



**Evaluation of OHSxtra – a programme providing occupational health case management and rapid access to services, delivered within 15 NHS Scotland boards (2007 – 2009)**



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*The Appendices to the report are published in a separate document.*

**Appendix 1** Description of service delivery

**Appendix 2** Providers' reflections on OHSxtra delivery

**Appendix 3** Clients' comments on OHSxtra

## EXECUTIVE SUMMARY

### **Background**

Following a successful pilot study<sup>1</sup> into the delivery of case management and access to services for NHS staff with common health problems, funding was provided over 2 years for 15 NHS boards to deliver the OHSxtra programme. The programme adopted a case management model, whereby NHS staff with musculoskeletal conditions and common mental health problems were supported through case management and access to appropriate services (including physiotherapy, occupational therapy, counselling and CBT) in their retention in work or early return to work. This approach complemented and extended existing occupational health services.

### **Delivery**

A year's funding was provided in 2 waves, in 2007 and 2008, with match funding provided by each board to continue the service for a second year. Each board received funding to enable them to extend their occupational health services to meet the model; overall, funding was given for 6.9 wte case managers (in most cases this function was undertaken by an existing senior clinician, with the funding providing back-fill); 11.45 wte physiotherapists; 4.2 wte occupational therapists; 3.2 wte counsellors/CBT therapists/clinical psychologists; and 4.8 wte administrative staff. Due to regional and practical differences, the model was adopted in different ways across boards, although the core approach was common, and compromised:

- Strategic involvement by occupational health professionals in absence management;
- Triage and prioritisation of individuals' cases;
- A case management approach where appropriate (typically in complex cases), focusing on functional impairment rather than illness, and co-ordinating all available resources (including liaising with other health care providers and the individual's manager) to mitigate or resolve functional impairments with regard to work;
- Early access to rehabilitation services, specifically physiotherapy, psychological therapies and occupational therapy.

The measured outcomes were retention at work or return to work, and change in standardized health tool scores. Standardised data were collected by all boards.

### **Outcomes**

Entry data were received from 7,380 cases (data from 14 boards), meaning approximately 5% of NHS staff in participating boards were seen within OHSxtra. Staff gained access to services quickly, with 85% of cases (data on 4,962 cases available) being provided with their first service within 14 days. Standardised tool scores (EQ-5D, COPM and GHQ-12) showed noticeable improvements between entry and discharge. Discharge data were available on more than 2,200 cases. On discharge, 88% thought that the primary issue with which they came into the service had been resolved, and 81% thought OHSxtra helped them to stay / return to work. Twenty one percent of cases were absent at entry; by discharge, 83% of these had returned to work. Cases took fewer days absence than the average work-related absence durations reported in the HSE's Labour Force Survey (LFS); the amount of absence taken was about half of HSE LFS figures for cases with musculoskeletal conditions. Health benefits appeared to be maintained following discharge from the programme (measured using EQ-5D three and six months after discharge). The service was well received by cases.

Occupational health departments also reported favourably on the benefits of the programme, finding it helped with focusing the integration of services and building relationships between clinicians / service providers, leading to better return to work outcomes for clients. It was found that the approach could be successfully integrated into occupational health services. Working practices were reported to have changed, and boards intend to continue to work in this way.

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<sup>1</sup> [www.staffgovernance.scot.nhs.uk/downloads/1236336254-OHSxtra%20Final%20Report%20300707.pdf](http://www.staffgovernance.scot.nhs.uk/downloads/1236336254-OHSxtra%20Final%20Report%20300707.pdf)

# 1. INTRODUCTION

## 1.1 Background to the programme

The OHSxtra programme which is evaluated in this report adopted a case management model, and was available for NHS employees with health problems that were affecting them at work. In the model the case manager provided dedicated support for individuals with the clearly stated goal of retention in work or early return to work as a successful outcome. The case manager facilitated access to services, and liaised with the service providers, other health care providers such as GPs, and the individual's manager to expedite a return to or retention in work. This approach was intended to complement rather than replace existing NHS occupational health services.

Previous studies show the effectiveness of case management and provision of services in other organisations in helping people remain in work or return to work (e.g. Hanson *et al*, 2006); an example of the cost of, and potential savings from, rapid access to physiotherapy (based on data from NHS Lothian) was modelled in that study. In 2006, OHSxtra was piloted in two Scottish board areas, NHS Fife and NHS Lanarkshire. The pilot evaluated the effectiveness of early access to appropriate services (physical and talking therapies) and case management for NHS staff with occupational health related problems which were having an impact on their ability to stay at work or had resulted in absence. The service was shown to be effective both for clients with musculoskeletal conditions and those with common mental health problems. The results also demonstrated the cost benefit potential of the OHSxtra approach in retaining NHS staff at work and returning to work those off with both short and long-term absence, with the cost of service delivery being less than the anticipated cost of sickness absence for these staff. The programme was shown to be effective for clients and cost effective, with an estimated cost saving of £1.66 for every £1 spent on service delivery (Hanson *et al*, 2007).

Following the success of the pilot study, the Scottish Government offered funding for other Scottish health boards to adopt the same approach. Funding was awarded in April 2007 to eight boards, and in April 2008 to a further eight boards. In both funding rounds, 12 months funding was awarded by the Scottish Government with the individual boards committing to continue with the programme for a further 12 months by match funding.

During the course of the programme, 'Health Works' a review of the Scottish Government's Healthy Working Lives Strategy (Scottish Government, 2009) identified an action to create a 'Scottish Offer', that sets out, for individuals with a health barrier to entering work or who are in employment with a health condition that may compromise their ability to continue in work, what health services should be expected, standards they should be delivered to, how they can be accessed and the links to wider services such as employability. OHSxtra is a rapid intervention 'fit for work' service aimed at providing quick access for those working in NHS Scotland to allow staff to remain at work or to enable a fast return to the workplace. The approach adopted a biopsychosocial model utilising case management – as recommended by Dame Carol Black, National Director for Health and Work, in her review (Black, 2008). OHSxtra is effectively a 'Scottish Offer' to NHS Scotland staff.

## 1.2 Wider roll out of the programme

The boards that received funding to adopt the programme were:

2007 Funded	2008 Funded
NHS Ayrshire and Arran	NHS Dumfries and Galloway
NHS Borders	NHS Golden Jubilee
NHS Fife	NHS Greater Glasgow and Clyde <sup>1</sup>
NHS Forth Valley	NHS Lothian <sup>2</sup>
NHS Grampian	NHS National Services Scotland
NHS Highlands	NHS Orkney
NHS Lanarkshire	NHS Shetland
NHS Tayside	NHS Western Isles

<sup>1</sup> Funding was received for delivery of the service in four board locations only (three hospitals and one partnership).

<sup>2</sup> Funding was received for delivering the service in West Lothian only.

Each board had existing occupational health provision, with there being some differences in approach and services offered. The intention of the OHSxtra funding was to provide additional funds to allow boards to adopt the OHSxtra model. Where existing services met the OHSxtra model (e.g. rapid access to physiotherapy), funding was not provided to cover the cost of those services; the funding allowed new services or extension of existing services (e.g. to allow equity of access across the board). Funding was available for:

- Case management (whether by a dedicated case manager or integrated into existing clinical roles);
- Physiotherapy;
- Occupational therapy;
- Talking therapies, specifically counselling / cognitive behavioural therapy or psychotherapy;
- Administrative support.

Funding bids were reviewed by a panel chaired by the Scottish Government. Details of the services available within a board prior to OHSxtra funding, and the services that were provided by each board through OHSxtra funding are given in Appendix 1.

## 2. THE OHSxtra APPROACH

### 2.1 Overview

Despite differences between the 15 boards in terms of size, logistical challenges, existing service provision, existing methods of working and additional services funded through the programme, all boards signed up to the OHSxtra approach, which encompassed:

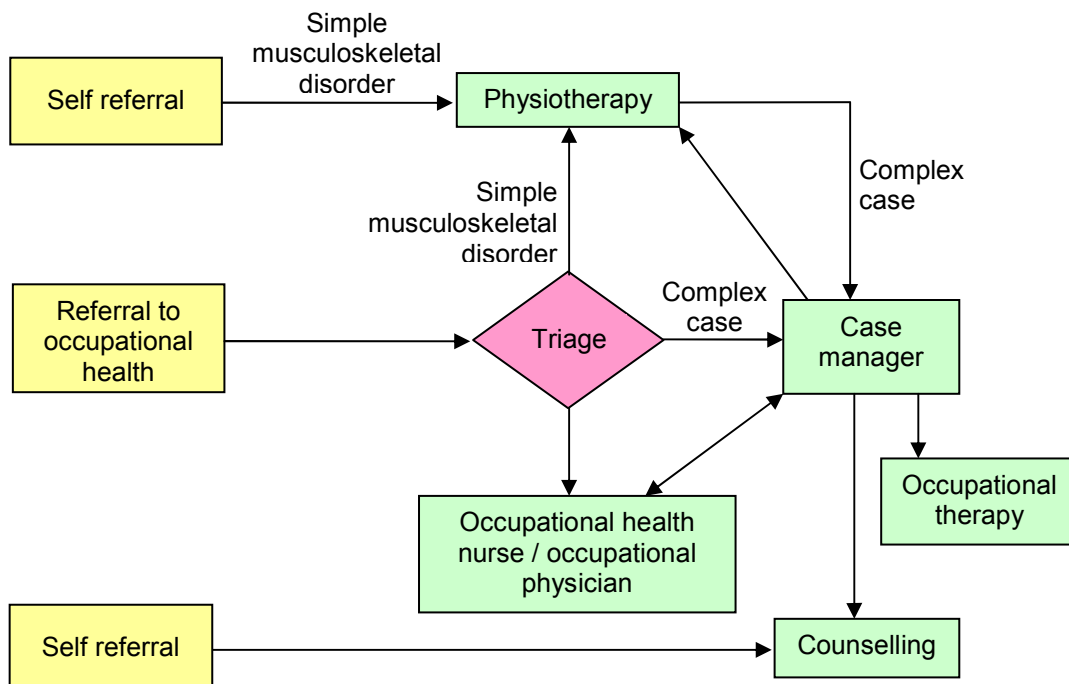
- Strategic involvement by occupational health professionals in absence management;
- Triage and prioritisation of cases;
- Early access to rehabilitation services, specifically physiotherapy, psychological therapies and occupational therapy;
- A case management approach where appropriate (typically in complex cases). This approach focuses on functional impairment rather than illness and co-ordinates all available resources to mitigate or resolve functional impairments with regard to work.

The outcome being measured was retention at or early return to work, and change in standardized health tool scores. The approach adopted a biopsychosocial model, which considers the biological (condition), psychological (impact on mental health and well-being) and social (wider factors that can have an impact on health and well-being). This approach enables health conditions to be de-medicalised, and the broader factors impacting on health to be considered and addressed.

### 2.2 Delivery of case management

It was accepted that there was no one delivery model that would suit all boards and the approach was implemented in different ways based on local needs. Different boards followed slightly different models concerning who undertook triage, and whether self referral by cases to physiotherapy and counselling services was possible. Another difference was whether a dedicated case manager was provided, or whether the case management function was undertaken by clinicians. However, all boards broadly followed the model shown in Figure 1.

**Figure 1: Flow chart of client route to services**



Triage criteria were established so that it was clear which clients may benefit simply from rapid access to services, which would benefit from case management, and which should receive pre-existing occupational health services.

It was intended that case management would be undertaken for more complex cases (where there may be multiple services provided), where such an approach has been shown to be effective. The case management approach focussed on the work ability of the client, with referral, advice, support and liaison with appropriate service providers and managers. In order to identify those clients who may benefit from a case management approach, guidance was given on the most appropriate clients to receive case management. This was:

- a. Clients who presented with a musculoskeletal disorder (MSD) of longer than 12 weeks, especially where one or more of the following was indicated:
  - i. Recurring problem
  - ii. Absent from work
  - iii. Repeated absence from work
- b. Clients who presented with multiple/complex needs (where a biopsychosocial model would be appropriate).
- c. Clients who might require more than one therapeutic intervention or assessment.

These triage criteria were adopted by all boards.



### **3. IMPLEMENTATION**

#### **3.1 Overview**

Each board adapted the philosophy of OHSxtra to meet local needs. As described in Section 1.2, in the bidding for funding, boards were asked to identify what additional resources were required to adopt this approach, as many boards were already providing elements of the service. Therefore boards received funding for different elements of the programme. The key issue was that board would provide case management for clients who required it, and rapid access to physiotherapy, counselling / cognitive behavioural therapy (CBT) and occupational therapy services.

Largely due to existing arrangements, boards had different criteria for entry into the programme; some received all clients whatever the impact of their health condition, while others only received those whose condition was affecting them at work ('work relevant').

Due to different approaches for integrating OHSxtra into existing service delivery, some boards collected data only relating to clients who received services funded by OHSxtra. Two boards (NHS Grampian and NHS Highlands) fully integrated their approach, and were not able to identify 'OHSxtra cases'. They therefore provided data for analysis on all clients who attended occupational health.

Although NHS Lanarkshire participated in the pilot study, and continued with the OHSxtra approach beyond the end of that pilot period, they changed their approach in 2008, and introduced an absence management programme which included case management and referral to services. This project, known as the EASY Project (Early Access to Support for You), provided services to those who had become absent, but not those who were at work and struggling (although staff at work can access these services by a self referral route); it therefore differs in approach to OHSxtra. NHS Lanarkshire did not collect data relevant for OHSxtra, and they are not included in the analysis described in this report.

NHS National Services Scotland, which is a geographically dispersed board with staff located across Scotland, experienced time delays in setting up the programme. They therefore were not able to contribute data for central analysis within the time frame of the project.

#### **3.2 Training**

All boards received one day's training in case management and the tools and data collection required for the project. A second half day's training was given in the use of the database. The trainers were experienced case managers and the OHSxtra project manager.

#### **3.3 Project management**

A project manager was appointed to co-ordinate the implementation of the programme in the different boards. They facilitated communication between the boards, and with the Scottish Government. In addition, each board had a representative who liaised with the project manager, and oversaw the delivery of the programme within their board. Most boards set up an internal OHSxtra implementation group, with regular meetings.

An OHSxtra national reference group was established with the remit of:

- identifying good practice;
- facilitating the sharing of information about approaches, processes, standards and experience, including case studies; and
- assisting with communication and joint working.

The meetings were bi-monthly during the early stages of the development of the programme, with meeting frequency becoming quarterly later in the programme. Teleconference facilities were available for those unable to travel. In addition, the different professional groups working on OHSxtra in their different board areas were offered the opportunity to network with others of the same profession from the other boards. Physiotherapy, occupational therapy and counselling networks were set up, for the sharing of experience and support.

### **3.4 Approach**

Table 1 summarises the different resources received and differences in data collection and service delivery between the boards. A more detailed description of service delivery in each of the boards is given in Appendix 1.

In total, the project notionally funded the following posts (where wte = whole time equivalent):

- 6.9 wte case managers: in most cases this function was undertaken by an existing senior clinician
- 11.45 wte physiotherapists
- 4.2 wte occupational therapists
- 3.2 wte counsellors / CBT therapists / clinical psychologists
- 4.8 wte administrative staff
- 0.5 wte dependency counsellor.

Not all boards were able to recruit to the intended posts, and for a variety of reasons, the approach adopted was not always that intended by the board at the bid preparation stage.

Because the boards differed widely in terms of size, geography, arrangements with existing service provision and funding received, the OHSxtra approach was implemented in different ways in different boards. The key differences are discussed below.

#### **3.4.1 Case management function**

Some boards chose to have case management delivered through a dedicated case manager, while the majority of boards integrated the function into existing clinical roles. Most of the boards that had case management as a discrete role found that delays could arise if the case manager was on leave or otherwise absent. The potential for delays partly depended on how the service was set up and how triage was undertaken and the position of the case manager within the team. Delays were more likely if all new cases had to be assessed by the case manager. They were minimised if the triage criteria (triage not undertaken by the case manager) allowed clients with simple conditions to go directly to the service provider, with cases being referred to the case manager (either at triage or by a service provider) if the condition was more complex. Three of the boards that provided case management as a discrete function changed to providing case management through a clinical function (i.e. undertaken by a team) part way through the project. One board (NHS National Services Scotland) continued with the specific case management function as this suited their particular needs, being a geographically dispersed board, where they provided telephone based case management and procured therapeutic services from a range of other NHS occupational health departments.

#### **3.4.2 Access**

Different criteria were used for access to services. Some boards provided their physiotherapy service for all musculoskeletal conditions, while others managed the demand on the service by only accepting 'work-affecting' conditions.

**Table 1: Summary of boards' approaches and the staffing provided through OHSxtra**

<b>2007 Funded boards</b>		<b>Ayrshire and Arran</b>	<b>Borders</b>	<b>Fife</b>	<b>Forth Valley</b>	<b>Grampian</b>	<b>Highland</b>	<b>Tayside</b>
<b>Clients received into programme</b>		All problems	All problems	Only work relevant	All problems	All problems	All problems; physiotherapy provided only for work relevant problems	All problems
<b>Data collected</b>		Only OHSxtra clients	Only OHSxtra clients	Only OHSxtra clients	Only OHSxtra clients	All clients through OH	All clients through OH	Only OHSxtra clients
<b>Case management (CM)</b>		Integrated into OH (PT / OT) roles	Integrated into OH (PT) roles	Dedicated CM part of the time / Integrated into OHN role	Integrated into OHN role	Integrated into OH roles	Dedicated CM part of the time / Integrated into OHN role	Dedicated CM part of the time / Integrated into OHN role
<b>Staffing funded by OHSxtra</b>	<b>Case manager</b>	-	-	1 wte	-	1 wte	1 wte	1 wte
	<b>Physiotherapy</b>	1 wte	1 wte	1 wte	0.5 wte	-	0.5 wte	3 wte
	<b>OT</b>	1 wte	0.1 wte	0.5 wte	-	1 wte	-	0.5 wte
	<b>Counselling / CBT</b>	License for 'Beating the blues'	0.3 wte clinical psychologist / CBT therapist	0.3 wte mental health support	0.2 wte Clinical psychologist	0.5 wte counsellor	Self help tools, group sessions	-
	<b>Other</b>	-	-	-	-	0.5 wte dependency counsellor	0.2 wte admin	0.5 wte admin
<b>Access to physiotherapy</b>		Self referral or OH referral	OH referral only	OH referral only	Self, manager, GP or OH referral	Self referral & referral via OH (to existing service).	Self referral or OH referral	OH and line manager referral.
<b>Access to counselling/CBT</b>		OH referral to CBT only. Self referral to staff care service and EAP also available.	Self referral (no reports to OH, except on discharge).	OH referral only.	OH referral only.	OH referral only.	OH referral only.	Self referral or OH referral (no reports to OH).
<b>Access to OT</b>		OH referral only	OH referral only	OH referral only	OH referral only.	OH referral only.	OH referral only.	OH referral only.

