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Faculty of Occupational Medicine

Back pain management: Occupational health practice in the NHS in England

A national clinical audit – round 2

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Health and Work Development Unit

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A national clinical audit – round 2

Prepared on behalf of the Health and Work Development Unit Audit
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- elimination of preventable injury and illness caused or aggravated by work
- access for everyone to advice from a competent occupational physician as part of comprehensive OH and safety services
- providing support to the Faculty's membership to raise the standard of OH practice.

Health and Work Development Unit

The Health and Work Development Unit (HWDU) is a partnership between the Royal College of Physicians and the Faculty of Occupational Medicine. The unit aspires to be known as a national centre of excellence for health, work and wellbeing quality improvement work. HWDU's remit is to contribute to improving the health of the workforce by supporting the implementation of evidence-based guidance. The unit carries out national clinical and organisational audit, facilitates change management work with participants and develops evidence-based guidelines.

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NHS Plus and the NHS Health at Work Network

NHS Plus was set up in 2001 to increase the quality and delivery of health and work services and support the broader health, work and wellbeing strategy. It funded and promoted this audit through the NHS Health at Work Network. The Network represents more than 90% of the providers of OH services to the NHS and is now progressing and developing the work of NHS Plus. It is dedicated to improving the health of NHS staff by influencing policy, building a robust evidence base and promoting best clinical and business practice in the innovative delivery of health and work services to NHS staff.

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Contents

Acknowledgements	ii
Contents	iv
Audit development group	vi
Foreword	vii
Executive summary	viii
Key messages	viii
Audit design	viii
Participation	viii
Clinician holding the consultation	ix
Sickness absence	ix
What OH clinicians did well	ix
Where OH clinicians need to improve	ix
Conclusions	ix
Next steps	x
Introduction	1
Clinical audit	1
Aims of this national audit	1
Documentation	1
Inter-audit period: implementation of change	2
Key changes to the audit process for the second round	2
Methods	3
Notes on terminology	3
Audit development group	3
Audit tool design	3
Eligible cases	4
Recruitment of trusts	5
Data collection and entry	5
Data analysis	6
Inter-rater study	6
Targets	6
Presentation of results and how to interpret your trust's results	6
Results and discussion	8
Inclusion of cases	8
Participation	8
Inter-rater reliability duplicates	9

Access to physiotherapy services	10
Case mix and demographics	10
Consideration of red flags	12
Consideration of yellow flags	14
Symptoms and causes	15
Assessing whether back pain is related to work	16
Clinical management	17
Continuation of activities	18
Information giving	19
Remaining at/returning to work	20
Advice about temporary adjustments	21
Additional analysis	22
Conclusion	23
What we did well	23
What needs to improve	23
Next steps	24
Occupational health providers	24
Health and Work Development Unit	24
List of abbreviations	25
Glossary	26
References	27
Appendix 1: Action plan template	28
Appendix 2: Participation list	29
Appendix 3: Audit tool	34
Appendix 4: Audit helpnotes	37
Appendix 5: Inter-rater reliability	49
Appendix 6: National audit results summary table	51

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Foreword

On behalf of NHS Plus as one of the audit funding sources, and the NHS Health at Work Network which promoted the audit, we would like to congratulate occupational health (OH) professionals across England for completing this second round of the national clinical audit of back pain management.

We were delighted to see that the vast majority of OH services providing to the National Health Service (NHS) participated, and that they contributed many more cases than in round one. In round two reported here, OH services have demonstrated better adherence to evidence-based management of back pain, along with important areas for improvement.

National clinical audit is an important tool in the healthcare quality improvement arena. Through their participation, NHS OH services have shown their commitment to critical review of their clinical practice and an appetite for change.

The NHS Health at Work Network is dedicated to improving the health of NHS staff through policy influence, building a robust evidence base and promoting best clinical and business practice in the innovative delivery of health and work services to NHS staff. We would like to encourage participants to review their local results in the context of the national picture and to act on their findings.

The results of this second national audit round will be launched at the Health at Work Network conference on 18 April 2012. We look forward to welcoming many of you at this important event.



Dr Ursula Ferriday
Chair NHS Health at Work Network



Professor John Harrison
Director NHS Plus

Executive summary

The national clinical audit of the occupational health (OH) management of back pain in NHS staff was established in 2008. This report describes the findings from round two and the progress made since round one.

Key messages

- OH professionals have improved their management of back pain compared to the previous round of this national audit.
- Some areas of practice are a priority for further improvement:
 - screening for markers of serious spinal pathology (red flags)
 - screening for psychosocial risk factors for chronicity and disability (yellow flags)
 - giving appropriate educational information to patients.
- Participating services should review their results against the national performance and plan actions to improve local practice.

Audit design

Round one examined how well OH doctors and nurses were managing staff of NHS trusts in England with back pain. For round two we extended the audit to include back pain cases seen by physiotherapists working as part of the OH team and added a new section measuring staff access to physiotherapy services.

OH professionals used a web-based tool to audit case notes of first consultations with an OH doctor, nurse or physiotherapist for employees who had a new episode of back pain ('new' was defined as separated from any previous episode by at least four weeks). The audit questions reflect evidence-based guidance on the OH management of back pain,¹ assessment of psychosocial risk factors or flags,² and the early management of non-specific low back pain.³

Each site was asked to enter 40 consecutive new cases of back pain. The national results show the progress that has been made since 2008. Local results (provided to each participating service) will enable OH services to compare themselves against best practice, to benchmark against other OH services in England and to measure change in performance since the first audit round.

Participation

- 86% (148/172) of OH providers to the NHS in England participated in this second audit round. They entered data for 57% of NHS trusts.
- 5,524 cases were submitted into the audit; an increase of 87% from 2008.

Clinician holding the consultation

- 12% of the consultations audited were with a physiotherapist working as a member of the OH team, 27% were with an OH doctor and 60% were with an OH nurse.
- Case notes of consultations with a physiotherapist were entered by 16% of audit sites.

Sickness absence

- 62% of cases audited were off sick at the time of their OH appointment in 2011 compared with 69% of cases in 2008.

What OH clinicians did well:

- taking appropriate action to address yellow flags where these are identified (78%)
- enquiring about symptoms and the impact on work (82%)
- checking that clinical management is recorded in notes (91%)
- discussing the continuation of activities (69%)
- encouraging patients, where appropriate, to stay at work despite residual pain (87%)
- documenting advice to managers about temporary adjustments where these are appropriate (95%)
- enquiring about whether back pain was caused by work (78%).

Where OH clinicians need to improve:

- screening for red flags (55%)
- screening for yellow flags (47%)
- enquiring about barriers to return to work (63%)
- taking action to investigate the cause of work-related cases of back pain (65%)
- providing clear information about back pain (48%) including information about the self-limiting nature of mechanical back pain, the importance of staying at or returning to work, and the relative importance of physical and psychosocial factors.

Conclusions

We have now completed the first national clinical audit cycle of aspects of back pain management in NHS staff by OH professionals. This second round of audit shows improvements in almost all areas of back pain management compared with round one. The progress made suggests that the audit process has been valuable. In addition, it shows what OH clinicians do well and where further activity should be focused.

Next steps

We recommend that OH departments consider their own results and develop mechanisms for further service improvement.

HWDU will facilitate improvement by:

- developing a pack, including a slide set, to facilitate review of local audit results
- circulating an action planning template
- facilitating development of a nationally agreed proforma and leaflet to support OH clinicians' consultations for back pain.

National data collection will be repeated in 2013, so that OH services have the opportunity to:

- measure improvement since round two
- submit participation in the audit as evidence towards Safe Effective Quality Occupational Health Service (SEQOHS) accreditation
- submit participation in the audit as evidence towards revalidation (doctors).

HWDU will present the national audit results at the NHS Health at Work Network conference in April 2012 and hold an implementation workshop for audit participants in June 2012.

The participants in this audit will be key stakeholders for these activities.

Introduction

Back pain is frequent and is a major cause of sickness absence in the NHS. It accounts for a high percentage of referrals to occupational health (OH) services.

This national comparative clinical audit measures how well OH professionals are managing NHS staff in England who present to their OH service with back pain. Round one was carried out in 2008 and we now report the findings from the second round of data collection in 2011. The survey of managers' and employees' attitudes that was included in round one was omitted.

Clinical audit

The purpose of clinical audit is to measure compliance with standards and to identify areas where practice should be improved. The audit process should compare actual performance against a standard and data are collected to determine whether the standard is met. Where a standard is not met, interventions can be designed to improve practice. A further round of audit monitors the effect of the intervention activities, and identifies new priorities for change.

Aims of this national audit

The principles of clinical audit can be applied to an OH setting. This audit examines clinical aspects of OH care in the assessment and management of back pain, and information and advice given to the employee. The aims are:

- To assess variations in the OH care of staff with back pain across NHS trusts in England.
- To enable NHS OH services to assess the quality of their care against evidence-based criteria.
- To enable NHS OH services to benchmark the care provided to their staff against other OH services providing to NHS staff.
- To enable NHS OH services, and the trusts with which they work, to compare the results from this audit with their own baseline data collected in 2008.
- To improve the management of back pain in NHS staff.
- To prompt and support NHS OH service providers to achieve aspects of Safe Effective Quality Occupational Health Service (SEQOHS).

Documentation

Our case note audit required the relevant information to have been documented. Full and accurate documentation of a consultation is an essential part of patient care. Clinical records demonstrate that an appropriate assessment has taken place, allow progress between appointments to be assessed and facilitate continuity of care where more than one clinician is involved in the case. The General Medical Council,⁴ Nursing and Midwifery Council⁵ and Healthcare Professions Council⁶ all produce guidance stating that the professional must keep clear, legible and accurate records. These records facilitate safe and effective clinical care provision by all members of the OH team.

Inter-audit period: implementation of change

The 2008 back pain audit results were disseminated to participating trusts. Findings were presented at a national conference attended by representatives of 60% of NHS trusts in England. A series of regional workshops based upon the audit results and feedback from the national conference was held to facilitate improvement in practice.

At the dissemination conference we discussed the audit findings. We used an electronic voting system to gather participants' views about national clinical audit. We used this feedback to improve this audit round, and to inform our implementation support at a national level.

The regional implementation workshops included facilitated discussions on what delegates had already done as a result of participating in the audit; what barriers they had encountered; presentations by delegates who had already taken their audit results forward; and completion of action plans. HWDU developed an action plan template based upon NICE guidance on identifying and overcoming barriers to change (appendix 1). HWDU collected copies of delegates' action plans and looked for themes in the barriers and actions that would be taken to overcome them. The workshop report is available on the NHS Health at Work Network website.

Key changes to the audit process for the second round

Following round one the audit tool, accompanying help materials and the audit process were reviewed to identify areas for improvement. Feedback was requested from participants at the close of data collection, during the dissemination conference and at the regional workshops. During data collection the HWDU kept a record of questions raised with the help desk relating to the audit tool and help notes. Comments entered onto the webtool by participants were checked and inter-rater reliability data were reviewed.

This feedback was considered by the in-house team, clinical leads and audit development group who agreed revisions to the audit tool, help notes and process.

The revisions focused on:

- Clarity of questions and instructions. Some minor amendments were made.
- Scope. A new section was added to measure staff access to physiotherapy services. Initial assessments carried out by physiotherapists were included as some trusts report that some back pain cases are initially assessed by the physiotherapy service located within the OH department.
- Leadership. For this audit round we recruited a nurse lead to the leadership team.
- Recruitment. In this audit round we recruited by OH service provider.
- Employee and line manager questionnaires. These were removed from this audit and were replaced with a separate and voluntary patient experience survey and audit of record keeping (which are covered in separate reports).

The following chapters report the process and results of the back pain audit.* As with the previous audit report, we have provided an explanation of the design and data collection process as well as a detailed results section.

*The clinicians who took part have been sent their site's own results for interpretation in the local context.

Methods

Notes on terminology

Sites

Trusts either have their own in-house occupational health (OH) service or commission OH from another provider. Because some trusts use more than one OH service and some OH services provide to more than one trust, we used the term 'site' for each combination of an OH provider and trust.

Unit of audit – trusts

Because NHS OH is organised and funded at a trust level, we analysed results and produced local reports by site. Where OH services submitted more than one set of data, we combined sets to produce an OH service report. OH services will be able to infer a consistent performance across all trusts they serve if the same staff members deliver the care.

Types of trust

Trusts were allocated into type of trust according to the lists available on the NHS Choices website and according to Binley's Directory of NHS Management.⁷

Case notes

Case note refers to the entry for a consultation in the OH record.

Case

A case is a member of staff from a participating trust who was seen by their OH department and whose consultation was audited. The case is also described as 'the patient' during this report.

Audit development group

The audit tool was developed by practising clinicians supported by the Health and Work Development Unit (HWDU) audit development group. In 2008 the group included specialists in OH (doctors, nurses, physiotherapists and academics), psychiatry, management and human resources, audit and clinical standards, and medical statistics. For the 2011 round we added a nurse lead and shifted the balance of the membership, recruiting a higher proportion of practising OH clinicians (doctors, nurses and physiotherapists).

Audit tool design

Rationale and evidence base

The back pain audit is an audit of process ie the management of new cases at the first appointment with an OH professional. It is a retrospective case note audit.

OH professionals should follow, where available, clinical management guidelines. In round one of this audit (2008) the standards contained in the FOM Guidelines for the Management of Low Back Pain¹ were used to develop audit criteria. These guidelines were published in 2000 and have not been updated.

