The Mental Health of Health Care Professionals

A review for the Department of Health

Samuel B Harvey, Lecturer in Occupational Psychiatry
Bee Laird, Postdoctoral Research Worker
Max Henderson, Senior Lecturer in Occupational and Epidemiological Psychiatry
Matthew Hotopf, Professor of General Hospital Psychiatry

King’s College London
Department of Psychological Medicine,
Institute of Psychiatry
Weston Education Centre
London SE5 9RJ

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Executive Summary

1. Work and health
   1.1. High levels of sickness absence and increasing numbers on incapacity benefits have made health and work a major public health issue in the UK.
   1.2. Mental disorders have recently become the leading cause of sickness related absence in the UK, accounting for around 40% of the total time covered by sick notes and around 35% of all claims for disability benefits.
   1.3. This literature review is part of a project to take forward recommendations outlined in the Department of Health White Paper “Trust, Assurance and Safety: the regulation of health professionals in the 21st Century”, and is specifically focused on the mental health of health care professionals.
   1.4. There are a number of reasons why the mental health of health care professionals requires separate consideration:
      1.4.1. The NHS is Europe’s largest employer and has been tasked to become “an exemplar for public and private sector employers”.
      1.4.2. There have been a number of reports suggesting that health care professionals feel more ‘stressed’ than other workers, and may be at increased risk for mental disorders.
      1.4.3. Despite this, healthcare professionals, especially doctors, are reluctant to access appropriate care for themselves.
      1.4.4. Illness in health care professionals has the potential to impact on patient safety and the operational effectiveness of the NHS.

2. The aims of this review were:
   2.1. To provide an evidence-based literature review on the prevalence and consequences of mental disorders amongst UK health care professionals.
   2.2. To identify gaps and suggest areas of further research
   2.3. To provide recommendations for the National Health for Health Professionals’ framework

3. Methods
   3.1. The literature review presented in this report is not systematic, but covers a wide selection of mainly UK-based studies. Medline, Embase and the Cochrane library were searched using key search terms.
3.2. The review covered the following regulated UK healthcare professionals: doctor/physicians, dentists, chiropractors, opticians, osteopaths, nurses, midwives, pharmacists, art therapists, biomedical scientists, chiropodists, podiatrists, clinical scientists, dieticians, occupational therapists, operating department practitioners, orthoptists, paramedics, physiotherapists, prosthetic and orthotists, radiographers, speech and language therapists.

3.3. In addition to the standard literature review, fifteen key opinion formers in the area of occupational health for health care professionals were contacted and invited to attend an interview. Seven were interviewed face-to-face, five were interviewed by telephone, and three provided written advice via email.

3.4. Forty-four regulatory bodies, unions and counselling associations for health care professionals were also contacted by email in a call for evidence. Twenty one (48%) of these responded.

4. Prevalence of mental disorders
4.1. Our search of the literature revealed a significant amount of relevant published work, although much of this was dominated by studies dealing with doctors.
4.3. There is clearly a need for additional research to consider other health care professionals.

“Stress” at work
4.4. Healthcare workers report high levels of workplace stress, burnout and other “work-related” mental illness.
4.5. One study suggested nursing staff had the highest level of “work-related” mental illness of any profession.
4.6. However, workplace based studies on symptoms such as stress and burnout are difficult to assess. Many are small with variable or uncertain participation rates. They may also frame questions in such a way that participants are primed to answer that they experience work related stress.
4.7. Regardless of the uncertainty surrounding these concepts, the perception of increased occupational stress is likely to have detrimental effects. Whether this leads to higher rates of mental disorder is less certain.
**Mental disorders**

4.8. The majority of published literature examining the prevalence of mental disorder amongst health care professionals consists of small cross-sectional studies examining specific groups of health professionals.

4.9. These descriptive studies show apparently high rates of depression, anxiety and substance misuse.

4.10. A small number of larger studies designed to allow true comparisons between occupational groups have not found evidence of elevated rates of mental disorder in health care professionals.

4.11. Despite this there is clear evidence of high rates of suicidal ideation and completed suicide amongst healthcare professionals providing some objective evidence of high levels of psychiatric symptoms.

4.12. Some of these apparent contradictions may be due to differences between different the health care professions which are sometimes lumped together in population studies.

**Substance misuse**

4.13. The situation regarding substance misuse appears to be clearer; there are high rates of alcohol and substance misuse amongst doctors, with emerging evidence of similar problems amongst other health care professionals.

**Cognitive impairment**

4.14. There is a dearth of evidence regarding cognitive impairments in health care professionals.

5. **Risk factors for mental disorders**

5.1. Healthcare professionals routinely work with patients who bring painful and challenging problems. They often need to make decisions which have enormous impacts on the lives of patients. Such work might be expected to cause distress or frank psychiatric disorder. However these job characteristics do not, of themselves, seem to be the most important of risk factors.

5.2. Instead the way work is structured and organised, at an individual and an organisational level appear to have considerable potential as risk factors for psychiatric disorder.
5.3. Some of the risk factors, such as conflict with line managers, bullying, harassment, and excessive working hours are predictably associated with mental disorders.

5.4. However it is often not predictable how a workplace factor will impact on health of the workforce, and much depends upon the way in which the work environment is organised and change is implemented.

5.5. Several examples show that aspects of work (e.g. multidisciplinary team working), if well-organised and managed, appear protective, but if poorly implemented might be harmful.

5.6. This suggests that responsibility for the prevention of mental disorders amongst health care professionals cannot rest solely with occupational health departments.

5.7. The majority of identified risk factors may require active commitment and engagement at a high level within organisations, e.g. at trust board level.

5.8. The research on risk factors for mental disorders among health professionals was dominated by small studies, many using self-report measures in a cross-sectional design. The possibility of reverse causation (i.e. “chicken or egg”) is rarely considered.

5.9. Many of the risk factors highlighted are quite common yet psychiatric illness is relatively rare and few studies attempted to look at the way individual risk factors interacted with occupational risk factors to produce psychiatric disorder.

5.10. Almost all studies are observational in design and the impact of making changes at either the individual or organisational level is largely unknown.

5.11. There is a need for the research on mental disorders amongst health care professionals to go beyond simple cross-sectional and observational studies. High quality, prospective cohort studies would allow the interactions between individual and workplace factors, reverse causality and the changing impact of various factors at different stages of ill health to be evaluated.

5.12. Such studies will require an initial investment of research funds, but are likely to provide key clues on the nature and timing of interventions that are likely to be effective.

6. **The impact of poor mental health at work**
6.1. The deleterious effects of mental disorders on workplace performance are well established. 
6.2. However, many individuals with symptoms of mental disorder will remain at work. There is evidence for particularly high rates of presenteeism amongst health care professionals, possibly due to the cultural and organisational factors that lead many health professionals to be reluctant to take days off work due to ill health.
6.3. There is also evidence that some of the symptoms of mental disorder, such as fatigue and perceived work stress, are associated with adverse clinical events.
6.4. Mood disorders are associated with cognitive impairment such as impaired concentration, poor decision-making and planning, time management, and irritability.
6.5. Substance misuse has a particularly severe impact on work performance.
6.6. Whilst there may be sound reasons why NHS trusts may be concerned about the performance of ill healthcare professionals, and in some cases the risk associated with presenteeism are obvious, it is far from clear how trusts should aim to reduce presenteeism.
6.7. Changes in culture over the long term may be needed to encourage healthcare professionals to seek help and take time off work earlier.
6.8. However there is a risk that, in encouraging early presentation, normal stress and distress become medicalised, leading to many more days lost through potentially unnecessary sickness absence.

7. The reluctance to seek help

7.1. Many health care professionals, especially doctors, are reluctant to seek help when they suffer from symptoms of mental disorder.
7.2. This is due to a range of factors, including a belief they are not susceptible to illness; a culture encouraging self reliance and coping; guilt over the possibility of being away from work; stigma and the fear of involvement of the regulating authorities.
7.3. In the case of mental disorder, there is evidence that concerns over confidentiality are one of the main barriers preventing health care professionals seeking help.
7.4. At present, even if a health care professional does seek help for a psychological problem, they will often utilise health care services in a different way to other patients. They will often engage in self-treatment or
informal consultations with colleagues. Such practices potentially result in inadequate clinical care.

7.5. Little is known about how important these issues are to health professionals other than medical staff, although it is likely that the same concerns affect all health care professionals.

7.6. Health care professionals might benefit from specialised health care services, although at present these are not widely available. Such services must be able to provide rapid, evidence based management in a way that ensures confidentiality.

8. Interventions

8.1. Most mental disorders are treatable, with a range of effective interventions being available in both primary and secondary care. Unfortunately the occupational impact of most of these treatments is unknown. Symptom reduction does not correlate well with work function, with some studies suggesting specific occupationally focused interventions may be needed.

8.2. The evidence base for many interventions relevant to prevent and treat mental disorders among healthcare professionals is limited.

8.3. Interventions can be aimed at preventing mental disorders, promoting early detection, facilitating appropriate assessments or treating established illness.

8.4. We have summarised the evidence available for each of these approaches and provided some examples of how these strategies are currently being used within the health sector.

8.5. There is need for large, well conducted trials to evaluate possible intervention strategies. Such studies must consider a range of relevant outcomes, including symptom reduction, work performance and sickness absence.

8.6. The increasing use of information technology, such as the electronic staff record within the NHS, may provide opportunities for secondary analysis of routinely collected data.

8.7. Such research would provide a cost effective method of answering key questions, but would need to occur with appropriate safeguards regarding staffs' personal information.
1. Introduction

1.1. Mental disorders in the working age population

High levels of sickness absence and increasing numbers on incapacity benefits have made health and work a major public issue in the UK (Harvey et al. 2009a). Across the UK economy approximately 175 million working days are lost due to sickness absence each year, equivalent to seven days for each worker (Confederation of British Industry 2007). The proportion of the working age population on incapacity benefits has increased from just over 2% in the 1970s to around 7% today (DWP 2007). Dame Carol Black, the UK National Director for Health and Work, recently published her in depth review of the health of Britain’s working age population (Black 2008). This review estimated the total annual cost of sickness related absence and worklessness in Britain to be more than £100 billion, greater than the entire NHS budget.

Mental disorders have recently become the leading cause of sickness absence in the UK, accounting for around 40% of the total time covered by sick notes (Shiels et al. 2004). Within Organisation for Economic Cooperation and Development (OECD) countries mental illness now accounts for 35% of all disability benefits (OECD 2003). In recognition of the increasing importance of mental disorders, Professor Black commissioned a separate report on Work and Mental Health from the Royal College of Psychiatrists’ Research and Training Unit (Lelliott et al. 2008). This report described how as many as one sixth of the working age population report symptoms that may represent an underlying mental disorder. It also detailed the stigma and discrimination experienced by those with diagnosed mental disorder in the workplace and the significant policy challenges associated with attempts to prevent, detect and treat mental illness amongst workers (Lelliott, Tulloch, Boardman, Harvey, Henderson, & Knapp 2008). The report written by the Royal College of Psychiatrists’ Research and Training Unit considered the impact of mental disorders on the entire working age population. The present report will focus specifically on the mental health of health care professionals.

There are a number of reasons to consider the mental health of health care professionals separately. The NHS is Europe’s largest employer and was tasked by a recent government white paper to become “an exemplar for public and private
sector employers” by “taking steps to support good health in a high-quality workforce” (Department of Health 2004). The new NHS constitution pledges to provide “support and opportunities for staff to maintain their health and well-being” (Department of Health 2009). Despite this, there have been a number of reports suggesting that health care professionals feel more ‘stressed’ than other workers, and may be at increased risk for mental disorders (Williams, Michie, & Pattani 1998a). Any significant ill health amongst health care professionals also has the potential to affect the health of the wider population, via decreased work performance in the health sector. The consideration of any possible interventions to prevent, detect or treat mental disorders amongst health care professionals also needs careful evaluation. It stands to reason that those who work within the health care system may seek help and experience the way healthcare is delivered in a very different way to other members of the public.
1.2. Purpose of review
This literature review is part of a project to take forward recommendations outlined in the Department of Health White Paper “Trust, Assurance and Safety: the regulation of health professionals in the 21st Century”, published in 2007 (HM Government 2007). Professor Alastair Scotland, Director of the National Clinical Assessment Service chairs the working group which is tasked with devising a framework for the Health of Health Professionals, as proposed in the White Paper. In addition, the project draws on the reports commissioned by the cross government review on Health Work and Well-being chaired by Dame Carol Black. This project will look specifically at mental health problems, including cognitive impairment amongst health professionals, and aims to build on the findings of the recently published “Mental Health and Work” report (Lelliott, Tulloch, Boardman, Harvey, Henderson, & Knapp 2008).

The aims of this review are:
• To provide an evidence-based literature review on the prevalence and consequences of mental disorders amongst UK health care professionals.
• To identify gaps and suggest areas of further research
• To provide recommendations for the National Health for Health Professionals’ framework

The specific questions the review will attempt to answer include:
1. The nature and prevalence of mental disorders among health professionals working in the nine regulated health professions of the NHS
2. The impact of mental disorders on the healthcare professionals’ ability to practise effectively and safely
3. Factors that cause any impairment of healthcare professionals’ ability to practise effectively and safely that are related to mental health problems including drugs and alcohol
4. Key factors in the workplace that increase or decrease the likelihood of health professionals developing mental disorders
5. Examples of good practice with regard to prevention, assessment and management of mental disorders, identifying what works and what does not work
6. The health seeking behaviours of health professionals, and whether this differs from that of other employees
7. Access to healthcare and experience of healthcare by health professionals and whether this differs from other employees
8. How mental health problems influence the likelihood of healthcare professionals having contact with regulators and how they affect the nature of that interaction (e.g. declarations of health on registration for example, fitness to practise reports)
9. Predisposition and risk of practitioners in training; health, dental, medical undergraduates
10. Impact of legislative framework including the Disability Discrimination Act

1.3. Scope of the review
The commissioners of this review directed that it should focus on UK healthcare professionals belonging to the following nine regulating bodies:

- General Chiropractic Council (GCC)
- General Dental Council (GDC)
- General Medical Council (GMC)
- General Optical Council (GOC)
- General Osteopathic Council (GOsC)
- Nursing and Midwifery Council (NMC)
- Pharmaceutical Society of Northern Ireland (PSNI)
- Royal Pharmaceutical Society of Great Britain (RPSGB)
- Health Professionals Council (HPC): Art therapists, biomedical scientists, chiropodists and podiatrists, clinical scientists, dieticians, occupational therapists, operating department practitioners, orthoptist, paramedics, physiotherapists, prosthetics and orthotists, radiographers, speech and language therapists.

This review will attempt to draw together information from a wide range of sources. It will consider the findings from published primary studies, previous reviews, policy statements, grey literature and the opinions of a wide range of experts.
2. Methodology

2.1. Literature search strategies
In keeping with the scope of this review, the literature search was primarily focused on UK-based studies. However, when gaps in the UK based evidence were identified, attempts were made to source information from studies based outside the UK. All literature used in this review was published in English.

Medline, Embase and the Cochrane library were utilised using some key search terms, for example ‘occupational stress’, ‘burnout’, ‘depression’, ‘anxiety’, ‘substance abuse’ and ‘presenteeism’. We also identified key authors in this area and carried out author-specific searches. Finally, each of the healthcare professions was used as a search term i.e. doctor, physician, dentist, chiropractor, optician, osteopath, midwife, pharmacist, art therapist, biomedical scientist, chiropodist, podiatrist, clinical scientist, dietician, occupational therapist, operating department practitioner, orthoptist, paramedic, physiotherapist, prosthetic and orthotist, radiographer, speech and language therapist. When this generated an excess of papers, as was the case for ‘doctor’, we restricted the search by preceding the term with the word ‘sick’ or ‘stressed’ e.g. ‘sick doctor’.

This was not a systematic review, so our intention was not to report every study examining these questions. However, the search strategy outlined was designed to be comprehensive and allowed us to select the most pertinent primary studies and any relevant review papers. Compared to other types of health care professionals, there was more literature discussing issues relating to doctors, nurses and dentists. Therefore the threshold for inclusion of papers concerning other types of health care professionals was lower. Despite this the papers cited in this review are heavily dominated by doctors, and to a lesser extent nurses, dentists and paramedics. The approximate proportion of papers that dealt with doctors: nurses: dentists: paramedics: ‘other’, is 8:1:1:1:1. There is clearly a need for additional research to consider other health care professionals.

2.2 Call for evidence
Forty-four regulatory bodies, unions and counselling associations for health care professionals were contacted by email in a call for evidence. Where possible an individual within each organisation was identified as the appropriate recipient for this
request. Each organisation was asked to provide publications or reports they felt to be relevant to this review. They were also asked to identify any examples of good practice with regard to prevention, assessment and management of mental health. The details of this e-mail request are provided in an appendix to this report. Of the forty-four organisations contacted, twenty-one responded, giving us a response rate of 48%. The following lists the organisations contacted and highlights those that provided information used in this report:

| 1. General Medical Council | Response |
| 2. General Chiropractic Council | |
| 3. General Dental Council | |
| 4. General Optical Council | |
| 5. General Osteopathic Council | |
| 6. Nursing and Midwifery Council | Response |
| 7. Royal Pharmaceutical Society of Great Britain | |
| 8. Health Professions Council | Response |
| 9. Society of Chiropodists & Podiatrists | Response |
| 10. British Dietetic Association | |
| 11. British Association and College of Occupational Therapists | Response |
| 12. Society of Occupational Medicine | |
| 13. Faculty of Occupational Medicine of the Royal College of Physicians | |
| 14. Chartered Society of Physiotherapy | Response |
| 15. Society and College of Radiographers | Response |
| 16. Royal College of Speech and Language Therapists | Response |
| 17. British Association of Art Therapists | Response |
| 18. Biomedical scientists | |
| 19. Clinical scientists | Response |
| 20. Operating department practitioners | |
| 22. College of Paramedics – British Paramedic Association | Response |
| 23. Prosthetics and orthotists | Response |
| 24. Royal College of General Practitioners | |
| 25. Royal College of Psychiatrists | |
| 26. British Medical Association | Response |
| 27. Sick Doctor’s Trust (alcohol and drug addiction) | |
| 28. Doctors’ Support Network (Mental Illness) + Doctors’ Support Line | |
2.3. Expert opinion

In addition to the search strategy outline above, key opinion formers in the area of occupational health for health care professionals were contacted and where possible interviewed. The list of opinion formers to be contacted was not intended to be a complete list of all involved in this area, rather it was intended to supplement the more standard search techniques and ensure that a variety of opinions were represented in this review. Fourteen key opinion formers were contacted by email, inviting them to either comment by email, or to attend a face to face or telephone interview.