<b>2008 Funded boards</b>		<b>Dumfries and Galloway</b>	<b>Golden Jubilee</b>	<b>Greater Glasgow and Clyde</b>	<b>Lothian</b>	<b>NSS</b>	<b>Orkney</b>	<b>Shetland</b>	<b>Western Isles</b>
<b>Clients received into programme</b>		Only work relevant	All problems	Only work relevant	Only work relevant into OHSxtra triage. Counselling (not reported to OHSxtra) took all self referrals.	All problems	All problems	All problems	All problems
<b>Data collected</b>		Only OHSxtra clients	Only OHSxtra clients	Only OHSxtra clients	Only OHSxtra clients	Only OHSxtra clients	Only OHSxtra clients	Only OHSxtra clients	Only OHSxtra clients
<b>Case management</b>		Integrated into OHN role	Integrated into OHN role	Integrated into lead PT's role	Integrated into OH role	Dedicated CM	Integrated into OHN role	Integrated into OHN role	Integrated into OHN role
<b>Staffing funded by OHSxtra</b>	<b>Case manager</b>	0.5 wte	1.0 wte	-	-	1.2 wte	0.2 wte	1.0 wte	0.2 wte
	<b>Physiotherapy</b>	0.73 wte	0.25 wte	2.0 wte	2.0 wte	Purchased as required	0.2 wte	0.5 wte	0.5 wte
	<b>OT</b>	-	-	1.0 wte	0.5 wte		-	-	0.1 wte
	<b>Counselling / CBT</b>	1.0 wte	0.2 wte	-	0.6 wte		0.1 wte	0.4 wte	0.2 wte
	<b>Other</b>	1.0 wte admin	0.5 wte admin	2.0 wte admin	1.0 wte admin	10 days admin	0.2 wte admin	0.2 wte admin	0.2 wte admin
<b>Access to physiotherapy</b>		OH referral only	Self referral or OH referral	Self referral or OH referral	Self referral or OH referral*	CM referral only	Self referral	Self referral or OH referral	OH referral faster than self referral
<b>Access to counselling/CBT</b>		OH referral only	OH referral only	Self referral or OH referral	Self referral only (no reports to OH)	CM referral only	OH referral only	Self referral or OH referral	OH referral
<b>Access to OT</b>		OH referral only	OH referral only	OH referral only	OH referral only	CM referral only	OH referral only	OH referral only	OH referral

\* only data on self referrals was reported

**Key:**

CM = Case manager

EAP = Employee assistance programme

OH = Occupational health

OHN = Occupational health nurse

OT = Occupational therapy

PT = Physiotherapy

wte = whole time equivalent

Although triage criteria were agreed, the method of initial contact by therapists with the client following triage varied. Some boards undertook telephone assessments and provided advice (e.g. via leaflets or on intranet), while others saw all initial referrals for a face-to-face assessment.

### **3.4.3 Delivery method of 'talking therapies'**

Different approaches were used for the delivery of counselling and CBT, partly due to staff skills available. Some boards (those that were smaller and more remote) had difficulty recruiting CBT therapists in their geographical area and had to consider alternative ways of delivering the service. Solutions included providing an on-line self-help program ('Beating the Blues') and group sessions. In some boards, other clinicians with CBT training (e.g. occupational health nurses or occupational therapists) provided support in this area.

### **3.4.4 Geography**

Boards covering a small population or a geographically dispersed population faced practical challenges concerning delivery of services over a large area. Although they may have had OHSxtra funded therapists based at the main centre, in the locations remote from the centre they tended to use NHS outpatient facilities; case management was undertaken by phone.

### **3.4.5 Feedback from service providers**

In most boards, the occupational health team received client progress reports from the counselling / psychological therapies when they had referred a client for this service.

However, for confidentiality reasons, some boards were not able to gain reports from counselling / psychological therapy, and therefore to effectively case manage them. In these boards, clients requiring counselling support were asked to self-refer into the service; the occupational health staff did not know who had made use of the service, and data for evaluation were not available for these cases.

### **3.4.6 Classification of clients referred to services**

Following application of the accepted triage criteria, some boards collected data on all clients who received occupational health therapeutic services (particularly physiotherapy), whether or not it was paid for by OHSxtra, while others only collected it on services that were specifically paid for by OHSxtra. For example, if some physiotherapy was already provided prior to OHSxtra but this was extended by OHSxtra funding, some boards collected data only on the clients who were seen by the additionally funded physiotherapist, while other boards collected data on all clients who received occupational health physiotherapy services.

One board (NHS Lothian) only recorded data on clients who had self referred into the programme (i.e. excluded management referrals).

NHS Grampian and NHS Highlands collected data on all clients that were referred to occupational health services, not only those who met the OHSxtra triage criteria.

### **3.4.7 Summary**

These differences in approach limit the application of an economic evaluation, and make it more difficult to draw conclusions about particular elements of the approach.

## **3.5 Data collection**

### **3.5.1 Standardised data collection**

In order to ensure that data were collected and recorded in a standard way by each board a protocol for data collection and recording were established; data collection forms were developed

and standardised tools identified. Data were collected on a client's entry into the programme, during their involvement with the programme, and on their discharge. Data were sought from clients 3 and 6 months following their discharge to evaluate the longer term impact of the programme. Each board received training in the use of the questionnaires and tools. Each case entry received a unique identifying number; if a client entered the programme twice they would receive a new identifying number on the second entry; each individual was termed a 'client', and each unique entry a 'case'. A Microsoft Office Access™ database was provided on which data were recorded. The database was typically managed by an administrator within each of the boards.

### **3.5.2 Questionnaires**

Questionnaires and data collection forms were developed on which to record the required data. Some of this data was to help the case managers / clinicians in their role, while some was also required for entry into the database, which would enable subsequent analysis.

### **3.5.3 Standardised tools**

#### **3.5.3.1 EQ-5D**

The EQ-5D (European Quality of Life – 5 Dimensions) was used in the OHSxtra pilot study, and had been shown to be quick and easy for clients to complete. It asks clients to answer questions about their health status relating to five dimensions: mobility, self-care, ability to perform usual activities, pain and discomfort, and anxiety or depression. For each dimension there are three possible responses, essentially no problems, some problems, or significant problems. The tool also has a Visual Analogue Scale on which clients score their overall health status on the day from 0 (worst state imaginable) to 100 (best state imaginable).

#### **3.5.3.2 COPM**

The COPM (Canadian Occupational Performance Measure) was used in the pilot study, and had been well received by both clients and case managers. In this tool clients are asked to identify the activities important to them that they have most difficulty performing. They are asked to rate their ability to perform each identified activity (performance score), and their satisfaction with their ability to perform the activity (satisfaction score), in both cases using a scale of 1-10, with 10 being the best. Essentially, this tool is a way of clients subjectively quantifying their performance. It requires a careful discussion with the client to help them identify which tasks are most significant for them, and therefore is more time consuming to complete than the EQ-5D. However, it provides information which can help the clinician / case manager identify what the obstacles to work may be and can help develop an action plan with the client to overcome these obstacles.

Boards were requested to use the COPM for clients who were being case managed; clients who were referred directly (or self referred) to physiotherapy or counselling without the need for case management did not need to complete the COPM, although they completed the rest of the data collection related paperwork.

Both these tools are effective at measuring health changes for a range of conditions (including musculoskeletal and mental health).

#### **3.5.3.3 GHQ-12**

The General Health Questionnaire – 12 dimensions (GHQ-12) had been used in the pilot study with cases where a common mental health problem was indicated. This was found to be helpful by the case managers. It was made an optional tool in the programme, to be used if helpful with cases with a common mental health problem.

In addition to these tools, some service providers also continued to use other standardised tools that were relevant to the health condition / discipline. Since this was not standardised across the boards, this was not collected or analysed centrally.

#### **3.5.4 Variables recorded**

The key variables that were requested for each case are shown below.

##### ***Entry assessment questionnaire***

- Demographic information (Date of birth, gender, staff group)
- Primary presenting issue
- Absence status and duration, if absent
- Services received prior to OHSxtra
- EQ-5D
- COPM (if being case managed)
- GHQ-12 (optional)

***Service provision questionnaires*** – to assist with communication between the service providers and those undertaking case management.

- Services received through OHSxtra (including the number of sessions)

##### ***Discharge questionnaire***

- Resolution of primary presenting issue
- Absence status
- Number of days absence due to primary presenting issue since entering the programme
- View of whether OHSxtra helped them stay in work or return to work
- EQ-5D
- COPM (if used at entry)
- GHQ-12 (if used at entry)

##### ***3 month follow up questionnaire***

- Number of days absence due to primary presenting issue since being discharged from programme
- EQ-5D

##### ***6 month follow up questionnaire***

- Number of days absence due to primary presenting issue since 3 month follow up questionnaire
- EQ-5D

#### **3.5.5 Duration of the project**

Due to recruitment and personnel issues, each board launched OHSxtra at a different time. This varied from July to December 2007 for the 2007 funded boards, and August 2008 to April 2009 for the 2008 funded boards. Boards were asked to collect data for 12 months from the start of the programme. Each board maintained its own database. At the end of data collection, all records were made anonymous and securely transferred for central analysis.

### **3.6 Advertising the programme**

Boards were offered standard OHSxtra leaflets and posters on which their local contact details could be provided. A website, was also available to provide background information about the project and contact details of each of the participating boards ([www.ohsextra.scot.nhs.uk](http://www.ohsextra.scot.nhs.uk)).

A dedicated phone line for OHSxtra had been established for the pilot study. This number was well known and widely advertised in NHS Fife. They therefore continued to use this phone line as a route of entry for clients. Other boards were offered the opportunity to also use this number (with a routing for calls to a local number), however all opted to use their existing methods of referral into the OH service (maintaining the same phone number / email address).

Boards used a variety of methods of advertising the service (described in Appendix 1), including using the posters and leaflets, staff bulletins, intranet, talking at management meetings and informing local GPs of the service. Some boards chose not to actively promote the service to employees, in order to allow time to fully integrate it into existing service delivery, without being overwhelmed by referrals.



## 4. RESULTS

### 4.1 Reports from boards

Boards submitted their completed database for central analysis; data were not received from NHS Lanarkshire and NHS National Services Scotland (see Section 3.1). For the 14 contributing boards, the number of cases that were reported by each board are shown in Table 2. Note that NHS Grampian and NHS Highlands recorded data on all occupational health referrals, while all other boards recorded data on clients who had received services funded through OHSxtra only.

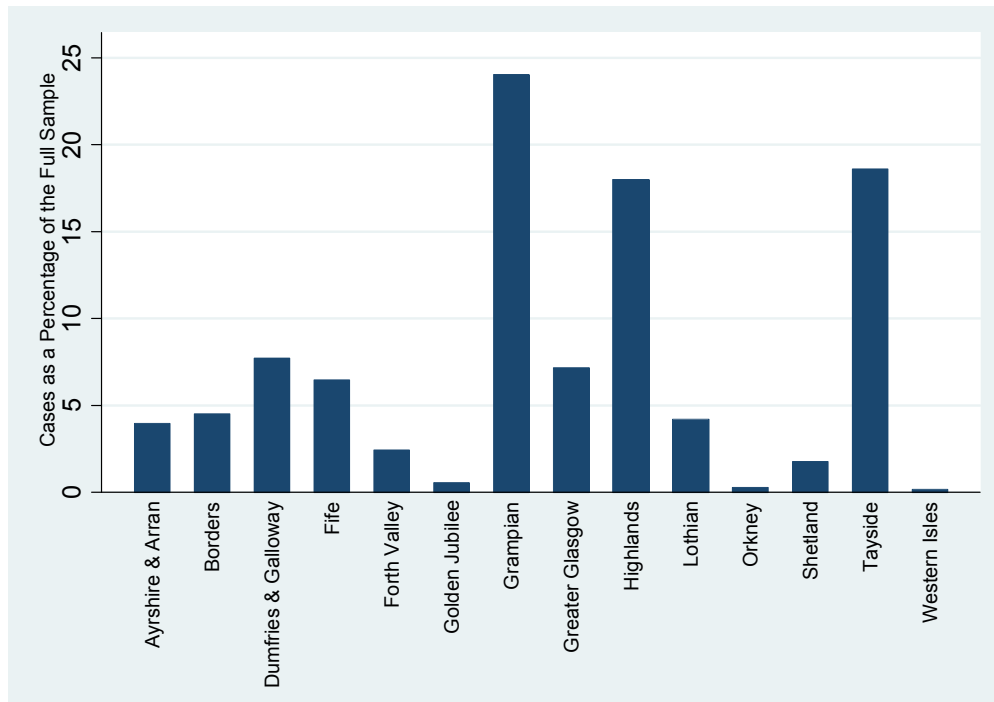
In many instances there was incomplete data relating to a case. Since the outcome measures of interest were change in absence status, EQ-5D scores and COPM scores, if there was no information on any of these three measures at entry, these cases were not included in subsequent analysis. The number of remaining cases ('usable entries') is shown in Table 2, and the proportion of the total cases supplied (n=7,380) per board is shown in Figure 2. Demographic data on cases is based on this sample of usable entries. Clearly, three boards (Grampian, Highlands and Tayside) provide the majority (over 60%) of this data; this is not surprising, as these are three of the four largest boards in NHS Scotland, and both Grampian and Highland provided information on all their occupational health referrals. The four smallest boards (Golden Jubilee, Orkney, Shetland and Western Isles) provided just 2.5% of the total number of entries.

In some cases (e.g. Borders) the difference between the number of cases entered on the database and the number where there was data on at least absence, EQ-5D or COPM at entry was due to clients withdrawing from the programme between contacting it, and the initial assessment. In other cases the reason for incomplete data was unclear.

**Table 2: The number of entries received from boards (all cases)**

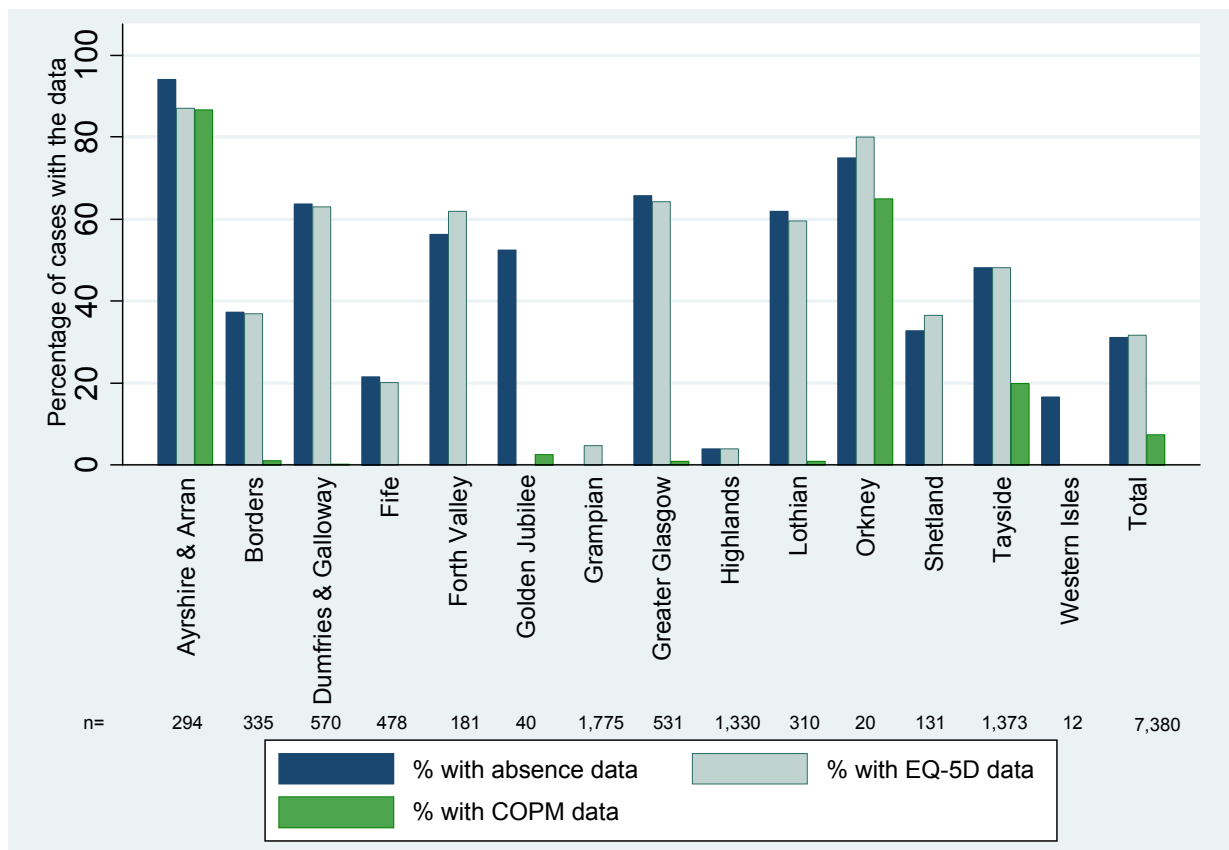
Health board	Number of entries received from all boards (n)	Number of entries with absence status, EQ-5D or COPM scores at entry (n)	Useable entries (%)
Ayrshire & Arran	294	294	100
Borders	357	335	93.8
Dumfries & Galloway	573	570	99.5
Fife	483	478	99.0
Forth Valley	219	181	82.6
Golden Jubilee	40	40	100
Grampian	3,113	1,775	57.0
Greater Glasgow	544	531	97.6
Highlands	1,412	1,330	94.2
Lothian	313	310	99.0
Orkney	20	20	100
Shetland	131	131	100
Tayside	1,418	1,373	96.8
Western Isles	12	12	100
<b>Total</b>	<b>8,929</b>	<b>7,380</b>	<b>82.7</b>

**Figure 2: The percentage of cases per board (n=7,380)**



For many of the clients for whom there was data at entry, data were missing at discharge. Where there is no discharge data, in some cases this was because the clients had not been discharged from the service (i.e. were still 'active'). Figure 3 shows (as a percentage of cases for that board) where there is data on at least absence status, EQ-5D or COPM at both entry and discharge.

**Figure 3: Showing data by boards with both entry and discharge data for key parameters**



NHS Ayrshire and Arran had the most complete data set (and a total of 294 cases). NHS Orkney also had a relatively complete data set, but only 20 cases. Unfortunately data on absence status, EQ-5D and COPM were missing for many of the cases from NHS Grampian and NHS Highland.

Altogether, there was absence data on 31% of the total number of cases, and EQ-5D data on 32%. NHS Tayside contributed to approximately 28% of the total data on both absence and EQ-5D, NHS Dumfries and Galloway and NHS Greater Glasgow and Clyde both contributed approximately 15%, NHS Ayrshire and Arran contributed approximately 11%, NHS Lothian contributed approximately 8% and NHS Borders contributed approximately 5%. The remaining boards, between them, contributed less than 5% of the data on absence and EQ-5D.

COPM data was available on 7.5% of the cases, which came largely from two boards; NHS Tayside contributed 50% of the data and NHS Ayrshire and Arran contributed 46%.