Since 2009, an increasing body of evidence including additional work on the psychosocial flag framework² and NICE guidelines³ on persistent low back pain have been published. This evidence and guidance is broadly in keeping with the original FOM Guidelines, with no important areas of disagreement. The FOM Guidelines¹ are also in line with the Chartered Society of Physiotherapy's clinical guidelines for the physiotherapy management of persistent low back pain.⁸ Collectively this evidence demonstrates the importance of good clinical assessment and management, identification of barriers to recovery and provision of clear information and advice to help staff understand how they can help their own recovery. We took this additional guidance into account when revising the tool for this audit round, but where possible retained the original questions so that direct comparison between audit rounds could be made.

The audit questions were designed to identify whether OH clinicians had documented the following:

- consideration of whether red flags and yellow flags were present
- investigation of work-related causes
- appropriate clinical management of back pain
- education of the patient about back pain and return to work
- communication with the referring manager about adjustments to work.

Definition of back pain

We made a pragmatic decision to define a 'new' episode of back pain as 'no back pain for the previous four weeks'. We aimed to assess the management of all back pain presenting to the OH service. Therefore, we did not define back pain either anatomically or by duration or severity of symptoms in the audit instructions.

However, where relevant during the analysis we filtered out cases with red flags for serious spinal pathology which might require a different care pathway from cases of non-specific back pain. Targets for performance against particular standards allowed for a small proportion of cases being attributable to nerve root entrapment.

Eligible cases

Participants were required to enter data on case notes relating to an OH doctor's, nurse's or physiotherapist's first consultation with an NHS staff member for a new episode of back pain (see definition above) between 1 January 2011 and 30 December 2011.

As a change from the first audit round, and in response to specific feedback from participants, we included first consultations with a physiotherapist. These were included provided that the physiotherapist was part of an OH service and therefore documentation and reporting would be in line with OH standards.

Participants were asked to submit the most recently-seen 40 consecutive eligible consultations into the audit. We note that a patient could have been entered into the audit more than once if he/she had two or more new episodes of back pain during the audit period.

Recruitment of trusts

OH care for staff is provided by NHS trusts in England in a range of different ways. In carrying out our audit, we observed that there is a certain level of flux as service provision is re-tendered and reorganised.

At the time of this audit there were 436 trusts in England and 172 OH service providers. Trusts either have an in-house OH service or contract their service from another provider (or, for a small number, more than one provider, usually a different (local) NHS trust). Some OH providers serve multiple NHS trusts.

Recruitment for this audit was organised by OH service. Data collection and analysis were organised at a site level. Each service provider was encouraged to submit a sample for each trust to which they provide OH care; however this was not mandatory. If the service provider had consistent services and staff delivering their service across multiple trusts they could submit one set of records. These results can be seen as indicative of the service they provide to all of their trusts. This was a change to the first round recruitment process where we recruited by trust. This change was made following the feedback received from the first audit round and is designed to reflect how OH services are provided.

All OH providers to NHS trusts in England were eligible to take part. The HWDU wrote to directors of OH departments, trust chief executives, heads of human resources departments and clinical audit or governance departments, inviting them to participate in the audit.

Participation in this national clinical audit will be required for OH services to comply with Safe Effective Quality Occupational Health Service (SEQOHS) NHS accreditation standard G4.1.

A full list of participating trusts and services can be found in appendix 2.

Data collection and entry

All data were entered through a specially designed, secure audit website ('webtool') that was open from 5 September 2011 to 30 December 2011. Each site received a unique log on ID and access to each site's data was password protected for confidentiality. The webtool routed data entry through the questions, making available only applicable responses. Responses were validated prior to completion of a case. No patient-identifiable data were requested. Help notes and definitions were provided as were free text 'comment boxes' to enable the data collector to give any clarifications. The audit tool and helpnotes can be found in appendices 3 and 4.

The HWDU ran a helpdesk for participants throughout the data collection period. We contacted OH departments by email and telephone to encourage them to participate and to offer support in using the webtool.

We specified that OH professionals should review case notes retrospectively and record the answers to the audit questions. Where feasible, data collection should have been carried out by someone other than the clinician who wrote the case notes. More than one data collector could enter data for any one site. No clinician identifiable data were collected. Participants were advised that if actions were not explicitly documented in the case notes it should be assumed that the action had not been performed. This assumption should be made even if the action was known to be normal practice for a particular OH professional or department.

Data analysis

We present descriptive statistics throughout this report without inference (p-values or confidence intervals). This means that differences between groups of cases are described but not tested for statistical significance. Where it is informative for a particular audit question, groups of cases are filtered out. However, more sophisticated statistical models have not been used to adjust for these factors.

The interpretation of results rests as far as possible with audit participants, who are best placed to understand their meaning in the local context and to formulate quality improvement strategies as a result. The role of central analysis is to produce valid, reliable and high-quality local and national statistics through extensive checking and data cleaning.

Statistical analysis was carried out by the medical statistician at the Royal College of Physicians using Stata version 11. Results were interpreted by the audit development group and the project team. For clarity, figures are usually given without decimal places and graphs may be truncated to omit extreme values.

Inter-rater study

Establishing good agreement between auditors is an important part of the process of validation, as valid data by definition will have to be repeatable. We asked sites to nominate a second OH professional to repeat data collection for the first five cases entered into the audit. This was to enable us to assess the repeatability of the questions, ie the extent to which different auditors agreed when asked to interpret the same set of notes.

Numerical questions (age, date of appointment and weeks off work) are examined in terms of the simple difference between them. For categorical questions (mostly Yes/No) the kappa statistic was used to measure agreement. Kappa scores can be found in appendix 5.

Targets

We have set aspirational targets for compliance with the main standards. The purpose of targets is to encourage continuous improvement, aiming to achieve as close as possible to 100% compliance. We acknowledge that for some cases there may be good clinical justification for deviating from a particular standard and for this reason we have arbitrarily set the target at 90%. Targets may be revised in future audit rounds in light of new evidence.

Presentation of results and how to interpret your trust's results

The 2008 audit did not include physiotherapy cases. To allow direct comparison between the 2008 and 2011 audit rounds we present the 2011 results excluding physiotherapy cases, in addition to the results for all cases submitted for 2011. Tables for physiotherapy cases alone (nationally) and other OH professionals alone are reported separately for 2011 in appendix 6.

Commentary focuses on the national result for 2011 excluding physiotherapy cases and where appropriate compares performance to the 2008 national result. The national results including physiotherapy cases are included in the tables for completeness and to provide the baseline for future audit. The same detail is provided for individual site data.

Each participating trust has received its own results for comparison with the national results. We advise that they are considered in conjunction with the following factors:

- A sample of 40 cases is considered large enough to reliably indicate local practice. Trust results based on fewer than 10 cases may not accurately represent local practice.
- Audit relies on documentation and we recognise that actions may have been carried out but not recorded. Failure to document actions that have been carried out will tend to under-estimate rather than over-estimate performance in this audit. Therefore the results will reflect a minimum level of compliance with each standard. Good documentation is important, and we expect that this audit will lead to improvements in documentation as well as practice.
- All audits demonstrate variation in practice both within and between trusts. Participants now have a measure of progress since the first round and a new baseline against which they can measure future improvements in performance.
- OH services that did not enter data for every trust to which they provide a service will be able to infer a consistent performance across all trusts they serve if the same staff members deliver the care.
- This audit measures a very specific area of OH practice. The results cannot be extrapolated as a measure of the full range of diverse activities undertaken by OH services. Each OH service will operate under different local circumstances. We also note that results could be influenced by local policies and practice.
- HWDU has not ranked trusts. The local results should be interpreted by each trust itself, taking into account knowledge of its service.
- The report is a tool for reviewing the OH care provided to the staff of a trust. It should be used by each trust for facilitating dialogue between OH services and the trust management to develop the most effective mechanisms for improvements.
- We recognise that the exact questions asked in a consultation for back pain will vary depending on the presentation of the case. Guidelines do not override the professional judgement of health professionals.

Results and discussion

Inclusion of cases

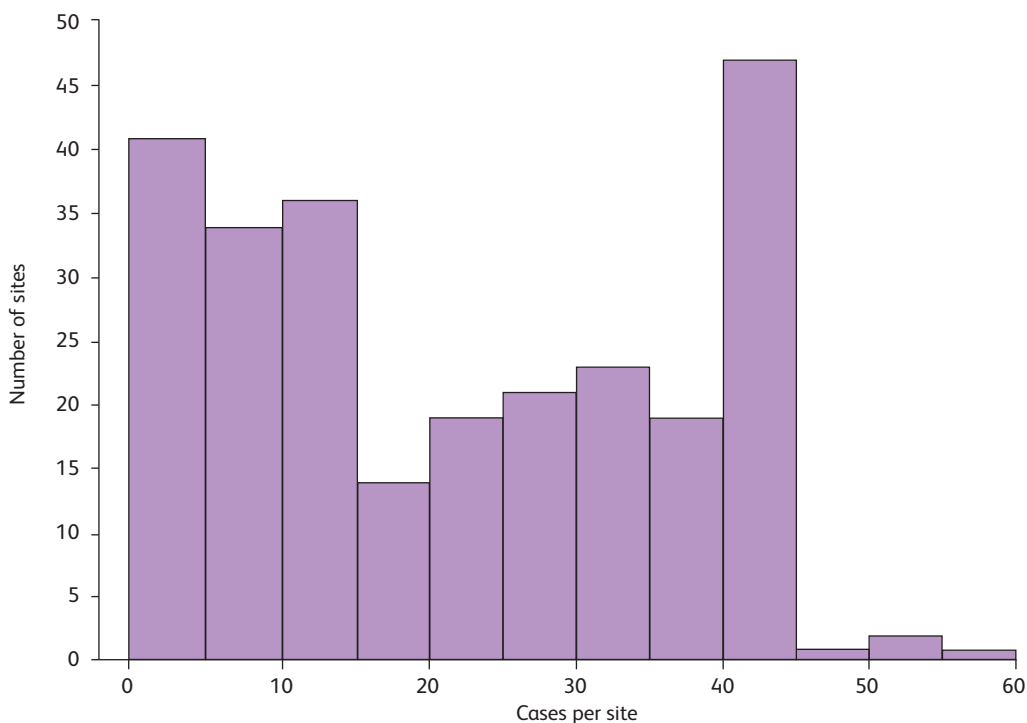
6,473 completed cases were entered into the audit. One case was deleted because free-text comments submitted alongside the audit data showed the case did not meet the audit eligibility criteria. This brought the total number of cases submitted to 6,472. Of these, 948 were entered as reliability duplicates as defined below and were set aside, leaving 5,524 cases for analysis.

In round one, 2,959 cases were analysed. The increase from rounds one to two in the number of cases submitted is 87%.

Participation

258 sites (covering 248 NHS trusts) submitted cases to the audit. 183 (71%) sites entered ten or more cases and half of the cases (2,813/5,524) came from 70 (27%) sites. The median number of cases submitted from a site was 21 (IQR 9–37, range 1–58).*

There was wide variation in the number of cases entered by different sites. In order to assess whether results from sites contributing a small number of cases (fewer than 10) were likely to be representative of their practice (and thus not bias the audit results as a whole), we compared the demographics of cases from these sites with those from sites with a larger number of cases. No noticeable differences in terms of age, gender and occupation were found (using t tests or chi square test as appropriate).



*Inter-quartile range (IQR) is the range within which the middle half of the results lie, one quarter being lower and one quarter higher. The range is different between the highest and the lowest values in the data set.

This graph shows the variation by site in the number of cases entered into the audit.

We ask participants to note that if a small number of cases were entered site-specific results should be interpreted with caution.

The table below breaks down the participation rates for 2008 and 2011 by trust type.

Type of trust	2008 Round one		2011 Round two	
	Total, England	Participating trusts Number (%)	Total, England	Participating trusts Number (%)
Acute	170	135 (79)	167	137 (82)
Ambulance	11	5 (45)	11	6 (55)
Mental health	53	33 (62)	55	37 (67)
Primary care	129	70 (54)	n/a	n/a
PCT (commissioner)	n/a	n/a	149	39 (26)
PCT (provider)	n/a	n/a	52	27 (52)
Other	3	1 (33)	2	2 (100)
Mixed (providing more than one type of service)	23	9 (39)	n/a	n/a
TOTAL	389	253 (65)	436	248 (57)

Participation was also recorded by OH service. At the time of data collection (September – December 2011) there were 172 OH services providing to the NHS (6 of these were private OH providers). 148 (86% of) OH services (including private providers) providing care to the NHS took part in this audit ie they provided case note data for at least one trust to which they provide a service.

Inter-rater reliability duplicates

In total, 948 cases were entered onto the webtool as the second part of an inter-rater reliability (IRR) pair of cases (see Methods) ie as duplicates of a case already entered into the audit. Of these, 66 cases did not match to a case already entered into the audit and were deleted, leaving 882 pairs.

The 882 IRR duplicate cases were used to calculate the inter-rater reliability statistics (see appendix 5) and were excluded from the main analyses (which used only the first entry of the IRR pairs). There are exceptions (Q3.5 and Q3.5.1) but overall the IRR results showed good agreement between two auditors (average kappa 0.65) when answering the audit questions for the same cases, indicating reasonably strong reliability of the data (see Methods). These results are encouraging in terms of the utility of the audit tool in future.

Access to physiotherapy services

Among the submitted cases, 90% (4,962/5,524) had access to physiotherapy services through OH, including 26% (1,454/5,524) where the physiotherapist functioned as a member of the OH team, 52% (2,852/5,524) where OH could fast track referral to a trust physiotherapist and a further 12% (656/5,524) where OH had a referral pathway to an external physiotherapist.

16% (42/258) of sites entered cases where a physiotherapist working as a member of the OH team conducted the initial consultation for back pain. These physiotherapists contributed 12% (651/5,524) of all cases, whilst 60% (3,336/5,524) of cases were seen first by an OH nurse and 27% (1,476/5,524) by an OH doctor.

