THE **COUNCIL** FOR
WORK&HEALTH

Planning the future:
Delivering a vision of good work and health in the UK for the next 5-20 years and the professional resources to deliver it

Good work is good for health, good for business and good for national prosperity

April 2014

Foreword

This report marks the culmination of the first phase of a collaborative project that aims to clearly articulate a vision of how occupational health should be delivered over the next 20 years and to identify the medium and long-term workforce planning that is needed to support that vision. In this report, we describe a strategic analysis of the likely drivers of future occupational health provision.

Professor John Harrison

The approach that we have taken and the planning process means that all stakeholders can become actively involved in shaping this vision.
By working together we can influence what our future services will look like, the way they will be delivered and ensure that we effectively plan our services and the workforce needed to deliver them. Subsequent stages of the project will examine models of delivery, competencies of practitioners and the anticipated workforce requirements.

Occupational health professionals improve the health of the UK's working population, help prevent illness caused by work, and by preventing unnecessary sickness absence, increase the productivity of UK businesses and enable our public services to become more efficient and cost effective. They can play a major part in revitalising the UK's economy. It is a unique multidisciplinary area that prevents work-related illnesses, provides early interventions for those who develop a health condition, reduces sickness absence and uses the workplace to promote health and wellbeing. We are distinctive because we offer a holistic approach that focuses on the person, their work and the business rather than just the disease.

This report has been prepared for the members of the Council for Work and Health but the contents are relevant for a much wider group of stakeholders, including managers, engineers, human resources, unions and employees. There is a compelling case for change and this report sets out the first steps in making that change happen.

This is an opportunity for us to deliver a 'step change' for occupational health. It is vital that together we demonstrate and raise awareness of the pivotal role we can contribute and ensure we have an occupational health workforce that is fit for the future needs of all workers and employers in the UK.

Professor John Harrison
Chair, Project Working Group
April 2014

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This report represents the first stage of a project being undertaken on behalf of the Council for Work and Health. The following organisations are represented:

Confederation of British Industry (CBI)

Defence Medical Services

Trades Union Congress (TUC)

UK Rehabilitation Council (UKRC)

The Council for Work and Health

Health and wellbeing (occupational health and workplace safety) services are delivered collaboratively by a wide range of professional groups. Each one contributes its own particular blend of skills and competencies, some of which are unique, and some of which are shared with other professions.

The Council for Work and Health brings together the professional bodies which represent these groups to provide an authoritative and representative 'single voice' on health and wellbeing issues. It also provides an opportunity for co-ordinated and integrated working on all issues which impact on health and wellbeing services and facilitates information sharing to promote improvement.

Our guiding mission

In all of its activities, the guiding mission of the Council will be to ensure that people have the best opportunities to benefit from the positive health impacts of employment, and that workers are not injured or made ill by the work that they undertake.

To this end, it will aim to:

- Promote the improvement of health and wellbeing of the working age population

- Prevent ill health conditions caused or made worse by work and the working environment

- Encourage a culture of safe working and health and wellbeing at work amongst managers, HR, planners and designers

- Provide necessary support to maximise opportunities for individuals to access, retain or regain employment

Occupational Health

Throughout this report occupational health refers to the full range of healthcare professionals and other resources involved in improving health and work.

These include but are not limited to:

- Human factor specialists and ergonomists

- Occupational health doctors

- Occupational health nurses

- Occupational health technicians

- Occupational hygienists

- Psychologists

- Occupational therapists

- Mental health support workers

- Occupational health physiotherapists

- Vocational rehabilitation specialists

- Workplace health and safety professionals

Many generic Allied Health Professionals (AHPs) have 'work' as an outcome measure and GPs are encouraged to consider the benefits of work when completing the Fit Note.

The relationship between work and health, particularly good work and good health, is fundamental to all these practitioners. The need for occupational health and safety in the UK dates back at least as far as the industrial Revolution, although students of the history of occupational injuries and diseases will know that appreciation of the maladies of the mechanical arts dates back to ancient Greece[1]. In the era of Blake's "dark satanic mills", safety at work and improved industrial (occupational) hygiene were the cornerstones of preventing injury, disability and life-shortening diseases. In the ensuing centuries work design has both caused and solved occupational diseases. At the beginning of the twenty-first century, workplace health and wellbeing has become a unifying approach to health at work, bringing together the need for good physical and mental health, good work and workplace design, good management of people at work and specialist support from the wide range of practitioners. Thus, workplace health and wellbeing is everybody's responsibility. