1,988*

7.2.4 Action plans

The action plan was an obligatory part of the assessment procedure, whereby a plan detailing the services and treatments to be provided was agreed with the volunteer. The client then signed the plan and was given a copy. When prompted, 81 per cent of OCS respondents remembered agreeing to such a plan. For most respondents who recalled one, their help or treatment followed this plan exactly (44 per cent), or a great deal (28 per cent). However, changes to the planned treatment occurred for a sizeable minority, as the action plan was only followed to some extent for 16 per cent, not much for five per cent and not at all for seven per cent. The workplace group were significantly less likely to recall an action plan being drawn up (65 per cent) than either the health or combined groups (both 88 per cent). For those who did remember a plan, workplace group members were also more likely to say that their treatment had not actually followed this plan. Fifty-nine per cent said their treatment had followed the plan exactly or a great deal, compared with 80 per cent of the health and 72 per cent of the combined group.

7.3 Treatments and advice

This section reports clients' views on the support they received, whether they found it helpful and whether there were any particular treatments that they did not consider helpful or appropriate. It also explores whether participants perceived any gaps in the treatment that was offered and what additional treatment they would have liked.

Where either work- or health–related support was received, OCS respondents were generally very positive about this help. Nearly three-quarters said that both types of support were 'very helpful', and most of the remainder found them 'fairly helpful'. Only two or three per cent found the support unhelpful to any degree or felt that some of it had been helpful, but some unhelpful. There were no differences in how work- and health-related support were perceived – both were viewed as equally helpful. However, workplace group members were less likely to say that either type was helpful. Only 58 per cent said that the work help was very helpful compared to 81 per cent of the combined and 75 per cent of the health group. Fifty-six per cent found the (contaminatory) health treatment very helpful, but this was much higher among the combined (76 per cent) and health groups (72 per cent).

Table 7.5 Helpfulness of work- and health-related support, rated by Outcome Survey respondents

	Work help				Health help			
	Health	Workplace	Combined	Total	Health	Workplace	Combined	Total
	%	%	%	%	%	%	%	%
Very helpful	75	58	81	71	72	56	76	73
Fairly helpful	20	21	16	18	17	29	14	16
Neither helpful nor unhelpful	4	11	2	6	4	10	5	5
Fairly unhelpful	2	2	*	1	1	3	1	2
Very unhelpful	*	3	1	1	1	1	2	1
Some helpful, some unhelpful	*	5	1	2	5	*	2	3
Unweighted base	*43*	*144*	*157*	*344*	*423*	*58*	*355*	*836*
Weighted base	*51*	*185*	*194*	*430*	*508*	*72*	*436*	*1,016*

Respondents were slightly less likely to have found any *advice* given very helpful than they did any practical support received. Sixty-four per cent found the advice 'very helpful' and 25 per cent 'fairly helpful'. Very few found it unhelpful (two per cent). Again, the workplace group were less likely to have found it very helpful (56 per cent) than either the combined (70 per cent) or health (66 per cent) groups.

7.3.1 Perceived gaps in service provision

The OCS evidence suggests that quite a large minority of intervention group respondents perceived a gap in services. Among those who did not withdraw before or immediately after giving consent, 32 per cent said that there were services they would have liked to receive which were not offered to them. Workplace group clients were more likely to have perceived such a gap (45 per cent), than those in either the health (28 per cent) or combined (24 per cent) groups. Those in the workplace group with musculo-skeletal problems were especially likely to have felt that they did not g*et all* the treatment they wanted (59 per cent), whereas those in the health group with an injury were the least likely to say this (only 17 per cent).

The services most commonly desired by the workplace group were medical – 27 per cent of those who wanted additional services wanted a referral to a consultant or specialist, 26 per cent named physiotherapy, 22 per cent counselling or cognitive behavioural therapy (CBT), ten per cent complementary or alternative therapies and ten per cent a pain management programme. However, ten per cent wanted help with arranging a gradual return to work, and ten per cent training so they could do a different job. This suggests that a minority of workplace clients were not offered services that were appropriate to their group.

Health group members who wanted additional services most commonly desired help that could only be given to the workplace group, such as arranging a gradual return to work (22 per cent), liaison with their employer (15 per cent), help with arranging a different job with their employer (14 per cent), or training to do a different job (ten per cent). However, they too named some treatments that could have been offered as part of their intervention (17 per cent wanted referral to a specialist and 13 per cent counselling or CBT). The combined group was more likely to mention health than workplace treatments (19 per cent a referral, 17 per cent counselling, and 14 per cent physiotherapy).

8 Discussion

This report has shown *no* evidence that offering Job Retention and Rehabilitation Pilot (JRRP) interventions to those off work sick improved their chances of returning to work. This is a rather surprising finding: certainly the assumption of the evaluation team was that at least one of the interventions would prove cost-effective. In this final section we consider *possible* explanations for this. We should stress, however, that much of this is tantamount to speculation. Importantly, what we cannot do is infer whether the interventions would have been more successful if they had been delivered differently or to a different group.

The explanations for the negative findings are inevitably complex, and, arguably, a key criticism of RCTs is that they allow for impact (or the lack of it) to be quantified but they do not offer many clues as to how and why. Theories as to what went wrong have to be formulated outside of the trial itself, and in this instance, the primary source of evidence is the qualitative work that was carried out during the running of the trial amongst participants (including control group members) and the service providers *(Farrell et al 2006).*

An important issue to bear in mind is that, although it appears that the interventions do not impact on return-to-work rates when measured across *all* participants in the trial, this obscures some sub-group findings. In particular, there is *some* evidence that the impact of the interventions is dependent on the health condition of the participant. In particular:

- the return-to-work rates were *higher* amongst the intervention groups for those off work because of an injury (that is, the interventions had a positive impact);
- the return-to-work rates were *lower* amongst the intervention groups for those off work because of a mental health problem (that is, the interventions had a negative impact);
- the return-to-work rates were *unaffected* by the interventions for those in other health groups (that is, the interventions had no impact).

In addition, there is some evidence that for those stating when they joined the trial that they would be able to do the same job in six months time, the interventions appear to have detrimental to subsequent return to work rates.

The possible explanations for the findings cover five broad *hypotheses*:

(i) The interventions were either too weak to make a difference, or were delivered in a way that was unhelpful;

(ii) Service providers faced too many external barriers;

(iii) The factors affecting a return-to-work are not ones that the interventions could impact on;

(iv) The withdrawal rate from the trial was too high;

(v) The participants entering the trial were not a population group who could benefit from the JRRP interventions.

These five are taken in turn below.

The interventions were either too weak to make a difference, or were delivered in a way that was unhelpful

The evidence here is rather mixed. From the perspective of the service providers, the qualitative research suggested that the interventions were making a significant impact. Although there was some frustration that the budget was not high enough to allow spending on necessary surgery for some people, overall staff felt that the budget they could spend on clients was sufficient. Furthermore, they in general thought that the models of intervention developed (within the budget) were good.

The perspective of participants was rather more ambivalent. Within the sample of participants in the qualitative study who were actively receiving an intervention, there were examples of people saying that they had received interventions they were unhappy or uncomfortable with, or more generally they felt they fell short of what they needed. There were also instances of interventions being offered that never materialised.

The communication between clients and the service providers came out as a general theme. People did not appear to be actively involved in making decisions about the type of help they could get from JRRP. Clients were not always given the opportunity to explain about changes in circumstances since they entered the trial (such as a change in health or a change in their relationship with their employer) which might have influenced how the intervention progressed. And there were instances where clients were left uncertain as to whether or not they were still part of JRRP, and unclear as to when and if the service provider would contact them again. On the whole people described provider staff as having initiated each contact. This worked well where provider staff were in touch regularly, but where they were not it meant that contact could dwindle and cease without this being what the client wanted and without the client themselves taking steps to resurrect contact.

In contrast, there were examples of people in the control group being very proactive on their own behalf. Some, for instance, referred themselves for treatment, with others doing their own research into conditions and possible treatments.

The qualitative research is based on small numbers, so it is hard to draw hard and fast conclusions. But if it *was* the case that the interventions were not always seen to be appropriate to the clients, and that the service providers did not encourage clients to be proactive and to initiate contact, then this *might* explain why the intervention group clients did no better, and in some cases worse than those in the control group.

Service providers faced too many external barriers

In the group discussions with the service providers one clear message from all the provider organisations was that the main barriers and constraints on their work with clients emanated from external sources. Although they identified problems associated with the structure of the pilot and service provision, the biggest impediments to client progress were associated with the attitudes of, and working relationships with, employers, General Practitioners (GPs) and other health services. In particular it was noted that employers have a lot of power concerning employees' future employment, and to this extent, JRRP providers were reliant on employers to make a return to work possible. Having said this, it should be noted that the providers did engage with employers and attempt to address their attitudes and relationships with employees.

These barriers would have significantly reduced the probability of being able to bring about a successful return to work.

The factors affecting a return-to-work are not ones that the interventions could impact on

The qualitative research with participants suggested that the reasons some people returned to work were not entirely about feeling well enough to work. Reasons given were financial pressures, fears around job tenure, and because work was seen as a way of improving mental and emotional wellbeing. Largely people made their own assessments as to whether and when to go back to work, and people did not talk about JRRP providers influencing those assessments.

The withdrawal rate from the trial was too high

Section 2.1 of this report showed that 29 per cent of those allocated to one of the intervention groups progressed no further than the initial assessment stage before dropping out of the trial (the percentage being particularly high for those allocated to the workplace group, at 42 per cent). Although withdrawal rates of this level would inevitably reduce the size of any impact (assuming that only those who take up an intervention actively benefit from it), this does not seem a plausible explanation as to why *no* overall impact was observed. It certainly does not explain why some groups appeared to do worse with the JRR interventions.

The participants entering the trial were not a population group who could benefit from the JRRP interventions

The question of whether the self-selection into the trial affected the results is more difficult to address and the qualitative research cannot shed much light on this.

Certainly, the trial predominantly included people who actively wanted to return to work, and it has been speculated that this means service providers were asked to help people who simply weren't in need of help. There is no evidence to back this up however. In the control group, less than half returned to work for a period of 13 weeks during the reference period (see Table 3.1) and the simplest interpretation of this is that over half of those who entered the trial were not able to engineer a successful return-to-work on their own behalf. So, on this basis the service providers had a fairly large group of people to work with who actively needed help.

Another take on this could be that those who could not (or chose not to) return to work when left to their own devices were also a group who could not be helped by JRR-style rehabilitation services. (The natural corollary would then be that some other, less self-selecting group might be more responsive to JRR services.) This of course, may be true, but it is seems unlikely. One argument against it is that during the trial JRR service providers did not identify their clients as being people particularly resistant to or incapable of being helped. The report on the qualitative research with service provider staff concluded that a powerful message from staff was that they can only help people who want to be helped, so the self-selection on to the trial should have ensured that this criterion, at least, was met in the main. This leaves the issue of whether those who did not return to work could not be helped for other reasons (perhaps because of their health condition) but this seems unlikely to be true for *all* those who entered the trial.

For all these reasons we have to leave open the question of whether the negative impact of JRRP was an artefact of the recruitment approach used. The evidence we have suggests this is implausible, but without a new trial of a group recruited in a different way, we cannot be definitive.

Piecing the evidence together, it appears that the most likely explanations for the 'no impact' finding overall are:

- that the interventions offered were not always seen to be appropriate to the clients or meeting their needs fully, and that the service providers did not always encourage clients to be proactive and to initiate contact. There is some evidence that, in contrast, those in the control group were prepared to be proactive on their own behalf;
- some of the primary reasons for returning to work, such as concerns about money or job tenure, would be outside of the control of the service providers;
- Service providers faced barriers from employers and GPs that reduced the probability of their being able to gain a successful return-to-work.

Other possible explanations, such as the high withdrawal rate and the profile of people who entered the trial seem implausible, although it is possible that they made a contribution.