Discussion

Most sites had access to physiotherapy advice, but relatively few (16%) used a physiotherapist as the first point of contact for patients presenting with back pain. As this question was not asked in 2008 it is not possible to determine whether the practice of using a physiotherapist as the gateway to OH management for back pain is increasing.

To allow direct comparison with the 2008 round, physiotherapy referrals have been excluded from the results of the 2011 round in the main analyses and discussion that follow.

In the tables that follow, there are three columns showing national results: column 1 shows the results for the 2008 national audit, column 2 shows the results for the 2011 national audit after excluding the physiotherapy cases, and column 3 shows the results of all cases for the 2011 national audit ie including the physiotherapy cases.

Commentary focuses on the national result for 2011 excluding the physiotherapy cases and where appropriate compares performance with 2008. The national results including physiotherapy cases are included in the tables for completeness, and to provide the baseline for future audit.

Individual site results are shown in the last three columns of each table: column 4 shows the results for 2008, column 5 shows the results for 2011 after excluding any physiotherapy cases, and column 6 shows the results of any physiotherapy cases for 2011.

Case mix and demographics

Data collectors were asked to enter the age, gender and occupational group of each employee whose case notes were audited. The responses are shown below:

Cases			
	National 2008	National 2011 (excl. physio)	National 2011 (incl. physio)
Number of cases	2,959	4,873	5,524
Age			
	National 2008	National 2011 4,873 cases (excl. physio)	National 2011 5,524 cases (incl. physio)
Median (IQR)	43 (34-50)	44 (35-51)	44 (35-51)
Gender			
	National 2008 2,959 cases	National 2011 4,873 cases (excl. physio)	National 2011 5,524 cases (incl. physio)
Women	2,431 (82 %)	3,988 (82 %)	4,506 (82 %)
Men	528 (18 %)	885 (18 %)	1,018 (18 %)
Occupation			
	National 2008 2,959 cases	National 2011 4,873 cases (excl. physio)	National 2011 5,524 cases (incl. physio)
Allied health professionals	389 (13 %)	675 (14 %)	758 (14 %)
Ancillary staff	516 (17 %)	601 (12 %)	669 (12 %)
Clerical	392 (13 %)	701 (14 %)	802 (15 %)
Doctor	53 (2 %)	109 (2 %)	124 (2 %)
Nurse (including nursing assistants)*	1,405 (47 %)	2,602 (53 %)	2,908 (53 %)
Other	197 (7 %)	174 (4 %)	248 (4 %)
Not documented /Not known	7 (0.2 %)	11 (0.2 %)	15 (0.3 %)
TOTAL	2,959	4,873	5,524

* The 2008 question on occupation did not make reference to nursing assistants.

Including cases seen by physiotherapists, the median age of cases whose consultations were entered into this audit was the same as the median age of all staff in the NHS (44 years). The proportion of women in our audit (82% (4,506/5,524)) was higher than the proportion of all women in the NHS (77%). A higher proportion of nurses (53% (2,908/5,524)) and a lower proportion of doctors (2% (124/5,524)) were entered into this audit than would be expected from current demographics of the NHS workforce: nationally 29% of NHS staff in England are nurses and 10% are doctors.⁹

The distribution of age and gender was similar to the 2008 audit. The proportion of nurses was higher and ancillary staff lower than the previous audit, but all other patient occupation categories were similar.

Absence from work at the time of the audited appointment (first appointment for a new episode of back pain)			
2.7: Has the patient been absent from work as a result of this episode of back pain?	National 2008, Q1.5, 2,952 cases	National 2011 4,873 cases (excl. physio)	National 2011 5,524 cases (incl. physio)
Yes	2,039 (69%)	3,006 (62%)	3,284 (59%)
2.7.1: If yes: full weeks absent at the time of the first appointment			
Median (IQR)	4 (2–8)	4 (2–7)	3 (2–6)

The prevalence of absence from work due to back symptoms at the first appointment was lower in 2011 compared to 2008. The duration of absence was similar in both years.

The data were analysed to assess case mix severity bias. The 24 sites with only cases off work had slightly higher median lengths of absence before the first OH appointment, but these tended to be sites contributing a small number of cases. The smaller contributors also accounted for most of the variation between site medians. Overall, there did not seem to be a systematic difference between the sites that entered only cases absent from work and the others.

Discussion

A number of factors might have influenced the fall in the proportion of staff absent at the time of their first consultation (from 69% to 62%). These include an improved awareness of the adverse effect of sickness absence on health and better support for rehabilitation within the workplace.

Consideration of red flags

Evidence base

The 2000 FOM Guidelines¹ recommend screening for serious spinal diseases and nerve root problems as part of the OH management of low back pain. The 2009 NICE guidelines³ on the early management of persistent non-specific low back pain explicitly do not cover specific disorders such as malignancy, infection, fracture, ankylosing spondylitis and other inflammatory disorders, radicular pain arising from nerve root compression and cauda equina syndrome. Therefore the audit development group deemed it good OH practice to:

- Exclude specific disorders as far as possible by simple enquiry about clinical indicators for serious spinal pathology (red flags) before managing the case as persistent non-specific low back pain.
- Facilitate referral of possible cases of serious spinal pathology for urgent diagnosis when red flags are identified (and appropriate action has not already been taken).

Target

More than 90% of consultations for back pain should document consideration of red flags, including recording as an important negative if they are not present. The OH practitioner should consider whether it is appropriate to contact

the GP or specialist in cases where red flags are found to be present and this should be documented in the OH records.* This target involves three processes, namely whether:

- red flags had been considered
- red flags have been found
- appropriate steps have been taken to ensure that the GP or specialist have been alerted to any red flags (unless they are already aware (not applicable)).

Audit results			
3.1: Do clinical consultation notes demonstrate that red flags have been considered?	National 2008, Q2.1, 2,959 cases	National 2011 4,873 cases (excl. physio)	National 2011 5,524 cases (incl. physio)
Yes	1,307 (44 %)	2,681 (55 %)	3,246 (59 %)
3.1.1: If yes, are red flags present?			
Yes	212 (16 %)	647 (24 %)	704 (22 %)
No	1,044 (80 %)	1,973 (74 %)	2,475 (76 %)
Not documented	51 (4 %)	61 (2 %)	67 (2 %)
3.1.1.1: If yes, is it recorded that appropriate action was taken?			
Yes	n/a*	179 (28 %)	192 (27 %)
No	n/a*	11 (2 %)	17 (2 %)
Not applicable, GP / specialist already aware	n/a*	457 (71%)	495 (70 %)

*This question is new for 2011.

The consideration of red flags was actively recorded in the OH records for 55% (2,681/4,873) of cases (compared to 44% (1,307/2,959) in 2008). Among these, appropriate action in terms of referral to a GP or specialist was taken in 94% (179/190) of cases where red flags were identified.

Discussion

The proportion of cases in which the consideration of red flags was documented and managed appropriately has improved substantially since the first audit round. However, there is scope for further improvement. The proportion of cases in which red flags were identified (13% of all cases and 24% of cases that were asked explicitly about red flags) is likely to be much higher than the proportion in which serious spinal pathology is actually present.**^{10,11} The presence of red flags among those who were explicitly asked has increased compared to the 2008 audit (24% in 2011 compared to 16%), and this may reflect a greater awareness of the signs of red flags among OH professionals. The very low proportion of identified red flag cases where appropriate action was not recorded (2%) is excellent.

*We acknowledge that there may be exceptional cases where the action would be inappropriate, for example if the patient had not given consent.

**Published estimates suggest that <1% of cases of low back pain presenting in primary care have serious spinal pathology.

Consideration of yellow flags

Evidence base

The 2000 FOM Guidelines¹ advised that yellow flags (personal psychosocial risk factors for chronicity) should be considered in order to identify workers at particular risk of developing long-term pain and disability. This assessment should be used to instigate active case management at an early stage. The 2009 guideline document ‘Tackling Musculoskeletal Problems – A guide for clinic and workplace: identifying obstacles using the psychosocial flags framework’² describes the use of flags (including personal (yellow), workplace (blue) and contextual (black)) as warning signals that psychosocial factors in or around the individual are acting as obstacles to full recovery and return to work. The guideline authors recommend that education and action planning centre on managing these barriers to recovery. The audit development group deemed it good OH practice to ask about yellow flags as part of the initial consultation for cases of back pain.

Target

At least 90% of consultations for back pain (where red flags are not present) should include consideration of yellow flags. Their absence should be documented as an important negative finding. If yellow flags are identified, they should be acted on in all cases.

Audit results: NB: This analysis excludes the cases where red flags were explicitly present			
3.3: Do the clinical consultation notes demonstrate that yellow flags have been considered?	National 2008, Q2.4, 2,747 cases	National 2011 4,226 cases (excl. physio)	National 2011 4,820 cases (incl. physio)
Yes	932 (34 %)	1,969 (47 %)	2,275 (47 %)
3.3.1: If yes, are yellow flags present?			
Yes	259 (28 %)	631 (32 %)	728 (32 %)
No	612 (66 %)	1,242 (63 %)	1,440 (63 %)
Not documented	61 (7 %)	96 (5 %)	107 (5 %)
3.3.1.1: If yes, is it recorded that they were acted on (ie have steps been taken to address low mood or harmful beliefs)?			
Yes	208 (80 %)	358 (57 %)	423 (58 %)
No	51 (20 %)	99 (16 %)	110 (15 %)
Not applicable, GP / specialist already aware	Option not asked	174 (28 %)	195 (27 %)

Nationally, 47% (1,969/4,226) of cases documented that the OH professional had considered yellow flags. This was a considerable improvement on the 2008 round of 34% (932/2,747).

Where yellow flags were considered, they were present in 32% of cases (631/1,969).^{*} When yellow flags were present, they were acted upon in 78% (358/457) of cases where applicable.

^{*}We note that yellow flags were probably more likely to be documented as a positive finding than a relevant negative.

To explore the influence of markers of serious spinal disease on the assessment of psychosocial factors, we repeated the analysis on the cases where red flags were explicitly present. In 2008, yellow flags were considered in 51% (109/212) and found in 41% (45/109) of these cases. In 2011 (excluding physiotherapist cases), yellow flags were considered in 65% (419/ 647) and found in 47% (199/419) of these cases. The consideration rate and the detection rate for yellow flags appear to be much higher in the presence of red flags in both years.

Discussion

These findings suggest that screening for yellow flags is not routinely recorded or acted upon by all OH professionals. This is a missed opportunity to identify and address barriers that lead to long-term back pain and disability and delay return to work. Although practice has improved since the last audit round, the consideration of yellow flags is recorded in less than half of cases. We recommend an aspirational target of 90% for screening for, and then acting on, yellow flags.

Symptoms and causes

Evidence base

Guidelines^{1,3} advise that the taking of a clinical, disability and occupational history, concentrating on the impact of symptoms on activity and work, and any barriers to recovery and return to work, is important in the management of back pain. The audit development group considered that recording the impact of symptoms on activity and work, and barriers to recovery/return to work is important for cases of non-specific mechanical back pain, including the small proportion who have nerve root symptoms/signs.* However, inclusion of all these items would be a matter of clinical judgement where there is evidence of serious spinal pathology.

Target

With the exception of cases where red flags are present, 90% of consultations should result in documentation of discussion of all of the three parts of the clinical history in the table below.

Audit results: NB: This analysis excludes the cases where red flags were explicitly present			
3.2.1: Is the impact of symptoms on activity recorded as part of the clinical history?	National 2008, Q2.3, 2,747 cases	National 2011 4,226 cases (excl. physio)	National 2011 4,820 cases (incl. physio)
Yes	2,026 (74 %)	3,486 (82 %)	4,029 (84 %)
3.2.2: Is the impact of symptoms on work recorded as part of the clinical history?			
Yes	2,005 (73 %)	3,478 (82 %)	3,982 (83 %)
3.2.3: Are barriers to recovery / return to work recorded as part of the clinical history?			
Yes	1,360 (50 %)	2,659 (63 %)	3,026 (63 %)

*Less than 5% of cases of back pain are due to nerve root irritation or entrapment.¹²

82% (3,486/4,226) of cases were asked about the impact of symptoms on activity; 82% (3,478/4,226) about impact of symptoms on work; and 63% (2,659/4,226) about barriers to recovery/returning to work. This represents a substantial improvement compared to the 2008 national audit results. Documentation of the impact of symptoms on work was slightly better (85%, 1,178/1,380) in 2011 for those who were at work at the time of the OH assessment. Documentation of the barriers to recovery/return to work was slightly better if the case was still absent (66%, 1,688/2,566).

Discussion

These findings indicate that OH professionals generally take and document a full clinical, disability and occupational history for most of their cases and that practice has improved over the past three years. However, it appears that there is still scope for improving enquiry about barriers to return to work, which should be recorded (even if as a negative finding) in at least 90% of cases where the employee has not yet returned to work.

Assessing whether back pain is related to work

Evidence base

The FOM Guidelines¹ recommend that the OH professional should ensure that relationship to work is investigated and advice is given on remedial action. If appropriate, the risk assessment should be reviewed. The audit development group considered that this aspect of history taking is important for cases of non-specific mechanical back pain and in the presence of nerve root symptoms/signs. However, inclusion of these items would be a matter of clinical judgement where there is evidence of serious spinal pathology.

Target

With the exception of cases where red flags are present, 90% of consultations should include an assessment by the OH professional of whether, in their opinion, the back pain was caused by work. If it is, then the OH professional should give advice on remedial action with the aim of preventing recurrence.