The following lists details which opinion formers were able to contribute to this review:

**Face to face interviews**

1) **Dr Sian Williams**, Clinical Director, OHCEU, RCP, Chair of the Audit Development Group
2) **Professor Amanda Ramirez**, Cancer Research UK Promoting Early Presentation Group, Department of Psychological Medicine, Institute of Psychiatry, Kings College London

3) **Lucy Warner**, Chief Executive
   - **Martin Black**, Operational Services Manager
   - NHS Practitioner Health Programme

4) **Dr David Snashell**, Clinical Director & Senior Lecturer, Occupational Health Department, St Thomas' Hospital

5) **Dr Nick Glozier**, Psychological Medicine, University of Sydney

6) **Dr Julia Bland**, Consultant Psychiatrist in Psychotherapy, MedNet Service

7) **Dr Jane Marshall**, Consultant Psychiatrist in Alcohol Studies, South London and Maudsley NHS Trust

**Telephone interviews**

8) **Professor Stephen Stansfeld**, Professor of Psychiatry, Barts and the London, School of Medicine and Dentistry, Honorary Consultant Psychiatrist East London Foundation NHS Trust

9) **Professor Kevin Holland-Elliott**, Director of Occupational Health & Safety Department, King's College Hospital

10) **David Qualter**, Manager of Pharmacist Support

11) **Dr Debbie Cohen**, Senior Medical Research Fellow, Centre for Psychosocial Research, Cardiff University

12) **Dr Nick Brown**, Assessment Advisor, NCAS

**Email consultations**

13) **Professor Mika Kivimaki**, Department of Epidemiology and Public Health, University College London

14) **Dr Ira Madan**, Director of Clinical Standards, NHS Plus

15) **Professor Jenny Firth-Cozen**, Clinical and organisational psychologist, London Deanery
3. Epidemiology of mental disorder amongst health care professionals

3.1. Frequency: the nature and prevalence of mental disorders among health professionals working in the nine regulated health professions of the NHS

What is meant by the term ‘mental disorder’?

The term ‘mental disorder’ can be used to cover a wide range of problems. In general these can be considered to fall into a number of broad categories (Lelliott, Tulloch, Boardman, Harvey, Henderson, & Knapp 2008):

1. Symptoms associated with psychological distress, which while not sufficient to meet criteria for a diagnosis of mental disorder, may be associated with significant functional impairment or suffering. This category would include complaints such as stress and burnout.
2. Common mental disorders, such as depression or anxiety. Previous estimates have suggested that at any time as many as one sixth of the working age population may have symptoms sufficient to be diagnosed with a common mental disorder (Office for National Statistics 2001). Because of the high prevalence of common mental disorders they represent the majority of the cost and impairment associated with mental disorders in the working age population.
3. Severe mental disorders such as schizophrenia or bi-polar affective disorder. These disorders are much less common, although when they do occur they typically have a major impact on occupational functioning.
4. Cognitive impairment which may be the primary symptom of a progressive dementia or may be secondary to other problems, such as depression or substance misuse.
5. Misuse of substances such as alcohol or illicit drugs, which often occur co-morbidly with common mental disorders.

Is mental disorder more prevalent amongst health care professionals?

In order to establish if health care professionals are more likely to suffer from mental disorder we need to be able to measure the prevalence of mental illness amongst
health care professionals and compare this to the prevalence found in other occupational groups. In order for these comparisons to be meaningful each group should be selected and assessed in an identical way with the potential effects of confounders being adequately considered. Studies allowing such direct comparisons between occupational groups are rare.

One of the few studies able to directly compare occupational groups is the ONS Psychiatric Morbidity Survey of Great Britain conducted in 2000. This used a structured diagnostic interview (CIS-R) delivered by lay interviewers to estimate the prevalence of mental health problems among adults aged 16 to 74 years living in private households in Great Britain. These data have recently been re-analysed to compare rates of psychiatric morbidity between various occupational groups. This secondary analysis suggested a mixed picture amongst health care professionals. Overall, the prevalence of psychiatric disorder amongst health associated professionals was slightly lower than the average amongst all workers (11% compared to an overall prevalence of 13%). However, certain occupations within the healthcare sector had a higher prevalence of psychiatric disorder than expected, for example, nurse auxiliaries and care assistants {Stansfeld, 2003 62 /id}. An earlier study, based in the USA, compared the rates of depression amongst individuals in over one hundred different occupations. The most at risk occupations, such as teachers and counsellors, had an estimated prevalence of depression of around 10%. The prevalence amongst registered nurses was 4% {Eaton, 1990 384 /id}.

In contrast to these findings, one UK based study suggest that nurses may have particularly high rates of “work-related” mental disorder (Baxter et al. 2009). As discussed in more detail later, the definition of a “work-related” illness is subjective and greatly influenced by an individual’s perception of themselves and their workplace. In 1995 as part of the UK Health and Safety Executive’s Labour Force Survey a sample of employees from a wide range of occupations were asked “In the last 12 months have you suffered from any illness, disability or other physical problem that was caused or made worse by your work?”. Together with teachers, nurses had the highest rates of work-related stress, depression or anxiety (around 2%) of any occupation examined {Jones, 1995 385 /id}.

Cross sectional descriptive studies of health care professionals
While there are relatively few studies which allow direct comparison between health care professionals and other occupational groups, there have been many which have
examined particular groups of health professionals in isolation. These studies are usually cross sectional in nature and describe the level of psychological symptoms within certain groups at a set point in time. While such descriptive studies can be useful, it is important to remember that prevalence estimates obtained in different groups using different study designs cannot be directly compared. Therefore, such studies are unlikely to be able to provide a valid answer to the question of whether health care professionals have a higher prevalence of mental disorder compared to other occupational groups. Despite this, each individual study can provide a useful estimate of the level of different types of psychiatric morbidity within various groups of healthcare professionals, and as such can help identify the specific needs of each group.

Many of these descriptive studies use self reported measures, such as the General Health Questionnaire (GHQ) (Goldberg and Williams 1988). The GHQ is a commonly used questionnaire which identifies symptoms and behaviours that are suggestive of general psychological distress and a possible common mental disorder. The GHQ has several versions but the 12 question and 28 question versions, which correlate highly (Banks 1983), have been employed predominantly in the studies we reviewed. Numerous cross sectional studies of healthcare workers, report high levels of GHQ caseness: 32% in hospital consultants (Taylor et al. 2007), 29% (clinically measurable symptoms) in hospital consultants, GPs and senior health service managers (Caplan 1994), 27% across gastroenterologists, surgeons, radiologists and oncologists (Ramirez et al. 1996), 31% in Scottish medical graduates (Baldwin et al. 1997), 35% in female doctors (Wall et al. 1997), 30% in 183 Scottish dentists (Baldwin et al. 1999), 41% of female managers (Wall, Bolden, Borrill, Carter, Golya, Hardy, Haynes, Rick, Shapiro, & West 1997), 31% of male staff in professions allied to medicine (Wall, Bolden, Borrill, Carter, Golya, Hardy, Haynes, Rick, Shapiro, & West 1997) 30% and 29% in male and female nurses respectively (Wall, Bolden, Borrill, Carter, Golya, Hardy, Haynes, Rick, Shapiro, & West 1997), and 22% of ambulance workers (Clohessy and Ehlers 1999).

It is perhaps unsurprising therefore that higher absence and sickness rates are reported in health professionals compared with staff in other non-medical sectors (Confederation of British Industry 1997).
Secondary analysis of ONS data reported that nurses, midwives and nursing auxiliaries have a significantly higher proportion of staff taking 6 or more days off work (Stansfeld, Head, & Rasul 2009).

Stress and Burnout

Although work-related stress itself may not be a measure of psychological ill health (Michie and Williams 2003), it has been found to be associated with psychiatric morbidity (Virtanen et al. 2007). Perceived stress at work can result in poor mental health (Ramirez et al. 1996).

“If stress is prolonged and not alleviated, that’s when it leads to depression.” S

Burnout is a controversial condition which is reported to be defined by three coexisting characteristics: emotional or mental exhaustion, depersonalisation, and low evaluation of self and one’s accomplishments (Rada and Johnson 2004). It is thought to mainly occur when a worker is dependent on persistent contact with other people where a service is being delivered, These defining characteristics are claimed to distinguish burnout from the more general stress response (Humphris 1998). Despite this, burnout is associated with stress (McManus et al. 2002) and also with depression (Humphris 1998). Numerous studies have reported burnout to be prevalent in healthcare professions including doctors (Isaksson et al. 2009), psychiatrists (Kumar 2007), radiologists (Ramirez et al. 1996) (Graham et al. 2000),
podiatrists (Mandy 2000), physiotherapists (Scutter and Goold 1995), occupational therapists (Schlenz et al. 1995) and nurses (Parker and Kulik 1995).

A number of published studies have attempted to measure the prevalence of stress and burnout amongst different groups of healthcare professionals. Various surveys report on elevated stress levels in doctors. For example, a survey found that 24% and 38% of 109 male and female preregistration house officers respectively suffered from possible psychological stress (Newbury-Birch and Kamali 2001). A postal questionnaire sent to GPs revealed that 33% respondents exceeded the threshold score for stress symptoms, a figure reported to be higher than the general working population (Firth-Cozens 1997). Similarly, a postal survey of hospital consultants reported that 33% of respondents had been irritable with a colleague at least monthly in the past 6 months owing to stress at work (Taylor, Graham, Potts, Candy, Richards, & Ramirez 2007); 16% reported having been irritable with a patient.

UK-based occupation analysis has also demonstrated that nurses are among those in the work force who fall into a high stress category (Smith et al. 2000a) (Baxter et al. 2009): nurses scored more poorly than the HSE average, suggesting perceived exposure to higher levels of stressors in their jobs (Ball and Pike 2006). Looking at nurses more closely, it appears that NHS hospital nurses may experience higher levels of stress at work than those working within GP practices. 28% of nurses surveyed in the RCN Working Well initiative had taken sick leave in the previous three months, and 60% of those reported that their job was very stressful (Ball & Pike 2006).

Young dentists also report various sources of stress for which many feel underprepared (Humphris 1999). One study compared general dentists, oral surgeons and orthodontists, and found that the latter had the lowest levels of burnout (Humphris 1998).

Emergency ambulance staff are also vulnerable to acute or chronic general stress (Smith 2009), demonstrating some of the highest levels of stress and burnout compared to other health professionals (Boudreaux and Mandry 1996).

Occupational therapists have been argued to have a number of issues unique to their profession that may contribute to stress and burnout, including the nature of clients and several professional factors (Edwards and Burnard 2003b). The prevalence of
burnout amongst 40 full time occupational and physical therapists working in head injury rehabilitation was studied, showing that emotional exhaustion was relatively high (Schlenz, Guthrie, & Dudgeon 1995).

A questionnaire study of podiatrists who had qualified between one and three years ago reported 30% of the sample demonstrated symptoms of burnout (Mandy 2000). Levels of emotional exhaustion and depersonalisation were high within this group. A similar methodology was employed with newly qualified (in the past five years) physiotherapists in South Australia, finding levels of emotional exhaustion to be moderate to high in 60% of respondents, and moderate to high levels of depersonalisation in 44% (Scutter & Goold 1995).

**Depression**

Various studies have attempted to measure the prevalence of depression amongst healthcare professionals. The resulting prevalence estimates have varied a great deal, partly due to differences in the measures being used and in the way samples have been selected.

A questionnaire based study reported that out of 109 preregistration house officers, 3% male and 8% female suffered from possible depression (Newbury-Birch & Kamali 2001). Similar study designs reported that 17% GPs scored above threshold for depression (Firth-Cozens 1998) and 27% GPs scored borderline or likely to be depressed (Caplan 1994). Based on such findings it is estimated that between 10 and 20% of doctors in the UK may have suffered from depression at some time during their career (Firth-Cozens 2006). Female doctors appear to be at greater risk of developing depression.

Nurses also appear to be susceptible to depression: the Royal College of Nursing Working Well survey (Ball et al. 2002) reported that 11% of respondents scored above the clinical cut-off on the CORE-OM questionnaire (Evans et al. 2000), rating highly on questions relating to depression or anxiety.

A questionnaire study of ambulance workers also found that 9% of respondents reported probable clinical levels of depression (Bennett et al. 2004).
Anxiety

Much of the research on the economic and occupational effects of common mental disorders has focussed on the effect of depression, or more general psychological distress. The impact of anxiety disorders, such as phobias, panic attacks, generalised anxiety disorder and obsessional compulsive disorder have received less attention. However, anxiety disorders are very common, with a recent primary care based study finding 19.5% of patients suffering from at least one anxiety disorder (Kroenke et al. 2007). A German study found similar high rates of anxiety, and found generalised anxiety to be associated with high rates of occupational impairment (Wittchen et al. 2002). Some authors have also noted specific work-related anxieties, such as workplace phobias (Radin 1972) (Linden and Muschalla 2007), with obvious occupational consequences. Some of these complaints may be linked to wider societal changes. An increased emphasis on risk and blame may well have made the workplace, particularly within the healthcare setting, a more anxiety provoking experience. Despite the high prevalence, studies suggest only a small proportion of people suffering from anxiety related problems ever receive formal treatment.

A number of questionnaire based studies have suggested anxiety levels may be particularly high amongst health care professionals. A survey of 109 preregistration house officers, found that 5% and 39% of male and female respondents respectively suffered from possible anxiety disorder (Newbury-Birch & Kamali 2001). Another survey of junior house officers reported that 21% of men and 45% of women had anxiety scores of 8 or more using the Hospital Anxiety and Depression Scale, indicating possible pathological anxiety (Birch et al. 2009).

Amongst nurses, 8% surveyed as part of the RCN Working Well initiative in 2005, claimed that they took sick leave last due to stress, anxiety or depression (Ball & Pike 2006).

Dentists also report work-related stress (Gale 1998), with one study reporting that 38% of the 3,500 dentists surveyed were always or frequently worried or anxious (Dunlap and Stewart 1982).

A questionnaire study of ambulance workers found that nearly 22% of respondents reported potentially clinical levels of anxiety (Bennett, Williams, Page, Hood, & Woollard 2004).
Post Traumatic Stress Disorder

Post traumatic stress disorder (PTSD) refers to protracted symptoms of repetitive, intrusive recollections following exposure to an exceptionally threatening or catastrophic event. The nature of some health care work, particularly emergency health care, means some health workers will be regularly exposed to potentially traumatic experiences.

A literature review of ambulance workers suggests that cumulative stress, psychiatric and PTSD symptoms are fairly common in populations of British ambulance workers (Smith 2009). For example, a UK based study reported that ambulance crew members showed all three clusters of PTSD symptoms (avoidance, intrusion, arousal), which were linked to specific critical incidents (Tyler and Leather 1996) (no further detail or figures were provided). Other studies report the prevalence of PTSD amongst ambulance workers to be 21% (Clohessy & Ehlers 1999), and 22% (Bennett et al. 2005). The latter study found that men had a higher prevalence at 23%, than women at 15% (Bennett, Williams, Page, Hood, & Woollard 2004). Such estimates are significantly more than seen in other professional groups regularly exposed to trauma. A study of UK military personal who were deployed to the 2003 Iraq war found the prevalence of PTSD to be 4% (Hotopf, 2006 386 /id).

Several other studies have shown that PTSD is also common in house officers, emergency doctors and doctors who routinely deal with death (Mills and Mills 2005).

Substance misuse

"Every few days another addicted doctor comes to light in Britain… risk posed by such doctors to the general public." (Strang et al. 1998)

Alcohol and drug misuse affect male and female doctors from all specialties, all degrees of experience and seniority, in all locations (BMA 1998) (Brooke et al. 1991), and have been recognised as being a major risk to doctors’ health (Silvester, Allen, Withey, Morgan, & Holland 1994). Although much more is known about doctors’ problems with alcohol and drugs, there is emerging evidence that other healthcare professionals such as nurses, dentists, pharmacists, are equally at risk (Baldwin, Dodd, & Rennie 1999) (Anon 2009) (Bennett and O'Donovan 2001) (Gossop et al.
Excessive alcohol consumption is often associated with other mental health problems (Hodgson et al. 2002) contributing to and aggravating anxiety and depression, and negatively impacting sleep (Gerada, Harvey, & Blake 2000) (Firth-Cozens 1998) (Gossop, Stephens, Stewart, Marshall, Bearn, & Strang 2001). Increased psychological symptoms were observed to correlate with alcohol consumption in young female dentists (Humphris 1999), and a further study found that current alcohol use was a predictor of depression in female GPs (Firth-Cozens 1998).

“12% admit to using alcohol and drugs to help them cope with work and ill health; 25% are aware of colleagues using such substances to cope” Dr M Peters of the BMA: (http://www.bma.org.uk/images/doctorshealth_tcm41-173983.pdf)

Studies of doctors suggest relatively high occurrence of drug and alcohol misuse (Pilowski and O’Sullivan 1989), with alcohol and drug dependence being the most common diagnoses in physicians being treated for mental disorder in one study (Rucinski and Cybulsksa 1985). In 1988 the BMA estimated that one doctor in 15 (7%) could suffer from some form of dependence (BMA 1988). Ten years later, a study in primary care seemed to confirm this prediction, with 7% of GPs admitting to using alcohol frequently to cope (Firth-Cozens 1998). A postal survey of hospital consultants reported 17% of respondents, more likely male, were drinking hazardous quantities of alcohol (Taylor, Graham, Potts, Candy, Richards, & Ramirez 2007). A further survey of 18 NHS Trust hospitals found that over 60% of male and female junior house officers exceeding the recommended safe limits for alcohol, and 10% were drinking at hazardous levels (Birch, Ashton, & Kamali 2009). Alcohol drinking had also been shown to have increased compared with when respondents were second year medical students.