The number of times that an entry was reported to be a second or more entry was recorded and is shown in Table 3.

**Table 3: Number of times clients entered the programme**

Health board	Entered once	Entered twice	Entered 3 times	Entered 4 times	Entered 5 times	Total No. of entries
<b>Ayrshire &amp; Arran</b>	290	4	0	0	0	294
<b>Borders</b>	316	16	3	0	0	335
<b>Dumfries &amp; Galloway</b>	467	100	3	0	0	570
<b>Fife</b>	468	10	0	0	0	478
<b>Forth Valley</b>	181	0	0	0	0	181
<b>Golden Jubilee</b>	40	0	0	0	0	40
<b>Grampian</b>	1,461	248	51	13	2	1,775
<b>Greater Glasgow</b>	507	23	1	0	0	531
<b>Highlands</b>	1,171	144	14	1	0	1,330
<b>Lothian</b>	283	27	0	0	0	310
<b>Orkney</b>	20	0	0	0	0	20
<b>Shetland</b>	109	16	6	0	0	131
<b>Tayside</b>	1,279	86	8	0	0	1,373
<b>Western Isles</b>	12	0	0	0	0	12
<b>Total</b>	6,604	674	86	14	2	<b>7,380</b>

The number of unique individuals ('clients') is therefore 6,604 (all clients will have a first entry). The number of cases is 7,380 (each entry is a 'case' even when it is the same 'client'). Altogether, 776 clients (10.5%) entered the programme (or the occupational health department in the case of NHS Grampian and NHS Highlands) more than once.

Overall, the service was available to almost 80,000 NHS staff (excluding NHS Lanarkshire and NHS National Services Scotland). Table 4 shows the percentage of clients seen in each board based on the approximate number of employees within that board (as provided by each board). Approximately 5% of the staff population accessed OHSxtra during the course of the programme. There are wide differences between boards in the number of clients who were seen under

OHSxtra. This in some ways reflects the different classifications of OHSxtra clients that were used by different boards (e.g. all clients who received physiotherapy, or only those who received physiotherapy from the OHSxtra funded physiotherapist).

In Table 4, the data relating to Grampian and Highland are based on clients for whom there is data on at least absence status, EQ-5D or COPM score at entry. This does not reflect the total number of clients seen by occupational health.

**Table 4: Number of clients per board**

Health board	No. of clients	Clients	No. of months over which data collected	Approx no. of Employees in board	% of board seen by OHSxtra
<b>Ayrshire and Arran</b>	290	OHSxtra only	15	15,000	1.9%
<b>Borders</b>	316	OHSxtra only	12	4,200	7.5%
<b>Dumfries and Galloway</b>	467	OHSxtra only	18	5,000	9.3%
<b>Fife</b>	468	OHSxtra only	14.5	9,000	5.2%
<b>Forth Valley</b>	181	OHSxtra only	18	8,000	2.3%
<b>Golden Jubilee</b>	40	OHSxtra only	12.5	1,400	2.9%
<b>Grampian</b>	1,461	All OH Clients	13	17,000	8.6%
<b>Greater Glasgow*</b>	507	OHSxtra only	15	15,000	3.4%
<b>Highlands</b>	1,171	All OH Clients	15	12,000	9.8%
<b>Lothian*</b>	283	OHSxtra only	12	4,313	6.6%
<b>Orkney</b>	20	OHSxtra only	12	640	3.1%
<b>Shetland</b>	109	OHSxtra only	14	560	19.5%
<b>Tayside</b>	1,279	OHSxtra only	18	15,000	8.5%
<b>Western Isles</b>	12	OHSxtra only	14	1,100	1.1%
<b>Total</b>	6,604				
<b>Total of OHSxtra only</b>	3,972	<b>(i.e. excluding Grampian and Highlands)</b>		79,213	5.0%

\* The service was only provided within a limited part of the board.

#### **4.1.1 Implication of differences in data collection between boards**

There were differences between boards regarding which clients were considered to fall within the OHSxtra programme, and this affected the data that was recorded. Two boards (NHS Grampian and NHS Highlands) used the dedicated database for recording data on all occupational health clients. Another board (NHS Lothian) only recorded data on clients who had self referred into the programme.

Due to differences in start time, some boards provided data covering more than a 12 month time period, as shown in Table 4.

Both NHS Greater Glasgow and Clyde and NHS Lothian only had their occupational therapy service available for 8 months of the data collection period (due to delays in recruitment).

NHS Grampian and NHS Shetland did not provide any data on the services clients received through OHSxtra.

NHS Forth Valley received funding for mental health support, which was provided through a psychiatrist. No data relating to these clients is shown in these tables, as the OHSxtra standard tools and database were not used for these clients.

## 4.2 Demographics

These demographic data are based on 'clients', i.e. unique individuals (n=6,604).

### 4.2.1 Gender

Clients' gender for the different boards is shown in Table 5; although there are some differences between the boards concerning the proportionate gender of clients, the overall figures are considered to reflect the demographics of the NHS in Scotland as a whole, and that found in the OHSxtra pilot study (which recorded 17% males).

**Table 5: Clients' gender by board**

Health board	Number of Clients (n)	Male (%)	Female (%)
Ayrshire & Arran	290	9.7	90.3
Borders	316	14.6	85.4
Dumfries & Galloway	570	16.1	83.9
Fife	468	12.0	88.0
Forth Valley	181	12.2	87.8
Golden Jubilee	40	20.0	80.0
Grampian	1,461	13.8	86.2
Greater Glasgow	518	20.7	79.3
Highlands	1,171	17.5	82.5
Lothian	310	14.1	85.9
Orkney	20	15.0	85.0
Shetland	109	20.2	79.8
Tayside	1,276	16.7	83.3
Western Isles	12	0.0	100.0
<b>Total</b>	<b>6,601</b>	<b>15.5</b>	<b>84.5</b>

Gender data were missing for 3 clients in NHS Tayside.

#### 4.2.2 Age

There was very little difference between the boards concerning the mean age or age distribution (Table 6). This is similar to the distribution seen in the OHSextra pilot study (mean = 43.3, SD = 9.9) and is thought to be representative of staff within NHS Scotland. A wide range of ages were seen (from 16.8 to 72.0 years).

**Table 6: Mean age by board**

Health board	Mean	Std. Dev	Min	Max	Number of Clients
Ayrshire & Arran	44.2	9.9	18.6	65.3	288
Borders	45.1	9.6	16.8	67.0	316
Dumfries & Galloway	45.0	10.2	19.1	72.0	467
Fife	43.5	9.4	18.2	71.1	463
Forth Valley	45.1	9.7	22.2	67.3	181
Golden Jubilee	38.9	8.9	22.4	55.4	39
Grampian	43.8	11.6	16.8	69.2	1,461
Greater Glasgow	45.5	10.4	18.3	70.6	499
Highlands	44.8	10.2	16.8	72.0	1,150
Lothian	46.0	9.2	20.9	63.0	282
Orkney	46.3	11.7	21.8	64.7	20
Shetland	42.7	10.8	20.1	68.5	109
Tayside	44.7	9.9	19.8	68.9	1,263
Western Isles	42.2	6.3	31.6	54.0	12
<b>Total</b>	<b>44.5</b>	<b>10.4</b>	<b>16.8</b>	<b>72.0</b>	<b>6,550</b>

Data are missing for 54 clients in Table 6.

The average age of male and female clients was very similar, as shown in Table 7.

**Table 7: Age by gender**

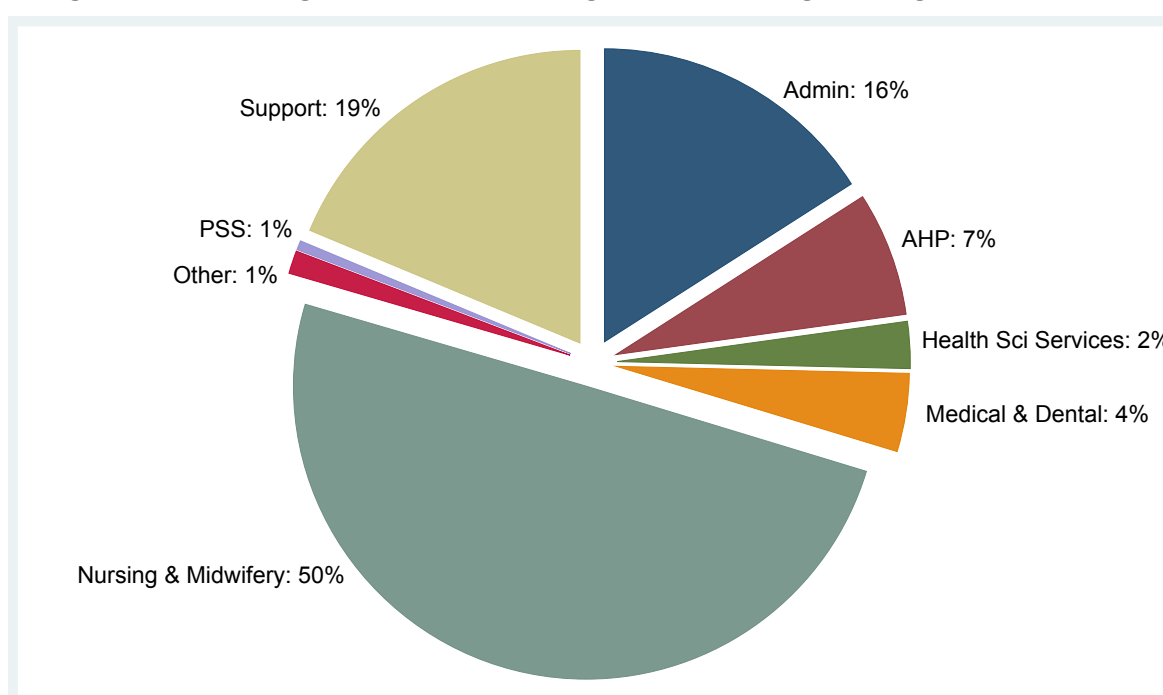
	Male	Female
<b>Mean</b>	45.3	44.4
<b>SD</b>	10.9	10.3
<b>Min</b>	17.7	16.8
<b>Max</b>	71.1	72.0
<b>Number of Clients</b>	1,019	5,528

Data are missing for 57 clients (who had either no age data or no gender data).

### 4.2.3 Staff group

Some differences were seen regarding staff group (Table 8). In some cases this is due to a small sample size within a board which means that a board's figures can be easily skewed. The overall percentage of clients in the staff groups is shown in Figure 4. The majority (50%) of staff were drawn from the nursing and midwifery staff group, with support (17%) and admin (16%) being the other main client groups. This is similar to the percentage observed in the OHSxtra pilot, and is thought to reflect the number of staff in NHS job groups.

**Figure 4: Percentage of clients in the Agenda for Change staff groups (n=6,542)**



### 4.2.4 Primary Presenting Issue

A 'Primary Presenting Issue' (PPI), i.e. the main health issue with which a client came into the programme, was recorded for each case. Note that following discharge, a client could re-enter the programme with the same or a different PPI; each entry is classified as a 'case', and these data relate to the PPI of cases. These are shown by board in Table 9, and for the whole group are shown in Figure 5.

Altogether, 65% of cases entered with a musculoskeletal disorder (MSD), with upper limb and neck problems being the greatest proportion of these (27.9% of total sample). Common mental health problems accounted for 19% of all cases, with neurosis problems being the greatest proportion.

The differences in distribution of primary presenting issue between boards largely reflect the services that were available, and the data collection that was undertaken. NHS Borders and NHS Tayside primarily provided a physiotherapy service (both of which have over 98% of cases presenting with a musculoskeletal issue). The data from NHS Grampian and NHS Highlands show all cases coming to occupational health, not only 'OHSxtra' cases, and therefore have a greater proportion of cases with 'other' as their PPI.

NHS Forth Valley received funding for and provided support for those with common mental health problems through OHSxtra, but these clients were not recorded in the OHSxtra database and are not represented in Table 9.

**Table 8: Percentage of clients in each staff group, by board**

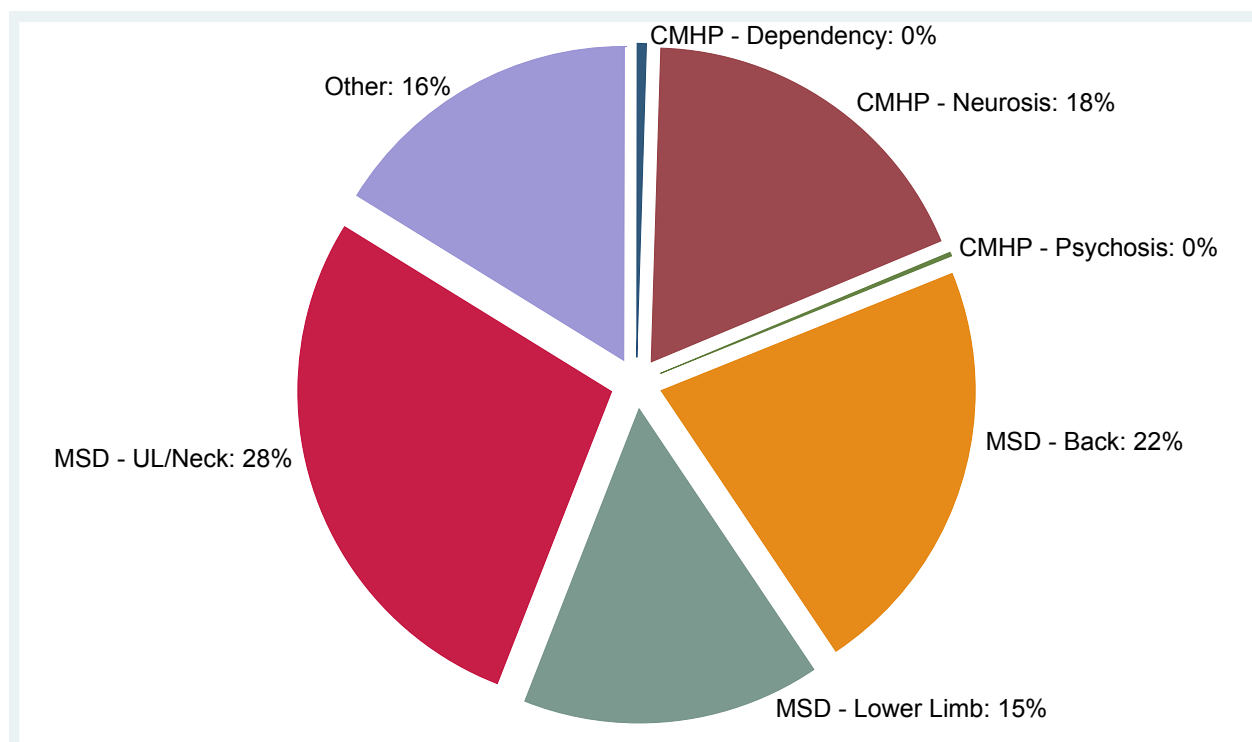
<b>Health board</b>	<b>Admin (%)</b>	<b>AHP (%)</b>	<b>Health science services (%)</b>	<b>Medical &amp; dental (%)</b>	<b>Nursing &amp; midwif'y (%)</b>	<b>Personal social services (%)</b>	<b>Support (%)</b>	<b>Other (%)</b>	<b>Number of clients (n)</b>	<b>Missing (n)</b>
<b>Ayrshire &amp; Arran</b>	12.8	5.5	3.5	1.4	57.4	0.0	12.5	6.9	289	1
<b>Borders</b>	15.5	8.9	2.9	2.2	50.0	0.0	20.6	0.0	316	0
<b>Dumfries &amp; Galloway</b>	14.3	8.6	1.7	4.5	51.4	1.5	16.0	1.9	463	4
<b>Fife</b>	13.7	6.3	2.8	2.4	62.8	0.0	11.1	0.9	460	8
<b>Forth Valley</b>	26.0	11.1	3.9	1.7	44.2	0.0	6.6	6.6	181	0
<b>Golden Jubilee</b>	17.5	10.0	0.0	0.0	47.5	0.0	25.0	0.0	40	0
<b>Grampian</b>	14.0	4.1	2.5	3.4	51.3	0.0	23.6	1.2	1461	0
<b>Greater Glasgow</b>	18.5	8.1	5.0	3.9	49.0	0.8	11.8	2.9	507	0
<b>Highlands</b>	13.6	3.6	1.0	7.4	49.5	2.2	22.0	0.6	1159	12
<b>Lothian</b>	18.1	13.2	1.6	5.2	45.2	0.0	16.5	0.3	283	0
<b>Orkney</b>	20.0	10.0	0.0	0.0	35.0	0.0	35.0	0.0	20	0
<b>Shetland</b>	20.2	11.9	2.8	1.8	49.5	0.0	11.0	2.8	109	0
<b>Tayside</b>	17.8	10.7	5.9	4.5	45.3	0.1	9.9	5.9	1242	37
<b>Western Isles</b>	16.7	25.0	0.0	0.0	50.0	0.0	8.3	0.0	12	0
<b>Total</b>	15.7	7.2	3.1	4.2	50.1	0.6	16.8	2.5	6,542	62



**Table 9: Percentage of cases per primary presenting issue, by board**

Health board	MSD			Common Mental Health Problems			Other	Number of cases (n)	Missing (n)
	UL/Neck	Back	Lower limb	Dependency	Neurosis	Psychosis			
<b>Ayrshire &amp; Arran</b>	41.2	24.5	16.7	1.0	13.3	0.0	3.4	294	0
<b>Borders</b>	41.5	38.5	19.7	0.0	0.0	0.0	0.3	335	0
<b>Dumfries &amp; Galloway</b>	29.3	33.3	12.0	0.2	31.6	0.0	0.2	566	4
<b>Fife</b>	19.4	22.3	7.8	0.0	47.0	0.8	2.7	475	3
<b>Forth Valley</b>	42.2	32.2	21.7	0.0	0.0	0.0	3.9	180	1
<b>Golden Jubilee</b>	30.0	17.5	0.0	0.0	35.0	0.0	17.5	40	0
<b>Grampian</b>	7.5	11.4	7.8	1.4	29.6	0.3	42.0	1,595	180
<b>Greater Glasgow</b>	42.8	25.4	26.3	0.0	1.5	0.2	3.8	528	3
<b>Highlands</b>	22.9	14.5	12.1	0.5	14.6	0.6	34.9	1,291	39
<b>Lothian</b>	28.2	26.2	15.2	0.0	26.2	0.0	4.2	309	1
<b>Orkney</b>	35.0	20.0	10.0	0.0	10.0	0.0	25.0	20	0
<b>Shetland</b>	32.8	29.0	22.1	0.8	13.7	0.0	1.5	131	0
<b>Tayside</b>	40.4	33.3	24.9	0.0	0.2	0.0	1.2	1,357	16
<b>Western Isles</b>	33.4	8.3	8.3	0.0	50.0	0.0	0.0	12	0
<b>Total</b>	27.9	21.7	15.4	0.5	18.2	0.2	16.2	7,133	247

**Figure 5: Showing the percentage of cases by primary presenting issue (n=7,133)**



### **4.3 Absence status at entry**

The absence status of cases when entering the programme is shown in Table 10 for each board, and overall in Figure 6. Note that this is based on the entry data of all cases, i.e. it includes the cases for whom there is no discharge data. Overall 71% of cases were at work at entry, with 29% being absent.

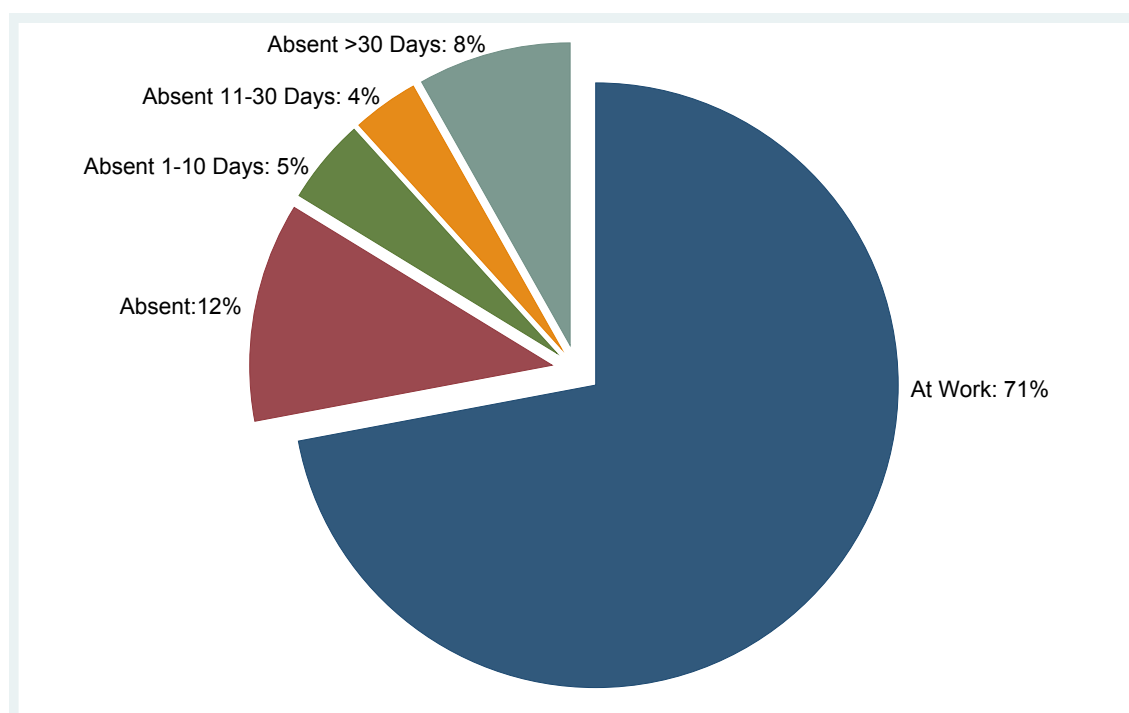
There are some differences between boards, with NHS Fife, NHS Grampian, NHS Highlands, NHS Orkney and NHS Western Isles having a lower percentage of clients at work at entry than some other boards. In the case of NHS Grampian and NHS Highlands, this may be because data is provided on all occupational health clients. The sample size for NHS Orkney is too small to draw strong conclusions. NHS Borders had the highest proportion of their clients at work. This may be because the service was delivering physiotherapy services (and no mental health services) to anyone with a musculoskeletal condition (not only work-affected); obviously, if the client's condition was not affecting them at work, they would not have been absent because of it. Table 11 shows that those with musculoskeletal conditions were more likely to be at work than those with common mental health problems. NHS Forth Valley, NHS Greater Glasgow and NHS Tayside also had high percentage of their clients at work, and were mainly delivering physiotherapy services.

Not all boards specified the duration of the absence at entry, but 8.6% of cases were recorded as being absent for more than 30 calendar days. These clients are those that are likely to be the most difficult to return to work and may be most in need of case management.

**Table 10: Absence status at entry, by board**

Health board	At Work (%)	Absent				Number of Cases (n)	Missing (n)
		(no time specified) (%)	1-10 Days (%)	11-30 Days (%)	>30 Days (%)		
Ayrshire & Arran	71.6	0.0	7.5	6.5	14.4	292	2
Borders	85.1	14.9	0.0	0.0	0.0	335	0
Dumfries & Galloway	71.8	5.9	6.6	7.1	8.7	564	6
Fife	61.3	38.7	0.0	0.0	0.0	442	36
Forth Valley	77.5	22.5	0.0	0.0	0.0	178	3
Golden Jubilee	70.0	2.5	12.5	2.5	12.5	40	0
Grampian	60.5	39.6	0.0	0.0	0.0	1,454	321
Greater Glasgow	78.1	7.4	3.6	4.2	6.7	525	6
Highlands	63.7	0.0	8.8	5.3	22.2	1,312	18
Lothian	77.2	8.9	4.6	4.0	5.3	302	8
Orkney	45.0	5.0	20.0	10.0	20.0	20	0
Shetland	82.4	17.6	0.0	0.0	0.0	131	0
Tayside	79.5	19.0	0.5	0.6	0.4	1,351	22
Western Isles	66.7	16.7	0.0	0.0	16.7	12	0
<b>Total</b>	<b>70.8</b>	<b>12.4</b>	<b>4.7</b>	<b>3.5</b>	<b>8.6</b>	<b>6,958</b>	<b>422</b>

**Figure 6: Absence status when entering the programme (n=6,958)**



The absence status of cases related to their PPI is shown in Table 11. A higher percentage of cases with musculoskeletal disorders (MSDs) were at work than those with common mental health problems. More long term absences (>30 days) were recorded for those with common mental health problems than MSDs.

**Table 11: Absence status related to primary presenting issue (n=6,810)**

Primary presenting issue		At Work (%)	Absent				Number of Cases
			No time specified (%)	1-10 Days (%)	11-30 Days (%)	>30 Days (%)	
MSD	UL/Neck	79.3	7.6	4.6	2.5	6.0	1,950
	Back	72.2	9.8	6.6	5.0	6.5	1,495
	Lower Limb	77.4	8.2	3.3	2.7	8.4	1,062
Common Mental Health Problems	Dependency	65.5	17.2	10.3	3.5	3.5	29
	Neurosis	56.7	19.0	5.6	5.3	13.4	1,198
	Psychosis	38.5	7.7	7.7	0.0	46.2	13
Other		63.4	20.1	2.7	2.6	11.1	1,063

Data are missing for 570 cases in Table 11.

#### 4.4 Services received prior to entering OHSxtra

Cases were asked whether they had received services prior to entering OHSxtra; they could indicate as many as they had received. This was to allow consideration of whether OHSxtra might be replacing existing services, and the extent of involvement that cases had with healthcare provision. The responses are shown in Table 12. Altogether 2,660 cases (47.5%) (excluding Grampian data for which this was not provided) did not report receiving any services prior to OHSxtra, although this may be due to missing data.

**Table 12: Showing the services cases were receiving prior to entering OHSxtra**

Intervention	Number of cases receiving this	Minimum number of sessions	Maximum number of sessions	Median number of sessions	Mean number of sessions	SD
CBT	38	1	6	1	2.1	2.0
Consultant	497	1	8	1	1.4	0.9
Counsellor	52	1	10	2	2.4	2.1
GP	2,476	1	15	1	1.7	1.4
OT	31	1	8	1	1.3	1.3
OHN	189	1	5	1	1.4	0.8
OHP	183	1	6	1	1.4	0.8
Physiotherapist	285	1	20	1	2.7	2.9
Psychologist	21	1	13	1	2.1	2.9

The most frequently used service was the GP, although a significant number of cases had received occupational health support prior to entering OHSxtra. Depending on the referral process set up by the board, clients may have been referred to OHSxtra services due to their receipt of occupational health support.

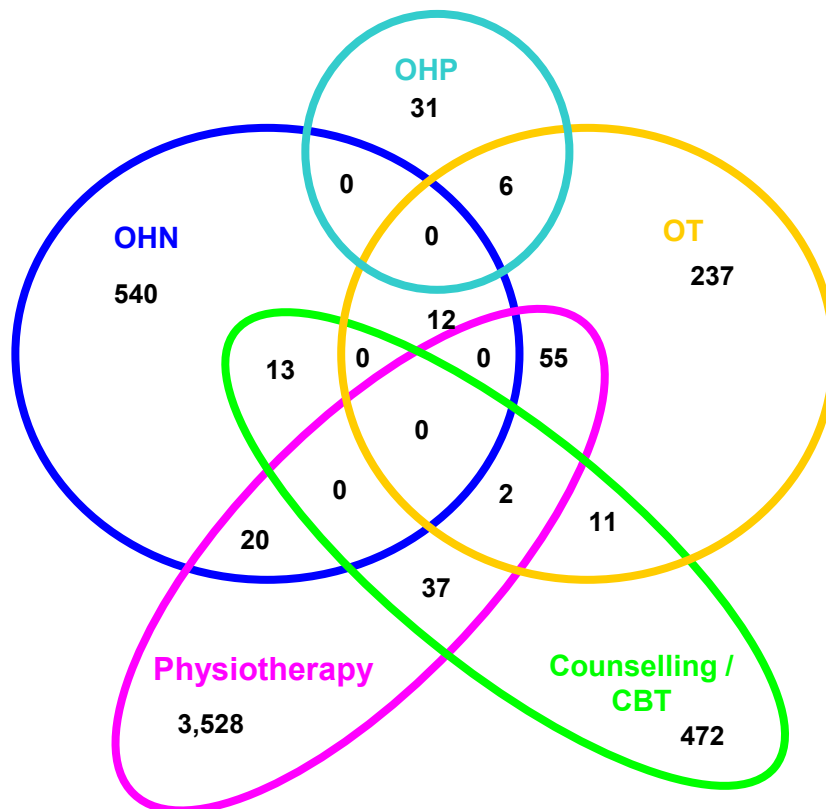
#### 4.5 Service provision

##### 4.5.1 Services received during OHSxtra

Cases could receive services that were available. Some boards recorded data only on those service that had been provided by OHSxtra funding; others recorded data on all services received by these cases, which means it is not possible to consider the costs associated with OHSxtra service provision.

One of the boards did not provide data on service provision, so all data from this board were excluded from this analysis. Of the cases from the remaining boards, the numbers receiving different combinations of service are shown in the venn diagram in Figure 7, while the overall number of cases receiving a service is shown in Figure 8. It was recognised that not all cases would require a service. Due to a different service delivery method in practice than had been initially envisaged, the cases who only received case management have not been easy to identify. For example, if case management was being undertaken by a physiotherapist, physiotherapy was recorded as the service provision, even if the client did not receive physiotherapy treatment.

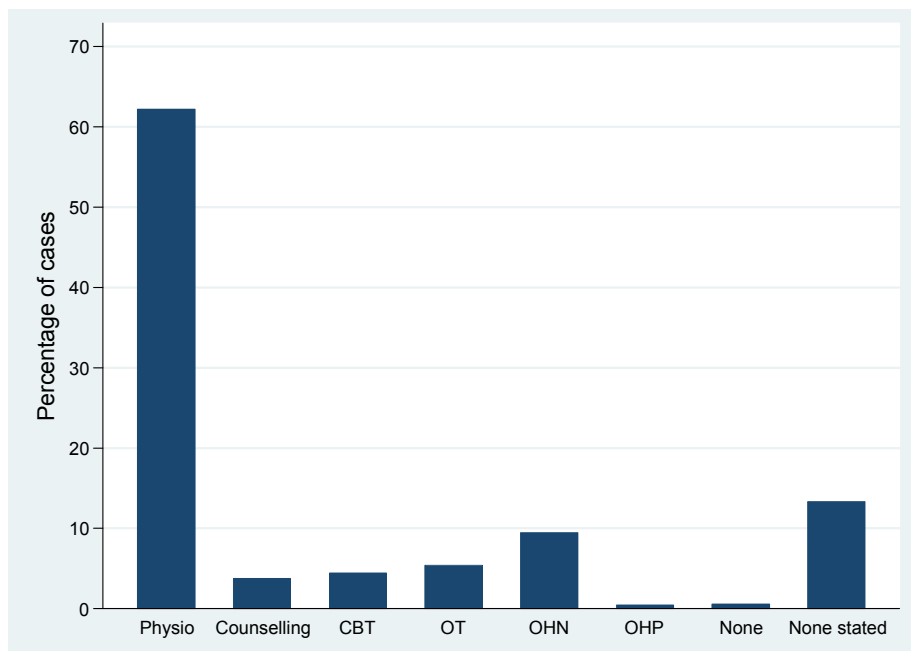
**Figure 7: The number of cases who received combinations of services (n=4,964)**



#### KEY

CBT = Cognitive Behavioural Therapy  
 OHN = Occupational Health Nurse  
 OHP = Occupational Physician  
 OT = Occupational Therapy

**Figure 8: Percentage of cases receiving services (n=5,692)**



Altogether 156 of the 4,964 cases (3.0%) are recorded as receiving more than one service. In contrast, 762 cases did not have a service provision stated. For the 36 cases who were reported to have 'none' service provision, 12 cases had voluntarily withdrawn. A large proportion of the remaining cases were all from one board which had dedicated case management, and it is assumed that these cases received case management without requiring further service provision.

The most frequently provided service was physiotherapy (3,642 cases). This is not surprising as within the project funding was provided for 11.45 wte physiotherapists, 4.2 wte OT, 3.2 wte mental health professional plus other mental health support methods ('Beating the blues' and group sessions). The professional group least frequently used by these cases was occupational physician, demonstrating the non-medicalised approach adopted.

The most frequent combination of services was physiotherapy with occupational therapy (55 cases) and physiotherapy with counselling/CBT (37 cases). Very few cases received support from three service providers with only two cases receiving physiotherapy, occupational therapy and counselling/CBT.

#### **4.5.2 Number of sessions received**

Where there was information on the number of sessions of a service received by cases, this is presented in Table 13. The mean number of physiotherapy sessions was relatively low (3.8). The reason for the high maximum number of sessions (particularly of physiotherapy) is not known.

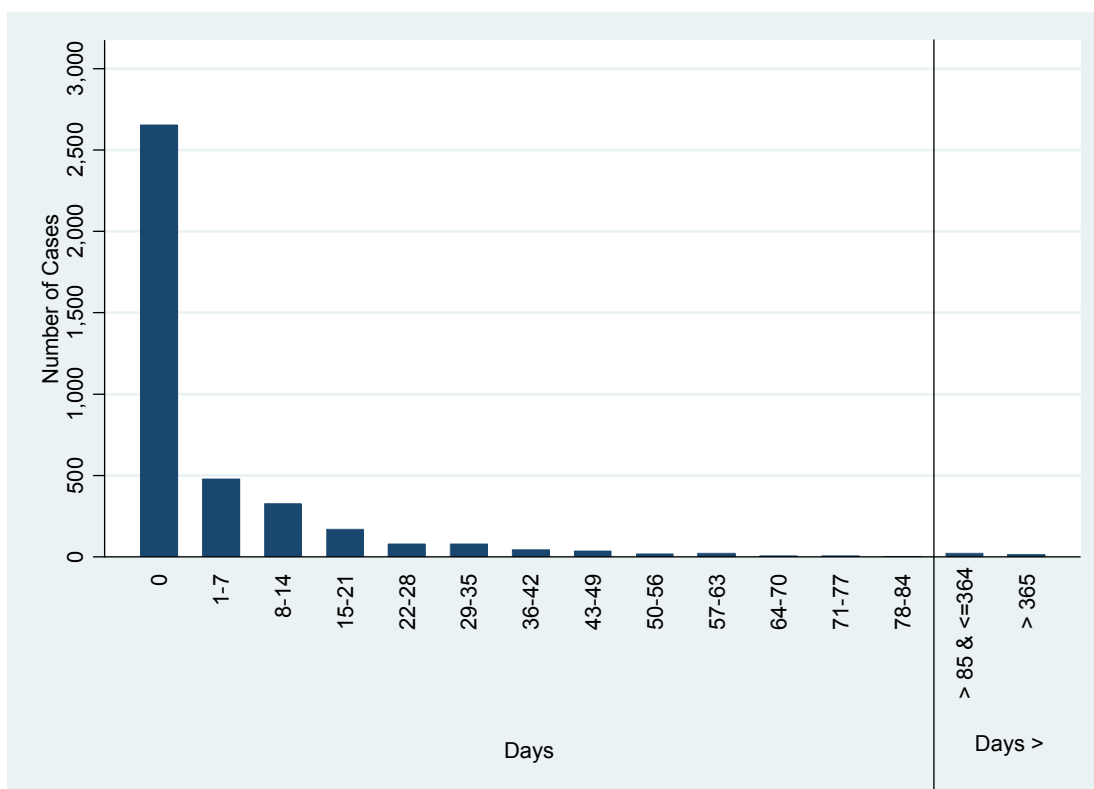
**Table 13: The number of sessions of service provision received in OHSExtra**

	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>Median</b>	<b>Min</b>	<b>Max</b>
Physiotherapy	2,535	3.8	3.1	3	1	27
Counselling	122	4.9	2.7	5	1	13
CBT	124	4.8	2.4	4	1	15
OT	242	3.8	3.4	3	1	27
OHN	15	3.1	1.9	3	1	6
OHP	4	3.0	2.4	2.5	1	6

### 4.5.3 Speed of service delivery

It was intended that the service would be provided rapidly; 65.5% (n=4,006) of cases were seen by a service provider on the day of the entry assessment being completed (likely due to the assessment being undertaken by the service provider), see Figure 9. In total 85.4% of cases were seen by a service provider within 14 days of the entry assessment. The vast majority (97.7%) were seen within 12 weeks of the entry assessment; typical NHS outpatient waiting times vary but are typically approximately 12 weeks. This demonstrates that there is some suggestion from the data that OHSxtra provided staff with faster access to services than they would have obtained through traditional NHS routes.