Audit results: NB: This analysis excludes the cases where red flags were explicitly present			
3.4: Is this an episode of back pain caused by work in the opinion of the assessing individual?	National 2008, Q2.6, 2,747 cases	National 2011 4,226 cases (excl. physio)	National 2011 4,820 cases (incl. physio)
Yes directly*	727 (26 %)	538 (13 %)	602 (12 %)
Yes contributed*	N/A	758 (18 %)	854 (18 %)
No	1,308 (48 %)	2,016 (48 %)	2,361 (49 %)
Not documented	712 (26 %)	914 (22 %)	1,003 (21 %)
3.4.1: If yes (directly or contributed), is there documented evidence that advice was given on further investigation of the cause/causes in the workplace?*			
Yes	400/727 (55 %)	833/1,276 (65 %)	922/1,435 (64 %)**

* For 2008 there was only a yes/no/not documented response option. When comparing positive responses to this question between rounds, combine 'yes directly' and 'yes contributed' responses used in 2011 for direct comparison with 'yes' in 2008.

** Data were missing for 20 cases

*** Data were missing for 21 cases

Whether the back pain was caused by work was assessed and documented in 78% (3,312/4,226) of all consultations, compared to 74% (2,035/2,747) for 2008. When the back pain was recorded as having been caused/ contributed to by work, 65% (833/1,276) of consultations resulted in advice being given on further investigation of the causes in the workplace compared to 55% (400/727) for 2008.

Discussion

Asking questions and taking action on contributing workplace factors are an integral part of the OH professional's role and should be performed in 90% of cases where red flags are not present. This aspect of practice has improved slightly since the last audit round, but there is scope for further improvement.

Clinical management

Evidence base

The 2009 NICE guidelines³ on the early management of persistent non-specific low back pain recommend the following treatments:

- exercise programme
- manual therapy
- acupuncture
- combined physical and psychological therapy
- oral paracetamol, non-steroidal anti-inflammatories or weak opioids.

Target

OH consultations for back pain should include a review of good clinical management in 90% of cases where red flags are not present.

Audit results: NB: This analysis excludes the cases where red flags were explicitly present			
3.5: Has clinical management been recorded in the OH notes?	National 2008, Q2.7, 2,747 cases	National 2011 4,226 cases (excl. physio)	National 2011 4,820 cases (incl. physio)
Yes	2,045 (74 %)	3,833 (91 %)	4,405 (91 %)
3.5.1.1: If yes to 3.5, is there documented evidence that the principles of good clinical management been followed?			
Yes	1,773 (87 %)	3,446 (90 %)	3,985 (90 %)
No	272 (13 %)	387 (10 %)	420 (10 %)

91% (3,833/4,226) of cases demonstrated recording of clinical management and 90% (3,446/3,833) of these followed 'good clinical management', compared to 74% (2,045/2,747) and 87% (1,773/2,045) respectively in 2008.

Discussion

OH professionals were generally good at ensuring that the principles of good clinical management had been followed in 2008. This aspect has improved since the last audit round, and reached the aspirational target level of performance.

Continuation of activities

Evidence base

Guidelines^{1,3} recommend that expected recovery times should be discussed with a patient and information should be given about the importance of continuing activities as normally as possible despite pain.

Target

In 90% of cases, back pain consultations should involve discussion of the importance of continuing normal activities. Such discussion might be inappropriate for those with serious spinal pathology that required further investigation (red flags present). However, it would still be relevant for most cases with nerve root symptoms/signs, excepting a small proportion of severely affected cases.

Audit results: NB: This analysis excludes the cases where red flags were explicitly present			
3.6: Is there documented evidence of discussion with the patient of continuation of activities?	National 2008, Q2.8, 2,747 cases	National 2011 4,226 cases (excl. physio)	National 2011 4,820 cases (incl. physio)
Yes	1,868 (68%)	2,911 (69%)	3,411 (71%)

Excluding cases where red flags were present, discussion of the importance of continuing activities was recorded in 69% (2,911/4,226) of back pain consultations. This conversation was documented for 79% (498/631) of these cases where yellow flags were identified, and for 87% (1,082/1,242) that were confirmed as having no yellow flags present. More discussion of the importance of continuing activities in cases where yellow flags were identified was expected.

Discussion

These findings show improvement from the last round of audit, but there is scope for further improvement. Advice to continue normal activities is even more important if yellow flags are present.

Information giving

Evidence base

Guidelines^{1,3} recommend that employees should receive key information in a form that they understand.

Target

Information should be given in 90% of initial consultations about back pain, unless red flags are present. It should cover the:

- brief self-limiting nature of mechanical back pain
- importance of staying at or returning to work
- relative importance of physical and psychosocial factors.

Information about return to work and psychosocial factors would still be relevant for most cases with nerve root symptoms/signs, excepting a small proportion of severely affected cases.

Audit results: NB: This analysis excludes the cases where red flags were explicitly present			
3.7: Is there documented evidence that the patient was given clear information about back pain in a form that could be understood? (any format: verbal, written, electronic, other)	National 2008, Q2.9, 2,747 cases	National 2011 4,226 cases (excl. physio)	National 2011 4,820 cases (incl. physio)
Yes	1,260 (46 %)	2,039 (48 %)	2,497 (52 %)
3.7.1: If yes to 3.7, did the information cover the brief self-limiting nature of mechanical back pain?			
Yes	905 (72 %)	1,480 (73 %)	1,747 (70 %)
3.7.2: If yes to 3.7, did the information cover the importance of staying at or returning to work?			
Yes	1,117 (89 %)	1,798 (88 %)	2,159 (86 %)
3.7.3: If yes to 3.7, did the information cover the relative importance of physical and psychosocial factors?			
Yes	889 (71 %)	1,524 (75 %)	1,805 (72 %)

48% (2,039/4,226) of first consultations for back pain resulted in documented evidence that clear information about the condition was given, representing a slight improvement from 2008. However the proportion that gave information about the self-limiting nature of back pain was similar to the previous audit round and remains lower than the 90%

target (73% (1,480/2,039)). It is possible that in some cases the information was not given because cases were mild or improving, or the employee was already staying active, or that they had signs of nerve root irritation or impingement.

Cases that were screened for yellow flags were given information about their back pain much more often (68% (1,340/1,969)) than those that were not (30% (699/2,257)). Among cases where yellow flags were present (and excluding those with red flags), 63% (397/631) were given information.

For cases that received information, we found that:

- In 62% (1,264/2,039) it covered all three topics.
- In 18% (370/2,039) it covered two topics, and amongst these cases:
 - the ‘importance of staying at or returning to work’ was most commonly included, in 92% (339/370)
 - in 13% (270/2,039) only one topic was covered, and in 72% of these the single topic was the ‘importance of staying at or returning to work’ (195/270).

Discussion

Information about back pain should be given to most cases at their first consultation in OH, unless red flags are present. There is a clear indication for using standardised written material, such as the ‘Back Book’.¹¹ There is little improvement compared to the last round of audit, so this aspect of OH care is a priority for improvement.

Remaining at/returning to work

Evidence base

The FOM Guidelines¹ recommend that OH professionals should encourage employees to remain at work, or to return at an early stage, even if there is still some back pain and not wait until they are completely pain-free. This advice would not be appropriate in the presence of red flags. However, it would still be relevant for some cases with nerve root symptoms/signs (ie less than 5% of all back pain cases).¹²

Target

In the absence of red flags, it is appropriate to encourage staying at or returning to work in more than 90% of cases of back pain. The advice given should always be documented.

Audit results: NB: This analysis excludes the cases where red flags were explicitly present			
3.8: Was the employee encouraged to stay at or return to work at an early stage despite residual pain?	National 2008, Q2.10, 2,747 cases	National 2011 4,226 cases (excl. physio)	National 2011 4,820 cases (incl. physio)
Yes	1,654 (60%)	2,809 (66%)	3,197 (66%)
No	308 (11%)	436 (10%)	484 (10%)
Not documented	785 (29%)	981 (23%)	1,139 (24%)

Excluding cases in which red flags were present, OH professionals documented whether the employee was given advice about work for 77% (3,245/4,226) of cases, and 87% (2,809/3,245) of these were encouraged to stay at or return to work despite residual pain.

Among the 436 cases that were not encouraged to stay at or return to work, back pain was deemed to be work-related in 30% (130/436) of cases (answered yes directly or yes contributed to Q3.4).

Among the 981 cases where documentation of advice about return to work was missing, yellow flags were present (answered yes to Q3.3.1) in 99 (10%), and back pain was not work-related (answered no to Q3.4) in 364 (40%).

Discussion

The lack of documentation of advice about maintaining or returning to work early in 23% of cases was an improvement upon the 2008 audit round. This is particularly important in cases where yellow flags are present.

Where advice about work was recorded, the proportion of cases that were encouraged to return to or stay at work has improved since 2008. Although it is not possible to be sure what proportion of the 436 (10%) cases were advised to refrain from work for justifiable clinical reasons (eg severe nerve root symptoms) we expected this in less than 5% of cases. Poor performance in recording advice about returning to work was particularly disappointing as 10% of cases lacking documentation had yellow flags and 40% were not caused by work. This area of practice should be a target for improvement.

Advice about temporary adjustments

Evidence base

The FOM Guidelines¹ recommend that temporary adaptations of the job or pattern at work should be considered.

Target

Advice about temporary adjustments, if appropriate, should be documented in written advice to the manager in 90% of cases.

Audit results			
3.9: Was advice about temporary adjustments, where these are appropriate, documented in written advice to the manager?	National 2008, Q2.11, 2,959 cases	National 2011 4,873 cases (excl. physio)	National 2011 5,524 cases (incl. physio)
Yes or Not applicable	2,596 (88%)	4,624 (95%)	5,244 (95%)
No	363 (12)	249 (5%)	280 (5%)

Where it was appropriate, advice about temporary adjustments was sent by the OH professional to the manager in 95% (4,624/4,873) of cases nationally.

Discussion

OH professionals performed well in giving written advice to managers about adjustments to work, where this was appropriate.

Additional analysis

In the 2011 audit round we have included cases seen by physiotherapists. This was a change from 2008 when such cases were not included. The proportion of cases seen by physiotherapists was small and the effect of their inclusion on the overall national results was minimal. To explore whether there were any differences in case management between physiotherapists and other OH professionals, we have separated out the two groups for direct comparison (appendix 6).

Cases seen by physiotherapists were less likely to have been absent from work as a result of their back pain (43% versus 62%) and absent for less time with this episode of back pain at the time of first appointment (median 2 versus 4 weeks). Physiotherapists were more likely to record the assessment of red flags than the other professionals (87% versus 55%), but red flags were present in a smaller proportion of their cases (10% versus 24%). Physiotherapists were more likely to record that they had given clear information about back pain to the patient (77% versus 48%). Otherwise, the results were similar.

Conclusion

We have now completed the first national clinical audit cycle of aspects of back pain management in NHS staff by OH professionals. This second round of audit shows improvements in almost all areas of back pain management compared with round one. The progress made suggests that the audit process has been valuable. In addition, it shows what OH clinicians do well and where further activity should be focused.

- 87% more cases were submitted to the second round of audit; this increase is not accounted for by the inclusion of physiotherapy cases.
- Fewer staff were off sick at the time of their OH appointment (69% to 62%).

A number of factors might have influenced the fall in the proportion of staff off sick at the time of their first consultation (from 69% to 62%). Firstly, the economic climate became increasingly challenging during 2008–2011 and this may have generated more pressure for employees to remain in work. Secondly, during the past 3 years, two national reports have emphasized the importance of early rehabilitation back to work after sickness absence.^{13,14} These reports have led to wide dissemination of the evidence base for an adverse effect of absence from work on health and wellbeing. Moreover, the mechanisms to support return to work have been reinforced by the replacement of the Med 3 statement of incapacity for work with a new style 'fit note' that encourages GPs to articulate capacity for altered work. Thirdly, the HWDU dissemination events following round one of this audit encouraged OH departments to address poor knowledge about the importance of early return to work through better local education of both managers and employees.

What we did well:

- taking appropriate action to address yellow flags where these are identified (78%)
- enquiring about symptoms and the impact on work (82%)
- checking that clinical management is recorded in notes (91%)
- discussing the continuation of activities (69%)
- encouraging patients, where appropriate, to stay at work despite residual pain (87%)
- documenting advice to managers about temporary adjustments where these are appropriate (95%)
- recording the enquiry about whether back pain was caused by work (78%).

What needs to improve:

- recording of screening for red flags (55%)
- recording of screening for yellow flags (47%)
- enquiring about barriers to return to work (63%)
- taking action to investigate the cause of work-related cases of back pain (65%)
- providing clear information about back pain (48%) including information about the self-limiting nature of mechanical back pain, the importance of staying at or returning to work, and the relative importance of physical and psychosocial factors.

Next steps

Occupational health providers

We recommend that occupational health (OH) departments consider their own results in light of the targets and in comparison with their previous (2008) results and the national results.

Where consultations do not meet the standards set in the relevant guideline, we recommend that OH professionals review their practice and develop mechanisms for further service improvement. The reasons for lack of improvement or insufficient improvement since the previous audit round should be explored.

Health and Work Development Unit

The Health and Work Development Unit will take the following action to support practice improvement:

- Develop a pack, including a slide set, to facilitate review of local audit results and development of improvement plans. Circulate an action planning template to all participating services. Used together, these tools will support a structured review of local practice and the systematic planning of local actions to improve performance when managing back pain.
- Facilitate development of a nationally agreed proforma and leaflet that reflect the evidence base. These will support OH clinicians when assessing and advising staff with back pain.
- Present the national audit results at the NHS Health and Work network conference in April 2012, and hold an implementation workshop for audit participants in June 2012.
- Repeat national data collection in 2013, so that OH services have the opportunity to:
 - measure improvement since round two
 - measure their baseline if they did not participate in round one or two
 - submit participation in the audit as evidence towards Safe Effective Quality Occupational Health Service (SEQOHS) accreditation
 - submit participation in the audit as evidence towards revalidation (doctors).