Appendix A
Adjustments for missing data

A.1 Overview

This appendix describes how missing data on outcomes has been dealt with in the trial analysis.

A.2 The nature of the non-response problem

In principle, if the Outcome Survey (OCS) had achieved a one hundred per cent response rate, the impact analysis would have been relatively straightforward, being simply a comparison between the estimates for each of the four randomisation groups. Given that was not achieved, the main challenge was to make suitable adjustments to ensure that the four groups would be as comparable as possible.

There were three elements of non-response that needed consideration:

- For a proportion of those randomised we have no follow-up data. That is, for 20 per cent of the three intervention groups an OCS interview was not achieved, and for 14 per cent of the control group neither an OCS interview nor a SoSOC survey interview were conducted. (SoSOC was an early telephone survey of those in the control group.)
- For some of the control group (21 per cent) an early SoSOC interview was conducted but not an OCS interview. For these cases only early follow-up data are available.
- For a small number (56) of those taking part in the OCS, the interview had to take place earlier than intended. For these cases outcome data on employment does not cover the full 42 week reference period since first going off sick. This is a problem because the full work history is needed to derive the primary outcome variable of a 13 week return to work.

A 'standard' survey non-response weighting approach was taken for the first and second elements of non-response described above. The details of the method are given in Section A.3 and A.4 respectively. The impact of the weighting is described in Section A.5.

For the 52 OCS respondents whose interview took place too early, the work status in the missing weeks has been imputed (using a statistical modelling approach). This is described in Section A.6.

A.3 Calculation of weights to reduce 'no-follow-up data' bias

A.3.1 Response to surveys

Eighty-one per cent of trial entrants were interviewed, either as part of the SoSOC or as part of the OCS. This means that for 19 per cent of trial entrants we have no follow-up data. A breakdown by randomisation group is given in Table A.1.

Table A.1 Survey response rates by randomisation group

	Health %	Workplace %	Combined %	Control %
Response (OCS only)	83	77	80	8
Response (OCS & SoSOC)	n/a	n/a	n/a	57
Response (SoSOC only)	n/a	n/a	n/a	21
Non-response	17	23	20	14
Unweighted base (All randomised)	*710*	*712*	*713*	*710*

A.3.2 Characteristics by response

To check whether survey non-response was related to personal characteristics, a range of variables collected during the screening interview were used to compare respondents to non-respondents. Tables A.2 to A.5 show a selection of these variables (one table per randomisation group). Significant differences have been highlighted.

Table A.2 Characteristics of health group, by response to the OCS

	Outcome survey respondent %	Outcome survey non-respondent %	Total %
Pilot area – BI	18.6	17.1	18.3
Pilot area – GL	26.1	21.1	25.2
Pilot area – SH	23.3	29.3	24.4
Pilot area – TE	7.0	8.1	7.2
Pilot area – TY	12.3	11.4	12.1
Pilot area – WK	12.8	13.0	12.8
Male	41.9	48.0	43.0
Age 20-29 years when join trial **	7.8	17.1	9.4
Age 30-39 years when join trial	24.7	28.5	25.4
Age 40-49 years when join trial	33.2	24.4	31.7
Age 50-59 years when join trial	30.5	27.6	30.0
Age 60+ years when join trial	3.4	2.4	3.2
Income before absence < £10,000 per annum	19.3	17.9	19.0
Income before absence £10,000 -£20,000 per annum	52.6	56.1	53.2
Income before absence £20,000 -£30,000 per annum	22.0	22.0	22.0
Income before absence > £30,000 per annum	5.5	4.1	5.2
Working 16-34 hrs before absence	26.1	18.7	24.8
Working 35+ hrs before absence	73.8	80.5	76.9
Off sick 6-12 weeks when join trial	56.2	59.3	56.8
Off sick 13-19 weeks when join trial	26.7	30.1	27.3
Off sick 20-26 weeks when join trial	17.0	10.6	15.9
Main health condition – mental	27.8	34.1	28.9
Main health condition – muskulo-skeletal	33.9	26.0	32.5
Main health condition – injury/ poisoning	15.2	9.8	14.2
Waiting for treatment when join trial*	78.2	86.2	79.6
Unweighted base	*587*	*123*	*710*

* = sig at 5%

** = sig at 1%

Table A.3 Characteristics of workplace group, by response to the OCS

	Outcome survey respondent %	Outcome survey non-respondent %	Total %
Pilot area – BI**	16.0	25.7	18.3
Pilot area – GL	26.2	21.0	25.0
Pilot area – SH**	26.8	16.8	24.4
Pilot area – TE	8.1	4.8	7.3
Pilot area – TY	12.3	12.0	12.2
Pilot area – WK**	10.6	19.8	12.8
Male	42.8	39.5	42.0
Age 20-29 years when join trial **	6.6	14.4	8.4
Age 30-39 years when join trial	27.5	34.1	29.1
Age 40-49 years when join trial *	34.7	25.1	32.4
Age 50-59 years when join trial	26.4	22.8	25.6
Age 60+ years when join trial	4.8	3.0	4.4
Income before absence < £10,000 per annum	19.4	19.2	19.4
Income before absence £10,000 -£20,000 per annum**	47.9	62.3	51.3
Income before absence £20,000 -£30,000 per annum*	25.1	17.4	23.3
Income before absence > £30,000 per annum**	6.6	1.2	5.3
Working 16-34 hrs before absence	24.6	29.3	25.7
Working 35+ hrs before absence	74.7	70.7	73.7
Off sick 6-12 weeks when join trial	60.6	57.5	59.8
Off sick 13-19 weeks when join trial	24.6	29.9	25.8
Off sick 20-26 weeks when join trial	14.9	12.6	14.3
Main health condition – mental	28.4	23.4	27.2
Main health condition – muskulo-skeletal	28.1	34.1	29.5
Main health condition – injury/ poisoning	10.6	12.0	11.0
Waiting for treatment when join trial*	81.5	89.2	83.3
Unweighted base	*545*	*167*	*712*

* = sig at 5%

** = sig at 1%

Table A.4 Characteristics of combined group, by response to the` OCS

	Outcome survey respondent %	Outcome survey non-respondent %	Total %
Pilot area – BI	17.3	22.5	18.4
Pilot area – GL	24.9	26.1	25.1
Pilot area – SH	25.9	19.0	24.5
Pilot area – TE*	8.2	2.8	7.2
Pilot area – TY*	13.3	7.0	12.1
Pilot area – WK**	10.3	22.5	12.8
Male	43.4	42.3	43.2
Age 20-29 years when join trial *	8.9	15.5	10.2
Age 30-39 years when join trial	24.3	27.5	25.0
Age 40-49 years when join trial	32.7	28.2	31.8
Age 50-59 years when join trial	30.5	23.9	29.2
Age 60+ years when join trial	3.0	4.2	3.2
Income before absence < £10,000 per annum	17.7	18.3	17.8
Income before absence £10,000 -£20,000 per annum	55.7	60.6	56.7
Income before absence £20,000 -£30,000 per annum	20.1	14.1	18.9
Income before absence > £30,000 per annum	5.8	4.9	5.6
Working 16-34 hrs before absence	25.2	28.9	25.9
Working 35+ hrs before absence	74.6	70.4	73.8
Off sick 6-12 weeks when join trial	54.5	59.9	55.5
Off sick 13-19 weeks when join trial	29.1	30.3	29.3
Off sick 20-26 weeks when join trial*	16.5	9.9	15.1
Main health condition – mental	30.3	28.2	29.9
Main health condition – muskulo-skeletal	31.2	28.9	30.7
Main health condition – injury/ poisoning	15.8	13.4	15.3
Waiting for treatment when join trial	81.1	82.4	81.3
Unweighted base	*571*	*142*	*713*

* = sig at 5%

** = sig at 1%

Table A.5 Characteristics of control group, by response to the OCS and/or SoSOC

	Outcome survey or SoSOC respondent %	Non-respondent %	Total %
Pilot area – BI	18.8	15.5	18.3
Pilot area – GL	25.5	22.3	25.1
Pilot area – SH	24.7	22.3	24.4
Pilot area – TE	6.8	9.7	7.2
Pilot area – TY	13.2	6.8	12.3
Pilot area – WK**	11.3	23.3	12.8
Male	44.2	43.7	44.1
Age 20-29 years when join trial	7.7	5.8	7.5
Age 30-39 years when join trial	26.5	31.1	27.2
Age 40-49 years when join trial	33.4	30.1	33.0
Age 50-59 years when join trial	26.9	24.3	26.5
Age 60+ years when join trial	5.4	5.8	5.5
Income before absence < £10,000 per annum	20.9	21.4	21.0
Income before absence £10,000 -£20,000 per annum	52.7	46.6	51.8
Income before absence £20,000 -£30,000 per annum	20.6	25.2	21.3
Income before absence > £30,000 per annum	4.9	2.9	4.6
Working 16-34 hrs before absence	26.7	28.2	26.9
Working 35+ hrs before absence	73.0	68.9	72.4
Off sick 6-12 weeks when join trial	56.8	63.1	57.7
Off sick 13-19 weeks when join trial	25.9	22.3	25.4
Off sick 20-26 weeks when join trial	17.0	11.7	16.2
Main health condition – mental*	25.5	35.9	27.0
Main health condition – muskulo-skeletal	33.3	31.1	33.0
Main health condition – injury/ poisoning	14.2	10.7	13.7
Waiting for treatment when join trial	78.7	83.5	79.4
Unweighted base	*607*	*103*	*710*

* = sig at 5%

** = sig at 1%

A.3.3 Creating the non-response weights

To create non-response weights, a stepwise logistic regression model was fitted separately for each randomisation group. The binary dependent variable per model was response to follow-up. 'Response' included partial and proxy responses as well as full in-person responses.

The independent variables were taken from the data collected during the screening interview. Whilst most of the independent variables were included on a stepwise basis, pilot area was always entered. A separate category indicating missing data was created for any independent variables that had at least thirty cases with missing values. For other variables missing values were recoded to the largest category (used as the base category in the model). The independent variables that predict the non-response are described in the next section.

Three cases allocated to the control group had asked for their data to be removed and to have no further contact from the trial post-randomisation. Rather than exclude them from the analysis completely they were treated as survey non-respondents.

The model was used to predict the probability of responding. The weight per responding person was then calculated as the inverse of this modelled probability. Extreme weights were trimmed and the weights were then rescaled to the responding sample size.

The independent variables included in each of the non-response models are shown in the table below. Pilot area was forced into the model but other variables were included only if they were significant predictors of response (forward stepwise inclusion). Only two variables were predictors in more than one model – age and whether waiting for treatment when join trial – and none of the variables were included in all of the models. The models used a small number of predictors with the exception of the health group – we have no particular theory as to why this might have happened.

Table A.6 Independent variables included in non-response weighting

	Health	Workplace	Combined	Control
Pilot area	Yes	Yes	Yes	Yes
Age when join trial	Yes	Yes		
Whether waiting for treatment when join trial	Yes	Yes		
Main health reason off sick (self-reported)	Yes			
Main health reason off sick (sick note)	Yes			
Whether believe could do job in 6 months time	Yes			
Relationship with manager/supervisor	Yes			
Marital status	Yes			
Hours working per week before off sick	Yes			
Income before off sick		Yes		
Weeks off sick when join trial			Yes	
If only sickness absence in last 12 months is spell joining trial				Yes
Non-health reason(s) off sick				Yes
Unweighted base (All randomised)	*710*	*712*	*713*	*710*

A.4 Calculation of weights to account for additional losses after SoSOC in the control group

A.4.1 Response to survey of screened outs and controls

In the calculation of the first set of non-response weights we were concerned with weights to adjust to cases for whom there was absolutely no outcome data. However there are cases in the control group for whom the only follow-up data we have is from SoSOC, and SoSOC was too early for most of our analyses of interest. To deal with this, the SoSOC-only cases were removed and the OCS control group respondents were up-weighted to adjust for these removals. This involved calculating a second set of non-response weights for the control group OCS respondents.