**Figure 9: Duration of wait for first service provision (n=4,006)**



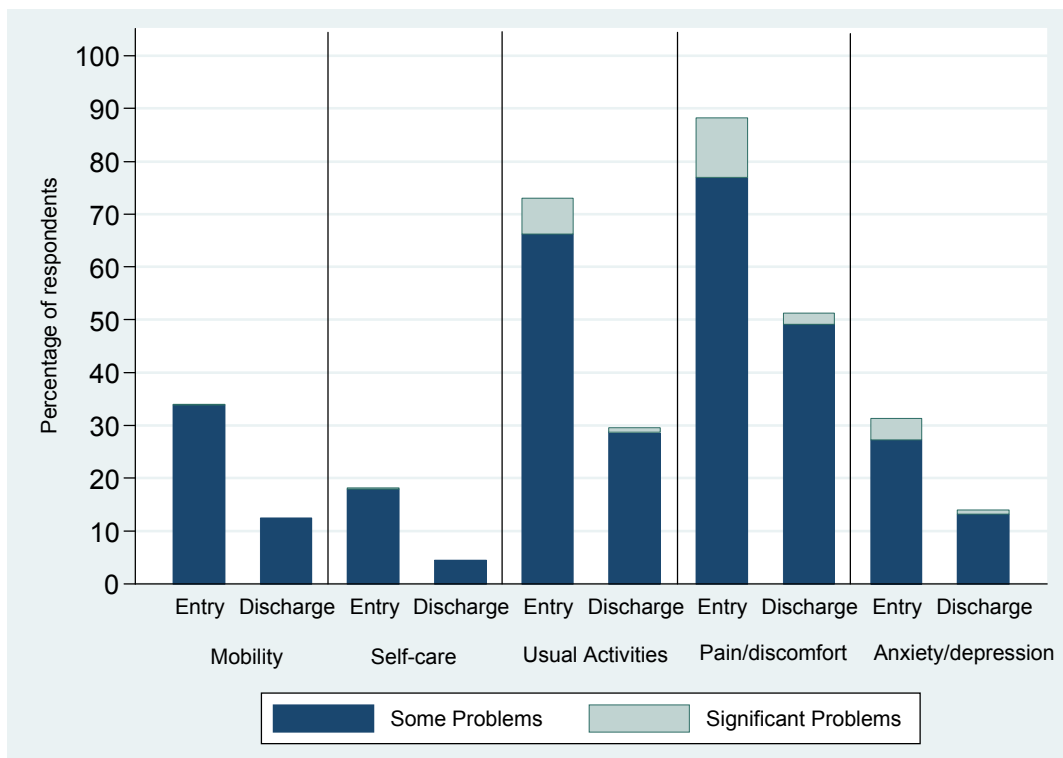
## 4.6 Tool scores

Standardised tools were used to collect data on cases at entry and discharge. Changes in responses indicate changes in health status.

### 4.6.1 EQ-5D

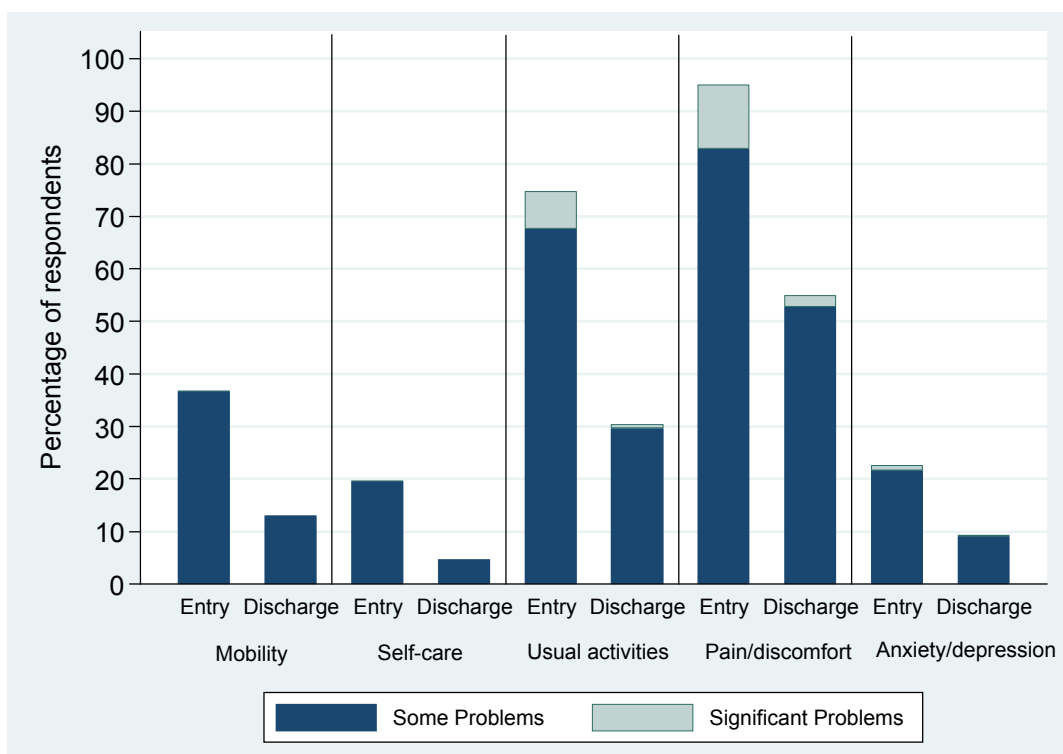
Figure 10 shows the percentage of respondents who reported problems on the five EQ-5D dimensions, at entry and discharge. There is a statistically significant difference in mean EQ-5D measures at entry and discharge ( $p < 0.001$ ).

**Figure 10: EQ-5D scores from entry to discharge (n=2,259)**



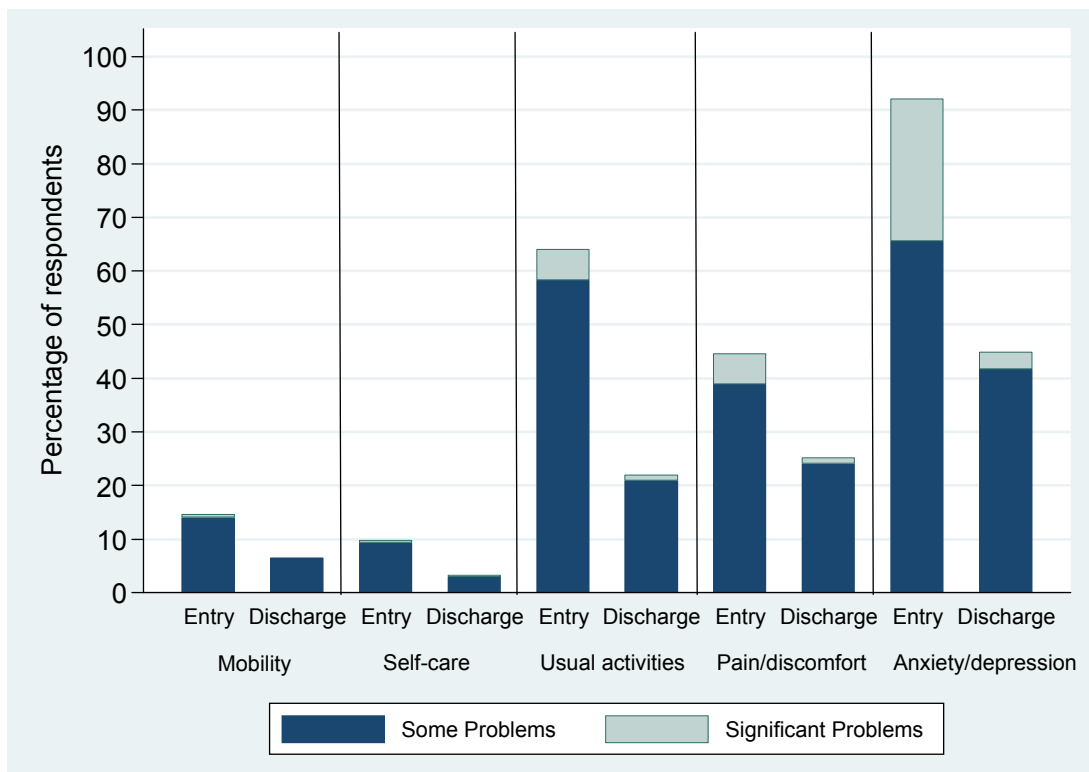
Figures 11 – 13 show the EQ-5D scores by the Primary Presenting Issues. Improvements are seen in each dimension from entry to discharge, but as might be expected, cases with musculoskeletal disorders reported more significant problems related to ‘pain and discomfort’ and ‘usual activities’, while those with common mental health problems reported more problems with ‘anxiety / depression’ and ‘usual activities’.

**Figure 11: EQ-5D for musculoskeletal disorders from entry to discharge (n=1,983)**

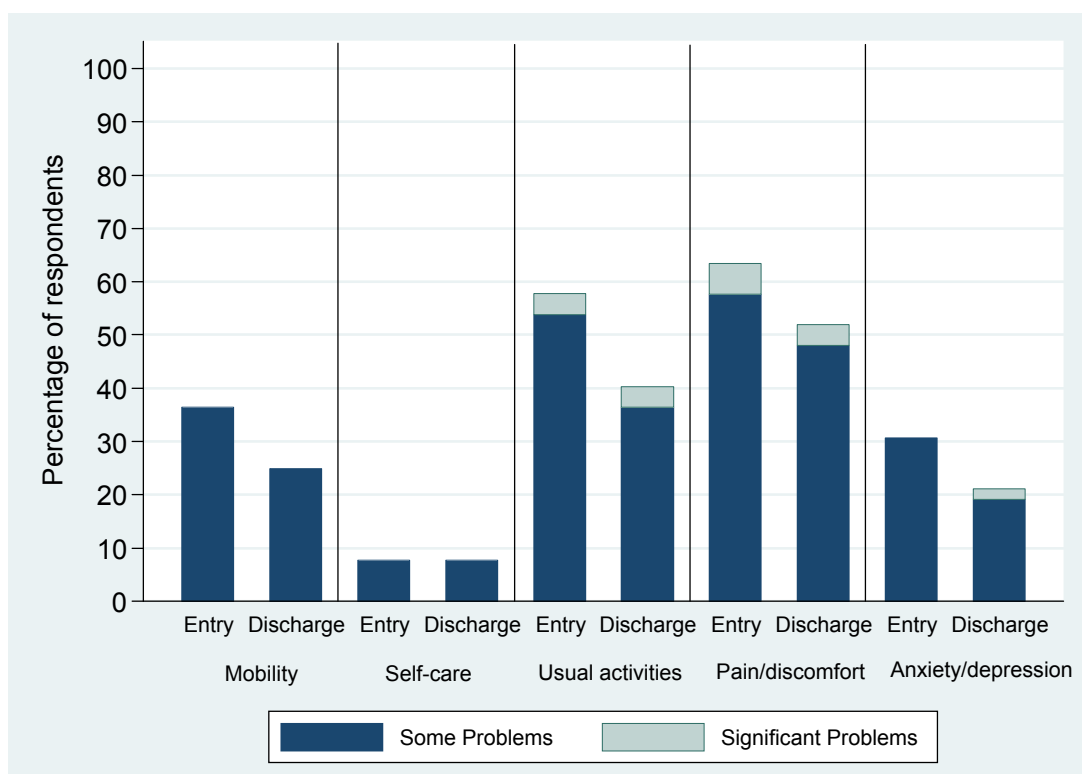




**Figure 12: EQ-5D for Common Mental Health Problems from entry to discharge (n=278)**

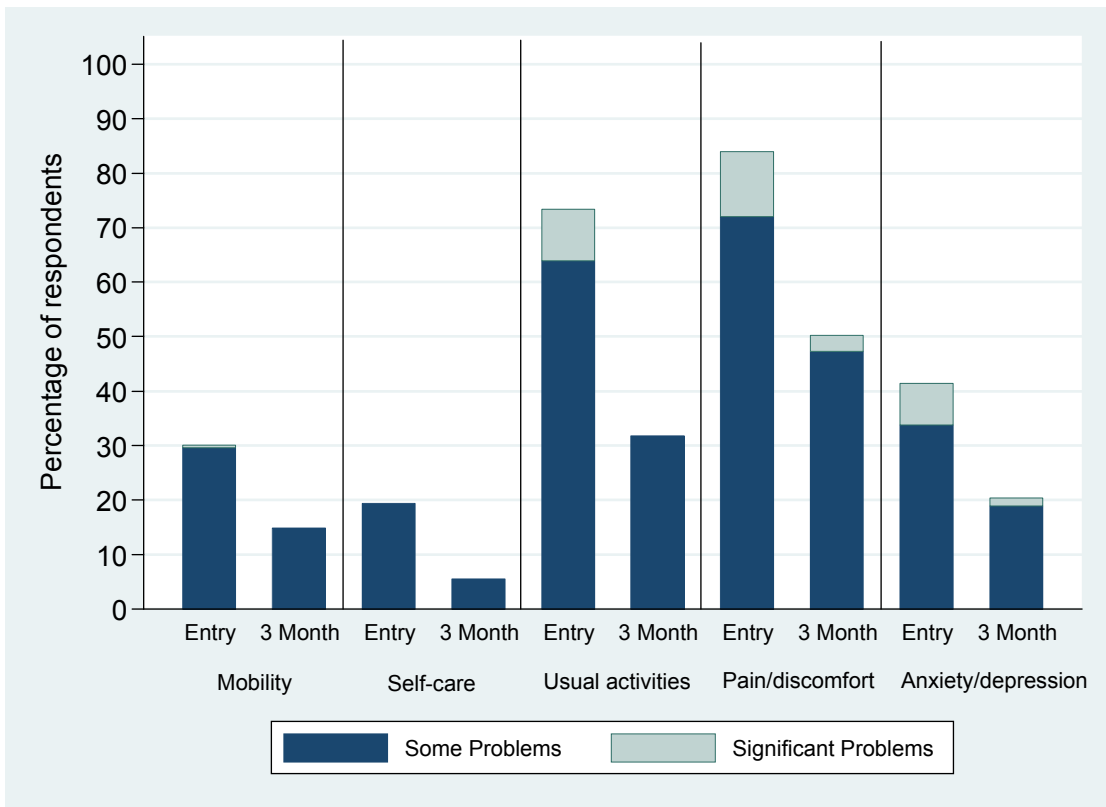


**Figure 13: EQ-5D for 'Other' from entry to discharge (n=60)**

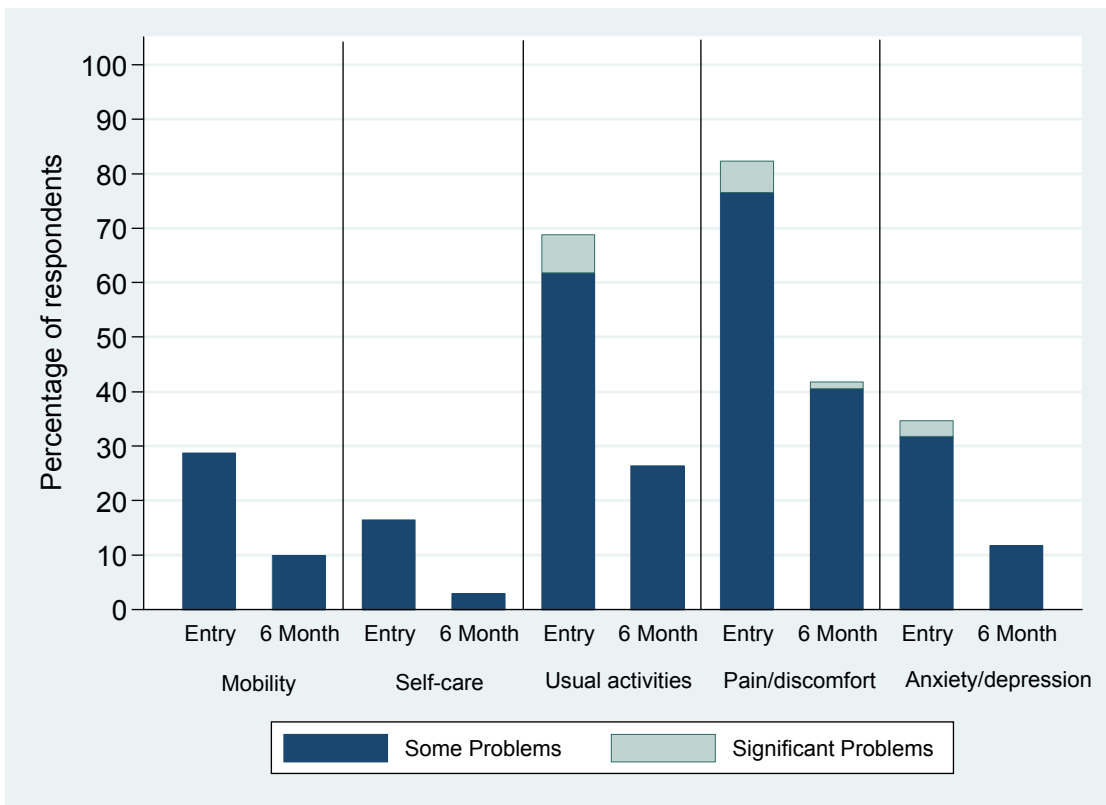


Cases completed the EQ-5D at entry, discharge and 3 and 6 months following discharge (Figures 14 and 15). Although there were relatively few respondents at 3 and 6 months, the data show that there were improvements from entry to both 3 and 6 months following discharge, indicating that the health improvements extended beyond the clients' involvement in OHSxtra.

**Figure 14: EQ-5D scores from entry to 3 month follow-up (n=402)**



**Figure 15: EQ-5D scores from entry to 6 month follow-up (n=170)**

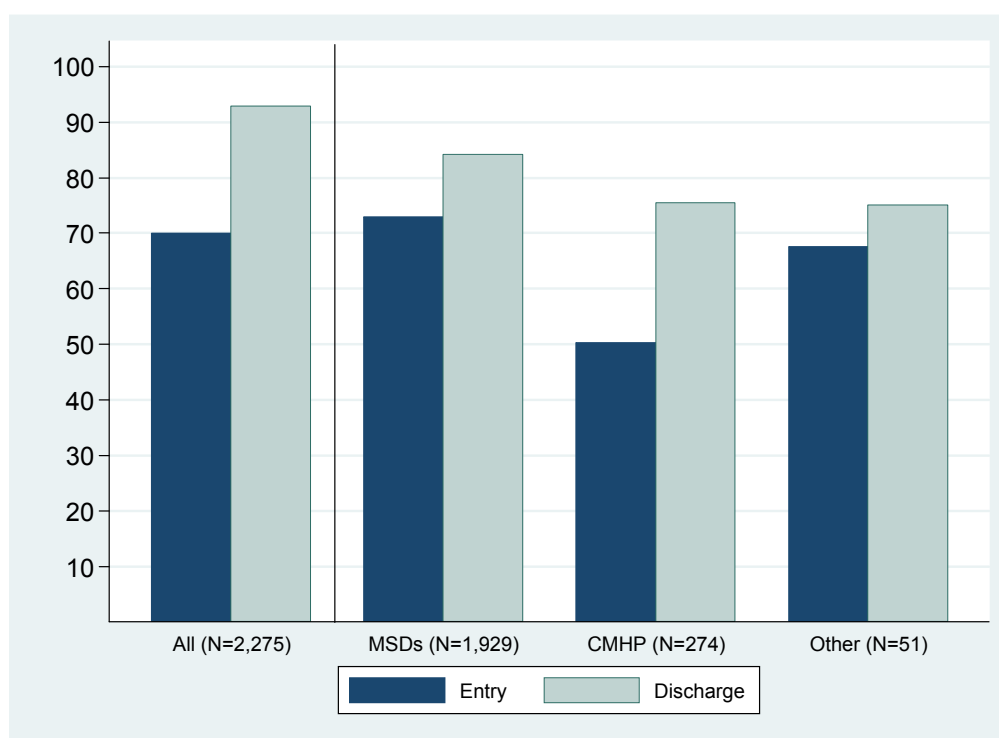


## 4.6.2 EQ-5D visual analogue scale scores

### 4.6.2.1 Entry to discharge VAS scores for the different primary presenting issues

Figure 16 shows the mean VAS scores for entry and discharge, for all cases, and then broken down by PPI. When considering all cases, a statistically significant mean increase of over 20 points is observed ( $p < 0.001$ ). The same effect was observed when considering the VAS score by PPI. A mean increase of more than 10 points is observed for musculoskeletal disorders (MSDs) and of more than 20 points for common mental health problems (CMHP).