The participants in this audit will be key stakeholders for these activities.

List of abbreviations

ANHONS: Association of NHS Occupational Health Nurses

ANHOPS: Association of National Health Occupational Physicians

FOM: Faculty of Occupational Medicine

HWDU: Health and Work Development Unit

IQR: Inter-quartile range

NICE: National Institute for Health and Clinical Excellence

OH: Occupational health

RCP: Royal College of Physicians

Glossary

Case: A case is a member of staff from a participating trust who was seen by their OH department and whose consultation was audited.

Case note: A case note refers to the entry referring to a consultation in the OH record.

Inter-quartile range: The range within which the middle half of the results lie, one quarter being lower and one quarter higher.

Site: Trusts either have their own in-house OH service or commission it from another provider. Because some trusts use more than one OH service and some OH services provide to more than one trust, we used the term 'site' for each combination of an OH provider and trust.

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Appendix 1: Action plan template

Version: 2008

Guideline implementation action plan		
Title of guideline		
Implementation lead		
Which recommendations do we need to implement?		
Barriers to change	Action to overcome barriers	Deadline
Awareness and knowledge		
Motivation		
Acceptance and beliefs		
Skills		
Practicalities		
Barriers beyond our control		

Appendix 2: Participation list

Participating trusts

2gether NHS Foundation Trust
 5 Boroughs Partnership NHS Foundation Trust
 Aintree University Hospitals NHS Foundation Trust
 Alder Hey Children's NHS Foundation Trust
 Anglian Community Enterprise
 Ashford & St Peter's Hospital NHS Trust
 Ashton, Leigh and Wigan Community Healthcare NHS Trust
 Barking Havering & Redbridge University Hospitals NHS Trust
 Barnet & Chase Farm Hospitals NHS Trust
 Barnet, Enfield and Haringey Mental Health NHS Trust
 Barnsley Hospital NHS Foundation Trust
 Barts and the London NHS Trust
 Basildon and Thurrock University Hospital NHS Foundation Trust
 Basingstoke and North Hampshire NHS Foundation Trust
 Bedford Hospital NHS Trust
 Berkshire Healthcare NHS Foundation Trust
 Birmingham and Solihull Mental Health NHS Foundation Trust
 Birmingham Children's Hospital NHS Foundation Trust
 Birmingham Community Health Care NHS Trust
 Blackpool Teaching Hospitals NHS Foundation Trust
 Bolton NHS Foundation Trust
 Bradford Teaching Hospitals NHS Foundation Trust
 Brighton and Sussex University Hospitals NHS Trust
 Buckinghamshire Healthcare NHS Trust
 Burton Hospitals NHS Foundation Trust
 Calderdale & Huddersfield NHS Foundation Trust
 Cambridge University Hospitals NHS Foundation Trust
 Cambridgeshire Community Health Services NHS Trust
 Camden and Islington NHS Foundation Trust
 Central and North West London NHS Foundation Trust
 Central and North West London NHS Foundation Trust
 (Camden Provider Services)
 Central Essex Community Services
 Central London Community Healthcare NHS Trust
 Central Manchester University Hospitals NHS Foundation Trust
 Chelsea and Westminster Hospitals NHS Foundation Trust
 Cheshire and Wirral Partnership NHS Foundation Trust
 City Healthcare Partnership
 City Hospitals Sunderland NHS Foundation Trust
 Colchester Hospital University NHS Foundation Trust
 Countess of Chester Hospital NHS Foundation Trust
 County Durham & Darlington NHS Foundation Trust
 Coventry & Warwickshire Partnership NHS Trust
 Croydon Health Services NHS Trust
 Derby Hospitals NHS Foundation Trust
 Derbyshire Community Healthcare Services NHS Trust
 Derbyshire Healthcare Foundation Trust
 Devon Partnership NHS Trust
 Doncaster and Bassetlaw Hospitals NHS Foundation Trust
 Dorset County Hospital NHS Foundation Trust
 Dorset HealthCare University NHS Foundation Trust
 Dudley and Walsall Mental Health Partnership NHS Trust
 Ealing Hospital NHS Trust
 East and North Hertfordshire NHS Trust
 East Cheshire NHS Trust
 East Lancashire Hospitals NHS Trust
 East London NHS Foundation Trust
 East Midlands Ambulance Service NHS Trust
 Epsom and St Helier University Hospitals NHS Trust
 Frimley Park Hospital NHS Foundation Trust
 Gateshead Health NHS Foundation Trust
 Gloucestershire Hospitals NHS Foundation Trust
 Great Ormond Street Hospital for Children NHS Trust
 Great Western Hospitals NHS Foundation Trust
 Greater Manchester West Mental Health NHS Foundation Trust
 Guy's and St Thomas' NHS Foundation Trust
 Halton and St Helens Community Health Services
 Heart of Birmingham Teaching Primary Care Trust
 Heart of England NHS Foundation Trust
 Hertfordshire Community NHS Trust
 Hillingdon Hospital NHS Trust
 Hinchingsbrooke Health Care NHS Trust
 Homerton University Hospital NHS Foundation Trust
 Hull and East Yorkshire Hospitals NHS Trust
 Humber NHS Foundation Trust
 Imperial College Healthcare NHS Trust
 Ipswich Hospital NHS Trust
 Isle of Wight NHS Primary Care Trust
 Kettering General Hospital NHS Foundation Trust
 King's College Hospital NHS Foundation Trust
 Kingston Hospital NHS Trust
 Lancashire Teaching Hospitals NHS Foundation Trust
 Leicestershire Partnership NHS Trust

Lewisham Healthcare NHS Trust	NHS South of Tyne – Gateshead Primary Care Trust
Lincolnshire Partnership NHS Foundation Trust	NHS Southampton City
Liverpool Community Health NHS Trust	NHS Stockport
Liverpool Heart & Chest Hospital NHS Foundation Trust	NHS Suffolk
Liverpool Women’s NHS Foundation Trust	NHS Swindon
London Ambulance Service NHS Trust	NHS Telford and Wrekin
Luton and Dunstable Hospital NHS Foundation Trust	NHS Trafford
Maidstone and Tunbridge Wells NHS Trust	NHS West Essex
Manchester Mental Health & Social Care Trust	NHS Westminster
Medway NHS Foundation Trust	Norfolk and Norwich University Hospitals NHS Foundation Trust
Mid Cheshire Hospitals NHS Foundation Trust	North Bristol NHS Trust
Mid Staffordshire NHS Foundation Trust	North Cumbria University Hospitals NHS Trust
Mid-Essex Hospital Services NHS Trust	North East Ambulance Service NHS Trust
Milton Keynes Hospital NHS Foundation Trust	North East London NHS Foundation Trust
Newham University Hospital NHS Trust	North Essex Partnership NHS Foundation Trust
NHS Barking and Dagenham	North Middlesex University Hospital NHS Trust
NHS Barnet	North Staffordshire Combined Healthcare NHS Trust
NHS Bedfordshire	North Tees & Hartlepool NHS Foundation Trust
NHS Birmingham East and North	North West Ambulance Service NHS Trust
NHS Brent	Northamptonshire Healthcare NHS Foundation Trust
NHS Brent – Community Services	Northern Devon Healthcare NHS Trust
NHS Bury	Northern Lincolnshire and Goole Hospitals NHS Foundation Trust
NHS Camden	Northumberland, Tyne and Wear NHS Foundation Trust
NHS Cumbria	Northumbria Healthcare NHS Foundation Trust
NHS Devon	Nottingham University Hospitals NHS Trust
NHS Dudley	Nottinghamshire Healthcare NHS Trust
NHS Ealing	Nuffield Orthopaedic Centre NHS Trust
NHS East Riding of Yorkshire	Outer North East London Community Services
NHS Gloucestershire	Oxford Health NHS Foundation Trust
NHS Harrow	Oxford Radcliffe Hospitals NHS Trust
NHS Havering	Oxleas NHS Foundation Trust
NHS Hertfordshire	Papworth Hospital NHS Foundation Trust
NHS Hounslow	Pennine Care NHS Foundation Trust
NHS Hull	Poole Hospital NHS Foundation Trust
NHS Islington	Portsmouth Hospitals NHS Trust
NHS Leeds	Robert Jones and Agnes Hunt Orthopaedic and District Hospital NHS Trust
NHS Leeds – Community Healthcare	Rotherham Doncaster and South Humber Mental Health NHS Foundation Trust
NHS Lincolnshire – Community Health Services	Royal Berkshire NHS Foundation Trust
NHS Milton Keynes – Community Health Services	Royal Devon & Exeter NHS Foundation Trust
NHS Norfolk – Norfolk Community Health & Care	Royal Free Hampstead NHS Trust
NHS North Staffordshire – Community Healthcare	Royal National Orthopaedic Hospital NHS Trust
NHS North Yorkshire and York	Salford Royal NHS Foundation Trust
NHS Oldham	Sandwell & West Birmingham Hospitals NHS Trust
NHS Redbridge	Scarborough and North East Yorkshire Healthcare NHS Trust
NHS Rotherham	Sheffield Children’s NHS Foundation Trust
NHS Sefton	
NHS South East Essex	
NHS South East Essex – Community Healthcare	

Sheffield Health and Social Care NHS Foundation Trust	The Queen Elizabeth Hospital King's Lynn NHS Foundation Trust
Sheffield Teaching Hospitals NHS Foundation Trust	Trust
Sherwood Forest Hospitals NHS Foundation Trust	The Queen Victoria Hospital NHS Foundation Trust
Shropshire County PCT – Community Services	The Rotherham NHS Foundation Trust
Solent NHS Trust	The Royal Bournemouth and Christchurch Hospitals NHS Foundation Trust
Somerset Community Health	The Royal Marsden NHS Foundation Trust
South Central Ambulance Service NHS Trust	The Royal Orthopaedic Hospital NHS Foundation Trust
South Essex Partnership University NHS Foundation Trust	The Royal Wolverhampton Hospitals NHS Trust
South Essex Partnership University NHS Foundation Trust – Bedfordshire Community Health Services	The Shrewsbury and Telford Hospital NHS Trust
South London & Maudsley NHS Foundation Trust	The Walton Centre NHS Foundation Trust
South London Healthcare NHS Trust	Trafford Healthcare NHS Trust
South Staffordshire and Shropshire Healthcare NHS Foundation Trust	Trafford Provider Services
South Staffordshire PCT – Provider Services	University College London Hospitals NHS Foundation Trust
South Staffordshire Primary Care Trust	University Hospital Birmingham NHS Foundation Trust
South Tees Hospitals NHS Foundation Trust	University Hospital of North Staffordshire NHS Trust
South Warwickshire NHS Foundation Trust	University Hospital of South Manchester NHS Foundation Trust
South West London & St Georges Mental Health NHS Trust	University Hospitals Bristol NHS Foundation Trust
South West Yorkshire Partnership NHS Foundation Trust	University Hospitals Coventry & Warwickshire NHS Trust
Southend University Hospital NHS Foundation Trust	University Hospitals of Leicester NHS Trust
Southern Health NHS Foundation Trust	University Hospitals of Morecambe Bay NHS Foundation Trust
St George's Healthcare NHS Trust	University Hospital Southampton NHS Foundation Trust
St Helens & Knowsley Teaching Hospitals NHS Trust	Walsall Healthcare NHS Trust
Stockport NHS Foundation Trust	Warrington & Halton Hospitals NHS Foundation Trust
Stoke on Trent Community Health Services	West Hertfordshire Hospitals NHS Trust
Surrey & Borders Partnership NHS Foundation Trust	West London Mental Health NHS Trust
Surrey & Sussex Healthcare NHS Trust	West Middlesex University Hospital NHS Trust
Sussex Community NHS Trust	West Midlands Ambulance Service NHS Trust
Tameside Hospital NHS Foundation Trust	West Suffolk Hospital NHS Trust
Tavistock & Portman NHS Foundation Trust	Whipps Cross University Hospital NHS Trust
The Christie NHS Foundation Trust	Whittington Health
The Dudley Group NHS Foundation Trust	Winchester & Eastleigh Healthcare NHS Trust
The Leeds Teaching Hospitals NHS Trust	Worcestershire Acute Hospitals NHS Trust
The Mid Yorkshire Hospitals NHS Trust	Worcestershire Health and Care NHS Trust
The Newcastle upon Tyne Hospitals NHS Foundation Trust	Wrightington, Wigan & Leigh NHS Foundation Trust
The North West London Hospitals NHS Trust	Wye Valley NHS Trust
The Pennine Acute Hospitals NHS Trust	Yeovil District Hospital NHS Foundation Trust
The Princess Alexandra Hospital NHS Trust	York Teaching Hospital NHS Foundation Trust

Participating OH services

2gether NHS Foundation Trust	ATOS
5 Boroughs Partnership NHS Foundation Trust	Barking, Havering and Redbridge University Hospitals NHS Trust
Aintree University Hospitals NHS Foundation Trust	Barnet & Chase Farm Hospitals NHS Trust
Anglia Support Partnership	Barnsley Hospital NHS Foundation Trust
Anglian Community Enterprise	Barts and the London NHS Trust
Ashford & St Peter's Hospital NHS Trust	Basildon and Thurrock University Hospital NHS Foundation Trust