A questionnaire study of UK dental practitioners revealed that 6% of the 545 respondents had a drink problem and 9% had alcoholic tendencies (Kay and Lowe 2009), assessed using the Short Michigan alcohol screening test. A US study found
that levels of self-reported alcohol dependence in nurses was 5.7% (Collins et al. 1999).

High rates of prescription and illicit drug use have also been found in doctors, mainly opiates and benzodiazepines. In the United States this has been demonstrated across all specialties in an anonymised mail survey (Hughes et al. 1992). The highest rates of multiple drug abuse and dependence were found in psychiatrists and emergency medicine doctors, with psychiatrists tending to use benzodiazepines, anaesthesiologists recording the highest rates for major opiate use, and emergency medicine specialists using more illicit drugs. In a UK based survey across 18 NHS Trust hospitals, 35% male and 19% female junior house officers reported using cannabis and 13% were using other illicit drugs e.g. hallucinogens, ecstasy, cocaine (Birch, Ashton, & Kamali 2009). At present it remains unclear whether similar figures apply for other health care professionals.

**Cognitive impairment**

In order to work in an effective and safe manner, health care professionals need to have high levels of cognitive performance. In 2008, 15% of the dentists and doctors referred to the UK National Clinical Assessment Service (NCAS) due to performance concerns were referred due to suspected cognitive difficulties. An Australian study designed to examine the causes of adverse events in the healthcare system found that cognitive failure may have a role in 57% cases, most of which both caused a significant disability and were judged preventable (Wilson et al. 1999).

The evaluation of cognitive decline is potentially complex. Neuropsychological assessments are often required to elucidate the causes for performance problems and to better understand why previously capable and high functioning, high IQ individuals appear to be functioning at lower levels (Pitkanen et al. 2008). Neuropsychological battery subtest scores may help understand how cognitive impairment impacts clinical performance, and aid development of an appropriate treatment and rehabilitation plan. Causes for this observed cognitive decline include fatigue (Wilson, Harrison, Gibberd, & Hamilton 1999), depression, early dementia, MS, cerebrovascular disorder and alcohol misuse (Pitkanen, Hurn, & Kopelman 2008). Natural ageing is also associated with some cognitive decline, for example in verbal memory, reasoning and visuospatial ability, especially after the age of 65 (Powell and Whitla 1994).
At present the prevalence of cognitive impairment amongst health care professionals is unknown. It is unclear whether different types of health care professionals are more likely to have any cognitive decline detected early. Team based professionals, such as hospital consultants and nurses interact with other health professionals on a daily basis, and may therefore be informally monitored to a much greater extent than isolated professionals such as independent GPs or community nurses.

Suicide
Suicide is an objective measure of mental health issues and as such is a useful marker of the overall burden of mental disorder on a given group (Hawton and Heeringen 2009) (Hawton et al. 2004) (Hawton et al. 2001). Most people who die by suicide suffered a mental disorder, such as mood, substance-related, anxiety, psychotic and personality disorders, with co-morbidity being common (Hawton & Heeringen 2009) (Kelly and Bunting 1998). A study of working doctors who died by suicide in England and Wales between January 1991 and December 1993, revealed that psychiatric illness was present in 25 of the 29 (86%) in whom sufficient information was available to assess psychopathology (Hawton, Malmberg, & Simkin 2004). Depression and drug/alcohol abuse were the most common diagnoses.

Comparative studies indicate that suicide rates are elevated amongst healthcare professionals. Data collected by the Office of National Statistics (ONS) from death registrations in England and Wales between 2001-2005 indicate that certain professions have a higher likelihood of death occurring by suicide than the population overall. These include male dental practitioners, male and female practitioners, male and female nurses (Meltzer et al. 2008). These results were partially supported by a separate investigation of suicide amongst 55 different occupations which found doctors and nurses to have the greatest risk of suicide (Agerbo et al. 2007). A further analysis ONS-based data reported that the suicide rate amongst male dental practitioners was approximately 2.5 times the national average, pharmacists were approximately 1.7 times the national average and male medical practitioners were 1.47 times the national average (Kelly & Bunting 1998). These three professions were in the top six of all occupations studied. Suicide rate amongst female nurses was approximately 1.37 times the national average and female medical practitioners were 2.85 times the national average. These were in the top eight of all occupations.
Cross sectional studies suggest as many as 5% (Firth-Cozens 1998) or even 14% (Caplan 1994) of GPs report suicidal ideation. Female doctors appear to be at particular risk (Hawton, Malmberg, & Simkin 2004) (Seagroatt and Rooney 1993) (Hawton, Clements, Sakarovitch, Simkin, & Deeks 2001). A study of suicide in doctors found that different specialties - community health doctors, anaesthetists, GPs and psychiatrists - were at significantly greater risk of suicide compared with doctors in general hospital medicine (Hawton, Clements, Sakarovitch, Simkin, & Deeks 2001). A study of female nurses in England and Wales suggested they also have elevated suicide rates (Hawton et al. 2002).

The high rates of suicide found amongst health care professionals may not be solely related to elevated levels of mental disorder. Some of the excess risk of suicide in doctors and nurses was found to be due to their access to and knowledge of effective methods of self-poisoning (Agerbo, Gunnell, Bonde, Mortensen, & Nordentoft 2007) (Kelly & Bunting 1998). However, the high rates of suicidal ideation suggest such factors cannot explain all of this increased risk of suicide.

**Summary of prevalence data for mental disorder amongst health care professionals**

The vast majority of published literature examining the prevalence of mental disorder amongst health care professionals consists of relatively small cross sectional studies examining specific groups of health professionals. These descriptive studies have tended to show apparently high rates of depression, anxiety and substance misuse. However, a small number of larger studies designed to allow true comparisons between occupational groups have tended to not find evidence of elevated rates of mental disorder in health care professionals. Some of these apparent contradictions may be due to differences between various types of health care professionals.

Healthcare workers report high levels of workplace stress, burnout and other “work-related” mental illness. Workplace based studies on symptoms such as stress and burnout are difficult to assess. Many studies are small with variable or uncertain participation rates. These studies also may frame questions in such a way that participants are primed to answer that they experience work related stress. However, there is at least one large study showing that healthcare professionals perceive their work as being more stressful than many other occupations.
Regardless of the uncertainty surrounding concepts such as stress and burnout, this perception of increased occupational stress is likely to have some detrimental effects.

The situation regarding substance misuse appears to be clearer; there is evidence of high rates of alcohol and substance misuse amongst doctors, with emerging evidence of similar problems amongst other health care professionals. The high rates of suicidal ideation and completed suicide amongst health care professionals provide additional objective evidence of high levels of psychiatric symptoms.
3.2 – Risk factors

The workplace as a risk factor for mental disorder

Until recently most of the research on the links between employment and health has focused on the possibility that certain types of work had a detrimental effect on employee’s health and well being. In 1979, Karasek proposed a way to characterise the psychosocial work environment based on both the psychological demands and the decision latitude of each individual employee {Karasek, 1979 254 /id}. It has since been shown that individuals with high “job strain” (a combination of high psychological demands and low decision latitude) have increased rates of cardiovascular disease and psychiatric disorders {Belkic, 2004 387 /id} {Sanne, 2005 388 /id}. Other, more recent models of the psychosocial work environment have focused on the balance between effort and reward {Siegrist, 1996 389 /id}, the role of social support {Johnson, 1988 390 /id} and the impact of perceived organisation justice {Kivimaki, 2003 392 /id}. However, many people work in very stressful environments without becoming unwell. Most of the research conducted on factors such as job strain relies on self-reported data and to that extent incorporate beliefs, perceptions, and attitudes to work. When objective, rather than self-reported, assessments of work demands are included the association between the psychosocial work environment and psychiatric disorder disappear {Stansfeld, 1995 393 /id}. It may be that an individual’s background, personality and opinions regarding work and their own health are important mediators of any relationship between work and ill health {Stansfeld, 2002 13 /id}. 
3.2.1. Individual workplace factors that both protect and increase the likelihood of health professionals developing mental disorders

**Patient contact**

“They [nurses] also have quite high levels of job stress but I think they have quite high job satisfaction because first of all they spend a lot of time with the patients... We forget that’s why people go into the NHS.” Z

Good interactions with patients can have a protective effect on the mental health of clinical staff. Cancer clinicians – who might perhaps be anticipated to have poor mental health because of the nature of their contact with patients, have levels of depression no worse than other clinicians (Graham and Ramirez 2002), and radiologists have cited good patient relationships as an important source of satisfaction (Graham et al. 2000).

However, the emotional demands of working with people may contribute to high levels of disorder (Stansfeld, Head, & Rasul 2009). For example, dealing with nervous or anxious dental patients (Kay & Lowe 2009), breaking bad news (Hodgkiss AD et al. 2000) and female junior house officers talking to distressed relatives (Firth-Cozens 1990) can be emotionally challenging and a source of stress. Relationships with patients was a primary predictor of depression in GPs ten years later (Firth-Cozens 1998).

Frequent contact with illness and death are believed by some to have a detrimental effect on mental health (Bennett & O'Donovan 2001). For example cancer doctors were found to have higher levels of poor mental health than the general population (Graham & Ramirez 2002), and stress in consultants was attributed to dealing with patients’ suffering (Ramirez, Graham, Richards, Cull, & Gregory 1996).

Violence and verbal aggression from patients can have a negative impact on healthcare professionals’ mental health (Hochschild 1983). The RCN Working Well survey reported that 34% of all nurses had been harassed or assaulted by a patient or their relative in the past year (Ball, Pike, Cuff, Mellor-Clark, & Connell 2002). This figure rose to 40% of all nurses in 2005 (Ball & Pike 2006). Personal threat can be a source of occupational stress for example in ambulance workers (Boudreaux &
Mandry 1996). On the other hand, greater psychological wellbeing was reported in nurses who felt protected by their employer (Ball & Pike 2006).

Work involving high public expectations can be stressful (Hochschild 1983). Patients are becoming steadily more expert with the increasing availability of health information, and have been encouraged to expect enhanced services, and this has led to a shift in the patient–practitioner relationship which some believe may cause unease with healthcare professionals (Edwards et al. 2002). Patient demands were cited as source of work-related stress in 75% of respondents in a questionnaire study of UK dentists (Kay & Lowe 2009). Burnout in newly qualified podiatrists has also been associated with patients’ lack of understanding of the scope of the work undertaken by the podiatrist (Mandy 2000).

**Relationships with colleagues and managers**

High levels of social support at work from colleagues and supervisors can have a protective effect on mental health (Stansfeld et al. 2000) (Weinberg and Creed 2000) (Rada & Johnson 2004). Dentists and dental auxiliaries who work well together have demonstrated enhanced performance and increased tolerance to stress (George et al. 1986). On the other hand, interpersonal conflict and low social support, for personal development and problem-solving, for example, may play a role in the development of occupational stress (Cox et al. 2009).

“Also very important is going to be relationships, particularly with your bosses and colleagues... because lack of social support at work is not good for your mental health.” P

Having a poor relationship with superiors has been identified as a stressor in healthcare professionals (Cox, Randall, & Griffiths 2009) (Edwards & Burnard 2003a) (Firth-Cozens 1990), and a primary predictor of depression in GPs ten years later (Firth-Cozens 1998). The feeling of being poorly managed is also associated with elevated levels of sickness absence (Michie & Williams 2003), and burnout and psychiatric morbidity in consultants (Ramirez, Graham, Richards, Cull, & Gregory 1996).

The mental health of accident and emergency consultants is negatively impacted by role ambiguity (Heyworth et al. 1993), and similarly in nurses (Revicki and May 1989) and dental assistants (Bourassa and Baylard 1994). The lack of definition of, or
agreement on, organisational objectives also plays a role in the development of new onset depression in hospital personnel (Ylipaavalniemi et al. 2005). Poor communication is associated with work-related stress (Cox, Randall, & Griffiths 2009), and improvements expected from facilitating two-way communication between employer and employee (Williams, Michie, & Pattani 1998a).

“The real killers are patient complaints and relationship difficulties with colleagues… mainly peers” Z

Bullying and harassment
There is no simple definition of bullying. However one useful definition is “persistent behaviour against an individual that is intimidating, degrading, offensive or malicious and undermines the confidence and self-esteem of the recipient.” (Chartered Institute of Personnel and Development, 2004 382 /id).

Part of the difficulty lies in the fact that it is a subjective experience and therefore subject to all the usual influences on perceptions. Furthermore it forms part of a spectrum of behaviour where its distinction from, say, assertive management, can, on, occasions be unclear. Workplace bullying and harassment are nonetheless well recognised problems across the health service, particularly within the medical profession (Castledine 2003) (BMA 2006). In one survey, 25% of NHS staff overall, and 20% of dental and medical staff, indicated that they had experienced bullying or harassment within the past 12 months from patients or their relatives; 15% reported bullying from staff (BMA 2006). One UK survey reported that as many as 37% of training doctors said that they had been bullied in the previous year (Quine 2002). 18% of trainee doctors in another study reported persistent bullying in their current post (Paice et al. 2004). The likelihood of bullying was greater for non-UK respondents, and in more junior trainees, primarily perpetrated by more senior doctors, though also by nurses and midwives.

It has been suggested that doctors are less likely to admit that they have experienced bullying and harassment compared to other healthcare workers (BMA 2006). A more open climate may be helpful in encouraging people to come forward and to enlighten perpetrators as to the effect of their behaviour on juniors.

Bullying is also a problem for nurses. The Royal College of Nursing’ Working Well survey in 2005 reported that as many as 23% of nurses surveyed had been bullied in the past year by a colleague (Ball & Pike 2006), up from 17% in 2000 (Ball, Pike,
Cuff, Mellor-Clark, & Connell 2002). 45% of nurses who had reported being bullied in 2005 (up from 41% in 2000), reported that their immediate supervisor or manager was the main person responsible; a third said a nursing colleague was responsible.

A UNISON survey found that 76% of those who had been bullied also reported stress, depression and lowered self-confidence as the most common non-physical sequelae, with staff who had been bullied being more likely to be clinically anxious and depressed (Rayner 1998).

Bullying in doctors is associated with stress, depression and intention to leave (Paice, Aitken, Houghton, & Firth 2004). Workplace bullying is also associated with an increase in sickness absenteeism of hospital staff (Kivimaki et al. 2000), nurses (Ball & Pike 2006) and doctors (Garelick and Fagin 2004). Bullying has been associated more strongly with medically certified rather than self-certified sickness absence (Kivimaki, Elovainio, & Vahtera 2000). However, in situations where employers were judged to handle bullying incidents well, nurses involved were reported to show much less stress (Ball & Pike 2006).

It is argued that the established culture of the medical profession perpetuates bullying and harassment, especially during training, and that this has a significant impact on recruitment and retention. Raising awareness might facilitate recognition leading to a swift and appropriate response (BMA 2006)

“It [bullying] is very relevant to very hierarchical professions like nursing where it can be a real problem.” P

“There is a fragmentation of care. Multidisciplinary care might happen in teams, but it doesn’t go across the board... Doctors don’t see one another any more... Most of the consultants in this hospital, which is a big hospital, won’t even know consultant colleagues beyond a small group.” S

Medical professionals have enjoyed much closer working relationships in the past with greater interaction, with colleagues and with their junior doctors. With reference to junior doctors, consultants now have several F1 and F2 working for them for four months at a time in surgery for House jobs in medicine. This used to be for six months which gave them longer to get to know their juniors. The European Working
Time Directive over the last decade has drastically reduced on call hours, an improvement in many ways, but it has led to fragmentation.

“The teams have become very fragmented… a consultant will have several SHOs working for him or her that he doesn’t necessarily know very well… The consultant won’t know his juniors as well as he used to, and the junior staff won’t know each other as well as they used to, so the sense of being held and supported in a team is much less than it was.”

Conflict with personal life
Conflict between work demands and personal home and family life can also contribute to poor mental health (Edwards & Burnard 2003a). The effect of work overload on home life has been cited a primary source of poor mental health (Hodgkiss AD, R, & Ramirez 2000). For example, female junior house officers reporting feeling stressed and depressed when there was conflict between work and their home lives (Firth-Cozens 1990). Similarly, stressed consultants partly blamed the negative effect of excess work on their home life (Ramirez, Graham, Richards, Cull, & Gregory 1996).

Job structure / organisation / work environment
High occupational demands, high workload and long hours are thought to contribute to the development of psychological distress and stress-related illness in healthcare professionals such as doctors, nurses, mental health nurses, dentists, occupational therapists etc (Edwards & Burnard 2003a) (Williams et al. 1998b) (Baldwin, Dodd, & Rennie 1999) (Stansfeld, Head, & Marmot 2000) (Cox, Randall, & Griffiths 2009) (Weinberg & Creed 2000) (Leonard and Corr 1998) (Cottrell 2001). This is exacerbated by high levels of effort-reward imbalance (Stansfeld et al. 1999).

Numerous examples of an association between workload and mental illness can be cited. A Finnish population study reported that high job demands and strain increased risk for future uptake of antidepressant medication uptake in men (Virtanen, Honkonen, Klivimäki, Ahola, Vahtera, Aromaa, & Lånnqvist 2007). A dose-dependent relationship was also found between antidepressant uptake in a cohort of Finnish nurses and physicians (approximate ratio 9:1 respectively), and overcrowding on general hospital wards (Virtanen et al. 2008b). Female junior house officers reported that overwork was the primary cause of stress and depression (Firth-
Cozens 1990), and similarly radiologists cited work overload as the most stressful aspect of their work in a study looking at job satisfaction (Graham, Ramirez, Field, & Richards 2000). Occupational therapists report staff shortages as being one of their most significant stressors (Leonard & Corr 1998).

High work overload is also associated with increased sickness absence in hospital physicians (Kivimaki, Sutinen, Elovainio, Vahtera, Rasánen, Toyry, Ferrie, & Firth 2001), and indeed a reduction in work hours has been associated with a reduction in occupational therapists report staff shortages as being one of their most significant stressors (Leonard & Corr 1998).

High work overload is also associated with increased sickness absence in hospital physicians (Kivimaki, Sutinen, Elovainio, Vahtera, Rasánen, Toyry, Ferrie, & Firth 2001), and indeed a reduction in work hours has been associated with a reduction in emotional exhaustion (Isaksson, Gude, Tyssen, & Aasland 2009).

“People might have thought that oncologists got depressed when seeing dying people all the time. Not at all... We looked at the reasons they felt that the work stress was coming from: it’s got nothing to do with the clinical nature of their specialty it’s to do with overload, too many patients, not enough secretaries... If you extrapolated that across doctors, specialists, I think you’d find the same anywhere.”

Long shifts and on call hours have also meant that healthcare professionals experience sleep deprivation. A meta-analysis of workers reported small positive associations between both physical and psychological symptoms and hours of work (Sparks et al. 1997). Tiredness caused by long hours at work can also exacerbate any other potential job stressor such as lack of support or control over role (Firth-Cozens and Cording 2004). Sleep deprivation has been shown to contribute to substantial decrements in doctors’ performance, cognitive and motor impairments, injuries and error (Pickersgill 2001) (Feyer 2001) (Firth-Cozens & Cording 2004). Reduced or disturbed sleep can lead to lowered mood in doctors (Firth-Cozens and Greenhalgh 1997) (Arnetz et al. 1990); a questionnaire study demonstrated current sleep levels to be one of the predictors of depression in male GPs (Firth-Cozens 1998).

Job insecurity e.g. extended bank work appears to be detrimental to mental health (Stansfeld, Head, & Rasul 2009). This is supported by the findings of a Finnish population study which report that antidepressant use was more pronounced when temporary unemployment was unstable (Virtanen et al. 2008a).
“Job insecurity... particularly in terms of people who are on short term contracts, nurses for instance, working permanently on bank. Job insecurity is not very good for your health.” P

Social or physical isolation can contribute to work-related stress (Cox, Randall, & Griffiths 2009) (Baldwin, Dodd, & Rennie 1999). For example, isolation in dentistry may be common, especially in small practices where work is restricted primarily to one room. This has been found to have a negative effect on psychological health (Humphris 1999) and may increase work-related stress (Rada & Johnson 2004). Isolation at work has also been associated with burnout in a questionnaire study of newly qualified podiatrists (Mandy 2000).

Team working has proven beneficial effects on mental health in healthcare professionals (Haward et al. 2003) (Firth-Cozens and Moss 1998). Provision of patient care through multidisciplinary teams has been cited as a primary source of job satisfaction in colorectal cancer team members (Taylor 2008), and an aid to reducing sickness absence in hospital doctors (Kivimaki et al. 2001). Good teamwork appears to protect against early retirement in consultant psychiatrists (Mears et al. 2004). Furthermore, there is evidence that the negative effects of working long hours can be counteracted by the positive effects of working within a well-managed team (Firth-Cozens & Moss 1998).

Conversely, a study of Finnish hospital personnel reported that poor team climate was more associated with risk of new onset of depression in respondents free from depression at the outset of the study, than work content or individual work characteristics (Ylipaavalniemi, Kivimäki, Elovainio, Virtanen, Keltikangas, & Vahtera 2005). Poor team climate, measured using the Team Climate Inventory (Agrell and Gustafson 1994) in another study of Finnish hospital employees, was related to a higher likelihood of intention to leave (Kivimaki et al. 2007). Physician members of poorly- compared to well-functioning teams were also reported to be at nearly twice the risk of taking extended (rather than short) breaks (Kivimaki, Sutinen, Elovainio, Vahtera, Rasänen, Toyry, Ferrie, & Firth 2001).

Given the evidence that well functioning teams with good team climates have healthier staff, better outcomes (Firth-Cozens & Cording 2004) (Kivimaki, Sutinen,
Elovainio, Vahtera, Ras\-\-nen, Toyry, Ferrie, & Firth 2001) and lower staff turnover (Kivimaki, Vanhala, Pentti, Lansisalmi, Virtanen, Elovainio, & Vahtera 2007), there is a strong argument for improving team management and leadership within teams, for example through training.

Shift working and night shifts can also be a source of work-related stress in healthcare professionals (Cox, Randall, & Griffiths 2009). The impact of unsociable hours on a GP’s personal life was shown to be a significant stressor in developing depression ten years later (Firth-Cozens 1998). When shift-working is not the preferred pattern of work for nurses, it is associated with poorer psychological wellbeing (Ball & Pike 2006) and is a key factor in explaining variation in CORE scores (Evans, Mellor-Clark, Margison, Barkham, McGrath, Connell, & Audin 2000).

**Psychosocial work environment**

Effort-reward imbalance can be a risk factor for common mental disorder (Stansfeld and Candy 2006), and is associated with increased risk of alcohol dependence, long spells of sickness absence and poor health functioning (Stansfeld, Head, & Marmot 2000). Inadequacies can also represent a stress-related hazard and have the potential to harm the individual and/or their organisation (Cox, Randall, & Griffiths 2009).

Job satisfaction and feeling sufficiently adequate to manage a demanding role can increase a sense of personal accomplishment and lead to a highly positive work experience (Wilks 1995). High levels of job satisfaction protect mental health, reduce the likelihood of emotional exhaustion, and protect from burnout (Ramirez, Graham, Richards, Cull, & Gregory 1996) (Graham et al. 2002) (Graham and Ramirez 1997). Workplace professional development activities which increase feelings of accomplishment have been found to reduce burnout in occupational and physical therapists (Schlenz, Guthrie, & Dudgeon 1995). Similarly, a questionnaire study with dentists found that increased feelings of competence were associated with increased satisfaction and reduced psychological symptoms (Baldwin, Dodd, & Rennie 1999). Enjoyment of work is also associated with intentions to retire later in consultants (Mears, Kendall, Katona, Pashley, & Pajak 2004).

Conversely, a survey of preregistration house officers showed significant negative correlations between job satisfaction scores and stress and anxiety (Newbury-Birch and Kamali 2001). Work-related stress can come from fragmented, meaningless and
unvaried work (Cox, Randall, & Griffiths 2009). Stress can also be increased where skills are underused (Cox, Randall, & Griffiths 2009), as reported in a study of dental assistants (Bourassa & Baylard 1994). Burnout in consultants was associated with low satisfaction regarding intellectual stimulation at work (Ramirez, Graham, Richards, Cull, & Gregory 1996).

“A huge source of job satisfaction for doctors is having variety and autonomy.” Z

Control over work and having high levels of autonomy appear to have a protective effect on mental health (Stansfeld, Head, & Marmot 2000) (Graham & Ramirez 1997). A sense of loss of control can come about through loss of clinical autonomy, growing use of guidelines, protocols, audit, regulation, inspection (Edwards, Kornacki, & Silversin 2002). Low participation in decision making, lack of control over workload, high uncertainty, and unpredictable hours all increase work related stress and poor psychological wellbeing (Cox, Randall, & Griffiths 2009;Rada & Johnson 2004) (Stansfeld & Candy 2006), likelihood of burnout (Humphris 1998) and depression (Ylipaavalniemi, Kivimäki, Elovainio, Virtanen, Keltikangas, & Vahtera 2005). Low job control is also associated with increased sickness absence in hospital physicians (Kivimaki, Sutinen, Elovainio, Vahtera, Raspanen, Toyry, Ferrie, & Firth 2001).

“One [psychosocial work] factor is how much control you have over your work, and that goes to make up job strain, with your overload of work load in general, is very important.” P

A literature review on interventions to reduce psychological ill health and sickness absence reported that successful interventions use training and organisation approaches to increase participation in decision-making and problem solving (Michie & Williams 2003)

“If you asked most doctors what would improve their life, they would say a decent office environment and a secretary... Some of them don’t have any office space... they are in clinics and that sort of thing... Hospitals don’t compare to modern office environments... So working conditions are not good, and simple office support systems are not good. Doctors enjoy their
professional life... if they had a decent space, I think it would take some of the pressure off... less time wasted." S

Inadequate equipment availability, poor environmental conditions such as lack of space can increase work related stress and impact psychological wellbeing (Cox, Randall, & Griffiths 2009) (Rada & Johnson 2004). Tackling these problems is important e.g. redecoration or refurbishment, changes to lighting, heating systems, and were often among the most serious problems reported by hospital staff (Cox, Randall, & Griffiths 2009). Administrative or organisational factors, e.g. paperwork and unsupportive administration, can also be a source of occupational stress for emergency staff (Boudreaux & Mandry 1996) (Bennett, Williams, Page, Hood, Woollard, & Vetter 2005), nurses (Edwards & Burnard 2003a) and basic grade occupational therapists (Leonard & Corr 1998). Concerns regarding funding and inadequate levels of staffing were found to be a significant source of stress for radiologists (Graham et al. 2000).

Access to drugs
Healthcare professionals appear to be at risk of substance misuse, partly due to relatively easy access to psychoactive substances which facilitates poly-substance abuse (Brooke, Edwards, & Taylor 1991) (Bennett & O'Donovan 2001). The medical profession may be more vulnerable to substance abuse because of their knowledge and access to drugs and tendency to self medicate (Marshall 2008). Managing addiction in doctors may involve removing them from the workplace because they may have access to the drugs at work.

“Doctors are at special risk of developing addiction problems, owing the strain of medical practice, erosion of the taboo against injecting and opiates, and particularly, access to supplies” (Strang, Wilks, Wells, & Marshall 1998).

In the case of elevated risk of suicide in doctors and nurses, access to poisons and methods appears to play an important role (Agerbo, Gunnell, Bonde, Mortensen, & Nordentoft 2007). Among doctors, anaesthetists are at particular risk, with anaesthetic drugs being used in many suicide deaths (Hawton, Clements, Sakarovitch, Simkin, & Deeks 2001). A study of suicide in working doctors reports that the most common method was poisoning, often with drugs taken from work (Hawton, Malmberg, & Simkin 2004). There are implications for risk management in terms of restricting access in depressed doctors.
Aspects of policy

Although other factors, such as personality, play a part (Brewin and Firth 1997), it is recognised that healthcare professionals work within a stressful environment defined by deadlines and time pressures (Cox, Randall, & Griffiths 2009). Problems with time management have been associated with depression and/or anxiety in dentists (Dunlap & Stewart 1982) (Gale 1998).

“There’s no doubt, the health service is a highly pressurised environment... It’s becoming increasingly managed... increasingly high profile... So all these things in a much more regulated... bound to knock off those people who are more vulnerable.” S

Policy, regulations, governmental interventions (Rada & Johnson 2004), externally imposed targets (Stansfeld, Head, & Rasul 2009), and increased administrative and performance expectations (Stansfeld, Fuhrer, Shipley, & Marmot 1999) (Leonard & Corr 1998) all provide unwanted occupational stressors.

“A series of checks need to be made all the time, and the whole thing has to be audited, so it does expose people quite a lot who are perhaps not functioning very well, or quickly... For some people is a real threat... If you’re not [performing well] and you’re weighed down with worries and problems, or just not terribly good at your job, the highlighting of this, or the exposure, bringing it out into the open, is really daunting for some people... I think it can be [bad for some people’s mental health]. Many people will go off work with anxiety and depression – all health professionals.” S

“I think one of the overriding things... is the impact of policy on people’s mental health.” Z

Over recent years there have been many changes in the NHS for staff to accommodate, and this is a potential source of stress (Edwards & Burnard 2003a). For example, multidisciplinary team working while generally viewed as a positive to both patients and staff (Taylor 2008), does represent a change in practice, and staff
are still believed to be on a learning curve in moving towards optimal working practice.

“Multidisciplinary team working...is quite difficult actually, if you’re not used to doing it” S

“The huge pace of change going on in the NHS... multidisciplinary team working... the imposition from above of targets and rates of work... there’s much more management now, by which I mean, there’s much more intensive attention paid to your work... statistics are produced on how many patients you see and things like that. There are many more things you have to take into account: legal things, ethical things... the healthcare profession is much more complicated than it used to be.” S

“[Physicians] are now much more managed and constrained... great for patients, they live longer, they have better experience of care... but probably at the cost of the quality of the lives of the clinicians.” Z

There have also been changes in training and application processes, which may be a source of stress for some, especially over the past three years. For example, the now defunct MTAS (online medical training application system) introduced in 2007, was considered rushed, insufficiently tested, and subject to a large disparity between available training places and applicants. Applicants reported significant psychological distress during and after the application process (Whelan et al. 2008), with nearly 75% of trainees reporting low energy levels, and half feeling hopeless about their future (Lydall et al. 2007).

“Changes in training and the application processes... have caused a lot of extra distress to doctors” A

“All this is changing... we’ve now got the Working Times Directive and the culture of the long working hours is changing.” Z

Financial reward
Low financial reward has been found to contribute to work-related stress, even high levels of disorder (Stansfeld, Head, & Rasul 2009) (Cox, Randall, & Griffiths 2009),
and conversely ‘good money’ has been linked to intention to retire later in consultant psychiatrists (Mears, Kendall, Katona, Pashley, & Pajak 2004).

3.2.2. - Predisposition and risk: evidence of individual risk factors interacting with workplace factors

Work factors can play both detrimental and protective roles in healthcare professionals’ mental health. However, becoming a healthcare professional is not a random event but rather is subject to significant selection pressures. Only a certain subset of society considers working in this field and only a proportion of them are offered employment. Whilst we have yet to describe in any detail the factors within an individual that bring them into this area, we know that these factors will have an impact on the way both work and health issues are perceived and the ways in which the individual responds.

“The difficulty with this whole area... is that it’s just not straightforward, it’s so complex... and there is some evidence that individual factors, personality and so on, are actually far greater predictors of your mental health outcome in work than your work factors.” M

Personality factors can predispose the development of mental health problems and poor occupational function {Henderson, 2009 383 /id}, especially when working within the pressurised environment of the NHS. Practitioner patients consulting MedNet were described by A as self critical, obsessional, conscientious, high achieving, driven, working to high standards, often with high family expectations. This general profile reflects the ‘compulsive triad’ in the normal physician’s personality: doubt, guilt and an exaggerated sense of responsibility (Gabbard 1985).

“Certainly for doctors, being highly obsessional and conscientious is a good thing, but under pressure that will crack.” Z

Numerous studies have identified self criticism in healthcare professionals as contributor to poor mental health. Self criticism in medical students was found to be a predictor of depression in doctors (Brewin & Firth 1997) and specifically in male GPs (Firth-Cozens 1998). Self critical medical students were also found to be more likely to experience greater work-related stress as a GP, with early stress levels appearing
to be less important than self criticism as predictors of stress symptoms over a long period (Firth-Cozens 1997). A longitudinal study assessed medical students using the Minnesota Multiphasic Personality Inventory (MMPI) shortly before they started medical school. Low self esteem, feelings of inadequacy, dysphoria, obsessive worry, passivity, social anxiety and withdrawal from others, significantly correlated with burnout scores 25 years later (McCranie and Brandsma 1988). The personality characteristic of neuroticism was found to be associated with greater stress and emotional exhaustion in doctors (McManus et al. 2004), and a predisposing factor for anxiety, depression and stress levels in both male and female preregistration house officers (Newbury-Birch & Kamali 2001). Neuroticism scores were also significantly negatively related to job satisfaction scores in women.

Dependency in male medical students was reported to be a predictor of depression two years later in respondents’ postgraduate year (Brewin and Firth 1997). Dependency was also predictive of depression ten years later, albeit less strongly. Sibling rivalry has been cited as an independent predictor of depression in female GPs (Firth-Cozens 1998). Extrovert doctors reported more personal accomplishment and satisfaction with medicine (McManus, Keeling, & Paice 2004).

A study of alcohol use found that narcissistic styles (i.e. lack of empathy to the needs of others) in medical students’ prior to entering medical school predicted alcohol abuse during year 3 of training (Richman 1992). Furthermore, those manifesting the onset of alcohol problems during training differed from other students in terms of elevated depression scores, drinking to escape and a family history of problem drinking or alcoholism (Richman 1992)

There is probably some association between personality and type of work (Stansfeld 2002) with certain occupations suiting particular personalities (Kohn and Schooler 1982). So we can also ask the question, ‘Are certain people attracted to the healthcare profession?’ For example, one author suggested that dentistry attracts people with compulsive personalities, unrealistic expectations and unnecessarily high standards of performance, who require social approval and status (Lang 1984). Other healthcare professions may equally be overrepresented by certain personality types, but the evidence for this is largely anecdotal
“There has been in some studies, higher mental illness, or higher mental stress shall we say, in surgeons and psychiatrists, which has been thought to be self selection.” S

“When you start boiling it down to the different specialties, then it gets interesting... I'm thinking of palliative care. They’re an interesting group. They're attracted to death and dying and the real tragedy of all that, and it has been argued that it is fragile people that have been attracted into that sort of work... but actually their levels of mental health are good... They protect themselves extremely well.” Z

There is anecdotal evidence that those who are attracted to psychiatry either have personal experience of mental disorder or through a close relationship with someone.

“The popular prejudice is that people who go into mental health have mental health problems themselves... I don't know... I think it's true that there probably is amongst mental health professionals in general, over-represented are people who have either had mental health problems themselves or have a relative who have has mental health problems... some tragedy they've had that nobody else should have in the future.” P

“What is becoming clear... is that people with an interest in mental health, maybe because they have some personal issues themselves, do tend to end up as psychiatrists, and we do have disproportional numbers of psychiatrists, for example, coming in.” C, PHP

Healthcare professionals with addictions may be overrepresented by health care professionals who have access to drugs and knowledge of them.