To adjust for the SoSOC-only exclusions we were able to take advantage of the fact that SoSOC covered a wide range of (albeit early) outcomes, especially on work. This allowed us to gain a very good understanding of the characteristics of the excluded cases.

A.4.2 Characteristics by response

Table A.7 shows a range of characteristics for SoSOC respondents that differ significantly between those who subsequently took part in the OCS and those who refused. The group who did not respond to the outcome survey were more likely to be working at the time of the SoSOC interview, have been in full-time work for at least half of the period between being randomised and the SoSOC interview, and

not be affected by their health condition either at the time of the interview or expect to be affected in the future. This suggests a more positive outlook for non-respondents in terms of work and health.

Table A.7 Characteristics of control group members, by response to the OCS

	Outcome respondent %	Outcome non-respondent %	Total %
Working at time of interview (FT or PT) *	45.9	55.7	48.5
No FT work in history**	56.4	43.0	52.7
Some FT work in history but < 50%	30.9	36.9	32.5
At least 50% FT work in history*	12.7	20.1	14.7
Health does not affect activities now, nor expect in future*	9.2	16.1	11.1
Unweighted base (respondents to SoSOC)	*401*	*149*	*550*

* = sig at 5%

** = sig at 1%

A.4.3 Creating the weights

To create the second set of non-response weights for the control group, a stepwise logistic regression model was fitted to the sub-sample of the control group who had responded to SoSOC. The binary dependent variable in this case was response to the outcome survey.

The independent variables were taken from the data collected during the screening interview and from SoSOC. Whilst most of the independent variables were included on a stepwise basis, pilot area and the length of the work history was simply entered.

The model was used to predict the probability of responding. Responding control group cases were then weighted by the inverse of this modelled probability (after multiplying it by the first set weight). The final weight was trimmed to remove extreme values then rescaled to the sample size responding to the OCS.

The independent variables included in the non-response model are given below, ordered by their order of inclusion, where length of work history entered the model before marital status for example. The source of the data is indicated by either C for screening at Contact Centre or S for SoSOC:

- Pilot area (C).
- Length of work history (banded into up to 28 weeks, 29-31 weeks, 32-34 weeks, 35-37 weeks, 38+ weeks) (S).
- Marital status when joined trial (C).

- Whether off sick for all weeks up to survey interview (S).
- NSSEC (C).
- Age when joined trial (C).
- Degree of disappointment about allocation to Control Group (S).
- Number of weeks in full-time work between going off sick and survey interview (banded into zero weeks, 1-13 weeks, 14+ weeks) and the interaction with length of work history (S).

A sensitivity analysis was conducting by forcing other variables relating to working into the model to check that they had no further effect on non-response that might need to be taken into account. Other independent variables that were tried in the model were: number in the household, housing tenure, health now and in future, current status (at survey interview), work expectations, summary of working life, transitions between working and other activities, weeks in part-time work, proportion of time in full-time work, whether had continuous spells in full-time of at least five/ eight weeks. Adding these variables did not appreciably change the non-response weights, so the simpler model was reverted to.

A.5 The impact of the weighting on the main outcome variables

The weighting strategy *could* have introduced bias into the impact estimates. A comparison of estimates calculated from unweighted and weighted data showed that, as a rule, the estimates have not been affected substantially. We conclude that the weighting has not distorted the measurement of the impact in a way that adversely affects the comparison of the randomisation groups or the interpretation of the estimates.

The effect of the weighting is demonstrated here in relation to the main outcome variable – working full-time for a spell of at least 13 weeks, and for self-assessed health. Table A.8 shows both unweighted and weighted estimates showing that the weighting changes the estimates for the intervention groups only very slightly and for the control group rather more, but again only by two percentage points. Overall the weighted estimates increase the estimated percentage who have successfully returned to work. In relation to the other randomisation groups, the control group moves from having the smallest percentage returning to work to the second highest. But tests show no significant differences between the randomisation groups for either set of estimates (unweighted or weighted).

This larger effect for the control group is directly attributable to that part of the weighting of the control group that account for losses of respondents after the SoSOC interview. As noted above, analysis of the SoSOC data showed that a higher percentage of control group non-respondents to the OCS had returned to work at

the time of the earlier SoSOC interview than was the case for the non-respondents. The weighting essentially corrects this imbalance, and inevitably leads to an increase in our estimated return to work rate for the whole of the control group.

Table A.8 Percentage returning to full-time work for a spell of at least 13 weeks: weighted and unweighted data, by randomisation group

	Health %	Workplace %	Combined %	All intervention groups %	Control %	Total %
13 week spell of FT work unweighted data	43.1	45.0	44.3	44.1	42.8	43.8
13 week spell of FT work weighted data	43.5	45.1	44.4	44.4	44.7	44.4
Weighted base	*710*	*712*	*713*	*2,135*	*710*	*2,845*
Unweighted base (All respondents)	*587*	*545*	*571*	*1,703*	*458*	*2,161*

This perhaps raises the question of whether the fact that we had SoSOC for the control group means we were able to do more sensitive non-response adjustment for this group than for the three intervention groups (because we some outcome data for 60 per cent of the OCS non-responders whereas we have no outcome data for any of the OCS non-responders from the other groups).

The best we can do to test this is to speculate about what we might have found if the response rate for each randomisation group was 86 per cent (that is, the same as the control group response rate after allowing for SoSOC-only cases as valid responses). This would mean increasing the OCS response rate from:

- 83 per cent to 86 per cent for the health intervention group;
- 77 per cent to 86 per cent for the workplace intervention group; and
- 80 per cent to 86 per cent for the combined intervention group.

If we further assume that the *extra* cases have, say, a 20 per cent higher return-to-work rate than the actually responding cases[26], we would observe the following return to work rates per group:

[26] Which is the approximate difference between OCS and SoSOC-only cases for the control group.

	Return to work rate (as observed)	Return to work rate (for 86% response rate)
Health intervention	43.5	43.8
Workplace intervention	45.1	46.0
Combined intervention	44.4	45.0
Control group	44.7	44.7

Under this scenario, the return-to-work rates increase for each of the three intervention groups, but the overall conclusion about 'no significant impact' does not change.

Table A.9 shows the difference between unweighted and weighted estimates for self-assessed health. In this case the effect of the weights is only very small.

Table A.9 Percentage in excellent, very good or good health: weighted and unweighted data, by randomisation group

	Health %	Workplace %	Combined %	All intervention groups %	Control %	Total %
Excellent, very good, or good health unweighted data	49.3	42.5	49.3	47.1	43.1	46.3
Excellent, very good, or good health weighted data	49.3	42.6	49.6	47.1	43.8	46.3
Weighted base	*708*	*709*	*712*	*2,130*	*707*	*2,837*
Unweighted base (All respondents)	*586*	*543*	*570*	*1,699*	*457*	*2,156*

A.6 Imputation for missing weeks in work history

A.6.1 Nature of the problem

In 87 cases data on work status was missing for a proportion of the weeks of the trial reference period. This meant that a 13-week return to work could not be accurately checked for, with the likely result being that some returns to work would be missed. To avoid this generating bias in the impact estimates data for the missing weeks as imputed.

For all cases the missing weeks were consecutive rather than intermittent over the period. Table A.9 shows that four cases had missing data from the early weeks of the reference period. This is a negligible percentage of those interviewed (< 0.5 per cent). The amount of data missing ranged from two to 13 weeks.

Eighty three cases had missing data from the later weeks of the reference period

(almost four per cent). The amount of data missing ranged from a single week to nine weeks.

Table A.10 Distribution of missing weeks in work history over 'reference period'

	Freq	%		Freq	%
Early weeks			Later weeks		
2	1	*	1	23	1.1
6	1	*	2	14	0.6
8	1	*	3	18	0.8
13	1	*	4	10	*
			5	5	*
			6	4	*
			7	6	*
			8	2	*
			9	1	*
Total	4	*	Total	83	3.8
Unweighted base (All respondents)2,161					*2,161*

* = <0.5%

A simple strategy was used to impute in the early missing weeks, simply replacing missing values with 'off sick'. A more complex strategy was used for later missing weeks.

The first week with missing data was week 34. To impute a value into week 34 we fitted an multinomial regression model to respondents will full work histories for weeks 1-34 where the dependent variable was week 34 status, and the independent variables were: randomisation group, gender, age when joined the trial, number of weeks off sick when joined the trial and work status each week from randomisation to week 33. The coefficients from this model was then used to generate 'probabilities of being in each work status category at week 34' for those with missing data. And based on these probabilities, a value was then imputed. The approach was then repeated for week 35, and so on.

A.6.2 Effect of the imputation on the impact estimates

There was a possibility that the inclusion of imputed data could have made large changes to the impact estimates. However a comparison of estimates calculated from data with and without imputed data showed that the imputation affected the estimates only very marginally.

The effect of the imputed data is demonstrated here in relation to the main outcome variable – working full-time for a spell of at least 13 weeks. Table A.10 shows that the imputation changes the estimates for the health and the combined groups very

slightly but does not change the estimates for the workplace or the control groups at all. The differences certainly do not have any impact upon the comparison of the randomisation groups or the interpretation of the estimates.

Table A.11 Percentage returning to full-time work for a spell of at least 13 weeks with and without imputed data, by randomisation group

	Health %	Workplace %	Combined %	All intervention groups %	Control %	Total %
13 week spell of FT work without imputed data	43.4	45.1	44.2	44.2	44.7	44.3
13 week spell of FT work with imputed data	43.5	45.1	44.4	44.4	44.7	44.4
Weighted base	*710*	*712*	*713*	*2,135*	*710*	*2,845*
Unweighted base (All respondents)	*587*	*545*	*571*	*1,703*	*458*	*2,161*

Appendix B
Cost data

B.1 *Overview*

This appendix describes the collection and verification of the cost data used in Chapter 6 to analyse resource utilisation by providers and the average cost and cost-effectiveness of the intervention. It also contains the key materials – proforma, instructions, and item checklist – used to collect and verify the provider cost data. Later sections in the chapter describe how information was collected from the Department for Work and Pensions (DWP) on centralised pilot costs and the known limitations of the data in relation to ideal information.

B.2 The provider data collection process and proforma

Data on providers' operating costs were collected in several steps over a nearly two-year interval between July 2003 and April 2005. Evaluation staff dedicated to this portion of the study carried out the following steps over that period:

- initial site visits to discuss costs data needs and availability with management and financial staff at each provider organisation;[27]
- development of a cost data collection proforma designed for universal applicability along with comprehensive instructions, based on information from the site visits concerning each provider's accounting system and service delivery approach;
- pre-test of the proforma with one provider (University of Glasgow);

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[27] The initial visits, and all subsequent steps, involved six provider organisations – the four lead organizations (University of Glasgow, Northumbria University, Sheffield Occupational Health Advisory Service (SOHAS), Human Focus) plus the two organisations that implemented the workplace and health interventions as subcontractors to Human Focus (ATOS, First Assist).

- introduction of all providers to the data collection process and proforma at a DWP-sponsored provider workshop in October 2004;
- written response to questions raised by providers at the workshop, with subsequent refinement of the proforma and instructions;
- receipt and review of initial cost data from each provider; and
- iterations to final fully validated data through telephone consultations and e-mail correspondence with each provider.

The proforma, presented in Table 11.1 at the end of the chapter, collected data from the providers under the following categories:

- Project Unit Labour
- Other Labour
- Office space
- Furniture
- Equipment and supplies
- Incidental expenses
- Purchased services
- Donated services
- Marketing costs
- Evaluation-induced costs

Providers were asked to go to their project accounting records for all of this information and to ensure a close mapping of figures there to the concepts described in the proforma instructions (shown in Table B.2 at the end of the chapter). It was evident that all six organisations took seriously this request and did indeed draw from detailed information on actual operations and expenditures for the January-June 2004 cost data coverage period.

B.3 Data checking and validation

Once all cost items had been collected, the collection was assessed by evaluation staff in several ways to gauge its appropriateness, accuracy, and overall completeness. The purpose of the checking system was to verify the data with methodological rigour. We expected data to be imperfect since service providers were being asked to submit accounting information for the purposes of research which is quite different from the normal remit of project administration. The process was iterative with several rounds of collection and queries for each provider. The checking system verified the accuracy of the data that were present, and where inaccuracies or missing items were present, appropriate queries were submitted to the source organisation and corrections made.

Firstly, the completeness of data was assessed. Through the team's knowledge of Job Retention and Rehabilitation Pilot (JRRP) service provision each cost item was checked for likelihood of appearance at each service unit. The team had made several visits to the units including the cost data planning visit noted above, interviewed staff about service provision, and learned about the ways in which each model was being implemented by each provider. A list of expected items was used to search for items within the data at each round of reporting. No inappropriate amounts were found and in general the initial data gave a fairly complete picture of all the expenses we had expected.

The list of expected items for each provider was then expanded to cover all items listed by *any* provider, resulting in the extensive list appearing in Table B.3 at the end of the chapter. For items not directly visible in a given proforma, the provider was asked to report if it was subsumed under other items, or to provide the appropriate additional monetary amount if not. In a few cases providers had simply not considered an item appropriate and upon clarification provided them to the research team once the appropriateness of that cost to the evaluation had been explained.

The internal consistency of cost components for any given provider was then checked and cross-provider comparisons undertaken to detect further potential omissions in reporting or flag unusually large or small pound amounts. For example, labour costs were manipulated to calculate hourly rates and fringe benefits to salary ratios. These rates for specific job titles were compared internally and across JRRP providers to assure plausibility. The proportions of resources allocated to each job classification were also discussed with providers whenever the logic was not obvious. In practice any difference in hourly rates between units and within units were substantiated. The fringe to salary ratios were upheld by providers, except where a few items had not been considered as fringe benefits and were subsequently added.

Additional checks were run on total costs for each provider. These were compared to payments received from DWP over the same period to assure they were not grossly out of line with revenue flows, a situation not expected nine to 15 months into the pilot. Also, once assembled by research staff each provider's figures were shared back with provider for comparison to its own records and expectations and approved or adjusted appropriately with satisfactory explanation of the relevance of any new costs then reported. Total figures were also broken down into percentages spent on each of the ten cost categories listed at the beginning of the chapter with the intent that the categories found to be unusually large or small compared to other providers would be scrutinised and resolved with the source organisation, though in practice this was rarely necessarily.

Items were also assessed for appropriateness in terms of where they appeared among the ten cost categories. In certain cases, the costs under one category may have also been appropriate elsewhere; we discussed these cases with providers and resolved each either with a satisfactory explanation or a change of category. For

example, an item listed as an 'incidental expense' that appeared to be labour hours or entailed a large monetary amount was looked askance and investigated. Similarly, resources appearing on one of the first five forms of the proforma that seemed related to marketing (e.g., cost of posters and display boards) but that were not separately itemized on the sixth, 'marketing' form were investigated with provider staff. This was obviously important to establish the marketing and – similarly – the evaluation expenses incurred by the providers and isolate them from the costs of direct service provision.

B.4 Collection and verification of cost figures for the individual intervention models

The next step was probably the most complex and time intensive. The proforma were re-issued and each item or the relevant proportion of the item was described as an expense arising from service provision for a particular intervention model: health, workplace, or combined. When returned by providers with this detail included, the first step in checking verified that totals (overall and for the ten cost categories) corresponded to previous submissions.

We then checked the allocation of costs by model. Internal checks for each provider, and cross provider comparisons were undertaken at this level similar to those described above for overall costs. Anything that appeared far off the norm for other providers, or contradicted total costs reported by the same provider, was discussed with the source and resolved. The resolution of these problems was fairly straightforward, once providers and the researchers had adequately discussed the conceptual framing of costs within models. The small number of issues that arose was resolved easily by re-allocating amounts to another model based on further input from the provider.

Finally, we flagged all expenses as either labour or non-labour to separately report on each classification. All expenses were also flagged as either outsourced or obtained in-house. The list of detailed cost items encountered from any provider shown in Table B.3 demarks those costs classified as labour and, separately, those resources classified as outsourced.

Once the final data were available, broken down by model and correctly categorised and flagged, the final round of checks was made. This consisted of re-running all the percentage calculations and validity checks from above, and any final queries put to providers to resolve or clarify any outstanding issues. After this, the provider cost dataset was clean and analysis could begin.

B.5 Collection of information on centralised costs

In addition to provider cost, DWP was asked to supply information on its resource use overseeing pilot operations and supporting outreach and enrollment activities during over the January-June 2004 period. The specific items requested and supplied by DWP were:

- costs of operating the centralized screening and intake Contact Centre used to enroll participants at all pilot sites;
- Jobcentre Plus staff costs, inclusive of pension and in-work benefit costs, for all labour used to overseeing pilot operations, net of labour hours used to support the evaluation;
- travel costs and other direct expenses incurred by staff in carrying out those duties; and
- resources invested in centralised marketing of the JRRP service.

The source figures and calculations used to obtain each of these figures were shared with evaluation staff, along with any assumptions involved so that all reported measures could be well understood and affirmed as consistent with the intention of the research. For the most complex cost derivation, measurement of the full value of Jobcentre Plus labour resources expended centrally, DWP solicited and received comments on the algorithm fiscal staff were to use prior to applying it to the source data. Because the derivation of the Government-reported figures was transparent (i.e., detailed in the material submitted to the evaluation staff) the types of internal and external data checks featured for the provider data were not needed.

B.6 Uncertainties and limitations in final data

Occasional lapses in providers' willingness or ability to provide every requested detail of information on their project expenditures made it necessary to apply assumptions to address remaining uncertainties. In all but one instance, it was clear that the amount of pounds riding on each decision was necessarily small in relation to overall provider spending on service delivery. The exception concerned our ability to identify and remove labour costs of marketing the service from the service delivery costs reported by one provider (Provider 2 in the anonymised notation of Chapter 6). All we were able to discern from multiple exchanges with the organisation is that that the equivalent of 1.5 full-time staff members spent their time in marketing pursuits. Payroll costs incurred for these workers were not itemised in the total staff costs reported on Form 1 of the proforma and could not be removed. As a result, the service delivery costs of all interventions are somewhat overstated for Provider 2 in Chapter 7 and marketing costs somewhat understated.

Though small individually, it should also be noted that the *number* of uncertainties that had to be resolved by assumption was unusually high for anonymised Provider 1. All figures reported for this provider have somewhat lower assurance of accuracy

than for the other organisations, though are still considered valid and correct in broad outline.

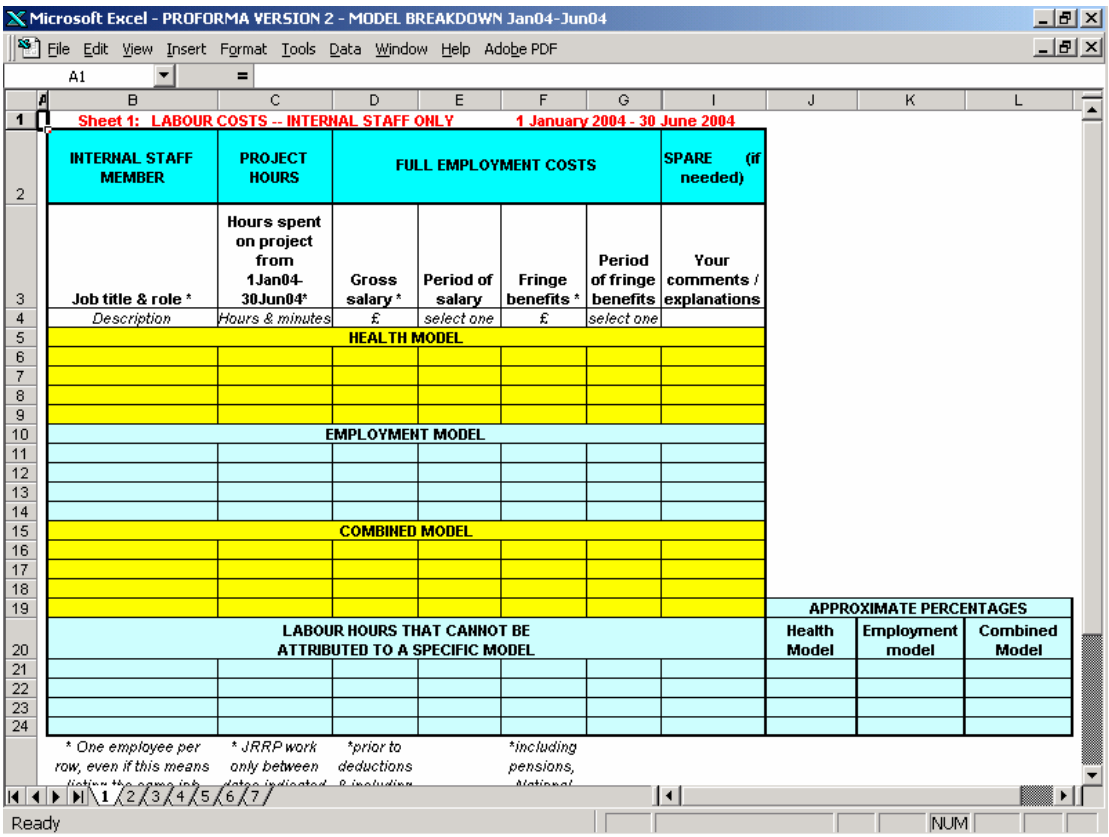
A few further caveats should be applied to the cost information supplied by DWP. By DWP's own assessment, the figures obtainable concerning the centralised costs of the pilot were inexact in the following instances:

- For Jobcentre Plus staff, average salaries for each job classification (e.g., Grade 7) were used rather than actual salaries of the precise individuals involved, though in all but one instance, hours spent on JRRP were measured at the individual level.
- Supervisory time of Grade 6 personnel within the central Jobcentre Plus unit was assumed to equal 25 per cent of full-time employment based on the number of individuals supervised (four per supervisor) and conventional experience of those working at this grade level.
- Jobcentre Plus staff costs of overseeing the operations of the Contact Centre could not be isolated and reduced by one-quarter to reflect the added screening and intake burden of creating a research control group, although for the direct costs of the Centre (which was run under contract by an outside organisation) this reduction could be implemented.
- Contract oversight costs, although measured in a relatively stable running period, likely exceeded what would be needed in a national programme, due to two factors: the decision to place all oversight responsibilities in the central DWP office in Sheffield rather than in District offices as is customary for any established programme (added travel and staff time costs likely resulted) and the additional work needed to address contractually the financing challenges of providers who continued to experience client flows below plan but whose services could not simply be discontinued without unduly disrupting the trial as a research project.

In several areas, providers and DWP alike stressed the potential for actual costs of service delivery and project oversight to overstate what might be expected from an ongoing programme: operation of the Contact Centre (thought likely to be less costly if brought in-house at DWP – a 25 per cent reduction from actual costs has been applied for this factor), more efficient contract monitoring, and the elimination of excess capacity among providers once more experience is gained in anticipating client flows and gauging resulting resource needs (a factor reduced but not eliminated by the bedding in of the pilot programme prior to cost data collection). These elements reflect the lack of assured replicability of pilot programmes in many domains once taken to scale, operating and oversight costs among them.

Table B.1 Provider cost data collection proforma

Project unit labour form



Microsoft Excel - PROFORMA VERSION 2 - MODEL BREAKDOWN Jan04-Jun04

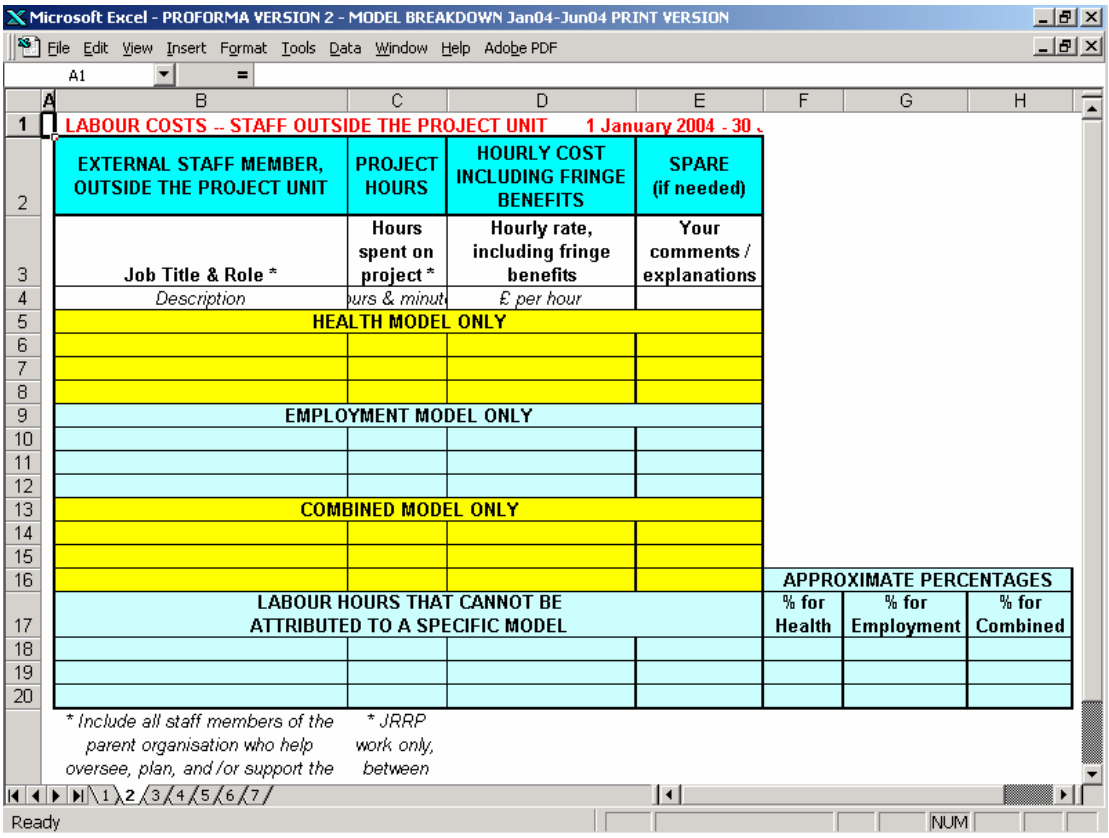
Sheet 1: LABOUR COSTS -- INTERNAL STAFF ONLY 1 January 2004 - 30 June 2004

INTERNAL STAFF MEMBER	PROJECT HOURS	FULL EMPLOYMENT COSTS				SPARE (if needed)
Job title & role *	Hours spent on project from 1Jan04-30Jun04*	Gross salary *	Period of salary	Fringe benefits *	Period of fringe benefits	Your comments / explanations
Description	*Hours & minutes*	£	*select one*	£	*select one*	
HEALTH MODEL						
EMPLOYMENT MODEL						
COMBINED MODEL						

LABOUR HOURS THAT CANNOT BE ATTRIBUTED TO A SPECIFIC MODEL	APPROXIMATE PERCENTAGES		
	Health Model	Employment model	Combined Model

** One employee per row, even if this means* ** JRRP work only between* **prior to deductions* **including pensions,*

Other (non-project unit) labour form



Microsoft Excel - PROFORMA VERSION 2 - MODEL BREAKDOWN Jan04-Jun04 PRINT VERSION

LABOUR COSTS -- STAFF OUTSIDE THE PROJECT UNIT 1 January 2004 - 30

EXTERNAL STAFF MEMBER, OUTSIDE THE PROJECT UNIT	PROJECT HOURS	HOURLY COST INCLUDING FRINGE BENEFITS	SPARE (if needed)
Job Title & Role *	Hours spent on project *	Hourly rate, including fringe benefits	Your comments / explanations
Description	*Hours & minut*	*£ per hour*	
HEALTH MODEL ONLY			
EMPLOYMENT MODEL ONLY			
COMBINED MODEL ONLY			

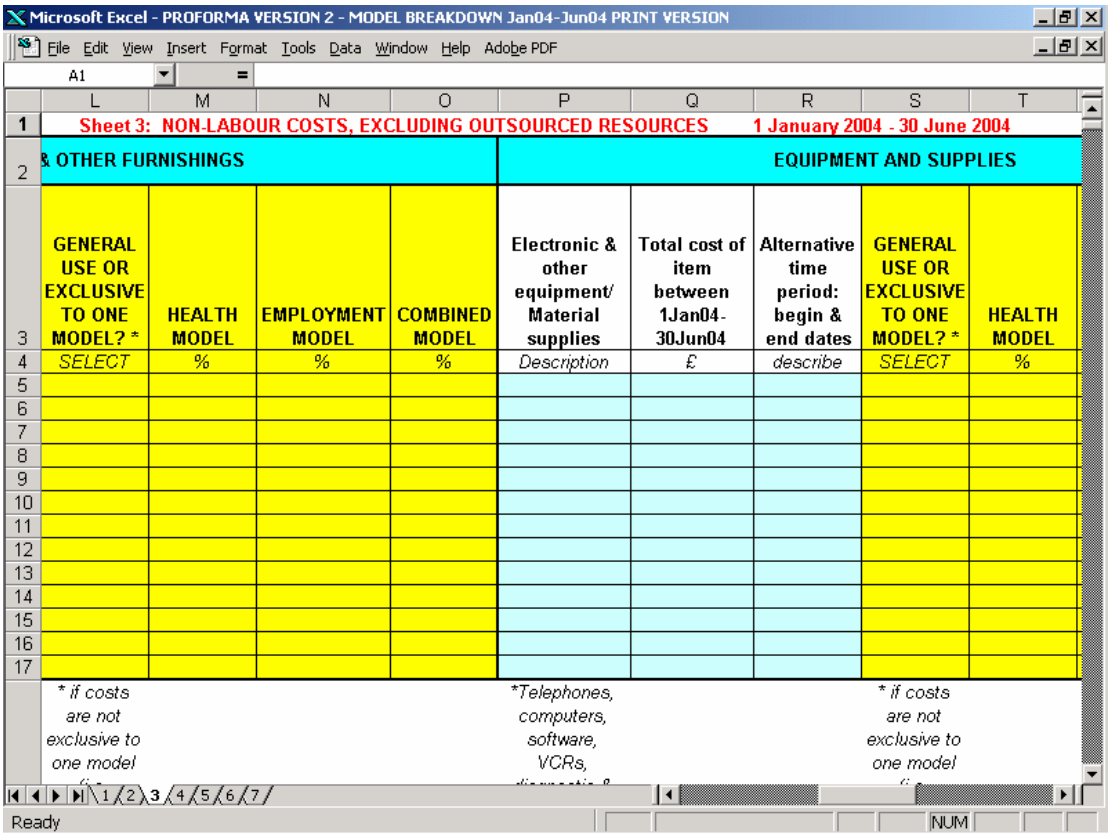
LABOUR HOURS THAT CANNOT BE ATTRIBUTED TO A SPECIFIC MODEL	APPROXIMATE PERCENTAGES		
	% for Health	% for Employment	% for Combined

** Include all staff members of the parent organisation who help oversee, plan, and /or support the* ** JRRP work only, between*

Internal non-labour resources form

[Partial display; full form includes:

- *Office space*
- *Furniture*
- *Equipment and supplies*
- *Incidental expenses]*



Microsoft Excel - PROFORMA VERSION 2 - MODEL BREAKDOWN Jan04-Jun04 PRINT VERSION

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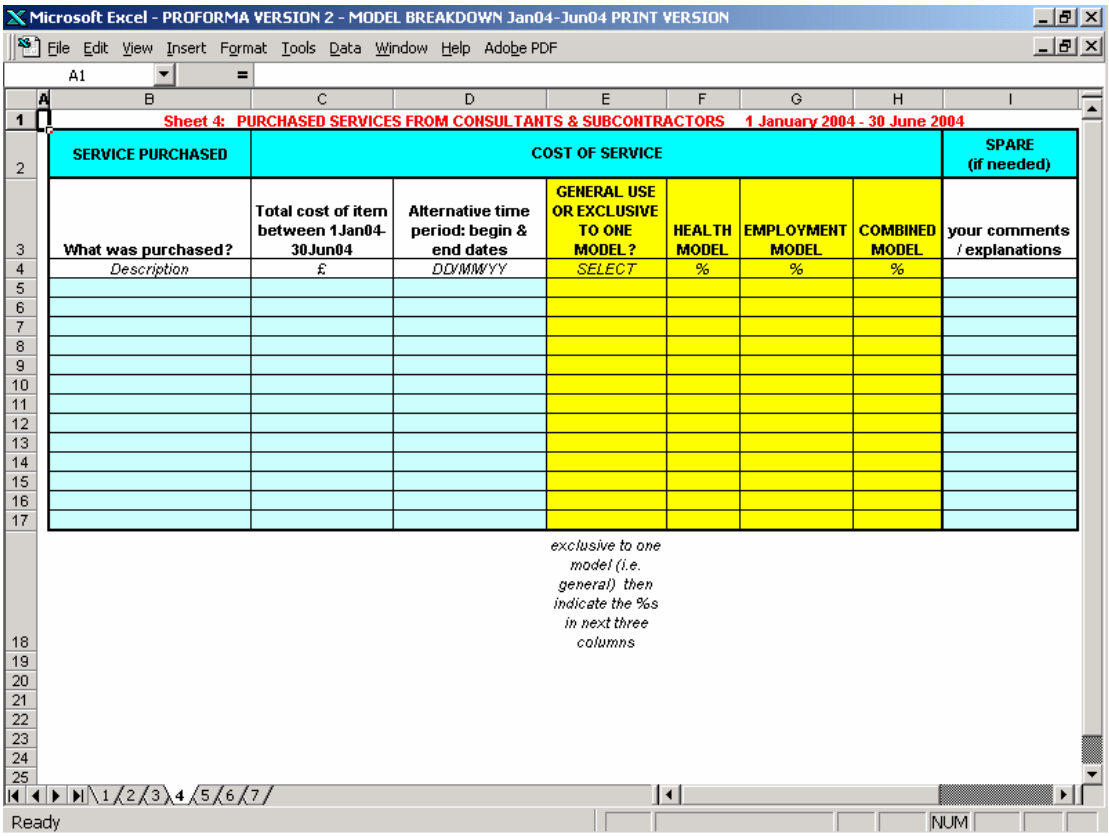
	L	M	N	O	P	Q	R	S	T
1	Sheet 3: NON-LABOUR COSTS, EXCLUDING OUTSOURCED RESOURCES 1 January 2004 - 30 June 2004								
2	& OTHER FURNISHINGS				EQUIPMENT AND SUPPLIES				
3	GENERAL USE OR EXCLUSIVE TO ONE MODEL? *	HEALTH MODEL	EMPLOYMENT MODEL	COMBINED MODEL	Electronic & other equipment/ Material supplies	Total cost of item between 1Jan04-30Jun04	Alternative time period: begin & end dates	GENERAL USE OR EXCLUSIVE TO ONE MODEL? *	HEALTH MODEL
4	*SELECT*	%	%	%	*Description*	£	*describe*	*SELECT*	%
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
	* if costs are not exclusive to one model				*Telephones, computers, software, VCRs,			* if costs are not exclusive to one model	