Basingstoke and North Hampshire NHS Foundation Trust	King's College Hospital NHS Foundation Trust
Bedford Hospital NHS Trust	Kingston Hospital NHS Trust
Blackpool Teaching Hospitals NHS Foundation Trust	Lancashire Teaching Hospitals NHS Foundation Trust
Bolton NHS Foundation Trust	Liverpool Women's NHS Foundation Trust
Bradford Teaching Hospitals NHS Foundation Trust	Luton and Dunstable Hospital NHS Foundation Trust
Brighton and Sussex University Hospitals NHS Trust	Maidstone and Tunbridge Wells NHS Trust
Buckinghamshire Hospitals NHS Trust	Medway NHS Foundation Trust
Burton Hospitals NHS Foundation Trust	Mid Cheshire Hospitals NHS Foundation Trust
Calderdale & Huddersfield NHS Foundation Trust	Mid Staffordshire NHS Foundation Trust
Cambridge University Hospitals NHS Foundation Trust	Mid-Essex Hospital Services NHS Trust
Central and North West London NHS Foundation Trust (Camden Provider Services)	Milton Keynes Hospital NHS Foundation Trust
Central London Community Healthcare	NHS South of Tyne – Gateshead Primary Care Trust
Central Manchester University Hospitals NHS Foundation Trust	NHS Telford and Wrekin
Cheshire and Wirral Partnership NHS Foundation Trust	Norfolk and Norwich University Hospitals NHS Foundation Trust
City Hospitals Sunderland NHS Foundation Trust	North Cumbria University Hospitals NHS Trust
Colchester Hospital University NHS Foundation Trust	North East Ambulance Service NHS Trust
Countess of Chester Hospital NHS Foundation Trust	North Essex Partnership NHS Foundation Trust
County Durham & Darlington NHS Foundation Trust	North Middlesex University Hospital NHS Trust
Coventry & Warwickshire Partnership NHS Trust	North Tees & Hartlepool NHS Foundation Trust
Croydon Health Services NHS Trust	Northamptonshire Healthcare NHS Foundation Trust
Derby Hospitals NHS Foundation Trust	Northern Devon Healthcare NHS Trust
Derbyshire Community Healthcare Services	Northern Lincolnshire and Goole Hospitals NHS Foundation Trust
Doncaster and Bassetlaw Hospitals NHS Foundation Trust	Northumbria Healthcare NHS Foundation Trust
Dorset HealthCare University NHS Foundation Trust	Nottingham University Hospitals NHS Trust
Dudley and Walsall Mental Health Partnership NHS Trust	OH Works
Ealing Hospital NHS Trust	Oxford Health NHS Foundation Trust
East and North Hertfordshire NHS Trust	Oxford Radcliffe Hospitals NHS Trust
East Lancashire Hospitals NHS Trust	Papworth Hospital NHS Foundation Trust
Epsom and St Helier University Hospitals NHS Trust	Poole Hospital NHS Foundation Trust
Frimley Park Hospital NHS Foundation Trust	Portsmouth Hospitals NHS Trust
Gateshead Health NHS Foundation Trust	Royal Berkshire NHS Foundation Trust
Great Ormond Street Hospital for Children NHS Trust	Royal Devon & Exeter NHS Foundation Trust
Great Western Hospitals NHS Foundation Trust	Royal Free Hampstead NHS Trust
Guy's and St Thomas' NHS Foundation Trust	Royal National Orthopaedic Hospital NHS Trust
Healthwork Ltd	Salford Royal NHS Foundation Trust
Heart of England NHS Foundation Trust	Sandwell & West Birmingham Hospitals NHS Trust
Hereford Hospitals NHS Trust	Scarborough and North East Yorkshire Healthcare NHS Trust
Hertfordshire Community NHS Trust	Serco Occupational Health
Hillingdon Hospital NHS Trust	Sheffield Teaching Hospitals NHS Foundation Trust
Hinchingbrooke Health Care NHS Trust	Sherwood Forest Hospitals NHS Foundation Trust
Homerton University Hospital NHS Foundation Trust	Solent NHS Trust
Hull and East Yorkshire Hospitals NHS Trust	South Staffordshire and Shropshire Healthcare NHS Foundation Trust
Humber NHS Foundation Trust	South Tees Hospitals NHS Foundation Trust
Imperial College Healthcare NHS Trust	South Warwickshire NHS Foundation Trust
Ipswich Hospital NHS Trust	South West Yorkshire Partnership NHS Foundation Trust
Isle of Wight NHS Primary Care Trust	Southend University Hospital NHS Foundation Trust
Kettering General Hospital NHS Foundation Trust	

St George's Healthcare NHS Trust
St Helens & Knowsley Teaching Hospitals NHS Trust
Stockport NHS Foundation Trust
Surrey & Borders Partnership NHS Foundation Trust
Surrey & Sussex Healthcare NHS Trust
Sussex Community NHS Trust
Tameside Hospital NHS Foundation Trust
Team Prevent
The Dudley Group NHS Foundation Trust
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Trafford Healthcare NHS Trust
United Lincolnshire Hospitals NHS Trust
University College London Hospitals NHS Foundation Trust
University Hospital of South Manchester NHS Foundation Trust
University Hospitals Birmingham NHS Foundation Trust
University Hospitals Bristol NHS Foundation Trust
University Hospitals Coventry & Warwickshire NHS Trust
University Hospitals of Leicester NHS Trust
University Hospitals of Morecambe Bay NHS Foundation Trust
University Hospital Southampton NHS Foundation Trust
Walsall Healthcare NHS Trust
Warrington & Halton Hospitals NHS Foundation Trust
West Hertfordshire Hospitals NHS Trust
West London Mental Health NHS Trust
West Middlesex University Hospital NHS Trust
West Suffolk Hospital NHS Trust
Whipps Cross University Hospital NHS Trust
Whittington Health
Winchester & Eastleigh Healthcare NHS Trust
Worcestershire Acute Hospitals NHS Trust
Wrightington, Wigan & Leigh NHS Foundation Trust
Yeovil District Hospital NHS Foundation Trust
York Teaching Hospital NHS Foundation Trust

Appendix 3: Audit tool

Version: August 2011

National Audit of the Management of Back Pain by Occupational Health Services 2011

Case Note Review

Your Site Code

Instructions for completion:

1. Please use a ball-point pen for all sections.
2. Please cross the boxes as appropriate (or .
3. You are required to enter data on case notes relating to an OH doctor's, nurse's or physiotherapist's first consultation* with an NHS staff member for a new episode of back pain (a 'new episode' being one that has been separated from any previous episode by at least four weeks).
4. Enter the most recent cases first, working back in time from the 5 September to 1 January 2011 until you have entered 40 consecutive cases *or* have included all cases seen during this period. This ensures you audit your most recent cases. You may enter more than 40 cases if you wish. If you do not reach 40 cases, your sample is still valid and you can continue entering any cases seen between 5 September and 9 December 2011.
5. Data should be extracted by a member of the OH unit staff with clinical knowledge (an OH nurse or doctor). Ideally a single individual should audit all cases. Individuals must not audit their own case notes. A second auditor should be identified to submit data for 5 inter-rater cases.
6. An inter-rater study is conducted for each sample to assess the reliability of the audit tool. A second, independent auditor must audit the first five cases of each sample for a second time, and these 'reliability' cases should be entered onto the webtool as pairs. The first auditor must make a note of the record ID assigned by the system when entering the case onto the webtool. The second auditor should then enter the case as a new case, and link the two entries using the case number assigned at the first entry by entering the record ID on question 2.1.
7. Please refer to the accompanying help booklet for full instructions.
8. Data should be submitted to HWDU via our webtool at <https://audits.rcplondon.ac.uk> between 5 September and 9 December 2011. Please note we are unable to accept forms submitted on paper for this audit.
9. The help desk can be contacted on 0203 075 1585 or hwdu@rcplondon.ac.uk.

PART ONE: OVERVIEW DATA

The responses for part one will need to be completed on the online data entry tool.

1.1.2 Does the Trust provide physiotherapy to staff?

- Yes, staff physiotherapist is part of the occupational health (OH) team
- Yes, OH can refer to the Trust physiotherapy service
- Yes, OH can refer to an external physiotherapy service
- No, client will have to be referred by his / her GP

*For this round you can include cases seen by a physiotherapist working within your occupational health service, provided they meet the normal inclusion criteria of an NHS staff member's first consultation for a new episode of back pain (separated from any previous episode by at least four weeks) with an OH doctor, nurse, or physiotherapist, regardless of whether they have had any sick leave for this episode.

PART TWO: DEMOGRAPHIC INFORMATION

- 2.1 Is this a reliability case? Yes No
- 2.1.1 If yes, please enter the record ID of the case you are entering for a second time?
- 2.2 Which team member held this consultation?
- OH doctor
 OH nurse
 Physiotherapist
 Other (please specify)
- 2.3 Patient age (years)
- 2.4 Patient gender Male Female
- 2.5 Patient occupation (tick one only):
- Doctor
 Nurse (including nursing assistants)
 Ancillary staff
 Clerical
 Allied health professionals
 Not documented
 Other (please specify)
- 2.6 Please enter the date of the initial consultation case note entry that is being audited (the date on which the employee is first seen in OH following referral for a new episode of back pain)
- 2.7 Has the patient been absent from work as a result of this episode of back pain? Yes No
 Not documented
- 2.7.1 If yes, how many full weeks has the patient been absent from work with this episode of back pain at the time of the first appointment?

PART THREE: INITIAL CONSULTATION (clinical notes and letter outputs)

- 3.1 Do clinical consultation notes demonstrate that red flags have been considered? Yes No
- Tick 'yes' if either/both of the following are mentioned explicitly in the case notes:
- 'Red Flags'
 - Three or more of the following (N.B. the description in the case notes does not have to be identical to the wording below, but you should be convinced that the clinician has looked for these red flags):
 - presentation under age 20 or onset over 55 years
 - non-mechanical pain
 - past history of carcinoma or steroids or HIV
 - unwell, weight loss
 - widespread neurology
 - structural deformity
- 3.1.1 If yes, are red flags present? Yes No
 Not documented
- 3.1.1.1 If yes, it is recorded that appropriate action was taken (ie referral to GP or specialist)? Yes No
 N/A (GP / specialist already aware)

- 3.2 Are the following items recorded as part of the clinical history?
Please tick any that apply:
- 3.2.1 Impact of symptoms on activity Yes No
- 3.2.2 Impact of symptoms on work Yes No
- 3.2.3 Barriers to recovery/return to work Yes No
- 3.3 Do the clinical consultation notes demonstrate that yellow flags have been considered? Yes No
- Tick 'yes' if either/both of the following are mentioned explicitly in the case notes:
- 'Yellow Flags'
 - Two or more of the following (N.B. the description in the case notes does not have to be identical to the wording below, but you should be convinced that the clinician has looked for these yellow flags):
 - a belief that back pain is harmful or potentially disabling
 - fear/avoidance behaviour and reduced activity levels
 - tendency to low mood and withdrawal from social interaction
 - expectation of passive treatments rather than a belief that active participation will help.
- 3.3.1 If yes, are yellow flags present? Yes No
 Not documented
- 3.3.1.1 If yes, is it recorded that appropriate action was taken (ie have steps been taken to address low mood or harmful beliefs)? Yes No
 N/A (GP / specialist already aware)
- 3.4 Is this episode of back pain caused by work in the opinion of the assessing individual? Yes, directly caused by work
 Yes, work has contributed
 No, not work related
 Not documented
- 3.4.1 If yes, is there documented evidence that advice was given on further investigation of the cause/causes in the workplace? Yes No
- 3.5 Has clinical management been recorded in the OH notes? Yes No
- 3.5.1 If yes, is there documented evidence that the principles of good clinical management have been followed? Yes No
- 3.5.2 If yes, is there documented evidence that any noted deviations from the principles of good clinical management were acted on? Yes No
 No deviations noted
- 3.6 Is there documented evidence of discussion with the patient about continuation of activities? Yes No
- 3.7 Is there documented evidence that the patient was given clear information about back pain in a form that could be understood? (any format: verbal, written, electronic, other) Yes No
- If yes, is it clear that the information given covered the following:
- 3.7.1 The brief self-limiting nature of mechanical back pain? Yes No
- 3.7.2 The importance of staying at, or returning to, work? Yes No
- 3.7.3 The relative importance of physical and psychosocial factors? Yes No
- 3.8 Was the employee encouraged to stay at or return to work at an early stage despite residual pain? Yes No
 Not documented
- 3.9 Was advice about temporary adjustments, where these are appropriate, documented in written advice to the manager? Yes No
 Not appropriate

Appendix 4: Audit helpnotes

Version: August 2011

National Audit of the Management of Back Pain by Occupational Health Services 2011: Helpnotes

1 Acknowledgements

The Health and Work Development Unit (HWDU) audit development group thanks all those who have been involved in developing and piloting the audit tool, and colleagues for their help and advice.

The audit has been part funded by NHS Plus and the Academy of Medical Royal Colleges.

2 Help and support for data collection

These helpnotes contain all the information needed to participate in the audit. Please read them carefully before commencing data collection and entry onto the webtool. If you have any queries, or find that your occupational health (OH) provision does not fall into the structures described, the Audit Helpdesk should be contacted for advice either by email to hwdu@rcplondon.ac.uk or by phone on 020 3075 1585 (Monday – Friday, 10:00am–4:00pm).

3 The Health and Work Development Unit

The HWDU is a partnership between the Royal College of Physicians (RCP) Clinical Standards department and the Faculty of Occupational Medicine (FOM). HWDU aims to improve the health of the workforce through the delivery of national quality improvement projects. HWDU measures and raises standards, and reduces variability, of OH care through the development of evidence-based guidelines and by conducting national clinical and organisational audits. HWDU also works to improve the implementation of NICE public health guidance for the workplace.