“We have a breakdown of patients which is essentially 40% primary care, 40% secondary care and 20% dentists, which is roughly the makeup of our target group... But within the secondary care, certainly psychiatrists and anaesthetists stood out as significant groups... Anaesthetists... may be addiction type issues.” C, PHP
3.2.3. – Summary of the role of risk factors

Healthcare professionals routinely work with painful and challenging problems which patients bring. They often need to make decisions which have enormous impacts on the lives of patients. Such work might be expected to cause distress or frank psychiatric disorder. However these characteristics of the job do not, of themselves, seem to be the most important of risk factors. Indeed perhaps the most striking finding from this review is that the nature of clinical encounters with patients contributes relatively little to the psychiatric morbidity of healthcare professionals. Instead the way their work is structured and organised, at an individual level, an organisational level, and in terms of central policy seems much more commonly associated with psychiatric disorder. Some of the risk factors, such as conflict with line managers, bullying, harassment, and excessive working hours are predictably associated with mental disorders. However it is often not predictable how a workplace factor will impact on health of the workforce, and much depends upon the way in which the work environment is organised. Several examples show that aspects of work, if well-organised and managed appear protective, but if poorly implemented might be harmful. Multidisciplinary teamwork is an example.

These conclusions are necessarily broad as the literature on which they are based is limited partly in size but also in quality. The research reviewed is dominated by small cross sectional studies using self-report measures. The possibility of reverse causation (e.g. does bullying lead to depression or might an already depressed individual be more likely to interpret someone else’s behaviour as bullying?) is rarely considered. Many of the risk factors we have highlighted are common yet psychiatric illness is relatively rare – hence many will be exposed to such problems in the workplace, not all of whom become unwell. Few studies have addressed the way in which individual risk factors may interact with occupational risk factors to produce psychiatric disorder. Many of the risk factors assessed are probably strongly correlated, and few studies have attempted to test the strength of competing risk factors in causing mental disorders simultaneously – a study which did this would be helpful for policy by allowing an insight into the likely impact of policy change. Finally, all studies are observational in design and the impact of making changes at either the individual or organisational level is largely unknown.
4. Performance: impact of mental disorder on healthcare professionals’ ability to practise effectively and safely

4.1. Impact of mental ill health on performance at work in general
Mental disorders can cause reduced work performance in a number of different ways. As previously discussed mental disorders are now the leading cause of sickness absence. When an individual worker is absent from work they are obviously not contributing, and their co-workers may have extra requirements placed upon them, However, in many cases an individual worker with symptoms of mental disorder may remain at work. Despite continuing to work, they may be performing at a sub-optimal level due to their symptoms; an effect termed presenteeism. It is estimated that as much as 60% of the employment related costs of mental illness are due to presenteeism (Sainsbury Centre for Mental Health 2007).

One large study found that depression has a greater negative impact on time management and productivity than any other health problem and to be equivalent to rheumatoid arthritis in its impact on physical tasks (Burton et al. 2004). The problems caused by mental ill health can be a particular barrier to high status jobs and those where there are high levels of contact with the public (Scheid 2005). It remains unclear which elements of mental disorders impair occupational functioning. Many studies have focused on the cognitive effects of depression, such as reduced concentration and attention (Mancoso 1990). Depression is also closely associated with fatigue (Harvey et al. 2009b), which is known to have a particularly deleterious effect on occupational performance (Janssen et al. 2003) (Lerner et al. 2004). Changes to an individual’s motivation and sleep pattern may also be important. These problems can be compounded by the effects of medication. However, ‘functional impairment’ at work is less common than ‘affective impairment’ such as emotional distress (Mintz et al. 1992) and there is only a weak association between the objective level of severity of a mental health problem and its impact on function at work (Dion et al. 1988) (Tohen et al. 2000).
4.2. Presenteeism amongst healthcare professionals: an unhealthy workforce may have a negative effect on patient care

Presenteeism describes the situation in which an employee is symptomatic and underperforming owing to their ill-health, but nevertheless attends work. The relationship between the well-being of the healthcare professional and the impact of his/her health on workplace performance is complex (James and McIntyre 1996). A variety of measures have been employed to assess presenteeism, such as the Work Limitations Questionnaire (WLQ) (Lerner et al. 2001) and the Health and Work Performance Questionnaire (HPQ) (Kessler et al. 2003), both of which have some demonstrated validity and reliability (Pilette 2009) (Schultz and Edington 2007).

“Nursing is an extremely tough profession really. When you’re at work you’re either full on or not, and therefore it’s quite difficult to function properly if you’re not well.”

Presenteeism is particularly well documented amongst doctors and nurses (Wrate 1999) (Middaugh 2007). Nurses have been identified as having one of the highest levels of presenteeism amongst any occupation according to one Swedish comparative study (Aronson et al. 2000). A questionnaire survey of doctors indicated that 90% of respondents had worked even when they felt too unwell to execute their duties to the best of their ability. Respondents cited cultural and organisational factors behind their decision not to take sick leave, such as the difficulty of arranging cover and attitudes to their own health (McKevitt et al. 1997). Young dentists have also reported taking an average of two days a year sick leave, and attending work unwell on average five days a year, again, suggesting an unwillingness to cancel patient appointments and take time off work (Baldwin, Dodd, & Rennie 1999).

A number of studies have attempted to study presenteeism amongst health care professionals by examining the links between self reported psychological symptoms (such as perceived stress and fatigue) and work performance. Overwork from long hours and lack of support are perceived by doctors to contribute to incidents of poor care (Firth-Cozens & Greenhalgh 1997). Fatigue has been found to be associated with psychological distress (Hardy et al. 1997) and to increase the incidence of cognitive errors amongst health care professionals and to contribute to hospital-based adverse events (Wilson, Harrison, Gibberd, & Hamilton 1999). Studies within
the military have confirmed that fatigue increases the prevalence of individual errors (Foushee and Helmreich 1988).

High levels of stress and poor psychological health are perceived to have work-related implications (Firth-Cozens 1998), through reduced quality and quantity of patient care, with a corresponding increase in work and stress for team staff (Michie & Williams 2003). Work related stress can lower morale and motivation, and result in poor communication and decision-making (Newbury-Birch & Kamali 2001). A questionnaire study on recent stressful events resulting in compromised patient care, found that 36% (82) of the 225 responding doctors considered that symptoms of stress contributed. Of those, 57% attributed events to tiredness, 28% to the pressure of overwork, 8% to depression or anxiety, and 5% to the effects of alcohol (Firth-Cozens & Greenhalgh 1997). The impact on patient care was in the overall lowering of care standards in 50% of incidents considered, doctors’ expression of anger or irritability in 40%, serious non fatal mistakes in 7%, and patient death in two cases.

Mood disorders can be associated with cognitive impairment such as impaired concentration, poor decision-making and planning, time management, concentration, inattention, irritability, interpersonal difficulties and general slowing down (Austin, 2001 325 /id) (Adler 2006). Depression has also been associated with memory deficits, episodic (Airaksinen, 2004 326 /id), verbal and visual (Austin, 2001 325 /id). These deficits in turn can impair multiple dimensions of occupational function (Adler 2006): depression has been cited as a major contributor to presenteeism (Firth-Cozens 1998) (Pitkanen, Hurn, & Kopelman 2008). A study of nurses reported that depression impacted the quality and quantity of their work output due to lower concentration and energy levels (Pilette 2009). This can also have a knock-on effect on morale amongst colleagues and patients. Depressed workers have also been found to require greater effort to function (Dewa and Lin 2000). PTSD may also have an adverse effect on work performance as it is associated to impairments in episodic memory and executive functions (Isaac et al. 2006).

A postal survey of hospital consultants with high levels of psychiatric morbidity reported that 17% of respondents had lowered their standard of care through taking short cuts or not following procedures (Taylor et al. 2007). Severe mental illness clearly will also have a profound impact on a healthcare professional’s ability to provide care, for example manic depression.
“One of the disorders which potentially has a big effect on practice [is manic depression]... People with bipolar disorder can go very rapidly into mania... or into depression... There certainly have been cases of people developing hyper mania very rapidly and being a risk to patients... They should be monitored closely.”

The relationship between psychotropic medication and workplace performance is complicated. In general medication which helps to reduce symptoms should result in improved workplace performance. However, it should also be noted that some psychotropic medications can cause drowsiness or poor concentration (Glozier 2002)

4.3. Effects of sickness absence and mental disorders on group (e.g. ward) performance

In 2005 the Healthcare Commission reviewed all nursing time lost to annual leave, sickness and study leave in a four week period as part of the Acute Hospital Portfolio Review (Healthcare Commission 2005). Sickness absence, calculated to be equivalent to 16.8 days per staff member per year, was higher than in many other public sector workforces. Furthermore, there was an inverse relationship between patient satisfaction and the use of bank and agency staff. Given that bank and agency staff are often used to cover sickness absence, this finding indicates that the health of ward staff can have a direct impact on patient care.
4.4. Drugs and alcohol
Misuse of alcohol and drugs by healthcare workers threatens their ability to provide adequate patient care, increases susceptibility to mistakes and compromises interpersonal interaction (Strang, Wilks, Wells, & Marshall 1998) (Fowlie 1999). Studies on the effects of alcohol have demonstrated a negative effect on memory (Moulton et al. 2005), attention and other cognitive skills such as performing complex tasks and decision-making (Pitkanen, Hurn, & Kopelman 2008). Computerised cognitive tasks used to evaluate the effects of alcohol have demonstrated that as alcohol levels fall, cognitive speed recovers faster than the rate of cognitive errors (Schweizer and Vogel-Sprott 2008). While the effect of acute intoxication on a health care worker’s performance is obvious, the risks associated with more chronic use are more difficult to predict. Heavy use of alcohol is linked to an increased risk of a variety of cognitive difficulties, including dementia (Deng et al. 2006).

A number of agencies advocate early identification as the key element in preventing risk to patients, together with good access to early intervention, treatment and supportive rehabilitation services (BMA 1998) (The Dentists' Health Support Trust 2000).

4.5 Summary of the impact of mental disorder on healthcare professionals' ability to practise effectively and safely
The deleterious effects of common mental disorders on workplace performance are well established. However, many individuals with symptoms of mental disorder will remain at work. There is evidence for particularly high rates of presenteeism amongst health care professionals, possibly due to the cultural and organisational factors that lead many health professionals to be reluctant to take days off work due to ill health. There is also evidence that some of the symptoms of mental disorder, such as fatigue and perceived work stress, are associated with adverse clinical events. Substance misuse appears to have a particularly toxic effect on work performance.

Whilst there may be sound reasons why NHS trusts may be concerned about the performance of ill healthcare professionals, and in some cases the risk associated with presenteeism are obvious, it is far from clear how trusts should aim to reduce presenteeism. Changes in culture may in the long term be needed to encourage
healthcare professionals to seek help and take time off work earlier. However there is a risk that in encouraging early presentation, normal stress and distress become medicalised leading to many more days lost through potentially unnecessary sickness absence.
5. Help seeking behaviour and access to healthcare by health professionals

5.1. Health professionals may be more reluctant to consult: barriers to help-seeking

“They are undoubtedly reluctant to seek help for a whole range of reasons.” A

“Only 1 in 3 doctors would consult a GP if unwell”. Dr M Peters of BMA:

The reluctance of health care professionals, particularly doctors, to seek help for a mental health problem has been described by many (Silvester, Allen, Withey, Morgan, & Holland 1994) (Davidson and Schattner 2003) (Chambers 1993). The potential reasons for this are numerous, including the stigma of mental illness; concern regarding professional consequences; the perception that they have to carry on and cope; and difficulty in health care professionals accepting the role of the patient.

“It is true, for doctors anyway (doctors are worst) that doctors won’t seek help... I think it’s improving... Doctors are getting better, nurses are already better... They get taught more as students to seek help. Also, to have a psychological illness is not the end of the road... I think it’s less stigmatised.” S

Dentists too, seem not be immune to this reluctance to consult; when discussing the availability of successful strategies to prevent and treat stress, anxiety and depression in dentists, some have claimed that “the only limitation is their willingness to take care of themselves” (Rada & Johnson 2004).

Restricted GP access

“They quite often don’t have GPs.” A

The reluctance of health professionals to seek help for psychological symptoms is exacerbated by the fact that a significant proportion of doctors at least, are not
registered with a GP (Williams, Michie, & Pattani 1998a). Health professionals can find it difficult to register with a GP because of their working hours and their peripatetic job patterns (Silvester, Allen, Withey, Morgan, & Holland 1994). Some authors have even raised the possibility of mandatory GP registration for some health professionals (Silvester, Allen, Withey, Morgan, & Holland 1994).

“What we’re finding with the younger doctors is that they’re finding it very hard to register with a GP because when they’re on rotation, they’re moving a lot, and so they don’t always get around to registering…. Especially with the younger doctors is that they move around a lot… it’s something you might not get around to doing.” Practitioner Health Programme (PHP), C

‘We do not get ill’

“In medicine we live on this myth that illness is for other people… Illness is for the patients.” Liz Miller of the Doctors Support Network

Some health professionals may lack insight into being unwell (Silvester, Allen, Withey, Morgan, & Holland 1994), maybe due to a sense that they are ‘invincible’ and unsusceptible to illness (Setness 2003). An interview-based study of GPs in Northern Ireland reported that participants’ need to portray a healthy image to patients and colleagues prevented their engagement of health screening (Thompson et al. 2001).

“Doctors are hopeless… they kind of work themselves to death… They feel themselves to be invulnerable and they feel they should be looking after others and not themselves, and often it’s simply not sensible to come to work.” Z

Furthermore, the medical culture encourages self reliance and competence which makes it difficult for an individual to admit to having a problem (Strang, Wilks, Wells, & Marshall 1998) (Brooke 1995). Perhaps it is not surprising therefore, that doctors appear to find it particularly difficult handing over their personal care to others and allowing themselves to be patients (Marshall 2008). When interviewing GPs in a study examining their attitudes to illness, they admitted embarrassment in adopting the role of patient (Thompson, Cupples, Sibbett, Skan, & Bradley 2001). It is likely that similar processes occur with other health professionals, although these do not appear to have been discussed or examined in any detail.
“Doctors don’t like to be seen to be sick.” P

“Any failure in themselves they find terribly difficult to accept... [psychological illness] is perceived as a failure.” S

**Workload and responsibility**

Healthcare professionals may be less likely to take time off ‘to be ill’ to avoid letting their colleagues down. The responsibility for running clinics, seeing patients, not increasing their colleagues workload etc encourages them to work through illness (Silvester, Allen, Withey, Morgan, & Holland 1994) (Thompson, Cupples, Sibbett, Skan, & Bradley 2001) (Wrate 1999) (Baldwin, Dodd, & Rennie 1999). Some have suggested that such concerns can only be tackled with organisational changes, such as increased staff numbers (Wrate 1999).

“If you’re a doctor and you’ve got various responsibilities and nobody else can really do them if you don’t go in, so things are just not going to get done, then you might as well go in and get them done, even though you might not feel brilliant.” P

“Doctors know that their colleagues are going to have to cover, so they feel they have got to do that clinic whatever happens.” Z

**Stigma of mental illness: confidentiality and the consequences of being open**


“The whole business of being mentally unwell is stigmatising on a good day, but particularly to doctors who regard themselves as being invulnerable to all illnesses generally.” Z
The stigma of mental illness can act as a real barrier to consulting for any individual. Health professionals face the additional fear that a mental health diagnosis could lead to investigation of their ability to practise and may have a detrimental impact on a healthcare professional's career e.g. to professional reputation, professional accreditation, career progression, employment status, even leading to dismissal (Strang, Wilks, Wells, & Marshall 1998) (Marshall 2008) (anon. 1994) (Iversen et al. 2009).

“... reluctant to consult because of the whole fear about career progression” A

“For younger doctors, there is the issue of, ‘Will this impact my career in the future? If I go and declare myself as having a problem now and then I want to get a job somewhere else, but it was the psychiatrist where I was treated, are they going to offer me a job if they know I’ve had a problem in the past or have a current ongoing problem?’” C (PHP)

“It’s worse with health professionals because it’s their profession. It’s not just calling into question their job, it’s calling into question their career. It is different. I think that is a pressure that can make some people less mentally stable.” S

Contact with regulators, such as informing the GMC or the GDC, may be feared sufficiently to deter many practitioners from help-seeking (Hodgkiss AD, R, & Ramirez 2000). This could clearly have a negative knock-on effect to long term health: failing to consult early can leave the problem to develop unaddressed (anon. 1994):

“The internal investigations are often inefficient, protracted, and inhumane for a doctor who essentially has a health problem. It is easy to see why addicted doctors feel they can not seek treatment” (Strang, Wilks, Wells, & Marshall 1998).

This inevitably leads to concerns about breaches of confidentiality. Although such fears should be unfounded, anecdotal evidence suggests that highly confidential information about colleagues' health problems can indeed spread through a “hospital grapevine” (Wrate 1999).
“There’s a significant proportion [of website hits] that are around confidentiality... access to their records.” B (PHP)

“It’s [confidentiality] a major preoccupation for a minority of patients, not for all... a small number are very, very anxious about it.” A

A postal questionnaire study based in Australia used vignettes to identify barriers to doctors seeking appropriate healthcare. The results revealed that concern over confidentiality was a significant predictor of not choosing the appropriate treatment for anxiety, particularly amongst GPs (Davidson & Schattner 2003). This finding was replicated in an interview-based study with GPs in Northern Ireland (Thompson, Cupples, Sibbett, Skan, & Bradley 2001).

In response to such concerns, a number of the mental health services currently available for healthcare professionals, such as the London based Practitioner Health Programme (PHP) and MedNet, guarantee highly confidential services, and are not obliged to notify the GMC or GDC without a perceived threat to patients. There is clearly a requirement for these organisations to work within the GMC guidelines, and if the treating practitioner perceives that patients are at risk, then confidentiality no longer applies. However, without the offer of confidentiality, it is believed that health care professionals would not seek help through these organisations.