1 2 3 4 5 6 7

Ready NUM

Purchased services form



Microsoft Excel - PROFORMA VERSION 2 - MODEL BREAKDOWN Jan04-Jun04 PRINT VERSION

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A1 =

Sheet 4: PURCHASED SERVICES FROM CONSULTANTS & SUBCONTRACTORS 1 January 2004 - 30 June 2004

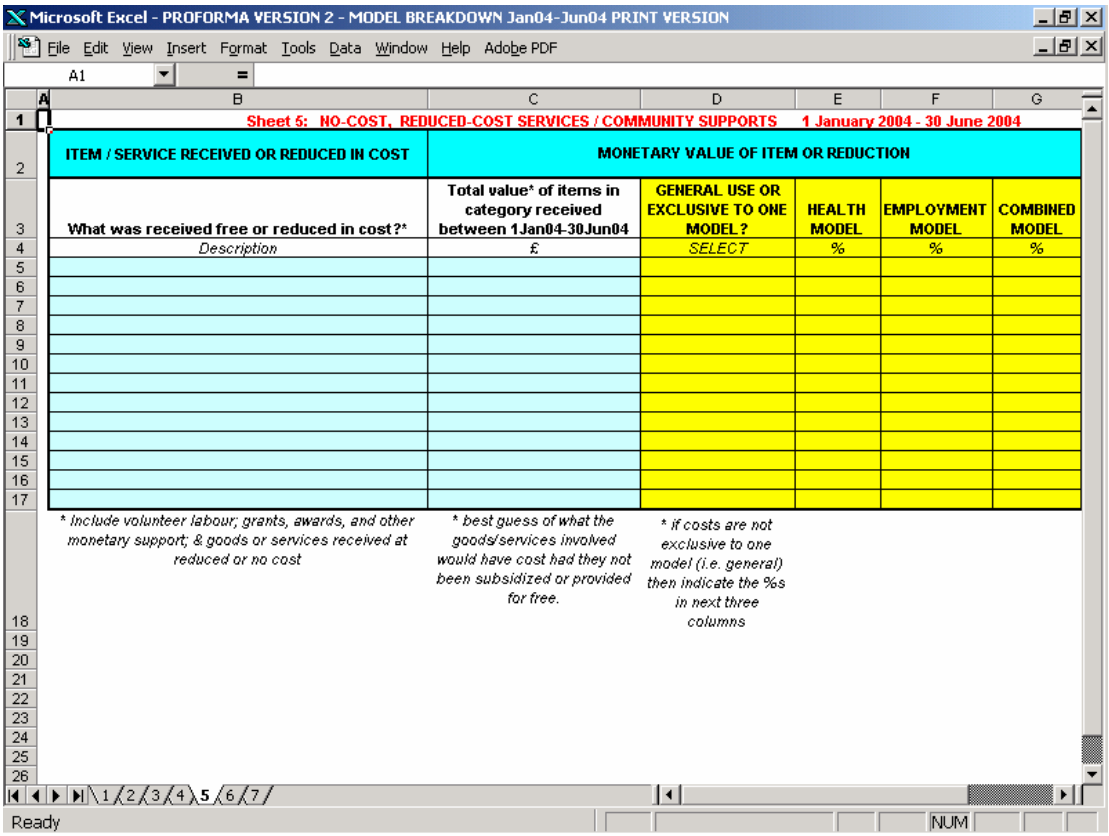
SERVICE PURCHASED	COST OF SERVICE						SPARE (if needed)
What was purchased?	Total cost of item between 1Jan04-30Jun04	Alternative time period: begin & end dates	GENERAL USE OR EXCLUSIVE TO ONE MODEL?	HEALTH MODEL	EMPLOYMENT MODEL	COMBINED MODEL	your comments / explanations
Description	£	*DD/MM/YY*	*SELECT*	%	%	%	

exclusive to one model (i.e. general) then indicate the %s in next three columns

1 2 3 4 5 6 7

Ready NUM

Donated resources form



Microsoft Excel - PROFORMA VERSION 2 - MODEL BREAKDOWN Jan04-Jun04 PRINT VERSION

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Sheet 5: NO-COST, REDUCED-COST SERVICES / COMMUNITY SUPPORTS 1 January 2004 - 30 June 2004

ITEM / SERVICE RECEIVED OR REDUCED IN COST	MONETARY VALUE OF ITEM OR REDUCTION				
What was received free or reduced in cost?*	Total value* of items in category received between 1Jan04-30Jun04	GENERAL USE OR EXCLUSIVE TO ONE MODEL?	HEALTH MODEL	EMPLOYMENT MODEL	COMBINED MODEL
Description	£	*SELECT*	%	%	%

** Include volunteer labour, grants, awards, and other monetary support; & goods or services received at reduced or no cost*

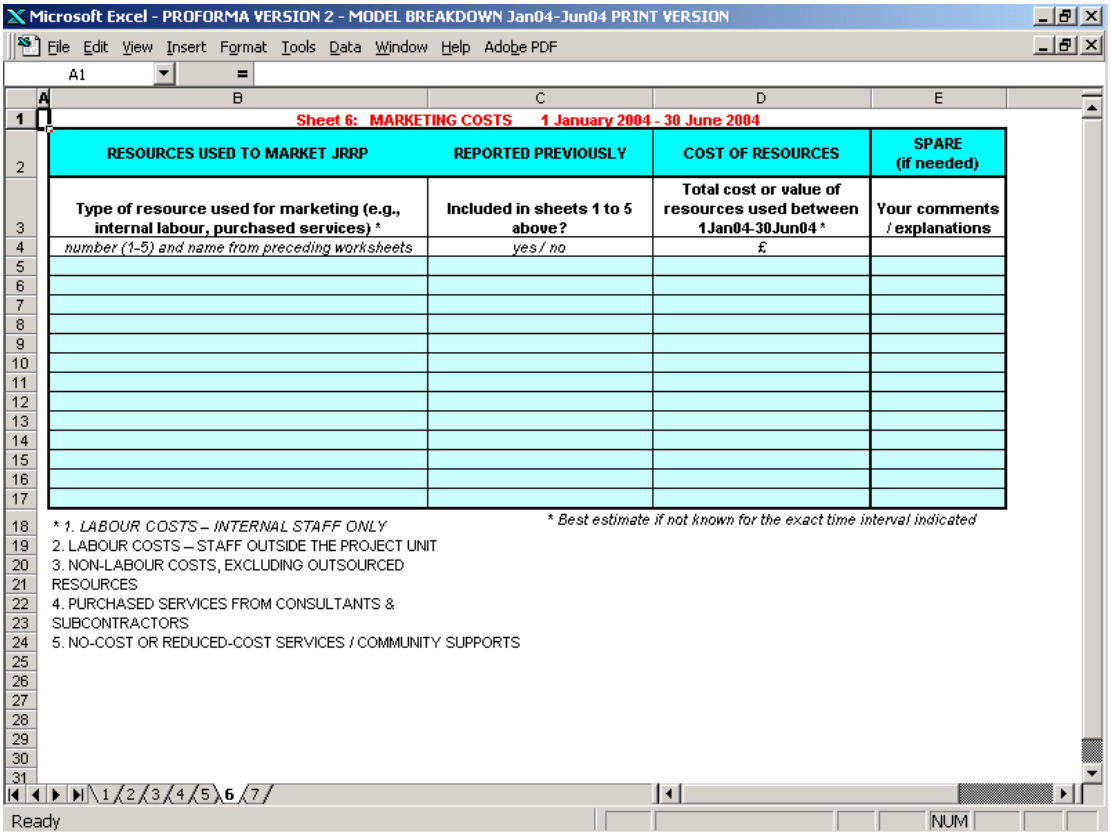
** best guess of what the goods/services involved would have cost had they not been subsidized or provided for free.*

** if costs are not exclusive to one model (i.e. general) then indicate the %s in next three columns*

1 2 3 4 5 6 7

Ready NUM

Marketing form



Microsoft Excel - PROFORMA VERSION 2 - MODEL BREAKDOWN Jan04-Jun04 PRINT VERSION

File Edit View Insert Format Tools Data Window Help Adobe PDF

A1 =

Sheet 6: MARKETING COSTS 1 January 2004 - 30 June 2004

RESOURCES USED TO MARKET JRRP	REPORTED PREVIOUSLY	COST OF RESOURCES	SPARE (if needed)
Type of resource used for marketing (e.g., internal labour, purchased services) *	Included in sheets 1 to 5 above?	Total cost or value of resources used between 1Jan04-30Jun04 *	Your comments / explanations
number (1-5) and name from preceding worksheets	*yes / no*	£	

** 1. LABOUR COSTS – INTERNAL STAFF ONLY*

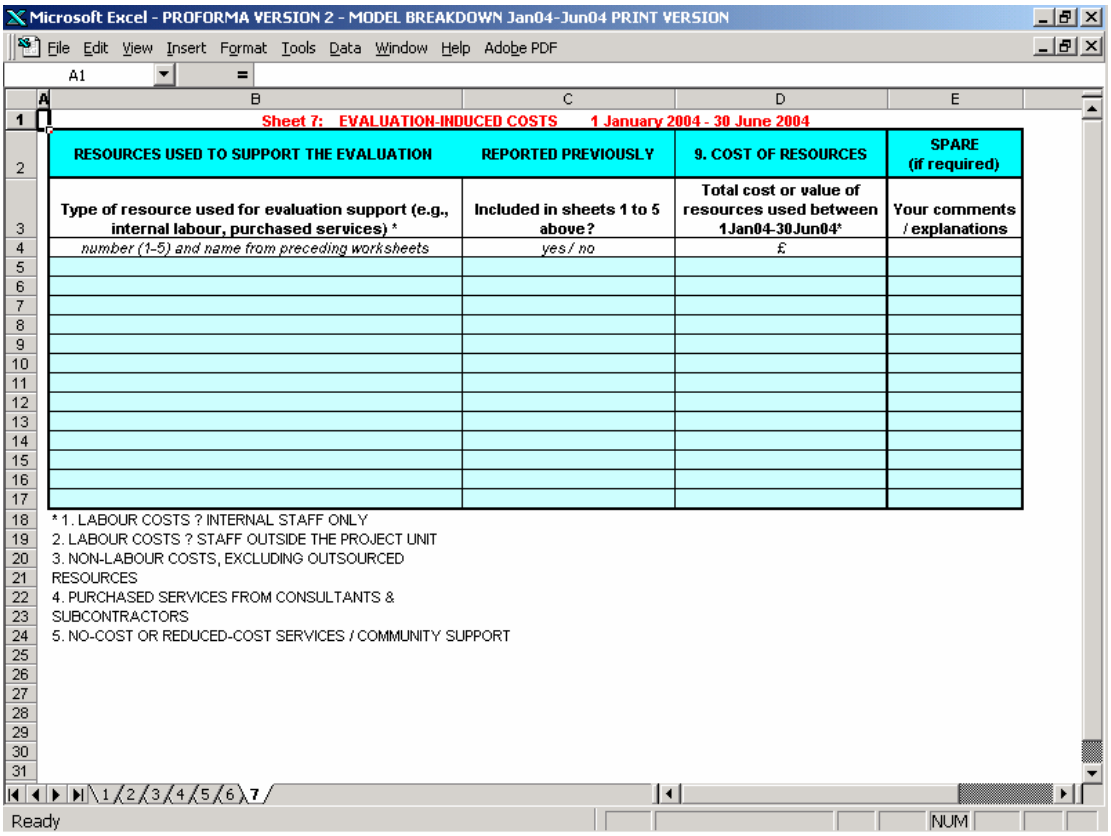
** Best estimate if not known for the exact time interval indicated*

2. LABOUR COSTS – STAFF OUTSIDE THE PROJECT UNIT
3. NON-LABOUR COSTS, EXCLUDING OUTSOURCED RESOURCES
4. PURCHASED SERVICES FROM CONSULTANTS & SUBCONTRACTORS
5. NO-COST OR REDUCED-COST SERVICES / COMMUNITY SUPPORTS

1 2 3 4 5 6 7

Ready NUM

Evaluation support form



Microsoft Excel - PROFORMA VERSION 2 - MODEL BREAKDOWN Jan04-Jun04 PRINT VERSION

File Edit View Insert Format Tools Data Window Help Adobe PDF

A1 =

Sheet 7: EVALUATION-INDUCED COSTS 1 January 2004 - 30 June 2004

RESOURCES USED TO SUPPORT THE EVALUATION	REPORTED PREVIOUSLY	9. COST OF RESOURCES	SPARE (if required)
Type of resource used for evaluation support (e.g., internal labour, purchased services) *	Included in sheets 1 to 5 above?	Total cost or value of resources used between 1Jan04-30Jun04*	Your comments / explanations
number (1-5) and name from preceding worksheets	*yes / no*	£	

* 1. LABOUR COSTS ? INTERNAL STAFF ONLY
2. LABOUR COSTS ? STAFF OUTSIDE THE PROJECT UNIT
3. NON-LABOUR COSTS, EXCLUDING OUTSOURCED RESOURCES
4. PURCHASED SERVICES FROM CONSULTANTS & SUBCONTRACTORS
5. NO-COST OR REDUCED-COST SERVICES / COMMUNITY SUPPORT

1 2 3 4 5 6 7

Ready NUM

Table B.2 Instructions for provider cost data collection proforma

Evaluation of the Job Retention and Rehabilitation Pilots

COST DATA COLLECTION PROFORMA INSTRUCTIONS

This document is for reference when completing the CBA Proforma. For any outstanding queries please contact _____ at the National Centre for Social Research.