4 Introduction

This national comparative audit aims to measure NHS OH services' compliance with evidence-based guidelines on back pain management and benchmark against NHS OH services nationally. Where possible the results from this audit round will be compared with baseline audit data collected in 2008.

Participation in this national clinical audit will be required for OH services to comply with Safe Effective Quality Occupational Health Service (SEQOHS) NHS accreditation standard G4.1.

5 Methodology

Eligibility

All OH providers to the NHS in England are eligible and encouraged to participate. The unit of audit is the OH service, and services are encouraged to submit a sample for each trust to which they provide OH care.

Site codes

OH services will receive a site code for each trust to which they provide OH care. It is important that each case is entered against the site code for the trust that employs the patient.

How has this audit been designed?

The national audit of back pain management is a retrospective case note review of process. The objective is to compare and contrast the process of medical care documented in the case notes with national evidence-based guidance. The audit criteria are based on Waddell G and Burton K (2000) Occupational Health Guidelines for the Management of Low Back Pain 2000: Evidence Review and Recommendations (Faculty of Occupational Medicine).*

An inter-rater study will be conducted for each sample of data to assess the reliability of the audit tool.

Audit tool development has been overseen by a multidisciplinary steering group. The tool was piloted in 28 NHS OH services, and amended in response to feedback from participants and statistical analysis of the pilot data.

What are the inclusion/ exclusion criteria?

You are required to enter data on case notes relating to an OH doctor's, nurse's or physiotherapist's** first consultation with an NHS staff member for a new episode of back pain (a 'new episode' being one that has been separated from any previous episode by at least four weeks).

How should I sample cases?

OH services should aim to submit a sample of 40 consecutive cases for each trust to which they provide a service. If you are a service which provides OH care to more than one trust HWDU will provide you with a site code for each trust that you provide to. You should ensure that you enter the data for each trust under the correct site code.

The sample should be constructed of consecutive cases, ordered by the date of the first consultation in OH. At the start of data collection the 40 most recent cases should be audited, ie cases seen on 5 September then work strictly backwards. The cut off point is consultations held on 1 January 2011. If you reach this point and have not collected 40 cases please supplement your sample with cases seen during the data collection period ie from 5 September until 9 December 2011. You should not enter any cases seen in 2010.

You may enter more than 40 cases if you wish. If you do not reach 40 cases, your sample is still valid if it includes all eligible cases seen.

If there are any complications or difficulties in carrying out sampling as described above please contact the HWDU team for advice on your specific circumstances.

How do I select cases/ patients for the survey?

If you are not able to identify cases that meet the inclusion criteria retrospectively through your OH database, you are advised to tag suitable cases as they are seen in clinic. If you are a service which provides OH care to more than one trust, please tag cases from all trusts and remember that a sample of 40 cases should be entered for each trust under a separate site code.

*Although these Guidelines refer specifically to 'Low Back Pain' (the most common type), they are also relevant to the occupational health management of back pain more generally. To simplify the criteria and allow a suitable sample size from each site to be entered into the audit, we therefore specify that all initial 'back pain' consultations with occupational health doctors and nurses can be included.

**For this round you can include cases seen by a physiotherapist working within your occupational health service, provided they meet the normal inclusion criteria of an NHS staff member's first consultation for a new episode of back pain (separated from any previous episode by at least four weeks) with an OH doctor, nurse, or physiotherapist, regardless of whether they have had any sick leave for this episode.

6 Data collection

How does the audit ensure the quality of the data collected?

Each trust will have a designated lead clinician who will take overall responsibility for the data submitted to the audit.

The data should be extracted by a member of OH unit staff with clinical knowledge. A single individual should audit all 40 cases if possible, remembering that individuals should not audit their own case notes. A second auditor should be identified to submit data for 5 inter-rater cases (see the section on data collection below for details).

When is data collection running?

The data collection period is 5 September to 9 December 2011. The help desk can be contacted by email to hwdu@rcplondon.ac.uk or phone to 020 3075 1585 throughout this period.

What should I do to prepare for data collection?

- Those responsible for collecting data and feeding back results (the audit clinical lead and/or coordinator) should set aside time to plan the service's participation in the audit.
- At the start of the data collection period you should check how many cases have been identified that meet the inclusion criteria; if this number is below 40 you should continue tagging cases seen between 5 September and 9 December.
- If you want to enter the same case for both the record audit and the back pain management audit please create two data records for submission.
- Auditors should review the tool and identify the sample of case notes as described above.
- You should keep a secure, local record of the webtool record ID number that has been assigned to each clinical case in your sample. This is in case we need to contact you for any further information whilst we are cleaning and analysing your data. It is also used to match inter-rater cases entered by the second auditor with those initially entered by the first auditor.

How can I access the webtool and how do I use it?

- The webtool is accessed at <https://audits.rcplondon.ac.uk> and full details of how to enter data online are available in the support document 'Guide to using the webtool'. This can be downloaded once you have logged into the website. If you have any difficulty getting started please contact the help desk and we will talk you through the process.
- Online help is available at the right hand side of the screen as you respond to each question.
- The webtool has been designed for data to be entered at the time of extraction from the case notes. A printable version of the audit tool is available should you prefer to collect data on paper before transferring it onto the webtool.
- HWDU is also conducting the national audit of record keeping standards by OH services – when you go to add a new record you will be asked which audit you are entering data for; please select the 'back pain management audit' to enter data for this audit. The webtool will only allow you to answer questions on sections 2 and 3.
- Your raw data can be exported into spreadsheet format as a local record, or for additional, local analysis.
- Please note that the HWDU does not have capacity to accept audit data on paper proformas; all data should be submitted via the webtool.
- You can leave additional comments via the webtool. **In the interests of patient confidentiality, no name, number or other information that could potentially identify an individual should be entered onto the webtool, including into the comment facility.**
- You must 'commit' your audit cases when finalised. This indicates to HWDU that your data are ready for analysis.

How do I complete the audit proforma?

- The data submitted must reflect what is in the records being audited.
- The audit tool should contain data only from the consultation being audited and should not include any patient identifiable information eg full name, specific job title or date of birth.
- The data must not represent what the auditor knows or assumes about the clinical state of the individual case.
- Data may be collected by any member of the clinical team but ideally only two auditors should audit the records, with one individual auditing the majority of the cases and a second individual auditing any cases that relate to consultations held by the first auditor and the 5 inter-rater cases
- 'Yes' means that an action has been taken, and was recorded.
- 'No' means the action is not documented in the case notes.
- 'Not applicable' means that there was a clinical judgement/decision, recorded in the notes, that this action was not applicable for the patient.

Why does my colleague need to re-audit my first five cases?

An inter-rater study is conducted for each sample to assess the reliability of the audit tool. A second, independent auditor must audit the first five cases of each sample for a second time, and these cases should be entered onto the webtool as pairs. The first auditor must make a note of the record ID assigned by the system when entering each case onto the webtool. The second auditor should then enter the data as a new case, and link the two entries using the case number assigned at the first entry by entering the record ID on question 2.1.

7 Results and publication

How will the results be disseminated?

A generic national report will be publicly available describing the national average picture, and each site will be provided with a confidential report detailing average results in comparison to the national average results. These reports will be ready by March 2012.

The national results will be presented at the NHS Plus conference in April 2012.

How will you compare the data I enter for my service with the data I entered by trust in the first audit round?

From the data we collected in 2008 we have a full list of participating trusts and the services that provided to them. You will see in the registration form that we have asked you to identify your service/ trust relationship. We will use this information to map the data from 2008 for comparison. Please ensure you notify HWDU of any changes to your service arrangements throughout the data collection period.

How will you compare our results for this audit round with our 2008 data if we have added cases seen by our physiotherapist in this round?

We will report the results for all the cases you submit, however when comparing with your 2008 data we will only include cases seen by OH doctors and nurses, so that we are comparing like with like.

Will occupational health services be ranked on the audit results?

Will the audit results be made public?

The aim of the audit is not to produce a league table of OH services or assess individual performance. Information on qualifications and seniority of the OH clinicians managing the cases is not collected. Nor is comparison made

between Trusts using NHS OH services and Trusts outsourcing to private sector providers. The average data for each Trust will be reported in comparison to the national average data. Individual trust's data will not be put into the public domain. A participation list will be published in the final national report.

8 Ethics, confidentiality and data protection

Do I need to submit this audit to my local ethics committee?

It is the understanding of the HWDU that you will not need to submit this audit to your local ethics committee. No patient identifiable data will be collected, and reports will provide the average data for the OH care provided to employees of a given trust in comparison to the national average data and where possible, their 2008 data. If local arrangements require you to submit the audit to your local ethics committee and you need help with a proposal for ethics committee review please let us know and we will do our best to support you.

How can I ensure confidentiality/ anonymity of clients? Should I inform our clients the audit is taking place?

Each OH unit is responsible for ensuring that clients are aware that clinical audits are carried out by the service, and that their records may be included in an audit so that they have the opportunity to opt out (for example by placing notices in staff/waiting areas). Due to the sensitivity of auditing the case notes of employees we advise that a member of the OH unit's clinical team extracts the data.

How are data confidentiality and security ensured?

Data will be submitted via the webtool which is hosted on a secure server. OH services will be provided with a site code and password relating to each trust for which they are submitting data, as described under 'How do I select cases/ patients for the survey'. These site codes and passwords are confidential to the OH service and employing trust. Under no circumstances should site codes or passwords be passed on to others outside the organisation. If a user believes that their password has been compromised they should inform the HWDU immediately. Users will only be able to see data in records from their own service. If a user detects what he or she believes is a breach of security or confidentiality then it is their responsibility not to disseminate the information obtained and to report the event to the HWDU immediately. In the interests of patient confidentiality, no name, number or other information that could potentially identify an individual should be used on the audit documentation or entered onto the webtool, including into the comment facility.

Data protection and information governance

The HWDU processes the contact details held for the purpose of managing the audits in line with the data protection act. The HWDU operates under the Royal College of Physicians' Clinical Standards Department information governance policy. If you would like a copy of this document, please email HWDU (hwdu@rcplondon.ac.uk)

National Audit of the Management of Back Pain & Record Keeping Standards: helpnotes and rationale for the case note review

Question Number	Question Text	Standard	Source	Helpnotes
Part One: Overview Information				
1.1.1	Does the Trust provide physiotherapy to staff?			<p>'Yes, staff physiotherapist is part of the OH team' – select this answer if the staff physiotherapist is part of the OH team and gives work related advice <u>based</u> on communication with an OH doctor or nurse.</p> <p>'Yes, OH can refer to the Trust physiotherapy service' – select this answer if there is a designated physiotherapy service provided by the Trust to staff.</p> <p>'Yes, OH can refer to an external physiotherapy service' – select this answer if there is a contracted/ agreed external physiotherapy (by NHS or other) for staff.</p> <p>'No, client will have to be referred by their GP'.</p>
Part Two: Demographic Information				
2.1	Is this an inter-rater reliability case?			An inter-rater study is conducted for each sample to assess the reliability of the audit tool. A second, independent auditor must audit the first five cases of each sample for a second time. If this is the second time a case has been entered into the tool then choose 'yes'
2.1.1	If yes, please enter the record ID of the case you are entering for a second time			The first auditor must make a note of the record ID assigned by the system when entering each case onto the webtool. The second auditor should then enter the case for a second time as a new case, and link the two entries using the case number assigned at the first entry by entering the record ID here.
2.2	Which team member held this consultation?			<p>Answer one only.</p> <p>In the interests of patient confidentiality, no name or number that could be linked to an individual should be entered onto the webtool, including into the comment facility.</p>
2.3	Patient age (years)			
2.4	Patient gender			

continued

Question Number	Question Text	Standard	Source	Helpnotes
2.5	Occupation			<p>This question refers to the occupation of the patient.</p> <p>'Nurse' includes nurse assistants and midwives.</p> <p>'Ancillary' includes domestics, porters, electricians, catering and allied staff.</p> <p>'Allied health professionals' includes radiographers, physiotherapists, occupational therapists, speech therapists, dieticians, dentists, chiropodists, podiatrists.</p>
2.6	Please enter the date of the initial consultation case note entry that is being audited (the date on which the employee is first seen in OH following referral for a new episode of back pain).			<p>The earliest date that will be accepted by the webtool is 1st January 2011 (as this is the earliest date at which cases are eligible to be included in the sample).</p> <p>The 'initial consultation' is the first consultation with an OH nurse, doctor, physiotherapist or other health care professional who is designated by OH to manage staff with a new episode of back pain. A 'new episode' being one that has been separated from any previous episode by at least four weeks) between 1st January 2011 and the end of the data collection period (December 2011).</p> <p>Please see the 'instructions' section at the beginning of the audit tool for more information about sampling.</p>
2.7	Has the patient been absent from work as a result of this episode of back pain?			Please enter 'no' if the patient was absent for fewer than 7 days as a result of this episode of back pain.
2.7.1	If yes, how many full weeks has the patient been absent from work with this episode of back pain at the time of the first appointment?			Please round down to full weeks.