**Figure 16: Mean visual analogue scale scores**



### 4.6.2.2 Changes in VAS scores

Table 14 shows the changes in VAS scores between entry, discharge, 3 months post discharge, and 6 months post discharge for all cases. Only cases for whom there are matched scores (i.e. at 2 of these points) are shown. The numbers in gray are the scores, while numbers in bold / blue are changes in score.

**Table 14: Changes in VAS scores from entry to discharge to 3 months and 6 months**

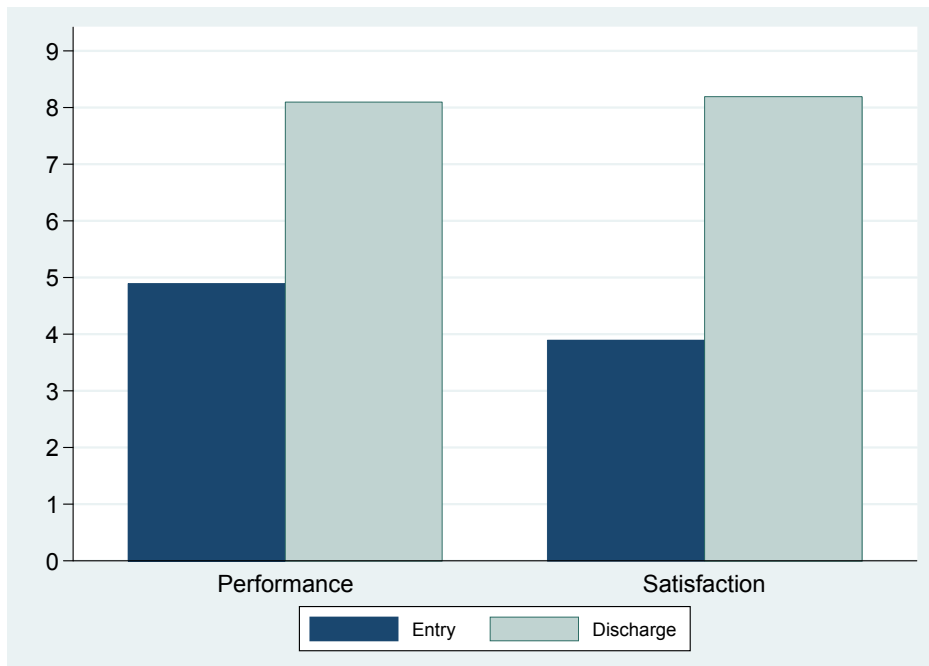
	End Scores		
	Discharge	3 Months	6 Months
Change in score from entry	70.1 to 83.0	66.3 to 81.3	72.8 to 84.4
	<b>+ 12.9</b>	<b>+ 15.0</b>	<b>+ 11.6</b>
	(n=2,275)	(n=371)	(n=160)

An improvement in score of over 10 points is seen from entry to discharge and this is maintained at 3 and 6 months following discharge. This implies that the health condition has been improved and that this benefit has been maintained.

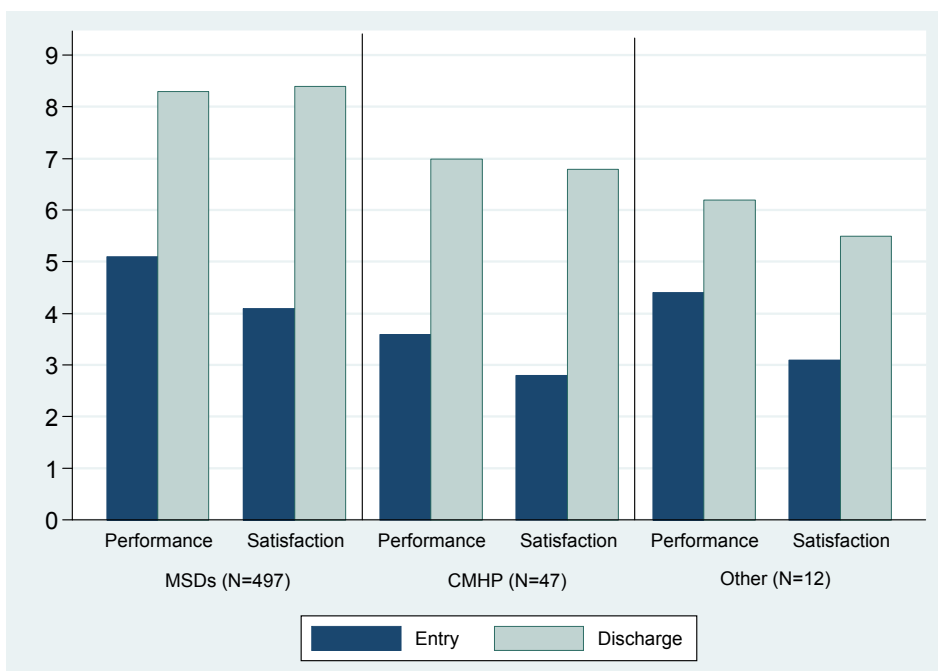
### 4.6.3 COPM

COPM asks the client to give a subjective score (1-10) for (a) their ability to perform tasks they identify as important to them, and (b) their level of satisfaction with this. Changes in score for all cases are shown in Figure 17, while Figure 18 shows this for the different health conditions. Substantial improvements are seen for all health conditions, with improvements in performance scores of approximately 3 points on average, and slightly more for satisfaction scores. An improvement in score by 2 points is considered clinically significant. It should be noted that the sample sizes are relatively small, particularly for the 'Common Mental Health Problems' and 'Other' Primary Presenting Issue (Figure 18), meaning the results should be interpreted with caution.

**Figure 17: COPM performance and satisfaction scores for all cases (n=556)**

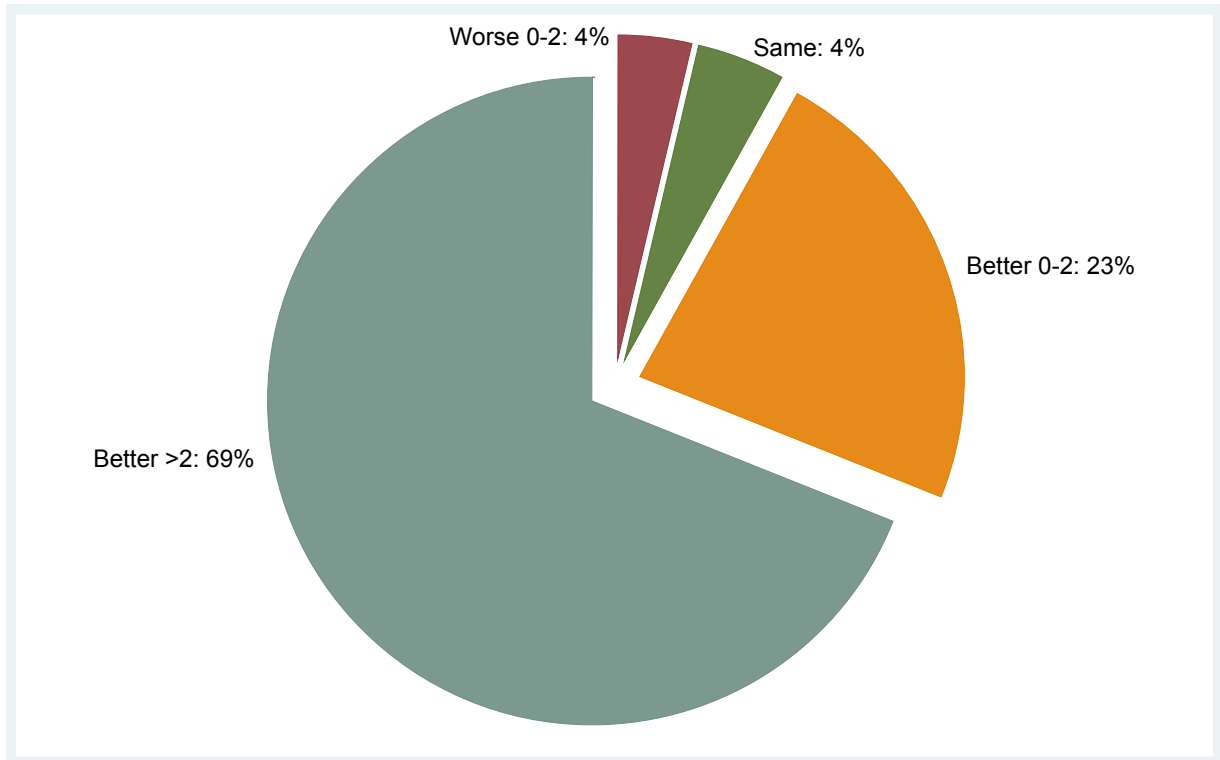


**Figure 18: COPM Scores by primary presenting issue**

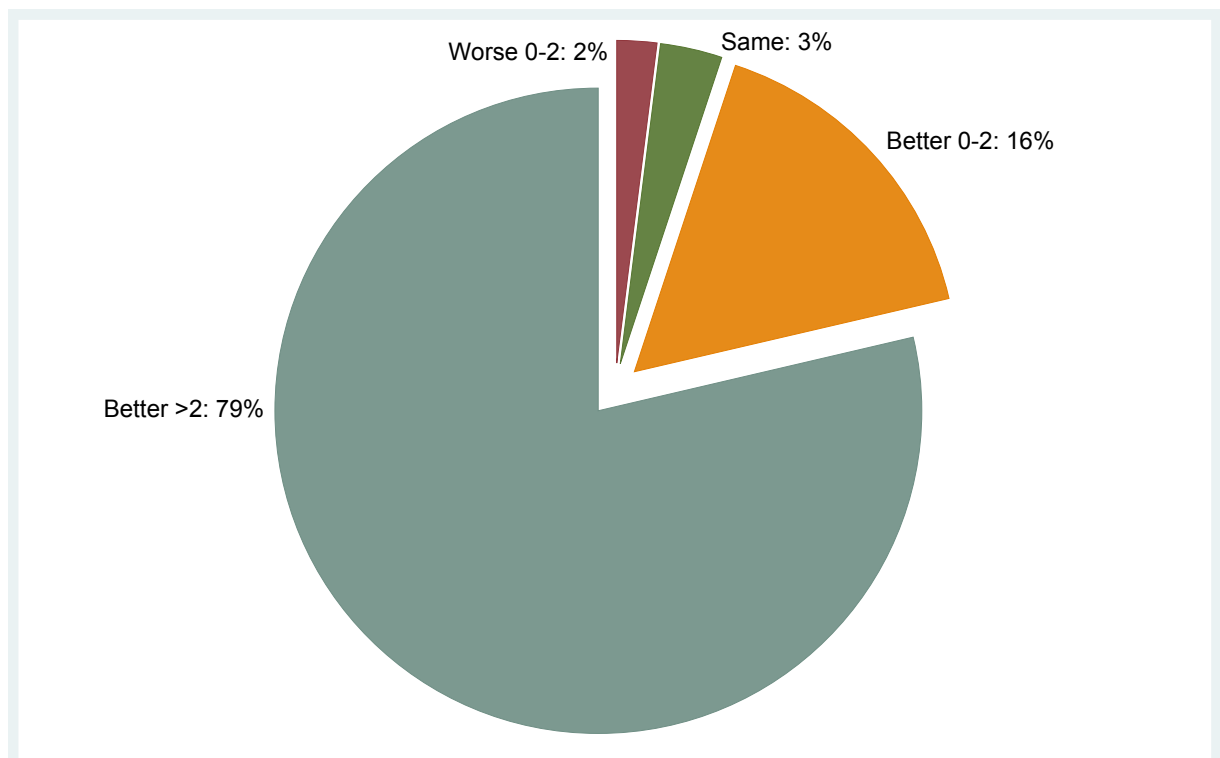


Looking at this in more detail, Figure 19 shows the percentage of cases who had a change in COPM score of more than 2 points (better or worse), in their performance, and Figure 20 shows this for satisfaction. Altogether 69% of cases had an improvement in their COPM performance scores of more than 2 points, while 79% had an improvement in their satisfaction scores of over 2 points.

**Figure 19: Changes in COPM performance scores (n=548)**



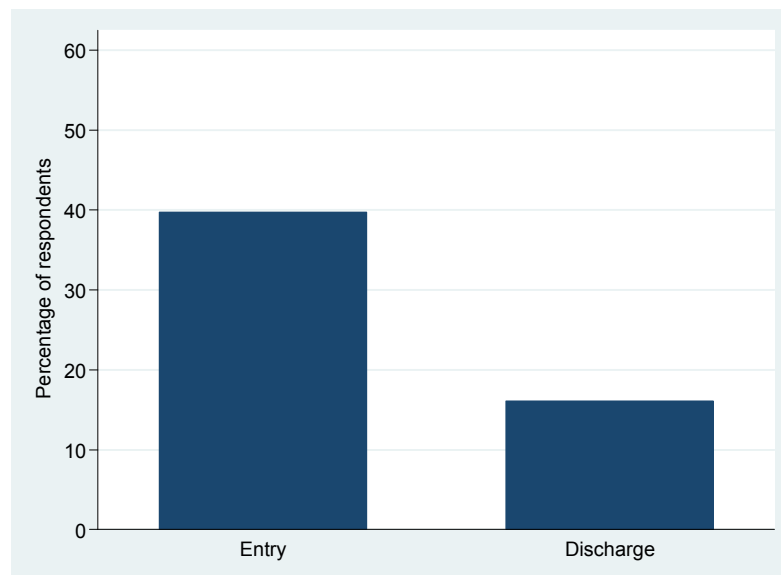
**Figure 20: Changes in COPM satisfaction scores (n=548)**



#### 4.6.4 GHQ-12

The GHQ12 was used at the discretion of the clinicians and case managers. It is thought to have been used particularly with cases who had common mental health problems. Although the sample is therefore small (n=76), 40% of cases who completed the questionnaire had a clinically significant GHQ12 score (i.e. a score of 4 or over on the bimodal scoring) at entry). This had reduced to 16% at discharge, indicating that the number of cases with a clinically significant GHQ12 score had been reduced by over half (Figure 21).

**Figure 21: The percentage of clinically significant GHQ12 scores (n=76)**

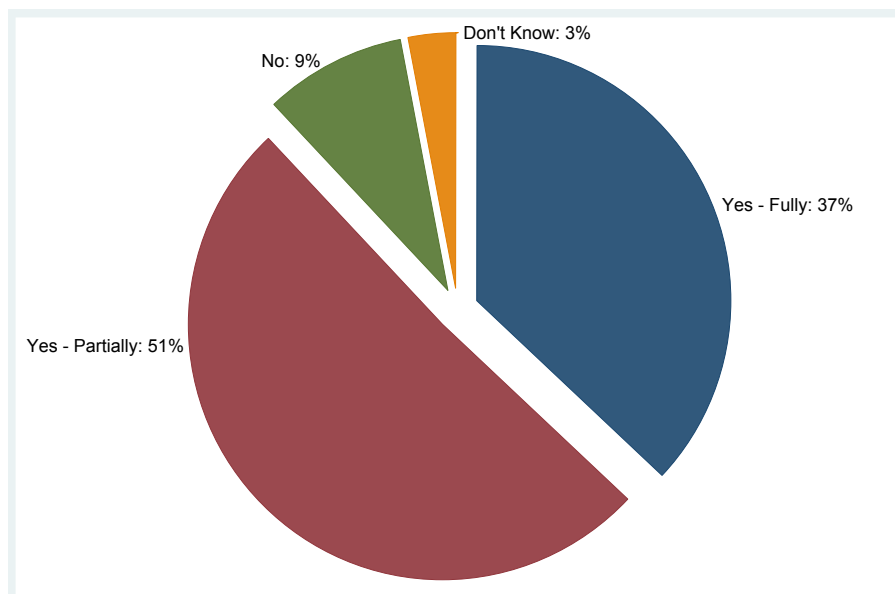


#### 4.7 Perceived health improvements

##### 4.7.1 Clients' perception of whether their primary presenting issue had been resolved

In response to the question asked on discharge 'Has your Primary Presenting Issue been resolved?', 88% answered positively, with over a third (37%) reporting that it had been fully resolved (Figure 22).

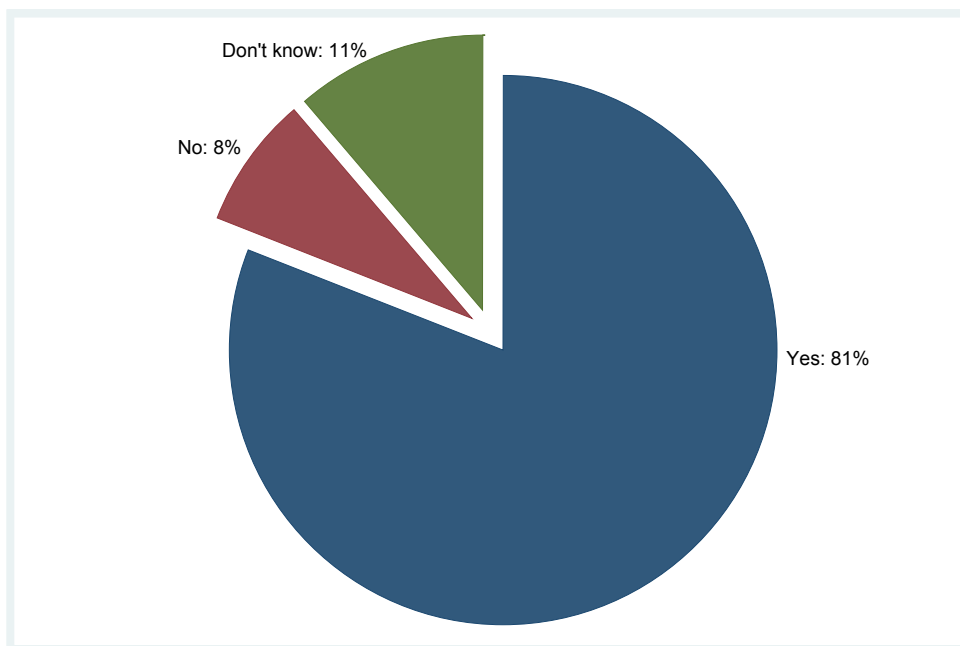
**Figure 22: Percentage of respondents considering their primary presenting issue had been resolved (n=2,228)**



#### 4.7.2 Clients' perception of whether OHSxtra helped them return to work or stay in work

In total 2,264 clients responded to the question 'Did OHSxtra help you return to work or stay in work?'; 81% of respondents reported positively (Figure 23). Some boards did not present the service as 'OHSxtra', as they integrated the service delivery into their normal occupational health service provision, so cases may not have been aware that they received OHSxtra services. For this reason they may have answered this question as either 'No' or 'Don't know'.

**Figure 23: Percentage of respondents who thought OHSxtra had helped them stay in work or return to work (n=2,264)**



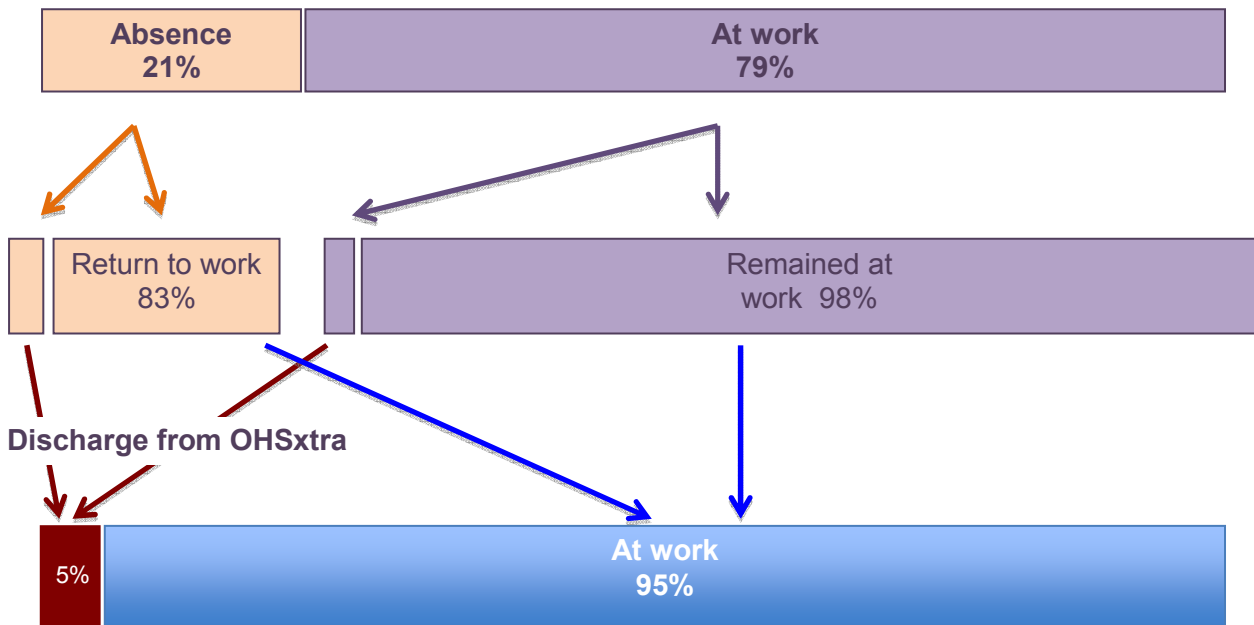
#### 4.8 Absence data

One of the important variables of interest was the change in absence status, particularly whether absent cases had returned to work. The figures shown in Figure 24 are for the 2,308 cases for whom there are data on absence status available at entry and discharge. On entry, 21% of cases were absent from work; 83% of these were at work at discharge. Of the 79% who were at work at entry, 2% were absent at discharge. Altogether, 95% of cases for which there are data were at work on discharge from OHSxtra. The overall absence rate for the group dropped from 21% to 5%.

If the absence status of cases at entry is taken for all cases where there is this information at entry (n=6,958), 71% of cases were at work. It is possible that the clients for whom there are both sets of data are those who have engaged more fully with the programme, and it may be that fewer of them were absent initially.

**Figure 24: Showing absence status at entry and discharge (n=2,308)**

**Entry to OHSxtra**



There was limited data on the duration of absence at entry. For the 599 cases who reported being absent for more than 30 days at entry, data on absence status was provided by 167. Where data were available, 125 (75%) were at work at discharge, and 42 were not. It is well recognised that those who are absent for longer durations prior to intervention are more difficult to return to work. Despite this, a substantial number (75%) of those with longer absences prior to their entering the programme were at work on discharge.

**4.9 Absence duration compared with Labour Force Survey figures**

Average absence figures for the cases' primary presenting issues can be compared against HSE figures from the Labour Force Survey (2008/09) which gives average durations of absence for those with work related health problems, based on a survey of 100,000 people.

The number of days absence while in the programme was available (self report) for discharged cases. If cases were absent when they entered the programme, information was also available on when this absence started. In order to establish a comparable time period (1 year) for comparison against HSE figures, the discharge date was compared against the entry date. If a case was in the programme for less than a year, but absent at entry, the amount of absence in the 12 month period prior to their discharge from the programme was considered, i.e. if they had become absent on 1.11.07, come into the programme on 1.3.08, and been discharged on 31.12.08, the amount of absence from 1.1.08 to 31.12.08 was calculated. For cases that had been at work at entry, the amount of time absent while in the programme was calculated. If a case was in the programme for more than a year and reported having lost more than 220 working days during their time in the programme, the duration of intervening absence was set at 220 days (typical number of working days within a year). From this an average number of days lost per case can be calculated by health condition. This is shown in Table 15, and is based on data for 2,532 cases.

Data were not available from the sample to convert the figures into a full-day equivalent (number of hours staff worked was not recorded) as used in the Labour Force Survey. However, a comparable sample in the OHSxtra pilot study (N=386) (Hanson *et al*, 2007) reported that 66% of clients (all NHS employees) were employed full time (37 hours per week); and the 34% of clients



who worked part time, worked on average 26.9 hours per week. These figures are less than the average number of hours worked per week used in the Labour Force Survey (40.6 hours per week). Converting the number of working days lost from the OHSxtra sample to full time working days lost would reduce the figures for number of days lost by OHSxtra cases.

**Table 15: The average number of days absence for cases who said that the programme helped them remain / return to work, compared with HSE figures**

	<i>Number of cases</i>	<b>Average number of days absence per case</b>	<b>HSE figures for average number of days absence*</b>
MSD – upper limb and neck	950	8.6	17.5
MSD – lower limb	503	8.4	20.8
MSD – back	765	8.1	15.5
Common mental health problems	274	21.9	27.5
Other health conditions	40	27.7	n/a

\* From: <http://www.hse.gov.uk/statistics/lfs/0809/typesex3.htm>

This implies that OHSxtra cases with musculoskeletal conditions and common mental health problems took fewer than the average number of days absence when compared with HSE figures; for cases with musculoskeletal conditions the average absence taken was approximately half of the amount reported in the HSE Labour Force Survey. However, without a control group it cannot be concluded that these shorter absences are due to the OHSxtra programme.

#### **4.10 Economic analysis**

The OHSxtra pilot study (Hanson *et al*, 2007) had modelled the potential impact of the OHSxtra service, demonstrating the cost benefit potential of the OHSxtra approach in retaining NHS staff at work and returning to work those off with both short and long-term absence, with the cost of service delivery being less than the anticipated cost of sickness absence for these staff. This wider implementation of the programme aimed to show whether the approach could be adopted into NHS occupational health services on a wide scale in Scotland. In this broader roll out, the potential to undertake an economic analysis was restricted by the lack of a comparable control group. Furthermore, the different methods of adopting the approach and different services that received funding across the boards makes it difficult to economically quantify the benefits of the approach. It has therefore not been possible to undertake a detailed economic analysis. However, the data indicate that clients received services more quickly than they would have via the normal NHS routes, with the implication of associated cost savings through quicker return to work, or prevention of absence.

#### **4.11 Summary**

- 7,380 cases were enrolled in the programme, representing approximately 5% of the NHS working population being seen during the course of the programme.
- Client demographics were broadly similar across all boards, and reflect that of all NHS employees.
- The majority of cases (65%) had a musculoskeletal disorder as their primary presenting issue; 19% had a common mental health problem, and 16% had 'Other'. The high proportion of musculoskeletal conditions reflects the services provided within OHSxtra (11.45 wte physiotherapy, 4.2 wte occupational therapists, 3.2 wte counsellors / CBT therapists / clinical

psychologists). The high proportion of 'other' primary presenting issues is due to two boards recording data on all occupational health referrals.

- On entry to the programme, a higher percentage of cases with musculoskeletal disorders (MSDs) were at work than those with common mental health problems. More long term absences were recorded for those with common mental health problems than MSDs.
- 66% of cases were seen by a service provider on the day they entered the programme; 85% were seen within 14 calendar days of their entry to the programme.
- Physiotherapy was the service provision most frequently used, reflecting the fact that this was the service that received the most funding through OHSxtra.
- Only 3% of clients received services from more than one specialism.
- The mean number of sessions received were: physiotherapy, 3.8; counselling, 4.9; CBT, 4.8; occupational therapy 3.8; occupational health nurse, 3.1 and occupational physician 3.0.
- Noticeable improvements are seen in all health measures (EQ-5D, VAS, COPM and GHQ12), and for the three classification of health condition 'MSDs', 'common mental health problems' and 'other'. Where data are available these health improvements are maintained 3 and 6 months post discharge.
- 88% of cases thought their primary presenting issue was fully or partially resolved at discharge.
- 81% of cases thought that the programme had helped them stay in work or return to work.
- The proportion of absent cases reduced from 21% at entry to 5% at discharge.
- 83% of those who were absent on entry had returned to work at discharge.
- OHSxtra cases reported fewer days absence for musculoskeletal conditions and common mental health problems than those reported in the HSE's Labour Force Survey.

## 5. CASE STUDIES

Case studies were provided by NHS Dumfries and Galloway, NHS Forth Valley and NHS National Services Scotland.

### 5.1 Common mental health problems

#### 5.1.1 Common mental health problems – case study 1

##### ***About the Client***

A female administrator, in her 40s, managing a busy clinical area, had been to her GP regarding panic attacks experienced following an on-going situation with some of her colleagues. Her GP had signed her off work due to the agoraphobic symptoms experienced on going to work. He suggested that she contact her OH department.

##### ***Assessment and services provided***

The client self-referred and was initially assessed by a specialist nurse practitioner in occupational health (SPOH) who had the role of case manager. The client intended to return to work. However, it was clear that her level of distress may have prevented her from managing herself in the situation at work effectively and that the potential for relapse was high. Based on the assessment, the client was referred to the CBT therapist.

At entry, the client rated her overall health at 30/100 on the VAS scale and at 22222 on the EQ-5D. On the COPM scale the client rated her performance at 2.2 and satisfaction at 2.2.

She was offered 8 sessions of CBT and attended 5, which was agreed between the client and therapist as sufficient. The CBT therapist worked with the client on managing the panic and agoraphobic symptoms and on managing interpersonal situations in the workplace assertively. The SPOH reviewed the client and liaised with the CBT therapist with regard to any workplace recommendations. The SPOH also liaised with the line manager and advised on recommendations, which were agreed, which included phased return with initial limited exposure to the work environment, workload monitoring, and clarification of roles and boundaries.

##### ***Outcomes***

During the period of her involvement with the OHSxtra project and subsequent return to work the client had no absences and therefore only 5 working days in total had been lost (prior to referral to OH). VAS score on discharge was rated by the client as 95, EQ-5D at 21122 (i.e. an improvement from some problems to no problems with self-care, and from some to no problems with performing usual activities). On the COPM scale, she rated her performance at 7.2 and satisfaction at 7.8. The client's manager praised her professional performance at work and assured her of ongoing support.

#### 5.1.2 Common mental health problems – case study 2

##### ***Client***

The client was a female in her 50's working in Housekeeping services; she was reported to be a good worker who was frequently moved from place to place to cover different areas. She was absent from work at her initial appointment, and reported feeling stressed, overloaded and was experiencing difficulties coping at work. She presented with anger issues and issues with her mood which were impacting on relationships at work and home.

### **Assessment and services provided**

The client was initially seen for a psychological assessment to ensure appropriateness of service. She was then offered a series of appointments for therapy and attended 6 in total. The assessment highlighted that she was suffering with post-traumatic stress disorder (ptsd) relating to previous events in her personal life; there was an unresolved significant bereavement and significant difficulties with assertiveness. The therapy focused on resolving the bereavement, identifying the cause of the assertiveness difficulties and working through the traumas leading to ptsd symptomatology.

### **Outcomes**

The client was at work on discharge from the Staff Psychology service. On return to work she was able to assertively address work issues which were contributing to her feeling overwhelmed. Her grief was resolved and the symptoms of ptsd were resolved with resolution of anger. Her mood was improved as were relationships at work and home. Her presenting issues were all resolved. Changes in standardised tool scores are shown below.

<b>Tool</b>		<b>Assessment</b>	<b>Discharge</b>
<b>Hospital Anxiety and Depression Scale</b>	Anxiety	16 (severe)	5 (normal)
	Depression	10 (mild)	0 (normal)
<b>GHQ-12</b>		11 (caseness)	0 (normal)
<b>Global Assessment of Functioning (GAF from DSM-IV)</b>		51 (moderate impact on functioning)	75 (minimal impact on functioning)

### **5.1.3 Common mental health problems – case study 3**

#### **Client**

The client was a female administrative officer in her mid-forties involved in data processing, working for a large division in charge of supplying contractor payments throughout Scotland. The woman had previously been referred to occupational health services and had been advised to seek Bereavement Counselling for her depression. A referral was made to OHSxtra to seek additional support as the client was currently on the waiting list for Bereavement counselling (with a wait of an undetermined amount of time). The original diagnosis of depression had been made in November 2003, following the death of the woman's father. The woman suffered another episode of depression in 2009 following the death of a close family member. At the time the referral was made, the woman was still at work, but indicated that she was struggling to cope and was close to being signed off.

#### **Assessment and Services Provided**

During the initial telephone assessment, the case manager addressed the options available to the client through the counselling service. It was clear that although the client was able to continue with normal day to day activities (i.e.: personal care, household management, various recreation/hobbies, socialising with friends), she was finding it hard to cope with this in addition to attending her job. The client indicated that she was experiencing moderate to more severe anxiety and depression. Following the referral, the woman was recommended to receive counselling for her depression. She attended two counselling sessions and was then discharged from the service.

After the initial discharge, the client's manager contacted the case manager as they did not feel that the woman was ready to be discharged. In order to alleviate this situation, the case manager contacted counselling services and requested further appointments for the woman, who is currently still attending counselling.

## **Outcomes**

During the woman's involvement in the programme, the client did not go off work and still remains at work. Her EQ-5D score changed from 11112 to 11111 (i.e. changed from being moderately anxious or depressed to not being anxious or depressed) and her COPM performance score remained a 7 with satisfaction changing from 7 to 9. The woman found the programme to be greatly beneficial as it allowed her to access counselling services that she had previously been put on a waiting list for and she also felt that she had extra support from the case manager, especially when she needed additional counselling sessions. Her manager felt that the programme was helpful as the case manager could act as a liaison between them and the counselling services to arrange additional sessions or discuss an early discharge. All involved with the programme were happy that the client maintained their ability to stay at work and continue with their job responsibilities.

## **5.2 Musculoskeletal disorders**

### **5.2.1 Musculoskeletal disorders – case study 1**

#### **Client**

The client was a female nurse manager in her mid-forties who is responsible for a day care unit; this is located in the community. The client was referred to OHSxtra in relation to a fall she had in October 2009 during which she twisted and injured her knee. At the time, she felt this injury was not severe enough for her to attend her GP for a consultation. However, five months after the initial injury, her knee had only slightly healed and she visited her GP for advice in February 2010 as she felt concerned over this slow recovery. The woman's GP suggested that the best treatment would be a course of physiotherapy, but could not confirm how long she would be on the waiting list to receive this. The client choose not to pursue this option as the physiotherapy appointments would have been located at her local hospital, requiring approximately four hours travel time in total, in addition to the length of the appointment. An OHSxtra referral was made in March 2010 to seek additional support for the situation.

#### **Assessment and services provided**

During the initial telephone assessment, the woman informed the case manager that her injury was continuing to cause her difficulties at work and she was finding it increasingly difficult to carry out her normal activities outside of work, ie: household chores, long periods of standing or walking, regular exercise and that she developed stiffness after prolonged periods of sitting. She indicated that she was not anxious or depressed about her injury, but would like to find a solution that would resolve her injury and allow her to carry on with her normal day to day activities. Following this assessment, the client was referred for six sessions of physiotherapy, which she reported benefited her greatly and helped to resolve her injury.

#### **Outcomes**

During the woman's involvement in the OHSxtra programme, she did not go off work and remains in work, and able to fulfil all her duties. Her score from the EQ-5D assessment went from 21221 to 21111 (i.e. changed from some problems performing usual activities to no problems with performing usual activities; and moderate pain or discomfort to no pain or discomfort). Her COPM performance score changed from 7 to 9 and her satisfaction score from 6 to 9. The client commented that she found the programme to be beneficial as it allowed her quick access into physiotherapy and appointments were able to be arranged at a location that was convenient to her work place.

## 6. CLIENT COMMENTS

Some boards collated comments from clients on discharge from the OHSxtra service. Comments were extremely positive and clients expressed appreciation for the benefits experienced through the service. A list of comments provided by NHA Ayrshire and Arran (AA), NHS Dumfries and Galloway (DG) and NHS Lothian (LT) is given in Appendix 3. A sample of comments receive are shown relating to the following themes.

### 6.1 General comments on benefit of the services

*“Excellent service.” (AA)*

*“I was very impressed with this service, as at first I did not really see the point of going to any of the sessions, but now I have a different approach to life and also to my working environment and I am very glad this is offered to staff working in the NHS. Thank you.” (DG)*

*“It would be impossible to put into words how much help/support/tools provided have helped me and I would recommend service to others.” (DG)*

*“Have found the treatment and advice to be very helpful... The approach adopted was very positive and constructive.” (LT)*

*“OHSxtra has greatly improved my tendon area, quick and good service – vastly improved on previous.” (LT)*

*“Excellent service, very valuable.” (LT)*

### 6.2 Improved functionality

Many clients reported on reduction in pain / discomfort/ restriction of movement, or an improvement in their mental health. Examples included:

*“Before I went to the physiotherapy programme I was very sore/stiff. Also had problems sleeping, caused by pain in lower back. Now have hardly any pain through the night and also less pain through the day. The exercise programme is very good – I would like to say thank you very much to the staff Physio.” (DG)*

*“Support for me at the time was vital. Definitely helped me to turn my life around and return to normality.” (AA)*

*“This has helped me do my job with less distraction caused by pain.” (LT)*

*“I am very grateful for the opportunity to have a physiotherapist get me back to full range of pain free movement. I would find it difficult to manage sitting at work as I was in pain. Thanks to the physiotherapist.” (LT)*

### 6.3 Quicker return to work or prevention of absence from work

Some clients recognised that the service had helped them stay in work or enabled them to return more quickly.