GENERAL POINTS

The Proforma is an Excel Spreadsheet with seven worksheets numbered 1-7:

1. LABOUR COSTS – INTERNAL STAFF ONLY
2. LABOUR COSTS – STAFF OUTSIDE THE PROJECT UNIT
3. NON-LABOUR COSTS, EXCLUDING OUTSOURCED RESOURCES
4. PURCHASED SERVICES FROM CONSULTANTS & SUBCONTRACTORS
5. NO-COST OR REDUCED-COST SERVICES/COMMUNITY SUPPORTS
6. MARKETING COSTS
7. EVALUATION-INDUCED COSTS

As shown in the example, the first 4 rows of each worksheet contain:

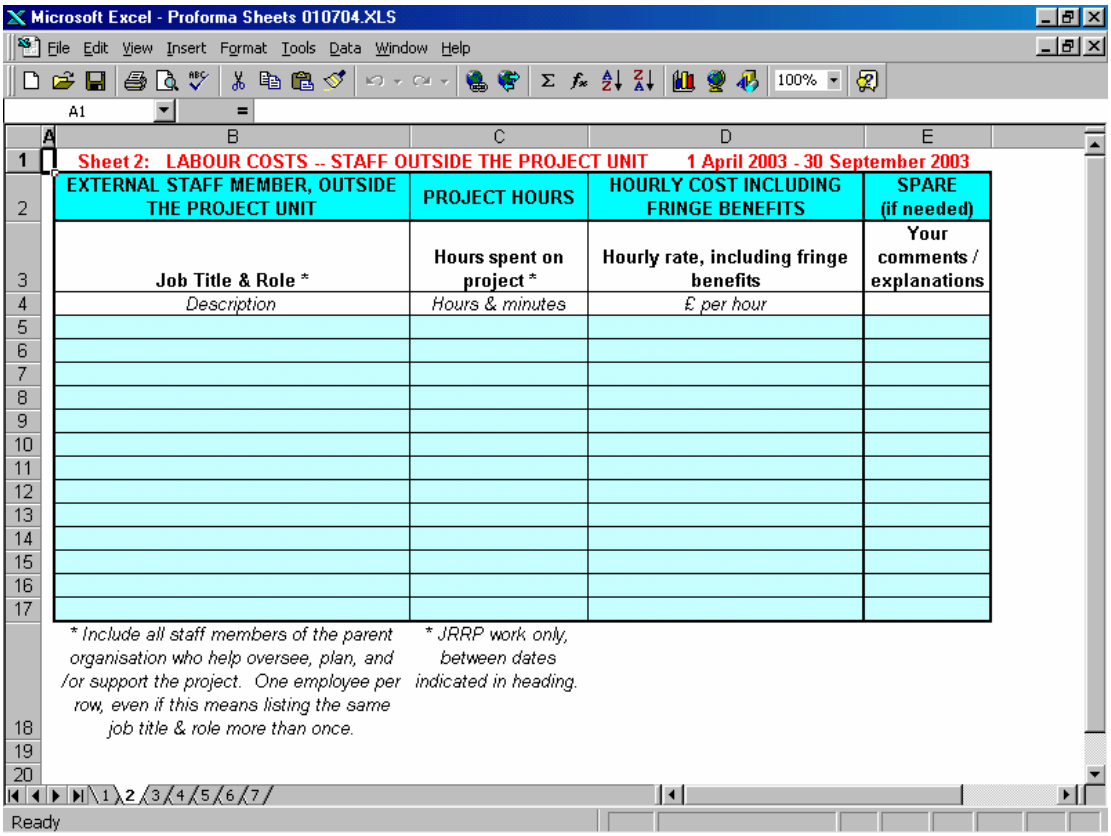
Title (in **RED)**

Topics to be covered by the data items provided **(IN BOLD)**

Description of items to be entered in each column -- with additional detail provided at foot of column as needed

Units to use in when entering numbers into the column (*Italics*)

Rows 5 and above provide space (cells) for data entry (PALE BLUE = ENTER DATA HERE).



Microsoft Excel - Proforma Sheets 010704.XLS

Sheet 2: LABOUR COSTS -- STAFF OUTSIDE THE PROJECT UNIT 1 April 2003 - 30 September 2003

EXTERNAL STAFF MEMBER, OUTSIDE THE PROJECT UNIT	PROJECT HOURS	HOURLY COST INCLUDING FRINGE BENEFITS	SPARE (if needed)
Job Title & Role *	Hours spent on project *	Hourly rate, including fringe benefits	Your comments / explanations
Description	*Hours & minutes*	*£ per hour*	

* Include all staff members of the parent organisation who help oversee, plan, and /or support the project. One employee per row, even if this means listing the same job title & role more than once.

* JRRP work only, between dates indicated in heading.

There are two versions of the proforma, the second with extra details added. It is only this second version – Version 2 (the Model Level Breakdown) – that *must* be completed. You do not have to complete Version 1, but experience has shown that completing it will make the required Version 2 easier to complete, using in part information from Version 1. The CBA requires that cost information be broken down into individual models wherever possible.

Version 1 - GENERAL

The first is a breakdown of all JRRP costs into their constituent components, e.g. Labour costs, office space etc.

Version 2 - MODEL BREAK DOWN

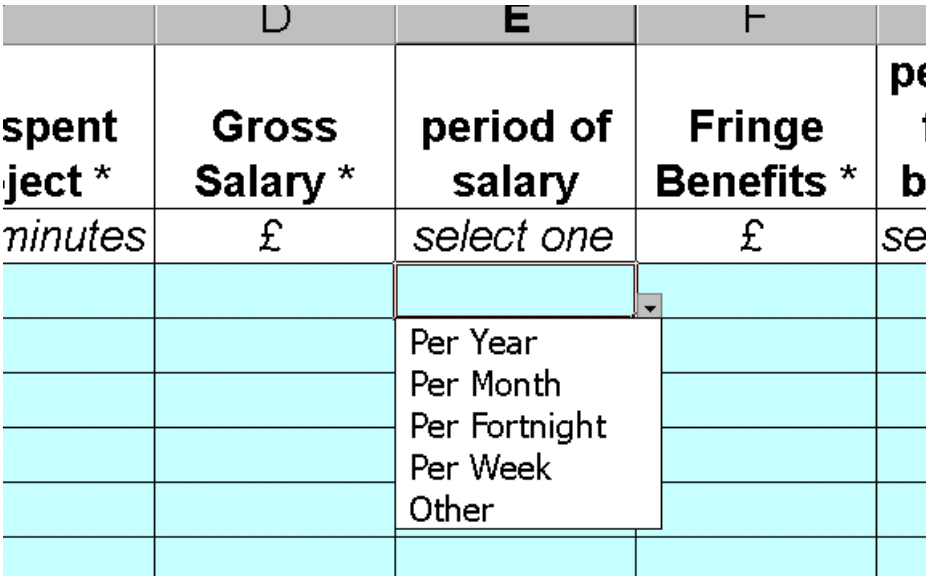
The second takes each component and breaks down each cost by model, e.g. Labour costs for Health Model / Employment Model /Combined Model.

It is vital to the analysis that the costs for each model are made available, therefore as a minimum we would like to have this form returned. Every effort should be made to indicate how different resources, and the expenditures used to acquire them, were allocated across the three models. As indicated in the proforma, approximations are acceptable (i.e., estimated % to each model) but are to be used only if direct figures for the individual models are not available.

Details are provided below for each sheet.

Entering data

- Select each worksheet in turn by clicking on the numbered tabs at the bottom of the screen.
- Data go in pale blue cells.
- Please ENTER AS MUCH DATA AS POSSIBLE in each worksheet.
- Some cells are pre-formatted (e.g. to enter £1,000.00 just type 100000) or have dropdown lists from which to select responses, as in the following example:



- Cells expand as necessary to fit longer text entries.
- A **SPARE** column is provided at the end (far right) of each worksheet for comments, explanations, or clarifications you may wish to enter.

Time periods

- Please provide COMPLETE, COMPREHENSIVE information for the ENTIRE time period indicated in the title of the spreadsheet.
- Where this proves impossible and complete information is not entered, please indicate the time period covered in the SPARE column on the far right.

Remaining pages

The rest of this document provides instructions for the individual worksheets. The most important details provided here also appear at the foot of individual column in the spreadsheets themselves. For each worksheet, instructions are given first that apply to both version 1 and version 2. These are followed by special instructions for version 2 (MODEL BREAKDOWN) where needed.

INSTRUCTIONS FOR WORKSHEETS 1 - 7

1. LABOUR COSTS – INTERNAL STAFF ONLY

This is ONLY for staff who work in the PROVIDER project unit. Do not include other employees of the organisation even if they support the project in some way (sheet 2). Also do not include labour costs of consultants or subcontractors (sheet 4).

Enter *Job Title* of the employee and briefly describe her/his *Role* within the PROVIDER unit (unless evident from the job title).

Please list each employee on a separate line even if this means entering the same job title & role more than once (i.e., if more than one employee has the same job title).

Be sure to include employees no longer with the project but who worked on the project at ANY time during the time period indicated

For each employee please enter:

- Number of *Project Hours* worked during the time period indicated ONLY FOR HOURS SPENT ON PROVIDER.
- *Gross Salary* prior to deductions & including any overtime pay, and whether the salary is per year/fortnight/month/week/other period [if 'other' please describe in SPARE column at far right.]. For staff members whose salary changed during the interval covered, please enter the approximate average salary over that period.
- *Fringe Benefits* (i.e. additional payroll costs not included in salary) in pounds. This should include any employer payments for pensions and National Insurance. It should also include any bonus payments from the employer, and whether the fringe benefit amount is per year/fortnight/month/week/other period if 'other' describe in SPARE column].

ADDED INSTRUCTIONS FOR VERSION 2 - MODEL BREAKDOWN

In addition to all of the above points:

Please enter each employee under the appropriate model-specific row category.

- If the individual has worked on more than one model, her/his hours should be split between the appropriate rows.
- If it is impossible to accurately separate out which hours have been spent on which model, the approximate percentages for each model should be given in the three extra columns to the right (labelled 'approximate percentages').
- For time which is not related to any particular model (e.g. high level management time) list the split as 33 per cent on Health, 33 per cent on Employment, 33 per cent on Combined.