continued

Question Number	Question Text	Standard	Source	Helpnotes
Part Three: Initial Consultation (clinical notes and letter outputs)				
3.1	Do clinical consultation notes demonstrate that red flags have been considered?	Screen for serious spinal diseases and nerve root problems	FOM, moderate	<p>Answer 'Yes' if either/both of the following are mentioned explicitly in the case notes:</p> <ul style="list-style-type: none"> • 'Red Flags', or • Three or more of the following (NB: the description in the case notes does not have to be identical to the wording below, but you should be convinced that the clinician has looked for these red flags) <ul style="list-style-type: none"> – presentation under age 20 or onset over 55 years – non-mechanical pain – thoracic pain – past history of carcinoma, steroids, HIV – unwell, weight loss – widespread neurology – structural deformity.
3.1.1	If yes, are red flags present?			
3.1.1.1	If red flags are present, is it recorded that appropriate action was taken (ie referral to a GP or specialist)			
3.2	Are the following items recorded as part of the clinical history?	Take a clinical, disability and occupational history, concentrating on the impact of symptoms on activity and work, and any barriers to recovery and return to work.	FOM, moderate to strong	
3.2.1	Impact of symptoms on activity			
3.2.2	Impact of symptoms on work			
3.2.3	Barriers to recovery/return to work			If the patient is not absent from work, answer 'yes' if barriers to recovery have been discussed. If the patient is absent from work, answer 'yes' if barriers to recovery and/or return to work have been discussed.

continued

Question Number	Question Text	Standard	Source	Helpnotes
3.3	Do the clinical consultation notes demonstrate that yellow flags have been considered?	Consider psychosocial 'yellow flags' to identify workers at particular risk of developing chronic pain and disability. Use this assessment to instigate active case management at an early stage.	FOM, strong	<p>Answer 'Yes' if either/both of the following are mentioned explicitly in the case notes</p> <ul style="list-style-type: none"> 'Yellow Flags', or Two or more of the following (NB: the description in the case notes does not have to be identical to the wording below, but you should be convinced that the clinician has looked for these yellow flags): <ul style="list-style-type: none"> a belief that back pain is harmful or potentially disabling fear/avoidance behaviour and reduced activity levels tendency to low mood and withdrawal from social interaction expectation of passive treatments rather than a belief that active participation will help.
3.3.1	If yes, are yellow flags present?			
3.3.1.1	If yes, is it recorded that appropriate action was taken (ie have steps been taken to address low mood or harmful beliefs)?			Steps taken to address low mood or harmful beliefs may be discussion with the patient, reassurance about the benign nature of back pain, or facilitating treatment of depression by GP.
3.4	Is this an episode of back pain caused by work in the opinion of the assessing individual?	Ensure that any incident of lower back pain which may be work-related is investigated and advice given on remedial action. If appropriate, review the risk assessment.	FOM, no direct evidence base	<p>If there is no direct documentation of the assessing individual's opinion of the cause of the back pain, this question must be answered as 'not documented'.</p> <p>Answer 'directly caused by work' if the notes document that on balance in the opinion of the assessing individual the major factor in the cause of the back pain episode is work exposures eg onset of pain while lifting at work.</p>
3.4.1	If yes, is there documented evidence that advice was given on further investigation of the cause/causes in the workplace?			

continued

Question Number	Question Text	Standard	Source	Helpnotes
3.5	Has clinical management been recorded in the OH notes?	Applies to 3.7 and 3.8: Clinical management should follow the RCGP guidelines. Discuss expected recovery times, and the importance of continuing ordinary activities as normally as possible despite pain.	FOM, strong (RCGP, strong)	Answer 'Yes' if the assessing OH clinician has recorded what clinical management had already been undertaken by the client's medical advisers (including a treating GP, specialist or physiotherapist) at the time of the appointment.
3.5.1	If yes, is there documented evidence that the principles of good clinical management have been followed?			In general, guidelines on clinical management advise the following: <ul style="list-style-type: none"> • diagnostic triage and consideration of psychosocial factors • drug treatment, simple analgesia for pain • avoid bed rest • encourage activity • manipulation if needed for pain relief. An OH professional would be expected to check that good clinical management by a GP or other health professional had been carried out. Answer 'Yes' if there is reasonable evidence that all these aspects of clinical care have been considered by the OH professional.
3.5.2	If yes, is there documented evidence that any noted deviations from the principles of good clinical management were acted on?			Where deviations from good clinical practice in the treatment of back pain are noted by an OH professional, they would be expected to facilitate compliance with good practice. Answer 'Yes' if there is evidence that action was taken as a result of the noted deviations from good clinical management eg attempts to liaise with the GP to clarify diagnosis or management, referral for red flags if these have been missed, addressing yellow flags if these have been missed, facilitating physiotherapy if this is indicated and has been omitted.
3.6	Is there documented evidence of discussion with the patient about continuation of activities?			Answer 'Yes' if it is documented that there was discussion about continuation of activities. This includes the provision of leaflets as long as this information is included in them.

continued

Question Number	Question Text	Standard	Source	Helpnotes
3.7	Is there documented evidence that the patient was given clear information about back pain in a form that could be understood? (any format: verbal written, electronic, other). If yes, is it clear that the information given covered the following:	Applies to 3.9, 3.10 and 3.11: Establish a partnership, involving workers, employers and health professionals in the workplace and the community, with a common consistent approach to agreed goals, to manage back pain and prevent unnecessary disability.	FOM, no direct evidence-base	
3.7.1	<ul style="list-style-type: none"> the brief self-limiting nature of mechanical back pain? 	Ensure that workers with lower back pain receive the key information in a form that they understand.	FOM, limited	
3.7.2	<ul style="list-style-type: none"> the importance of staying at, or returning to, work? 	Encourage the worker to remain in his or her job, or to return at an early stage, even if there is still some lower back pain – do not wait until they are completely pain-free. Consider the following steps to facilitate this:	FOM, strong	
3.7.3	<ul style="list-style-type: none"> the relative importance of physical and psychosocial factors? 	<ul style="list-style-type: none"> Initiate communications with their primary care professional early in treatment and rehabilitation. Advise the worker to continue as normally as possible and provide support to achieve this. Advise employers on the actions required, which may include maintaining sympathetic contact with the absent worker. Consider temporary adaptations of the job or pattern of work.	FOM, moderate	

continued

Question Number	Question Text	Standard	Source	Helpnotes
3.8	Was the employee encouraged to stay at or return to work at an early stage despite residual pain?	<p>Make employers and workers aware that:</p> <ul style="list-style-type: none"> • LBP is common and frequently recurrent but acute attacks are usually brief and self-limiting • Physical demands at work are one factor influencing LBP but are often not the most important. <p>Prevention and case management need to be directed at both physical and psychosocial factors.</p>	<p>FOM, Strong</p> <p>FOM, Range of evidence from limited to strong</p> <p>FOM, strong</p>	
3.9	Was advice about temporary adjustments, where these are appropriate, documented in written advice to the manager?			<p>Answer 'Yes' if there is evidence that written advice was given to the manager about adjustments needed in the workplace to support the employee in staying at or returning to work. This can include physical workplace adaptations, or a staged return to work.</p>

Appendix 5: Inter-rater reliability

In total, 948 cases were entered onto the webtool as one part of an inter-rater reliability (IRR) pair (see Methods) ie as duplicates of a case already entered into the audit. However, 66 were not able to be matched to a clinical case and were deleted, leaving 882 pairs.

We compared the data entered on duplicate cases entered by second auditors (see Methods). Numerical questions (age, date of appointment and weeks off work) are examined in terms of the simple difference between them. For categorical questions (mostly yes / no / not documented), we applied the kappa statistic. This quantifies the degree to which the assessors agree over and above what could be expected by chance (kappa score). Kappa ranges from 1 (perfect agreement) to 0 (no more than chance agreement) to -1 (complete disagreement).

The kappa is more useful than a % agreement, which is a crude rate of exactly the same answer occurring. In a question where the great majority of answers are in one category (eg has the OH professional asked about the use of illicit / street drugs), we would expect a high % agreement purely by chance; in these circumstances the kappa will be more stringent and distinguish how much more than chance agreement we have.

Additionally, we used the McNemar's test to see whether one of the assessors was inclined disagree in one direction than another.

Kappa values for questions with categorical data

Question	Kappa	Question	Kappa
2.2	0.96	3.4.1	0.64
2.4	0.97	3.5	0.45
2.5	0.86	3.5.1	0.27
2.7	0.77	3.5.2	0.43
3.1	0.71	3.6	0.58
3.1.1	0.73	3.7	0.74
3.1.1.1	0.54	3.7.1	0.66
3.2.2	0.53	3.7.2	0.63
3.2.3	0.55	3.7.3	0.73
3.3	0.70	3.8	0.57
3.3.1	0.75	3.9	0.65
3.3.1.1	0.60		
3.4	0.68	Average	0.65

Two questions showed significant results when using McNemar's test. For questions 3.5.1 and 3.6, when the second assessor disagreed they were more likely to answer yes.

Median, IQR and ranges of values for question with continuous data				
Question	Units	Median	IQR	Range
2.3: Age	Years	0	(0, 0)	(-24, 26)
2.6: Date of initial consultation	Days	0	(0, 0)	(-304, 280)
2.7.1: Number of full weeks patient absent from work	Weeks	0	(0, 0)	(-26, 15)

Appendix 6: National audit results summary table

In the 2008 audit cases for inclusion into the audit were seen by an OH doctor or nurse. In addition in the 2011 audit, cases seen by a physiotherapist were included. These cases could be included provided that the physiotherapist was part of an OH service and therefore documentation and reporting would be in line with OH standards.

In the main presentation of results, the physiotherapy cases were excluded from the 2011 results to enable a more like for like temporal comparison to the 2008 audit. The total results for 2011 were also presented to provide the national baseline for future audit.

In this appendix we stratify the results specifically by whether cases were seen by a physiotherapist.

16% (42/258) of sites entered cases for which a physiotherapist was an OH team member who conducted the initial consultation for back pain. These physiotherapists contributed 12% (651/5,524) of all cases, whilst 60% (3,336/5,524) of cases were seen first by an OH nurse and 27% (1,476/5,524) by an OH doctor.

	2011 Physios	2011 Dr/Nurse/Other
Total cases	651	4,873
Cases without red flags identified	594	4,226
Age, median	44	44
Female	518 (80 %)	3,988 (82 %)
Male	133 (20 %)	885 (18 %)
Allied health professional	83 (13 %)	675 (14 %)
Ancillary staff	68 (10 %)	601 (12 %)
Clerical	101 (16 %)	701 (14 %)
Doctor	15 (2 %)	109 (2 %)
Nurse	306 (47 %)	2,602 (53 %)
Other	74 (11 %)	174 (4 %)
Not documented	4 (1 %)	11 (0 %)
2.7 Has the patient been absent from work as a result of this episode of back pain?	278 (43 %)	3,006 (62 %)
2.7.1 If yes, how many full weeks has the patient been absent from work with this episode of back pain at the time of the first appointment? Median (IQR)	2 (1–5)	4 (2–7)

continued

	2011 Physios	2011 Dr/Nurse/Other
3.1 Do clinical consultation notes demonstrate that red flags have been considered?	565 (87%)	2681 (55%)
3.1.1 If yes, are red flags present?		
Yes	57 (10%)	647 (24%)
No	502 (89%)	1,973 (74%)
Not documented	6 (1%)	61 (2%)
3.1.1.1 If yes, it is recorded that appropriate action was taken (ie referral to GP or specialist)?		
Yes	13 (23%)	179 (28%)
No	6 (11%)	11 (2%)
Not documented	38 (67%)	457 (71%)
*3.3 Do the clinical consultation notes demonstrate that yellow flags have been considered?	306 (52%)	1,969 (47%)
3.3.1 If yes, are yellow flags present?		
Yes	97 (32%)	631 (32%)
No	198 (65%)	1,242 (63%)
Not documented	11 (4%)	96 (5%)
3.3.1.1 If yes, is it recorded that appropriate action was taken (ie have steps been taken to address low mood or harmful beliefs)?		
Yes	65 (86%)	358 (78%)
*3.2 Are the following items recorded as part of the clinical history?		
3.2.1 Impact of symptoms on activity	543 (91%)	3,486 (82%)
3.2.2 Impact of symptoms on work	504 (85%)	3,478 (82%)
3.2.3 Barriers to recovery/return to work	367 (62%)	2,659 (63%)
*3.4 Is this episode of back pain caused by work in the opinion of the assessing individual?		
Yes, directly	64 (11%)	538 (13%)

continued

	2011 Physios	2011 Dr/Nurse/Other
Yes, contributed	96 (16%)	758 (18%)
No	345 (58%)	2,016 (48%)
Not documented	89 (15%)	914 (22%)
3.4.1 If yes, is there documented evidence that advice was given on further investigation of the cause/causes in the workplace?	89 (56%)	833 (65%)
*3.5 Has clinical management been recorded in the OH notes?	572 (96%)	3,833 (91%)
3.5.1 If yes, is there documented evidence that the principles of good clinical management have been followed?	539 (94%)	3,446 (90%)
*3.6 Is there documented evidence of discussion with the patient about continuation of activities?	500 (84%)	2,911 (69%)
*3.7 Is there documented evidence that the patient was given clear information about back pain in a form that could be understood?	458 (77%)	2,039 (48%)
If yes, is it clear that the information given covered the following:		
3.7.1 The brief self-limiting nature of mechanical back pain?	267 (58%)	1,480 (73%)
3.7.2 The importance of staying at, or returning to, work?	361 (79%)	1,798 (88%)
3.7.3 The relative importance of physical and psychosocial factors?	281 (61%)	1,524 (75%)
*3.8 Was the employee encouraged to stay at or return to work at an early stage despite residual pain?		
Yes	388 (65%)	2,809 (66%)
No	48 (8%)	436 (10%)
Not documented	158 (27%)	981 (23%)
3.9 Was advice about temporary adjustments, where these are appropriate, documented in written advice to the manager?		
Yes or Not appropriate	620 (95%)	4,624 (95%)
No	31 (5%)	249 (5%)

*Denominator for these percentages were the number of cases without red flags identified.

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