*“If it wasn't for the staff physio I would have been absent from work longer.” (LT)*

*“Having instant access to physio enabled me a much quicker return to work.” (LT)*

*“I would have gone to my GP with this injury leading to time off work. I have been referred to hand clinic which may not have happened as quickly as with this service.” (LT)*

*“This is an invaluable service. I would have definitely have been off work on sick leave with pain... Thank you very much.” (LT)*

*“I felt that the counselling sessions really helped me to stay within work and develop coping strategies. I found the sessions most valuable.” (LT)*

#### **6.4 Assistance with return to work**

Some clients recognised the support given to them in their return to work or redeployment:

*“From my own personal perspective, I can make no suggestions to improve the service you provide. I had a health issue, it was identified, the case was recognised, positive steps were taken. I was redeployed and I am currently on secondment for a period of up to 3 months. My health has immediately improved. I am now extremely happy doing the job which I genuinely enjoy and get a great deal of satisfaction from. Thank you all in particular the doctor and the therapist.”* (DG)

*“Excellent support and return to work plan”.* (AA)

*“Staff physio was excellent. I felt supported in this period when I was desperate to get back to work. Many thanks to the physiotherapist.”* (LT)

*“By attending OHSxtra I am of the opinion that it assisted me to return to work and cope with the work demands.”* (LT)

#### **6.5 Speed of service delivery**

Clients recognised that the speed with which they received services was helpful.

*“Undoubted benefit of having physiotherapy promptly rather than waiting for GP referral. This for me has meant a speedier return to work, which in turn has maintained my general feeling of wellbeing.”* (DG)

*“I appreciated the prompt referral and I’m delighted with the service provided.”* (AA)

*“Quick attention – I did not have to wait long for advice and referral then treatment.”* (AA)

*“It was great to have such quick access to physiotherapy services. It really helped improve my ankle/legs mobility. I would have struggled at work for much longer.”* (LT)

*“Pleased with quick and regular/flexible appointments.”* (LT)

*“It was helpful getting an appointment as soon as possible.”* (LT)

#### **6.6 Accessibility of service**

Clients commented on the accessibility of the service, both in terms of its availability when needed, its flexibility, and its point of delivery.

*“It is a great help to know that I can always contact the physio if and when I need it.”* (DG)

*“Staff physiotherapy services accessible, friendly and helpful.”* (DG)

*“Flexible around my working hours.”* (AA)

*“Very helpful to have treatment on site within work so not missing work.”* (LT)

*“So easy to access department from work, no stress of trying to park and walk longer distance.”* (LT)

#### **6.7 Comments concerning personnel**

Many comments were received on the quality of the staff, being helpful, approachable and supportive:

*“The therapist was very supportive, friendly and easy to talk to. She has helped me greatly through a difficult period and I very much appreciated her calm approach when I felt upset.”* (DG)

*“If only every department had such friendly, smiling helpful people life would be much easier.” (DG)*

*“OT very helpful – not judgemental, very approachable and was a fantastic support to me.” (AA)*

*“So glad I made the phone call as this has been so beneficial. The physiotherapist has been great, approachable and extremely helpful.” (LT)*

*“Excellent physio very professional and thorough. Helped me a great deal.” (LT)*

*“Very supportive physiotherapist, gave thorough explanation of my condition and of the exercises given to help with same. Very satisfied with quick response to enquiry due to onset of problem, seen promptly. Excellent service, friendly and supportive staff.” (LT)*

*“The counselling service is a very important staff facility which provides professional and courteous support during difficult period for the individual concerned.” (LT)*



## **7. VIEWS OF OCCUPATIONAL HEALTH DEPARTMENTS IMPLEMENTING OHSxtra**

In order to help evaluate the programme it was considered important to obtain the views of the participating boards on how OHSxtra had been implemented in practice, and the benefits and challenges of the approach. Interviews were conducted with each board concerning their implementation of the programme (see Appendix 1), and the lessons learnt through it. In addition, at the final OHSxtra Implementation Group meeting (23<sup>rd</sup> June 2010), boards were asked to consider the benefits of OHSxtra to the occupational health department and whether and how it had changed their practice. The comments are shown in Appendix 2, and the key findings are summarised here.

### **7.1 Lessons learned**

- There are significant benefits in occupational health and service providers being located in the same building. This facilitates communication and team working as well as rapid access to the services.
- It has been helpful to focus on clients' functional impairments; this helps to identify appropriate services for them.
- Although on-line CBT software is useful for some clients, it is not suitable for everyone (those without access to computers, with more complex needs, who are not motivated etc).
- Monthly clinical governance meetings (attended by key clinicians involved in service delivery) were very helpful in ensuring integration of the approach and improving the quality of care for clients.
- It can be difficult to share information between different clinicians particularly at different sites, if using a paper based system. There are seen to be a number of significant benefits of an electronic record keeping system including quicker communication, clearer document tracking, reduced paper and associated handling and storage, ability to automatically generate prompts for review etc.
- Having a dedicated case manager allowed the rest of the team to be mentored in the case management approach.
- Some clients did not find being case managed over the phone very easy; in these cases, they were brought in for face to face case management.
- Providing self help advice can help manage the demand on the services.
- The EQ-5D and biographical information questions could be sent to a client with their appointment letter, or given to clients in the waiting room, to save clinical time.
- It can be challenging contacting clients by work or home phone number, and clinicians had to be sensitive about leaving phone messages. It is preferable to gain a personal mobile number to contact clients.
- Good communication about the availability of the services is essential (e.g. with staff, managers and GPs).
- Having a dedicated, but not full time case manager, could introduce delays into the process. Integrating the function into clinical roles allowed greater flexibility in delivering case management. The exception to this was NHS National Services Scotland where the disparate locations of their clients (and also the range of service providers) meant that having a central, dedicated case manager was more appropriate. For Boards with more remote locations to serve, case management was found to be best delivered from the main occupational health centre, even if services were being provided remotely. In both these situations, case management was undertaken by phone.
- Teleconferencing for CBT to remote areas was found to be acceptable.

- In order to manage the demand on the service, Boards found it necessary to be clear on the triage criteria, with most requiring that the condition be affecting the person's ability to work.
- Good administrative support was seen to be crucial to the effective running of the programme.

## **7.2 Operational benefits**

During the review, Boards identified the following operational benefits as arising due to OHSxtra:

- Occupational health professionals were reported to appreciate the focus of OHSxtra on multi-disciplinary team working and communication and the altered ways of working that arose, considering that they learnt from each other, and that it enhanced their skills and the services they could offer.
- Communication between occupational health team members and service providers were reported to improve due to OHSxtra, which was perceived as beneficial both for the service and for clients.
- Some Boards reported that OHSxtra helped provide a more complete service for clients, as they were able to offer additional services, and it had helped them become more aware of alternative services outside of occupational health (e.g. debt counselling services).
- Occupational health staff became aware of other options for supporting clients outside of OH and confident in referring to these.
- The OHSxtra programme helped OH departments to consolidate their processes, and provide a structured approach for assessing and managing clients.
- Several Boards introduced occupational therapy provision into their occupational health service for the first time. Although the benefit of occupational therapy was appreciated (see 7.5), on review of service provision, several Boards decided to purchase occupational therapy on a sessional basis rather than employ an occupational therapist within the OH department.
- Provision of additional staff was seen to strengthen the occupational health team (whether through the extension of existing services or introduction of new services and skills).
- OHSxtra resulted in many Boards having shorter waiting times for services.
- OHSxtra funding allowed services to be extended into other geographical or hospital areas that had not received these services previously.
- Some Boards identified that OHSxtra helped raise awareness across the Board of the occupational health services available, which was seen as a benefit for the service.
- OHSxtra facilitated the development of self-help guidance (e.g. exercises) and web based materials, in order to assist with managing the demand on the service.
- As a result of the data recording required in OHSxtra, some Boards noted that they now placed a greater value on audit and on measuring the outcomes of interventions; using standardised tools was seen as useful.

## **7.3 Changes in working practices**

Some changes in occupational health working practices were identified by Boards as a result of the OHSxtra programme. These can be summarised as:

- Better linkage with other hospital departments, with occupational health working more closely with them where a health condition may be work related or work affecting (e.g. dermatology, orthopaedic, mental health and addiction).
- Better use of assessment tools and data collection.

- One Board now allows direct GP referral into staff physiotherapy and occupational health.
- In one Board, all musculoskeletal clients are all triaged and managed by a physiotherapist, where previously they were managed by an OHN or occupational physician. This is seen to make the process more efficient.
- The means of referral into physiotherapy has been simplified in one Board.
- EQ-5D is being used for all occupational health clients at entry, and followed up 3 and 6 months following entry, to allow them to track clients' progress.
- Some Boards with a range of sites introduced a central point of contact for the first time, and this has been seen as beneficial.
- Documentation has changed and the approach has become more structured.
- Access to fast track interventions, treatment and rehabilitation is now available.
- There is now better communication between occupational health, human resources, management, staff side and clients.
- Telephone triage has been successfully introduced.
- One Board found that they could successfully deliver counselling over the phone, reducing the need for face to face contact.
- Some occupational health nurse advisors have expanded their skills in the areas of OT and CBT.

#### **7.4 Perceived challenges**

The main challenges facing Boards in continuing to deliver the OHSxtra model were seen to be:

- Being able to delivery the same level of service provision within the current financial climate. Budgetary constraints may become an ever larger factor in how and in what shape services will continue into the future. There was a recognised need to evidence the benefit of these services in supporting the organisation by keeping people in work / returning people to work.
- Managing increasing demand on the service but with fixed resources.
- Providing equity of service in more rural areas.
- Continuing the momentum and enthusiasm of staff and clients for the service.
- Tackling short term absences amongst staff which are often caused by biopsychosocial issues.
- Introducing a new way of working presents ongoing challenges.
- Quantifying the benefits of the services, particularly the mental health services.

#### **7.5 NHS Grampian's evaluation of occupational therapy service**

In addition, NHS Grampian undertook an audit of their occupational therapy provision, as they had not had this service as an integral part of their occupational health service previously (Campbell *et al*, 2010). They found that 56 (95%) of the respondents who had received OT reported that they were either 'satisfied' or 'very satisfied' with the OT service. All occupational health staff who referred clients to OT (18) stated that referring employees had been beneficial and the main perceived benefits being that it helped the employee to stay at work, helped the employee to manage their condition effectively at work, and helped the occupational health colleague to manage the employee's case effectively.

## 8. DISCUSSION

### 8.1 Concept and implementation

Prior to the adoption of OHSxtra, case management was being undertaken to varying degrees within the occupational health departments of the Boards. (The effectiveness / extent to which this was happening was not assessed, but this comment is made based on reports by Boards). The extent to which the case management model changed working practices therefore varied between Boards.

It was recognised that some cases would require no, or very little, case management, while others might require considerable case management. It had been intended that all clients who received case management would be assessed using the COPM tool, but this did not happen in practice. This made it very difficult to identify the impact of the case management component of the service, and the service has been evaluated in its entirety. Another challenge was to identify which clients should receive case management (or in the case of a clinician undertaking case management, identifying which clients *had* received case management). It is therefore not possible to evaluate the impact of the case management component within the programme. However, taken as a whole, the programme had a positive impact on health and absence status.

Different Boards adopted different approaches to case management, to suit their local needs and working practices. Because of these differences, and the integration of the service into existing occupational health provision, it is difficult to draw firm conclusions on the impact of a case management approach. The programme was not set up to be a case-control study, and establishment of a control group was recognised to be extremely difficult. However, evaluation of the approach shows that it could be successfully implemented within existing occupational health services, with positive health outcomes.

In general, Boards found that integrating the case management role into clinical roles was operationally preferable to having a dedicated case manager. Where dedicated case managers were used, there was potential for delays in service provision if the case manager was absent. Smaller Boards, with fewer clients, had to integrate the case management function into clinical roles for staffing reasons.

### 8.2 Findings

#### 8.2.1 Absence status

One of the key dimensions of interest to Boards is the reduction of sickness absence. This programme aimed both to help those who were absent return to work, and to enable those who were not absent to remain at work. In total the percentage of the group absent dropped from 21% at entry to 5% at discharge. This represents 83% of absent staff returning to work.

Much of the cost associated with absence relates to those who have long term absences, and who typically require a range of support to facilitate their return to work. Altogether, 75% of the clients who had been absent for more than 30 days when they entered the programme were at work at the end of it. This will be beneficial not only to the individuals, but to the organisation and the delivery of quality services.

#### 8.2.2 Tool scores

Tool scores also showed a positive change with the programme, with all three of the tools used (EQ-5D, COPM and GHQ-12) showing noticeable improvements. The tools can be used to quantify changes in health status. Where data are available at 3 and 6 months following discharge from the programme, the health benefits had largely been maintained.

### **8.2.3 Perceived benefit of the programme**

Clients' perceptions of the benefit of the programme were favourable, with a large majority (88%) considering that their primary presenting issue was at least partially resolved, and 81% reporting that the programme helped them stay in work or return to work. Comments received from clients showed the perceived value of the service.

### **8.2.4 Speed of service delivery**

The majority of clients (65%) saw a service provider on the day of their assessment, with 85% of clients seeing a service provider within 14 days of their entry to the programme. It is known that NHS waiting times for these services were considerably longer, typically being 12 weeks for physiotherapy and 12 or more weeks for counselling / CBT. Providing faster access to services is likely to facilitate the retention of staff in work, and to speed a client's return to work, both of which will result in cost savings.

### **8.3 Data collection**

The relatively large amount of missing data is disappointing, and limits the interpretation of the data. It was also a factor in the study not being able to produce an economic analysis (since data were missing on many clients who had entered the programme, the potential impact on them could not be quantified). However, some Boards achieved a high percentage of complete datasets, and these show a positive impact of the service. It is recognised that there were difficulties with data collection, particularly with the use of a separate database from the standard databases used within occupational health departments.

### **8.4 Key elements of successful service delivery**

Each Board was asked to identify what it had gained through the OHSxtra programme, and how their working practices had changed. Board responses are summarised in Section 7. Based on this, the following points were identified as key for delivery of a successful occupational health service:

- Adopting a multi-disciplinary approach, as each profession brings something different, thus allowing delivery of a complete care package.
- Ensuring an appropriate skills mix within the occupational health team. There are common skills across some professions, and identifying appropriate responsibilities is important.
- Regular case conferences, bringing together occupational health professionals and HR.
- Appropriate documentation. This is greatly facilitated by a good electronic record keeping / communication system.
- There are benefits in linking with other Board departments (e.g. this may allow NHS staff to fill late-cancelled appointments and therefore receive quicker access than otherwise).

All Boards thought they had benefited from the OHSxtra approach, with changes in working practices, increased multi-disciplinary working and improved communications. This was perceived by occupational health professionals to enhance the occupational health service, improve outcomes for clients and be more professionally satisfying.

### **8.5 Networking**

OHSxtra created the opportunity for experience sharing in a way that had not been done between occupational health departments in Scotland previously. During the course of the project, Boards were set up in regional groups, so that those who had received funding in 2007 could support and share experience with local Boards who had received funding in 2008. Some of these groups were more active than others, depending on local experience and need.

In addition, professional networks were set up, with the OHSxtra physiotherapists, occupational therapists and counsellors put in touch with each other, and encouraged to communicate as required. This provided networking and learning opportunities.

OHSxtra implementation group meetings also provided the opportunity for sharing experience. The end of OHSxtra funding brings these meetings to an end. The benefit of on-going networking and support between occupational health departments in Scotland was felt by Boards, and there may be benefit in maintaining links between professional groups.

## 8.6 Recommendations

### 8.6.1 Future data collection

The potential for collecting a small amount of standard data which would help to quantify the impact of occupational health services was discussed at the final OHSxtra meeting.

Discussions indicated that the primary outcome measures of interest relate to a client's presence at work, and their ability to perform their normal work duties. Changes in these from entry to a service to discharge from it would give an indication of the impact of the service. Two questions were proposed that would enable these to be measured, and the combination of responses categorised, as shown below. A change in category over time would indicate a change in work status. For example, a change from 7 (off work due to health reasons) to 6 (at work with restricted hour and not able to perform all normal duties) would indicate an improvement. An ill-health retirement (which could be seen as a successful outcome) would have to be treated as a separate outcome; these questions would not be asked of a client who was ill-health retired.

<b>1. Are you?</b>	
At work, with normal hours	<input type="checkbox"/> a
At work with restricted hours	<input type="checkbox"/> b
Off work due to health reasons	<input type="checkbox"/> c
Off work due to non-health reasons	<input type="checkbox"/> d
<b>2. If at work, are you?</b>	
Doing normal duties without difficulty	<input type="checkbox"/> a
Doing normal duties, but struggling	<input type="checkbox"/> b
Not able to do all normal duties	<input type="checkbox"/> c

Qu 1 response	Qu 2 response	Category
a	a	1
	b	2
	c	3
b	a	4
	b	5
	c	6
c		7
d		8
Ill-health retired		9

Without a control group (who do not receive the intervention) it is not possible to quantify the benefits of occupational health interventions, but the use of these questions would allow the change in work status and work ability of clients to be quantified. Currently these data are not collected routinely, but would be useful in helping to determine whether improvements in health and work status of the individual occur during occupational health intervention. Furthermore, they could be helpful as a means of auditing service provision. The wider use of these questions currently is being piloted within OHSAS, NHS Fife's occupational health service.

The continuing use of the EQ-5D questionnaire as a method of monitoring and measuring staff wellbeing was also discussed at the final OHSxtra meeting. It was felt that this data when combined with the work status data would give meaningful information for the employer both about their staff's attendance and contribution at work, and their health and well being.

This small additional data collection is being piloted within OHSAS, NHS Fife's occupational health and safety service with the aim of integrating it into standard occupational health and safety service delivery. This, if successful, will provide not only a method of auditing service delivery, but service effectiveness too for the employing organisation, its staff, and for patients.

### **8.6.2 Other recommendations**

Much has been learnt by all participating boards during the course of the project, as summarised in this report. Recommendations for future programmes are given below.

- The approach has been integrated into existing service delivery in many boards, and it is recommended that this is continued.
- A flexible approach to service delivery is recommended to accommodate differences between areas. This could include different approaches to implementing case management, and delivering services (e.g. self-help, classes and face to face for counselling / CBT support).
- Encourage networking between professionals in the same discipline working in different geographic areas.

## **9. CONCLUSIONS**

It has been shown that the OHSxtra approach of case management, dedicated provision of services, and integrated team working can be successfully adopted within occupational health departments within the NHS in Scotland. Benefits have been noted for both clients and clinicians.

Although there are considerable amounts of missing data, the evidence indicates that the programme had a positive impact on the health of cases. All health indices show a noticeable improvement. Cases were seen quickly (the majority within 14 days), and reported positively about their experience.

The service was primarily delivered to NHS employees who were at work, but struggling, and therefore had the potential to become absent. The majority of these were still at work at discharge from the service. Where cases were absent at entry, the majority were at work at discharge. The programme therefore appears to have greatly assisted NHS employees in remaining in or returning to work.

It has been proposed to collect standard information on absence status and work ability for all occupational health cases, to be able to further evaluate the impact of occupational health services.



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