2. LABOUR COSTS – STAFF OUTSIDE THE PROJECT UNIT

This is ONLY for staff members of the parent organisation OUTSIDE the PROVIDER project unit who help oversee, plan, and/or support the project in some way. Do not include employees who are part of the project unit (sheet 1) or the labour costs of consultants and subcontractors (sheet 4).

Enter *Job Title* of the employee and briefly describe her/his *Role* within the PROVIDER unit (unless evident from the job title).

Please list each employee on a separate line even if this means entering the same job title & role more than once (i.e., if more than one employee has the same job title).

Be sure to include employees no longer working to support the project but who worked in that capacity at ANY time during the time period indicated.

For each employee please enter:

- Number of *Project Hours* worked during the time period indicated ONLY FOR HOURS SPENT SUPPORTING PROVIDER.
- Hourly rate as best it can be approximated, including the cost per hour of fringe benefits.

ADDED INSTRUCTIONS FOR VERSION 2 - MODEL BREAKDOWN

Please enter each employee under the appropriate model-specific row category.

- If the individual has worked on more than one model, her/his hours should be split between the appropriate rows.
- If it is impossible to accurately separate out which hours have been spent on which model, the approximate percentages for each model should be given in the three extra columns to the right (labelled 'approximate percentages').
- For time which is not related to any particular model (e.g. high level management time) list the split as 33 per cent on Health, 33 per cent on Employment, 33 per cent on Combined.

3. NON-LABOUR COSTS, EXCLUDING OUTSOURCED RESOURCES

This is ONLY for material goods purchased and owned by the parent organisation and used by the PROVIDER project unit. Do not include labour costs (sheets 1 & 2) or the costs of purchased services from consultants or subcontrators (sheet 4).

As far as possible please report costs incurred during the precise time interval indicated. For costs that cannot be broken down to correspond to the exact period requested, please give costs incurred over the most closely corresponding period and describe its start and end dates.

Four categories of costs are included, each with its own set of columns. Multiple rows are provided for each category to allow itemization of specific expenditures if this is the easiest way to enter the data and ensure its completeness. Definitions of the specific categories appear below.

Similar items can be listed within a category on a single line or row, if described fully in the first column of that category [e.g. 'Desks, chairs & footrests for PROVIDER offices' in the Furniture and Other Furnishings category].

Office Space: Items listed under this category should include:

- Total rental payments or equivalent (of company-owned space) during the entire period indicated.
- Utilities—electric, water, etc.—not included in the cost of rental or equivalent, again for the entire period covered.
- Maintenance or cleaning not included in the cost of rental or equivalent, cumulated over the entire period indicated.
- Any other direct costs of any PROVIDER premises during that interval.

Furniture & Furnishings includes the (non-mechanical) contents of the project's premises, such as desks, chairs, plants, and art work.

Equipment & Supplies encompasses all other materials in the project unit offices, including paper and other supplies and electronic and mechanical equipment such as rehabilitation equipment and computers & photocopiers. Maintenance or operating fees for equipment should also be included here if paid to outside entities.

Incidental Expenses include costs of non-material inputs to PROVIDER activities, such as postage, travel, and other 'petty cash' type expenses.

ADDED INSTRUCTIONS FOR VERSION 2 - MODEL BREAKDOWN

- For each item entered on this sheet indicate the appropriate model-level category by selecting from the dropdown list.
- If the item is general to all models rather than specific to one model, indicate the approximate break-down as percentages
- For items which are not related to any particular model the appropriate split is 33 per cent on Health, 33 per cent on Employment, 33 per cent on Combined

4. PURCHASED SERVICES FROM CONSULTANTS AND SUBCONTRACTORS

Payments for services acquired from outside organisations and individuals through subcontracting or consulting arrangements. Do not include labour costs for employees from outside the Healthy Return unit (sheet 2) but employed within the same organisation.

As far as possible please report costs incurred during the precise time interval indicated. For costs that cannot be broken down to correspond to the exact period requested, please give costs incurred over the most closely corresponding period and describe its start and end dates.

Similar items can be listed on a single line or row, if described fully in the first column [e.g. 'Cognitive Behavioural Therapy Sessions' acquired from a range of consultants and subcontractors].

ADDED INSTRUCTIONS FOR VERSION 2 - MODEL BREAKDOWN

- For each item entered on this sheet indicate the appropriate model-level category by selecting from the dropdown list.
- If the item is general to all models rather than specific to one model, indicate the approximate break-down as percentages
- For items which are not related to any particular model the appropriate split is 33 per cent on Health, 33 per cent on Employment, 33 per cent on Combined

5. NO-COST OR REDUCED-COST SERVICES / COMMUNITY SUPPORTS

List all services/items or parts of services/items received from external sources that were not actually paid for but were used by PROVIDER to deliver the service. These items should include:

- Volunteer labour
- Grants, awards, and other forms of monetary support
- Goods or services received at reduced or no cost [e.g. supplies donated by a community organisation].

For each item, please provide a best guess of what the goods/services involved would have cost had they not been subsidized or provided for free. [**NB:** the part of the cost which has actually been paid out of PROVIDER budget should be listed in another worksheet – please make a note if you think this is not the case]

As far as possible please report only those no-cost and reduced-cost items received during the time interval indicated. For items that cannot be broken down to that level, please estimate the value of such donations during the most closely corresponding period and indicate its start and end dates.

Similar items can be listed on a single line or row, if described fully in the first column [e.g. 'Volunteer Nurses'].

ADDED INSTRUCTIONS FOR VERSION 2 - MODEL BREAKDOWN

- For each item entered on this sheet indicate the appropriate model-level category by selecting from the dropdown list.
- If the item is general to all models rather than specific to one model, indicate the approximate break-down as percentages
- For items which are not related to any particular model the appropriate split is 33 per cent on Health, 33 per cent on Employment, 33 per cent on Combined

MARKETING COSTS

List any resources from categories 1 through 5 above used specifically to market or promote PROVIDER services to a range of potential audiences: potential clients, GPs, other referral sources, and community organisations among others.

All such items should already have been reported in prior worksheets based on the type of input involved – internal labour, no-cost goods and services, etc. – but now organized according to the use made of those inputs. After writing the input type involved in the first column of sheet 6, indicate whether the monetary amount already appears on a prior worksheet; if so, the cost-benefit analysis will make sure to not double-count it.

Items in the same input category can be listed together or separately, depending on which version of the information is easiest to compile and provide.

As far as possible please report costs incurred during the precise time interval indicated. Where this is not possible, approximate the amount likely to have been incurred during that time.

EVALUATION-INDUCED COSTS

List any resources from categories 1 through 5 above used to support the evaluation component of the project – i.e. resources THAT WOULD NOT HAVE BEEN USED IF PROVIDER WERE A LOCALLY-INITIATED PROJECT WITHOUT THE ADDED BURDEN OF (A) BEING A RANDOMISED FIELD TRIAL AND (B) PROVIDING DATA TO THE EVALUATION TEAM.

Evaluation-induced expenditures include:

- Staff time spent talking to/having interviews with evaluation staff or DWP staff concerning evaluation matters.
- Staff time and vendor payments needed to provide extra data collection or data collection systems used in reporting client tracking, expenditure, and other management information to DWP or the evaluation that would otherwise not have been collected or conveyed.
- Staff time for outreach, intake, and service delivery activities NECESSITATED BY THE RANDOMISED TRIAL DESIGN: time spent explaining the trial to referral sources, informing clients about random assignment during intake, getting consent forms, and answering client questions + staff and management time devoted to assuring fidelity to the 3 intervention models – e.g., extra training by DWP, supervisory staff monitoring of compliance additional, unusual or ex-post marketing related activities.
- Increased hiring costs due to higher turnover of staff caused by short-run nature of project.
- Additional printing etc. costs of outreach materials added or modified to increase intake.
- Other evaluation-induced expenses.

All these items should already have been reported in prior worksheets based on the type of input involved – internal labour, no-cost goods and services, etc. – but now organized according to the use made of those inputs. After writing the input type involved in the first column of sheet 5, indicate whether the monetary amount already appears on a prior worksheet; if so, the cost-benefit analysis will make sure to not double-count it.

Items in the same input category can be listed together or separately, depending on which version of the information is easiest to compile and provide.

As far as possible please report costs incurred during the precise time

interval indicated. Where this is not possible, approximate the amount likely to have been incurred during that time.

Table B.3 Comprehensive list of individual cost items reported by providers

Key: * = costs (on sheets 1-5) classified as labour

^ = costs (on sheets 1-5) classified as outsourced

[NB: Cost items are listed under every cost category where they appear on any of the six organisation's final proformas; hence, a given type of item can appear in multiple places on this list]

Project Unit Labour (sheet 1)

caseworker*
project director*
project manager*
administrator - top level*
administrator - second level*
marketing officer*
marketing assistant*
finance officer*
therapy manager*
research advisor*
welfare rights advisor*
model team leader*
physiotherapist*
re-integration specialist*
cognitive therapist*
IT specialist*
occupational health advisor*
occupational therapist*
occupational physician*

Other Labour (sheet 2)

project manager*
project lead/medical advisor*
finance officer/senior administ.*
marketing placement student*
administrator - top level*
administrator - second level*
librarian*
corporate manager*
contract manager*
research advisor*
IT specialist*

Office Space (sheet 3-A)

managed office space
rent
council rates
landlord service charge
insurance
cleaning
water
electricity
telephones
fitting out of building
maintenance
art

Furniture (sheet 3-B)

all office contents
office furniture
fitting out of building

Equipment & Supplies (sheet 3-C)

all office contents
computing equipment
therapeutic equipment
IT maintenance^
electronic goods/software
compt'r supplies (toner, paper)
telephone
stationary
photocopying
marketing materials
subscriptions/memberships
medical supplies

Incidental Expenses (sheet 3-D)

client travel to JRRP office
staff transportation
staff overnight accommodation
business entertainment
postage & packaging
telephone
stationary
photocopying
printing
compt'r supplies (toner, paper)
catering
petty cash/sundry
drinking water
tea/coffee/milk
electronic goods/software
books
staff training*^
repairs/servicing^
payroll handling charge^
staff supervision*^
landlord service charge
cleaning

Purchased Services (sheet 4)

IT specialist*^
marketing consultant*^
alternative medicine therapist*^
orthopaedic consultant*^
occupational physician*^
mentor*^
counselling*^
welfare rights advisor*^
cognitive therapist*^
physiotherapist*^
other manual therapy*^
occupational therapy*^
dyslexia^
podiatry^
operations^
case conferencing/consultations*^
expert witness*^
staff training*^
agency recruitment fees*^
executive board fees*^
taxis to work^
therapeutic equipment^
worksite accommodations^
MRI scans^
CT scans^
EEG^
X-rays^
reports/tests^
pilates^
gym membership^
other^

Donated Services (sheet 5)

council rates
advertising^

Marketing Costs (sheet 6)

project manager
marketing officer
marketing placement student
marketing consultant
admin & planning staff
staff travel
telephone
postage & packaging
photocopying
marketing materials
stationary
display stand
leaflets
leaflet dispensers
posters
press advertising
radio advertising
ambient advertising
give-away items
employer mailings
GP mailings
events/major presentations

Evaluation-Induced Costs (sheet 7)

project manager
finance officer
corporate manager
contract manager
therapy manager
model team leader
caseworker
welfare rights advisor
physiotherapist
occupational health advisor
occupational therapist
occupational physician
re-integration specialist
cognitive therapist
doctor advisor
research advisor
marketing officer
marketing placement student

marketing consultant/assistant
administrator
IT specialist
payroll handling charge (labour)
staff supervision (labour)
client travel to JRRP office
reports/tests
managed office space
telephone
stationary
photocopying
postage
travel
repairs/servicing
compt'r supplies (toner, paper)
medical supplies
marketing materials
petty cash/sundries

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