5.2. Health professionals may seek help in different ways

“Typically they [doctors with mental health problems] are poorly managed and under managed and either self prescribing or getting your mate to do it in the corridor.” Z

Treating fellow health care professionals can be highly challenging since there is a tendency for them to act as clinicians rather than adopt the role of the patient, often resulting in poor compliance, self-diagnosis and self-treatment. As discussed later, the extent to which this occurs may vary between different types of health care professionals, with the majority of work published on this area focused on doctors. Where available we have tried to include information on how other health care professionals may seek help.
Self-prescribing

“There’s quite a lot of evidence that certainly doctors self prescribe.” Z

Doctors and prescribing nurses are in the unique position of being able to prescribe medication for themselves. Despite advice to contrary, healthcare professionals are known to often self-prescribe (Donaldson 1994) (Chambers 1993) (Iversen, Rushforth, & Forrest 2009) and their families (Forsythe et al. 1999), with some evidence that GPs are more likely to self medicate than hospital consultants (Forsythe, Calnan, & Wall 1999). Self-medication is convenient and time-saving, and thus also poses a particular advantage to doctors unwilling to admit to themselves or others that there is a problem with their mental health (Setness 2003).

“Doctors do tend to treat themselves... it's convenient, and easy to do.” P

There are some observed variations with self prescribing. A questionnaire study demonstrated that although GPs were more likely to self-treat, they would recommend other doctors to consult their GP if they became unwell with depression or anxiety. However, hospital consultants were more likely to recommend a sick colleague to consult specialists directly, rather than GPs (Chambers 1993). A self-completion, Australian postal survey using three hypothetical case vignettes found that 90% doctors thought it appropriate to self-treat acute conditions, yet only 25% would self-treat chronic conditions (Davidson & Schattner 2003). Only 9% of that sample of doctors believed it was acceptable to self-prescribe psychotropic medication.

Informal ‘corridor consulting’

“[Doctors] tend to consult colleagues in the corridor rather than seeking professional help.” A

Health professionals are often reported to consult a colleague directly and informally, rather than booking an appointment with their GP and then waiting for a referral to see a specialist. This may work well in relatively straightforward cases of physical ailments, but in the case of mental disorders this may not work as effectively.
“If you've got a straightforward problem, like getting angina or something, a quick referral to a cardiologist is probably the answer.” S

An informal or ‘corridor’ consultation does not provide all that a formal appointment can e.g. formally booked follow-up, time set aside specifically for a consultation. As a result, healthcare professional may actually end up receiving a lower standard of clinical care.

“A normal doctor-patient relationship cannot be established under such circumstances, and the quality of care given may be only marginally better than self care or no care at all” (Barrett 1995).

“[Doctors] get lost to follow up because the person they consulted says, ‘Just ring me’.” M

“Basically it’s self prescribing, getting your mates to do it, expecting Rolls Royce private care from your NHS mates, which is a huge stress and strain. My colleagues that look after the mental health of doctors will say it’s some of the most demanding work because they want to be seen out of hours, in private places in the context of the NHS.” Z

Private practice
Health care professionals may also be more likely to consult privately due to the perception of greater confidentiality.

“I think many doctors would not go to their GP, neither would they go to a psychiatrist, at least not to an NHS psychiatrist. They would go privately to a psychiatrist or sometimes to a psychologist to do CBT... so we really can't get the measure of it, that's the problem.” S

Early retirement
Early retirement may be a very late form of health seeking behaviour, but it is a well documented amongst NHS staff. The NHS pension scheme allows early retirement due to ill health which prevents employees carrying out their duties efficiently, with no requirement that alternative employment is sought (Anon 1999). Early retirement of healthcare professionals has huge cost implications to the NHS Pensions Agency and leads to the loss of highly trained staff.
A questionnaire survey of UK consultants over 50 years of age reported that the mean age consultant psychiatrists intended to retire was 60 years, suggesting a potential loss of 5725 consultant years. Reasons for early retirement included excessive bureaucracy, insufficient free time and heavy caseloads (Mears, Kendall, Katona, Pashley, & Pajak 2004). Authors calculated that the NHS could be losing as much as £10 million a year from early retirement.

A cross sectional study of early retirees due to ill health, revealed that the most common causes were psychiatric and musculoskeletal disorders (Pattani et al. 2001). 43% of both these groups attributed their ill health to work, although agreement with managers regarding cause was low, especially where problems were not physical and linked to observed work-related incidents.

5.3. Health professionals may have a different experience of the healthcare service
A significant contributor to healthcare professionals’ reluctance to consult may arise from their experience of the healthcare service which can be very different from that experienced by the general public.

The difficulty of consulting colleagues
“*I think people feel a bit ashamed about getting help from their colleagues.*” P

A healthcare professional’s reluctance to seek help may stem from embarrassment, shame or concern about adding to a colleague’s workload, especially if they have a close personal relationship with their GP (Chambers 1993). It is also not unusual for healthcare professionals to live within the catchment area of the hospital in which they work, thus admission for mental illness or psychological problems would likely involve treatment by friends or at least colleagues (Barrett 1995). Their experience of the healthcare service contrasts with that of the general public who have the privilege of being treated by unknown professionals. A 1994 Nuffield study encouraged health professionals to behave more like other patients and to seek early help through conventional referral mechanisms (Silvester, Allen, Withey, Morgan, & Holland 1994), but this advice failed to take these issues, and those of confidentiality and stigma into account.
Health care professionals may not be treated as patients

Healthcare professionals who consult colleagues informally e.g. ‘corridor counselling’ may not be receiving usual standards of care. Even if healthcare professionals do consult formally there is evidence to suggest they are still treated differently i.e. as colleagues rather than patients (Strang, Wilks, Wells, & Marshall 1998). There is also evidence to suggest clinicians treating health care professionals have higher expectations for recovery and compliance.

“When they’re treated by a colleague, they’re treated as experts, not as patients... You have a certain amount of knowledge behind you... so you’re not treated the same way as a normal patient.” C (PHP)

A well publicised example of a health care professional who many believe was not treated as a ‘normal’ patient, was Dr Daksha Emson. Dr. Emson was a Specialist Registrar in Psychiatry who was diagnosed with bipolar affective disorder during her undergraduate training, resulting in several hospital admissions. She killed herself and her three month old daughter during a psychotic episode in October 2000.

“Theyir experience of healthcare is a very important one [point]... Daksha Emson, the psychiatrist junior doctor set light to herself and her baby and died, and the investigation showed that she wasn’t being treated the same as a non doctor.” M

“This specialness was in the end terribly dangerous for her because she didn’t get the bog standard care” A

Confidentiality concerns, difficulties with admitting illness and reluctance to seek help, self prescribing, not being treated as a patient have all led some to suggest that there is a need for specific services aimed at health care professionals (Forsythe, Calnan, & Wall 1999).

5.4. Differences between the health professional groups

Health care professionals are a very heterogeneous group. Different groups of health care professionals have different skills and often have very different roles in
the health service. As a result it is not surprising that there may be differences in how different groups of health professionals respond to ill health and their experience of using the health service.

There is some evidence to suggest that nurses may have a lower threshold for taking time off in response to ill health than doctors. A study looking at sickness absence reported that both male and female hospital physicians took 33-50% of the sick leave that female head nurses and ward sisters did (Kivimaki, Sutinen, Elovinio, Vahtera, Rasonen, Toyry, Ferrie, & Firth 2001). It is not clear whether nursing staff are simply better at seeking help for health-related problems, or whether these differences may also reflect organisational and other cultural between the two professional groups. Nurses tend to have a system of bank staff, which allows an individual to take time off knowing that their absence is likely to be covered. Such a system does not always exist for medical staff.

There is very little information of where other groups of health care professionals sit on this spectrum of help seeking behaviour. However, even the simple differences identified between doctors and nurses raise questions on how generalisable findings amongst medical staff are to all other health professionals. Much of the published work on barriers to help seeking, stigma, self treatment and the problems with informal consulting has focused on medical staff. It is not clear to what extent these issues are relevant for other types of health professionals. It is likely that the same issues do affect all health professionals, although perhaps not to the same extent.

5.5 Summary of the health seeking behaviour of health care professionals

There is clear evidence that health care professionals are reluctant to seek help when they suffer from symptoms of mental disorder. This appears to be due to a range of factors, including a belief they are not susceptible to ill health, a culture encouraging self reliance and coping, guilt over the possibility of being away from work, stigma and the fear of involvement of the regulating authorities. In the case of mental disorder, there is evidence that concerns over confidentiality are one of the main barriers preventing health care professionals seeking help.
Even if a health care professional does seek help for a psychological problem, they will often utilise health care services in a different way to other patients. They will often engage in self-treatment or informal consultations with colleagues. Such practices often result in lower levels of clinical care. To date there is very little known about how important these issues are to health professionals other than medical staff, although it is likely that the same concerns affect all health care professionals, although perhaps not to the same extent.
6. Interventions and good practice

6.1 The evidence for occupational interventions in the general population
Before considering interventions aimed specifically at health care professionals it is important to consider the evidence base for interventions amongst the broader working age population. Despite the impact of mental disorders, surprisingly little is known about which interventions are most effective in an occupational setting (Lelliott, 2008 9 /id). This is partly because so few intervention studies adequately monitor occupational outcomes.

Prevention of mental disorders in the general working population
Preventive programmes can generally either be aimed at an organisation or individual level (Harvey, 2009 99 /id). A recent systematic review concluded there was currently insufficient evidence to judge the general effectiveness of any specific organisational changes in reducing levels of mental disorders amongst employees (Graveling, 2009 66 /id). In the case of individually focused interventions, two separate systematic reviews have concluded that individual stress management programmes might have a modest or short term impact on a range of variables associated with individual distress (Seymour, 2005 60 /id) (Graveling, 2008 66 /id). Undertaking regular exercise and maintaining a healthy weight may help prevent psychiatric disorders (Wiles, 2007 395 /id), but no reliable studies have been able to demonstrate that exercise programmes in the workplace reduce levels of mental illness (Seymour, 2005 60 /id).

Treating established mental disorder in the general working populations
The early detection and treatment of psychiatric disorders is essential if the occupational consequences of the illness are to be minimised. Very few of the studies examining treatments for mental disorders have considered occupational outcomes. As a result it is difficult to know which interventions have specific work benefits. The Cochrane Collaboration has published a systematic review of the randomised controlled trials that are available for work or worker-directed interventions for depression (Nieuwenhuijsen, 2008 4 /id). This review was only able to identify 11 studies and concluded that although a variety of interventions are effective in reducing symptoms, there was no evidence that either medication,
enhanced primary care or psychological interventions have any impact on the amount of sickness absence taken by depressed individuals (Nieuwenhuijsen, 2008 4 /id). The apparent lack of an effect of standard treatments on occupational outcomes suggests that additional specific interventions addressing return to work issues may be needed. There is some evidence that training occupational health practitioners in cognitive behavioural therapy (CBT) approaches may result in employees returning to work more rapidly (van der Klink, 2003 394 /id)
6.2. Prevention

6.2.1. Evidence for interventions aimed at prevention

Workplace interventions to control stress
In the past a lot of attention has been paid to stress management interventions as a potential method of reducing the incidence of mental disorder amongst employees. However, in 2006 the Cochrane Collaboration published a systematic review of intervention trials aimed at reducing occupational stress amongst healthcare workers (Marine et al. 2006). The authors of this review identified nineteen randomised controlled trials, but reported that only two of these were of high quality. The found limited evidence that both person-directed and work-directed interventions may be effective, but concluded that larger and better quality trials were needed (Marine, Ruotsalainen, Serra, & Verbeek 2006). This finding is in keeping with a general shortage of robust evaluations of workplace interventions aimed at mental well-being or stress reduction in the general workplace (Hill et al. 2007). Separate reviews have reported the same conclusion for doctors (Sims and Oakeshott 1996), psychiatrists (Kumar 2007), occupational therapists (Edwards & Burnard 2003b) and emergency ambulance personnel (Smith and Roberts 2003).

The BOHRF review of workplace interventions for common mental disorders (Seymour and Grove 2005) specifically considered interventions aimed at high risk groups, such as health care professionals. They reported that individual approaches to stress reduction were more effective than multimodal (Michie & Williams 2003).

Given the conclusions of all these systematic reviews great caution is needed when considering the results of smaller, individual studies. However, there are some individual studies that have produced intriguing results which may help guide larger studies in the future. One study – now over 20 years old - reported that an organisation-wide stress management programme across a number of different hospital departments resulted in a significant reduction in medication errors such as over- or under-dosing a patient, or medicating a patient with an inappropriate or non prescribed drug (Jones et al. 1988). The stress policy and procedural changes included interdepartmental communication, organisational and personnel policies, and working with the most highly stressed departmental managers to implement these changes. Survey results were shared and feedback encouraged, and all
employees were shown video training modules designed to enhance recognition and understanding of stress, and improve coping skills. A second study by the same team succeeded in reducing malpractice claims across 22 hospitals compared to matched control hospitals, following implementation of a similar organisation-wide stress management programme (Jones, Barge, Steffy, Fay, Kunz, & Wuebker 1988).

Helping medical students to cultivate coping skills may promote well-being throughout their careers and can protect against burnout (Dunn et al. 2008). Mental health nurses who employed more coping skills, assessed by the Cooper Coping Skills Scale (Cooper et al. 1988), experienced less stress and took less sick leave than colleagues with a restricted repertoire of coping skills (Holloway 1996). It is difficult to know whether such coping skills reflect fundamental personality characteristics that cannot be taught or altered in any brief intervention, although this finding may potentially have some implications for coping skills training.

The intervention studies reported above have tended to focused mainly on staff training rather than evaluations of employment practices and management style i.e. primary rather than secondary prevention (Michie & Williams 2003). It may be that the modification of workplace stressors would be more effective than treating the symptoms of stress (Sims & Oakeshott 1996):

“If the job is making the doctors sick, why not fix the job rather than the doctors?” (Chambers & Maxwell 1996).

Mentoring / Supervision
Discussion with colleagues has been found to be a widely used coping strategy among doctors (Paice et al. 2002) and basic grade occupational therapists (Leonard & Corr 1998). Supervision was also found to be helpful in reducing work-related stress in mental health nurses (Cottrell 2001) and occupational therapists (Leonard & Corr 1998), through improving communication and providing social support. Conversely, little or no supervision was significantly related to an increased perception of work stressors in occupational therapists (Allen and Nolan 1998). These findings suggest that mentoring schemes may be beneficial in some situations (Iversen, Rushforth, & Forrest 2009).
Effective management of bullying
The proactive approach taken by employers in resolving conflict brought about through bullying and harassment, may have a positive effect on psychological wellbeing in nurses: nurses who perceived that their employers were taking these problems seriously had higher job satisfaction (Ball, Pike, Cuff, Mellor-Clark, & Connell 2002).

The Devonshire Partnership NHS Trust provided staff with a direct ‘hotline’ to the chief executive to allow staff to report bullying. This reduced staff reports of abuse and harassment within two years, from about one third in 2003 to 10% in 2005. Staff morale and working relationships were also seen to improve (BMA 2006).

Working in multidisciplinary teams
Multidisciplinary working is increasingly a core feature of patient care and has been shown to work very well for the health professionals involved (Taylor 2008)

“Nurses have huge job satisfaction, it works for them… The second highest source of job satisfaction for everyone including surgeons, is working in a multidisciplinary team.” Z

“Certainly in cancer... and looking at the evidence... improved survival, improved patient experience of care, and I think there’s early evidence that it’s good for the mental health of the clinicians too, but it’s early... Certainly the subjective and anecdotal reports of the enthusiasts... but we do need to get these teams working better.” Z

Multidisciplinary groups have been shown to be beneficial where there was a danger that departments would split into factions. Regular, structured contact with management was associated with a workforce that felt adequately appreciated and recognised (Cox, Randall, & Griffiths 2009)

Managing shift patterns and flexible work time
Shift length and schedule are both associated with mental well-being, with – perhaps surprisingly - longer shifts being associated with better mental health (Barnes et al. 2008). Healthcare workers on fixed night shifts also reported significantly poorer well-being compared to workers on slowly rotating shifts and fixed day shifts. However, a
study of nurses and midwives suggested that individual choice may be important as choosing to work at night mitigated some of the negative health consequences normally associated with working those shifts (Barton 1994). Considering new shift patterns, for example in nursing, may aid psychological wellbeing (Ball, Pike, Cuff, Mellor-Clark, & Connell 2002).

**Patient interaction, handling complaints, handling patient expectations**

Patient conflict and complaints have been shown to be a source of work-related stress (Persaud 2002), for example management of difficult, uncooperative, anxious and aggressive patients (Rada & Johnson 2004). In a study of doctors who had committed suicide, seven were facing complaints, with this appearing to be a key factor in five of the cases (14% of the 35 cases with sufficient information) (Hawton, Malmberg, & Simkin 2004).

“The things that tipped them, it’s not working 60 or more hours a week, it’s working 60 or more hours a week when there is a conflict and dysfunction in whatever system they’re working in. And a real killer for them was complaints [from patients]... because of the way in which the Trust handles it, and the way colleagues handle it... the whole process is highly toxic to them.” Z

Breaking bad news to patients is also unpleasant and potentially stressful, therefore, training in effective management of conflict and confrontation may be beneficial (Rada & Johnson 2004)

**Leadership, practice management**

Poorly managed teams can be a source of dissatisfaction with poor teamwork being demonstrated to be associated with increased absenteeism (Kivimaki, Sutinen, Elovainio, Vahtera, Rasänäen, Toyry, Ferrie, & Firth 2001) (Michie & Williams 2003). Poor mental health, including burnout, has also been found to be more prevalent among consultants who felt insufficiently trained in communication and management skills (Ramirez, Graham, Richards, Cull, & Gregory 1996) (Graham & Ramirez 2002). Other reports suggest that dentists receive insufficient training in practice management, and may lack skills to remedy work conflicts with dental assistants (Rada & Johnson 2004). Thus, the provision of training in communication and management skills may be protective of mental health (Ramirez, Graham, Richards, Cull, & Gregory 1996).
“The increase in management pressure has not gone concomitantly with the training of managers.” S

“The policy implication looks like team-working is good for [cancer] clinicians... but it needs to be optimised... more guidance and more training” Z

“To assume that the doctors have the skills is simply wrong. There is a huge unmet need for training to lead teams.” Z

Managing students’ expectations

Undergraduate training may not adequately prepare healthcare professionals for the stress of their careers (Persaud 2002). For dental graduates entering primary care, there is some evidence that the abrupt change from student to dental practitioner has been somewhat eased with the introduction of mandatory vocational training in the 1990’s (Baldwin et al. 1998). However, this training appears not to have prepared young dentists for the administrative responsibilities that running a practice entails, and these aspects of work continue to be a source of stress to them (Baldwin, Dodd, & Rennie 1999). Similar problems are likely to be seen amongst other groups of health care professionals.

It is also important that concepts relating to the misuse of alcohol and other drugs become an integral part of student education, medical training, continuing medical education, and professional development (Brooke 1996). Health professionals need to be able to recognise drug and alcohol problems in themselves and their professional colleagues (Fowlie 1999).
6.3. Evidence related to detection strategies

It is generally agreed that early identification and diagnosis of mental disorders is key to providing early and effective treatment and to avoid crisis point being reached by any healthcare professional (Marshall 2008). Outside of the healthcare setting a large trial of screening for depression in the workplace (Wang, 2007 398) demonstrated that screening, followed by a systematic programme of telephone outreach and care management (encouraging employees to enter appropriate treatment and monitoring treatment quality) resulted in decreased symptoms, higher job retention and more hours worked. There is also some theoretical evidence that screening programmes may be cost effective for purchasers (Wang, 2006 397), however this should be tempered by a body of evidence from medical settings indicating screening for depression is not associated with improved outcomes (Gilbody, 2008 396).

Healthcare professionals will often delay seeking help for mental health problems. The Nuffield report found that interviewees agreed it was rare for sick health professionals to come to the attention of services (Silvester, Allen, Withey, Morgan, & Holland 1994).

“They’re not identified, are they... there’s nothing in place and that’s a huge issue... Normally they bubble up to the surface” Z

For example, the identification of a chronic problem like addiction, is often characterised by a crisis e.g. drink-driving, error at work, stealing drugs from the workplace (Strang, Wilks, Wells, & Marshall 1998) (Setness 2003). This was the case in the study of the new specialist drug and alcohol treatment service for healthcare professionals at the Maudsley Hospital in London, where referral was often observed to follow an incident involving persistent absenteeism or intoxication at work (Gossop, Stephens, Stewart, Marshall, Bearn, & Strang 2001). Earlier detection and intervention could reduce the damage done, both to the individual’s health and their career (Brooke, Edwards, & Taylor 1991).

A barrier to detection may be at least in part when colleagues are reluctant to report their concerns (Hodgkiss AD, R, & Ramirez 2000). This may be due to (misguided) professional loyalty, especially when there is insufficient evidence (Marshall 2008), and colleagues may tend to cover up poor practice: “a conspiracy of friendliness”
(Silvester, Allen, Withey, Morgan, & Holland 1994). Colleagues may also be deterred by the potentially emotional burden of the complex situation (Marshall 2008). This may have potentially serious side effects for patient care and to the practitioner in question who would benefit more from help than cover up (Liang et al. 2007).

Incidents often go unreported by staff, especially when there is no bad outcome for example, when no harm is caused to a patient (Lawton and Parker 2002), yet this may mean that underperforming staff take longer to be detected. Nurses, and to a lesser extent midwives, are more likely to report an incident than doctors and incidents are also more likely to be reported where protocols are in place (Lawton & Parker 2002).

Reducing the stigma of mental illness
As discussed earlier in this report, the stigma associated with mental illness may contribute to health care professionals’ reluctance to seek help early. This may be reduced through attempts to de-stigmatise mental illness (Gerada, Harvey, & Blake 2000). Although campaigns to reduce stigma may have some benefits, there is also a potential risk that they may lead to a greater tendency for distress to be medicalised and false labelling of distress as a psychiatric disorder.

A reduction in stigma may be achieved by encouraging employment of people with mental health problems (Department of Health 2006), employing mental health service users in medical schools for teaching and training (Department of Health 2008), and reducing discrimination by integrating the psychological aspects of illness with other parts of the curriculum to strengthen the message that mental and physical aspects of ill health have clinical similarities (Department of Health 2008). Oxleas NHS Foundation Trust, a mental health trust in south-east London, is cited as promoting social inclusion and supporting patients in employment. As part of this approach its council of governors includes a minimum of 12 service users and carers (Department of Health 2006).

“Raising the profile of services for doctors, dentists etc, is in itself a challenge to the stigma…” A

Trainee health care professionals
While it is important not to automatically deselect students who have a history of mental illness, it may be helpful to identify and target students who are highly self
critical and thereby may be vulnerable to developing stress later in their career (Firth-Cozens 1998). Such students may benefit from training strategies encouraging them to judge events more reasonably. A weak correlation has also been found between psychological distress experienced in year one of medical school and several years later (Guthrie et al. 1998). Again, identifying such students provides opportunity for supportive intervention.

“They [medical students] generally are supported... If they go on failing to meet targets and displaying the sort of behaviour that you think is not going to lead to a very good professional in the future, then you may decide in the end that they shouldn't continue. There's a lot of thought that goes into that.”

It is proposed that alcohol and drug addiction should feature more prominently on the under- and post-graduate curricula (Brooke, Edwards, & Taylor 1991), and students warned that they are high risk for drug misuse. Provision of surveillance and easily accessible support at medical school may be beneficial, as addiction problems can start very early on in a medical career given that many students may be manifesting vulnerabilities at medical school (Marshall 2008).

6.3.1. Examples of some detection strategies

St Thomas’ Hospital: managing staff who have bi-polar affective disorder.

“The way we do it here actually is to get a written formal arrangement with them whereby one of their trusted colleagues in the department they work, will report to me if they think they’re ‘going off’... and they will ring up and say so and so is behaving differently, and we will suspend them immediately and get them treatment if that is required, or whatever.”

Mental health first aid program (http://www.mhfa.com.au)
The mental health first aid (MHFA) training course was originally developed in Australia, but has now been used in Scotland, Ireland, Hong Kong and the USA (Kitchener and Jorm 2004). The program was designed to provide training to raise awareness of the importance of mental health and to promote recovery of those who might be experiencing mental ill health. The MHFA program, aimed at the public, consists of a four x 3 hour course. Participants are trained to recognise and provide
early help to those developing mental health problems utilising five steps (assess risk, listen, reassure, encourage help-seeking and self help). These steps can be applied to problems of depression, anxiety, psychosis, substance abuse, panic attacks, suicidal thoughts, trauma and psychotic behaviour.

Three evaluation studies have found MHFA to demonstrate benefits including better recognition of mental disorders from vignettes, reduced stigmatising attitude and greater confidence in providing help to others (Kitchener and Jorm 2006).

MHFA was recently trialed in Scotland. An evaluation of this found that overall the training was well received, across all groups and sectors, but especially public sectors, and successful in increasing knowledge and understanding of mental health issues, including participant’s own mental health, and in enabling people to talk more comfortably about mental health (Stevenson and Elvy 2007).

6.4. Evidence related to assessment strategies

Once a health care professional has presented with symptoms suggestive of a mental disorder, it is vital that appropriate assessment is able to take place. As discussed in other sections of this report, issues relating to confidentiality of any assessment are vital.

“The occupational health department is normally within a Trust. If it’s provided at work, then for all these groups of staff, it would be early access, appropriate assessment and appropriate management.” M

There is evidence that progress is being in improving the provision of occupational health services to NHS staff (Hughes et al. 2003). However, the government policy for all NHS staff to have access to a consultant-lead service is not yet met. For example, the RCN Working Well survey (Ball & Pike 2006) reports that 85% of nurse respondents claim that their employer provides access to an occupational health service, and 69% say that they can access the service without referral.

Many doctors may perceive occupational health departments as irrelevant to them, with contact limited to receiving vaccinations or starting a new job (Harrison 1994). Barriers to uptake of occupational health services may include ignorance of services offered, but also distrust and unfounded concerns that the service providers
communicate with management, leading to a convenient dismissal over rehabilitation (Donaldson 1994) (Pitkanen, Hurn, & Kopelman 2008). Unfortunately this often means the occupational health services are used reactivity and become involved after performance issues have arisen, such a medical error.

When an occupational health service is not available, health care professionals will usually rely on their GP for the assessment and management of any ill health. Most general practitioners are very familiar with common mental disorders, although studies have shown that they tend to under-recognise and under-treat psychiatric disorders (Thompson, 2000 399 /id), meaning the contribution of psychological factors may not be identified early in an episode of sickness absence. This may be particularly problematic if a patient presents with primarily somatic symptoms, as is often the case with common mental disorders. Similar problems may also occur within occupational health departments. Psychiatric disorders often occur co-morbidly in those with chronic physical health problems (Harvey, 2008 400 /id). The presence of co-morbid psychiatric disorder increases the risk of long term sickness absence progressing to permanent disability (Mykletun, 2006 401 /id). As a result it could be argued that the presence of a psychiatric disorder should therefore be considered in almost all individuals on long term sickness absence, regardless the initial reason for the period of absence. However, a recent national audit of all NHS occupational health departments found that amongst those on long term sickness absence for an apparent physical health problem, only 15% had evidence of an assessment for depression (Henderson, 2009 64 /id).

Pre-employment assessments

Pre-employment assessments date to a time when the main occupational risks were physical – such as exposure to machinery or dusts. They were designed to identify susceptible individuals thereby preventing occupational disease. This model is less satisfactory for psychiatric disorders where genetics, early life risk factors, and life events contribute more to the onset of psychiatric disorders than occupational risk factors, even in those who report “workplace stress”. The available evidence suggests that pre-employment assessments are not effective and calls have been made for them to be abandoned (de Kort, 1997 402 /id). This has happened in the Netherlands, where since 1998, they have been forbidden except in very specific circumstances (Harte, 1974 403 /id) (Sordrager, 2004 404 /id).
6.4.1. Examples of some assessment strategies
Department of Occupational Health and Safety, King’s College Hospital

The assessment of mental disorders and their impact on a health care professionals’ ability to practise safely can be complicated. In many cases the occupational health professional dealing with such cases may request the assistance of specialist psychiatry services. However, community psychiatry services tend to be set up to deal with more severe mental illness and often have very limited experience in dealing with occupational assessments. In order to tackle this problem the Department of Occupational Health and Safety, at King’s College Hospital in London established a specialist Occupational Psychiatry clinic in 2001. This service is run jointly with the hospital’s liaison psychiatry department and provides rapid psychiatric assessment and referral for treatment where appropriate (Greenberg et al. 2005). The service is currently being evaluated, but anecdotal evidence suggests it has been a very successful way of handling complicated cases.

Royal Free Health and Work Centre

The Royal Free health and work centre multidisciplinary team offers integrated, proactive support for individual and organisational health at work. The team includes specialist occupational health doctors, nurses and psychologists, a physiotherapist, and administrative support. The services offered include: work health assessments, statutory medicals, workplace assessment, training, psychology needs assessment, individual psychological assessment and therapy, managers’ consultancy, physiotherapy, health surveillance and health promotion.

“At the Royal Free we have a very big occupational health department… When someone has been off sick… once they hit four weeks their managers are asked to refer them to us, and we have a multi disciplinary rehabilitation programme, and if we think they need CBT or workplace coaching or whatever, we have a health psychologist and a clinical psychologist who are part of our unit.” M
6.5. Evidence relating to the treatment of mental disorders

Treatment of established mental disorder

Established guidelines on the treatment of common mental disorders (NICE 2004; NICE 2004) are based on the broad research evidence from primary and secondary care trials. However, as mentioned above, very few of these trials have measured occupational outcomes. As a result there is very little evidence relating to specific interventions for health care workers suffering from mental disorder. Within the general population a recent meta-analysis showed that while a range of different treatments can cause significant reductions in symptom severity, the associated gain in labour output was only a third as large as the reductions in symptoms {Timbie, 2006 405 /id}. The apparent lack of an effect of standard treatments on occupational outcomes suggests that additional specific interventions addressing return to work issues may be needed. For example, when occupational health practitioners are available, training them in cognitive behavioural approaches such as graded activity, can result in employees returning to work more rapidly {van der Klink, 2003 394 /id}.

The longer an employee is absent from work, the less likely they are to return (Department for Work and Pensions 2004), hence intervention studies should ideally focus the early phases of sickness absence. However, some individuals will progress to long term sickness absence and there are strong moral and health arguments for continued attempts at occupationally-focused rehabilitation. The UK National Institute for Health and Clinical Excellence (NICE) recently published preliminary guidance on the management of individual on long term sickness absence, which they defined as an absence of four or more weeks {NICE, 2008 214 /id}. This recommended that all employees should undergo an assessment within 12 weeks (ideally 2-6 weeks) of starting an episode of sick leave with a suitably trained person in conjunction with their employer {NICE, 2008 214 /id}.

Counselling

Services such as Employee Assistance Programmes, typically comprise face to face confidential counselling, telephone helpline, legal advice, and critical incident debriefing (McLeod and Henderson 2003). Six in 10 nurses responding to the RCN Working Well survey report that their employer provides a counselling service, and 62% say that they can access this service without referral (Ball & Pike 2006).
A review of 34 studies of counselling, cited clinically significant improvements in anxiety and depression levels in 60-75% of clients, and reduced sickness absence amongst other positive outcomes (McLeod 2001). Overall, clients reported subjective benefits from the counselling sessions (McLeod & Henderson 2003). The Working Well initiative study also reported that 60% of nursing staff surveyed were satisfied with the way in which a case of assault by a patient or relative was handled by their employer, but that this figure rose to 90% when counselling or a debrief was offered (Ball, Pike, Cuff, Mellor-Clark, & Connell 2002) However, positive results on satisfaction surveys are not the same as clinical effectiveness, and it has been argued that there is a lack of reliable evidence that counselling achieves meaningful clinical improvements (McLeod & Henderson 2003) (Henderson et al. 2003). Furthermore, evaluation of randomized controlled trials to examine the benefits of brief early psychological interventions following trauma, including debriefing, found they were not useful in preventing PTSD (Rose and Bisson 1998) (Wessely et al. 2000).

**Getting back to work**

Working has been shown to be good for mental health and well-being (Lelliott, Tulloch, Boardman, Harvey, Henderson, & Knapp 2008) (NICE 2009), leading to increased self-esteem, reduced symptoms of ill health, lowered dependency and risk of relapse (Seebohm and Grove 2006) (Cook and Razzano 2000). Unemployment has been linked to poor health, depression and risk of suicide (Lewis and Sloggett 1998). Work can both be an aid to, and indicator of, recovery from mental ill health (Ridgway 2001) (Claussen et al. 1993). Mental health service users have spoken of gaining work as a crucial step on the route to recovery from ill health, aiding further improvement in their health and wellbeing (Ridgway 2001), although few employers appear to provide a comprehensive and integrated rehabilitative service (James et al. 2000).

A survey of nurses’ attitudes towards co-workers returning to work, revealed that attitudes were significantly more negative when sickness absence was related a psychiatric illness compared to a physical illness such as diabetes. Stigma was especially apparent regarding alcohol problems (Glozier et al. 2006). This inevitably makes their reintegration at work more difficult (Read and Baker 1996). One suggestion of how to deal with this was managing the expectations of both co-workers and returning employee by providing a clear ‘return to work’ plan.
The Institute of Employment Studies wrote a review based on the literature and 14 case studies including two NHS Trusts (Thomson et al. 2003). Best practice in the stages of rehabilitation were outlined: (i) early contact with the employee; (ii) early health assessment; (iii) quality of the health assessment; (iv) developing an agreed rehabilitation plan; (v) availability of therapeutic interventions, appropriate to the individual employee; (vi) flexible return-to-work options; (vii) work adaptations and adjustment.

6.5.1. Examples of some programmes aimed at treatment of mental disorders

Despite the lack of evidence on interventions a number of treatment services aimed at health care professionals have been set up. The following is not a complete list of all services available, but is a sample demonstrating the type of interventions currently being used.

Practitioner Health Programme for Doctors and Dentists

The NHS Practitioner Health Programme (PHP) provides a free and confidential service for doctors and dentists living or working within the M25 who are suffering from mental health, addiction or physical health problems that are affecting their work. It was set up in response to recommendations from public enquiries that a new service was required to support the health of practitioners. It was formally launched in November 2008.

The PHP comprises PHP1 (assessment and case management) and PHP2 (specialist services) which are co-located within a Medical centre at Vauxhall. Its medical records are not shared with the rest of the NHS or employers, and PHP work hard at their relationship with the GMC and GDC to maintain this level of confidentiality. Information regarding any practitioner-patient is only shared when the PHP provides a treatment plan or advice which is not followed, which may put patients at potential risk.

“We would get involved in informing people. We have only had to do that on one occasion.” C PHP

The PHP works with their practitioner-patients to support them at work or advise them to take sick leave, as appropriate. It is not always possible for NHS
professionals to return to their clinical role, in which case the PHP will endeavour to find alternative roles where they are able to make use of the expertise they still have to offer e.g. in administrative roles.

“The aim is to get these people to be able to reengage with the existing NHS. That's the purpose of this service is to provide a haven, if you like, to come when they feel they can't, to get them to a point when they can to engage with the NHS.” C, PHP

MedNet for Doctors
MedNet is a confidential counselling service for doctors and more recently dentists, which was set up 12 years ago with funding from the London Deanery in response to the recognition ‘that doctors seemed to find it very difficult to seek help’ (A). It is part of a national grouping of Deanery-funded services (London, Leeds, Newcastle, Oxford). MedNet covers Kent, Sussex, Surrey, London within the M25) and is run entirely by consultants in psychotherapy. Two consultants are based at the in South London based at the Maudsley Hospital, and five are based in North London based at the Tavistock & Portman NHS Trust.

MedNet provides their self referring patients with a strictly confidential service, separate from regulatory processes, which they feel encourages patients to be more frank. Practical career advice, emotional support, and psychotherapeutic assessment are offered. Patients may be seen directly my MedNet-based consultants or alternatively they may be referred on for CBT (e.g. NHS, PHP, private), to adult psychiatry services or for longer term analytic psychotherapy.

“One of the reasons they come to us, undoubtedly, is that we offer a high level of confidentiality... They [the Deanery] sometimes suggest that people refer themselves to us, but we are an entirely self referral service... they don't know who comes to see us.” A

Royal College of Nursing survey of NHS staff counselling. RCN Working Well Initiative (Mellor-Clark 2004)
The Royal College of Nursing has increasingly recognised that some form of psychological support is important for NHS and other health service staff who experience emotional distress and psychological ill-health. In April 2002, under the broad remit of its Working Well Initiative, the RCN published a guide for employers
and counselling service managers entitled Counselling for Staff in Health Service Settings.

Pharmacist Support

“Our organisational culture is that we want people to come forward and use these services, like Listening Friends [before reaching crisis point]… Listening Friends is a really useful service… for people with stress… confidential advice… from volunteer qualified pharmacists.”

Listening Friends offers free telephone confidential advice to pharmacists suffering from stress. The scheme was set up by the Royal Pharmaceutical Society of Great Britain (RPSGB) but operates independently under Pharmacist Support. Pharmacists can talk to a trained pharmacist who has insight into the specific pressures of the job. The service extends to other causes of stress other than work, such as family issues, bereavement, illness etc. (Timoney 2004).

Pharmacists Health Support Programme is a separate service which helps pharmacists with alcohol and/or drug problems, or other problems that may impair fitness to practise. The programme was again set up by the RPSGB and also operates independently under Pharmacist Support, enabling help to be sought confidentially (Timoney 2004). Pharmacist Support will fund pharmacists who require treatment, for example for alcohol misuse.

The Individual Support Programme (ISP)

ISP is a service based at Cardiff University which provides individual support to doctors who are struggling with non-clinical aspects of their work performance. Since its inception in 2001 the programme has received over 160 referrals ranging from undergraduates to consultants. The service is led by an occupational health physician, and is supported by a GP with occupational health experience, two occupational psychologists and a language specialist. The service is self funding, and Trusts in Wales refer independently to the service. The ISP has close relationships with the National Clinical Assessment Service (NCAS) and other deaneries in the UK.

Training Support Unit of the East Midlands Healthcare Workforce Deanery (TSU)
The TSU is a local service for medical practitioners which deals with a wide spectrum of performance problems, ranging from minor lapses in behaviour, to major or persistent unprofessional behaviours or even acts of criminality. The TSU believe early intervention is essential to prevent adverse consequences for patients, the doctor concerned and his/her colleagues.

‘Leading by Example’
In 2003 the South East Regional Development Centre of the National Institute for Mental Health in England (NIMHE) asked the Sainsbury Centre for Mental Health (SCMH) to work with volunteer trusts in the region to develop this user employment programme (Seebohm & Grove 2006). The programme aids NHS managers and others in employing mental health service users in the NHS while also improving working lives and job retention for all staff in their workplace. This helps to break down the stigma and discrimination of mental service users. Outlined are various recommendations, such as providing support, reassurance and solutions to managers employing people with mental health problems. For example, facilitating flexible working hours, allowing time off for medical appointments, adjusting small, non-central parts of the job can all help make returning to work, successful.

The Individual Placement and Support (IPS) (Social Exclusion Unit 2004) is one method used to assist individuals with mental illness find employment. IPS has been shown to be more effective than traditional approaches in helping people with severe mental health problems into work (Crowther et al. 2001). South West London and St George’s Mental Health NHS Trust has used an IPS approach to successfully employ a number of staff with server mental illness.

6.6. Summary of interventions for health care professionals with mental disorders
Most mental disorders are treatable, with a range of effective interventions being available in both primary and secondary care. However, the occupational impact of most of these treatments is unknown. Symptom reduction does not correlate well with work function, with some studies suggesting specific occupationally focused interventions may be needed. The evidence base for many interventions commonly used in the health care setting is limited. Interventions can be aimed at preventing mental disorders, promoting early detection, facilitating appropriate assessments or
treating established illness. We have summarised the limited evidence available for each of these approaches and provided some examples of how these strategies are currently being used within the health sector. There is a clear need for large, well conducted trials to evaluate possible intervention strategies.
7. Mental disorder and contact with regulators

7.1. Fitness to Practise
Assessment of employees’ fitness to practise may be difficult. Healthcare professionals are aware of the potentially detrimental consequences of a psychiatric diagnosis, and thus may be highly motivated to hide or deny any work impairment. Similarly, illicit drug use may be concealed expertly (Wettstein 2005). This is not only true for doctors and nurses, but also psychologists, dentists, podiatrists and chiropractors (Wettstein 2005).

7.2. Fitness to Practise Hearings
If there are serious concerns regarding the performance of a health care professional, formal complaints may be made to the appropriate regulator. Each regulator has their own mechanisms for dealing with such complaints, although in general they will conduct initial internal enquiries before deciding if a formal fitness to practise hearing is required. Most regulators will have a separate health committee that will consider cases where a healthcare practitioner’s fitness to practise is in doubt due to ill health. The distribution of cases seen by these health committees gives some indication of the types of health problems which most commonly lead to serious performance concerns.

The Nursing and Midwifery Council (NMC) publish an annual report summarising the work of their Fitness to Practise committees.(NMC 2008) In 2007/8 the NMC Health Committee considered 41 cases of impairment of fitness to practise. Of these cases, 19% were due to drug abuse and 17% were due to alcohol abuse. A further 41% were due to other types of mental illness. Similar figures have been reported by other regulators. In 2007 the Royal Pharmaceutical Society of Great Britain considered 11 cases of alleged poor practice due to ill health.(RPSGP 2008) Of these cases 4 (36%) were due to drug abuse and one (9%) was due to alcohol abuse. All of the remaining cases (n=6, 55%) were due to other types of mental illness. Of the twelve doctors where the facts were found to be proven at GMC fitness to practise hearings in 2007, seven (58%) were found to have a diagnosis relating to substance misuse.
While these figures highlight the impact mental illness and substance misuse can have on health professionals' performance, they almost certainly represent only a small proportion of the impairment occurring across the health sector. Fitness to practise hearings are a relatively rare outcome that will only occur when very serious concerns have been raised. It is likely that many health care professionals suffering from mental illness or difficulties with substance misuse have impairments in their work performance, but these never led to formal interventions. Even in those who do undergo a formal review of their performance, it is likely the relative contribution of mental illness is probably under-recognised. The Health Professions Council publish details of all of the decisions made by their Health and Conduct Committees. (HPC 2008) Of the 81 hearings completed in 2006/7 where the allegation was well founded, six were referred to the Health Committee. However, when the details of the remaining 75 cases that were considered by the Conduct and Competence Committee are examined, 15 (20%) of cases involved allegations of misconduct such as driving under the influence of alcohol, self administering drugs at work and arriving at work intoxicated. (HPC 2008) Such allegations may be related to unrecognised substance misuse problems.

From this brief review, it is clear that mental disorders and drug and alcohol related problems are by far the most important underlying reasons why healthcare professionals are deemed unfit to practise.
8. Impact of legislative framework


The Disability Discrimination Act (DDA) is designed to help in protecting employees against discrimination in the UK. Virtually all patients of psychiatrists in secondary care would be covered by the DDA, therefore knowledge of the Act may enhance access to employment (Glozier 2004). Under the DDA employers have clear duties to make reasonable adjustments to the workplace before rejecting job candidates, or before terminating employment, on mental health grounds (D'Auria et al. 2002).

All public sector employers, including the NHS, are required to promote equality for people with mental health problems and disabilities within their workforce and in their services. The have a duty to publish and implement a Disability Equality Scheme demonstrating how they will promote equality. The NHS needs to be proactive in the measures taken to ensure equality in the recruitment and retention of staff with experience of mental ill health. Trusts will be required to produce a plan, set targets and report progress (Seebohm & Grove 2006).

The DDA may be more relevant in secondary care because the primary care setting may involve a group of self employed people working in a practice together. However, the amendments made in 2005 extend the influence of the Act to include small employers (e.g. general practices), emergency services, educational institutions (e.g. medical schools) and qualification bodies (e.g. GMC). Educational institutions, qualifications bodies and employers have separate duties under the DDA in respect of the services they provide in order to not to discriminate against disabled people (Wray et al. 2007). This can create a complicated set of competing demands on regulating bodies, who must weight up their responsibilities under the DDA, with their obligation to protect patients and maintain professional standards.

Implementation of the DDA may potentially overcome some of the effects of stigmatisation (Glozier 2004), with health professionals hopefully finding it easier to disclose psychological problems in order that reasonable adjustments can be made (Snashall 2009).
Examples of how the Disability Discrimination has been used in the health care sector

- **Health Professions Council (HPC 2007)**
  ‘An applicant to a speech and language therapy course said in her application that she had bipolar disorder. The admissions staff received an occupational health assessment and more information from the applicant. They were confident that they could accept the student, who met their admissions conditions. However, from informal discussions with colleagues who worked in clinical practice, they felt that there was little likelihood of a speech and language therapist with bipolar disorder being employed within the NHS. They felt that employers could be worried about her contact with children or vulnerable adults. So, they did not offer her a place on their course. This would be likely to be unlawful, because such a judgement may be discriminatory and could be based on assumptions or stereotypes about disabled people.’

  A health visitor in Scotland who had bipolar affective disorder had responded well to treatment and was stabilised on medication. However, when she applied for a new job and was successful at interview, the job offer was withdrawn following occupational health assessment when she disclosed her condition. The occupational health doctor concerned had not contacted her consultant who would have confirmed that she was fit and well. The health visitor complained to Employment Tribunal. It was agreed that she did have a disability under the terms of the Act, and the tribunal decided that she had been discriminated against, and that she should be paid compensation.

- **The Farnsworth Case (D'Auria, Howard, & Verow 2002): London Borough of Hammersmith and Fulham v. Farnsworth**
  Ms Farnsworth was rejected by the London Borough of Hammersmith and Fulham Council for a post working with children with special needs, because of an earlier history of clinical depression. The Employment Appeal Tribunal held that the employers had discriminated against her. They could have made reasonable adjustments such as placing her on a probationary period, supervising her closely during this period and monitoring her work and her absence record. In this case, it was the occupational health physician who recommended that the Council should not
employ Ms Farnsworth because of her history of clinical depression. The Borough knew about this history because Ms Farnsworth had given her consent for the Borough to see her medical questionnaire and to have her medical history disclosed to them.
9. Conclusions and recommendations for future practice and research

1. Health care professionals report high levels of workplace stress, burnout and other “work-related” mental illness. A large number of descriptive studies have also demonstrated apparently elevated rates of depression, anxiety and substance misuse. However, the vast majority of these studies are small, cross-sectional and prone to bias. Larger studies designed to allow true comparisons between occupational groups have tended to not find evidence of elevated rates of mental disorder amongst all health care professionals. Despite this, health professionals do have high rates of both suicidal ideation and completed suicide providing some objective evidence of high levels of psychological distress. Some of these apparent contradictions may be due to differences between various types of health care professionals.

2. The situation regarding substance misuse is clearer: there is evidence of high rates of alcohol and substance misuse amongst doctors, with emerging evidence of similar problems amongst other health care professionals.

3. Despite the inherently stressful nature of many health care professional’s work, the demands of direct patient care probably contributes relatively little to the psychiatric morbidity of healthcare professionals. Instead the way work is structured and organised within trusts is likely to be more strongly associated with psychiatric disorder.

4. This implies that responsibility for the prevention of mental disorders amongst health care professionals should not rest solely with occupational health departments. The majority of identified risk factors may be best addressed by the management of the health sector, with both organisation and local adjustments.

5. The research on risk factors for mental disorders amongst health professionals is dominated by small studies, many using self-report measures in a cross-sectional design. The possibility of reverse causation (i.e. “chicken or egg”) is rarely considered. Many of the risk factors highlighted are quite common, yet psychiatric illness is relatively rare – few studies have attempted
to look at the way individual risk factors interact with occupational risk factors to produce psychiatric disorder. Almost all studies are observational in design and the impact of making changes at either the individual or organisational level is largely unknown.

6. The deleterious effects of mental disorders on workplace performance are well established. However, many individuals with symptoms of mental disorder will remain at work. There is evidence for particularly high rates of presenteeism amongst health care professionals, possibly due to the cultural and organisational factors that lead many health professionals to be reluctant to take days off work due to ill health. There is also evidence that some of the symptoms of mental disorder, such as fatigue and perceived work stress, are associated with adverse clinical events. Substance misuse appears to have a particularly toxic effect on work performance.

7. There is clear evidence that many health care professionals, especially doctors, are reluctant to seek help when they suffer from symptoms of mental disorder. This appears to be due to a range of factors, including a belief they are not susceptible to ill health, a culture encouraging self reliance and coping, guilt over the possibility of being away from work, stigma and the fear of involvement of the regulating authorities. In the case of mental disorder, there is evidence that concerns over confidentiality are one of the main barriers preventing health care professionals seeking help.

At present even if a health care professional does seek help for a psychological problem, they will often utilise health care services in a different way to other patients. They will often engage in self-treatment or informal consultations with colleagues. Such practices often result in lower levels of clinical care. To date there is little known about how important these issues are to health professionals other than medical staff, although it is likely that the same concerns do affect all health care professionals, although perhaps not to the same extent.

It is likely that health care professionals benefit from specialised health care services, although at present these are not widely available. Such services must be able to provide rapid, evidence based management in a way that ensures confidentiality.
8. Most mental disorders are treatable, with a range of effective interventions being available in both primary and secondary care. However, the occupational impact of most of these treatments is unknown. Symptom reduction does not correlate well with work function, with some studies suggesting specific occupationally focused interventions may be needed. The evidence base for many interventions commonly used in the health care setting is limited. There is a clear need for large, well conducted trials to evaluate possible intervention strategies. Such studies must consider a range of relevant outcomes, including symptom reduction, work performance and sickness absence.

9. The increasing use of information technology, such as the electronic staff record within the NHS, may provide opportunities for secondary analysis of routinely collected data. Such research would provide a cost effective method of answering key questions, but would need to occur with appropriate safeguards regarding staffs’ personal information.

**Recommendations for policy and practice**

10. The prevention of mental disorders, stress, and adverse working conditions will require commitment throughout the NHS. Occupational health professionals, whilst providing valuable services to individuals, are likely to have limited ability to prevent mental disorders among health care professionals. It is not clear which risk factors would be most cost effective to tackle.

11. Whilst desirable, it is not clear how early detection of mental disorders can best be effected in occupational settings. There are risks with screening or public health campaigns to encourage early presentation, that these may medicalise minor, transient distress. Such approaches require rigorous evaluation.

12. Speedy access to expert assessment and treatment for mental and substance use disorders for healthcare professionals is a desirable goal. Care needs to be taken to provide services in confidential settings as free of stigma as possible. Whilst there are some promising examples of services which do this for doctors, they are not universally available for doctors, and the healthcare needs of other health care professionals have not received the same attention.
Recommendations for future research

13. The NHS is in a strong position to develop a portfolio of research on occupational health, with the potential both to improve outcomes within its own workforce, and to inform policy in other occupational settings.

14. The published research on the mental health of health care professionals is heavily dominated by work on doctors, and to a lesser extent, dentists and nurses. There is a need for additional research to consider other health care professionals, and the wider NHS workforce. Perhaps the most important outstanding question is the extent to which help seeking in other professional groups is similar to, or different from, that of doctors, and whether the same needs for specific services exist in these groups.

15. There is a need for observational research on mental disorders amongst health care professionals to go beyond small, cross sectional studies. A prospective cohort study would take account of reverse causation, and allow the interactions between individual and workplace factors and the changing impact of various factors at different stages of illness to be evaluated. A study of this nature might provide information on a range of occupational and health outcomes including the presence of common mental disorders and substance misuse among employees; the impact of such disorders on work; the pathways from health to long term sickness absence or retirement; and the barriers experienced in gaining help. Any such study should aim specifically to inform policy on the provision of interventions to sick healthcare professionals and others in the NHS workforce.

16. The evidence base for many occupational interventions used in the health care setting is limited. There is a need for large, well conducted randomised trials, cluster randomised trials, and other evaluations to measure the benefits or risks of preventive strategies and treatments. Such studies must consider a range of relevant outcomes, including symptom reduction, work performance and sickness absence.

17. Whilst the NHS will have statutory obligations to prevent employees from being exposed to clearly aversive events (such as bullying), it is vital that innovations and new enterprises aimed at prevention or early detection of mental disorders or substance abuse disorders, should be properly evaluated. There is a risk of inadvertently causing harm if untested interventions, which may seem obvious, are introduced.
18. The increasing use of information technology, such as the electronic staff record may provide opportunities for secondary analysis of routinely collected data. Such research would provide a cost effective method of answering key questions, but would need to occur with appropriate safeguards regarding personal information.

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Appendix

Email sent as part of the ‘call for evidence’

We have been funded by the Department of Health National Clinical Assessment Service (NCAS) to carry out a review on the mental health problems of health care professionals.

This is part of a project designed to take forward recommendations outlined in the Department of Health White Paper “Trust, Assurance and Safety: the regulation of health professionals in the 21st Century”, published in 2007.

The key areas of focus for this review are:

1. The epidemiology of mental health problems in health care professionals working in the nine regulated health professions
   a. how common they are and are they more common than in other similar industries?
   b. the nature of the problems seen (common mental disorders, substance misuse, cognitive impairment, etc)?
   c. specific and general predictors of mental ill health in health care professionals?
   d. predisposition to mental health problems amongst students / trainee health professionals

2. Performance implications of mental health problems, on ability to practice safely and effectively

3. What is being done / what should be done i.e. examples of good practice and research findings

4. The help seeking behaviour of health care professionals

We aim to use both primary published research, secondary evidence including previously published reviews and "grey literature" such as industry or union reports.

We wondered whether your organisation had any publications or reports on this area, either in-house or published, that you think should be included in this review. Furthermore, we are also seeking to identify examples of good practice with regard to prevention, assessment and management of mental health problems – could you direct us towards links, or send us copies of, such examples you know of.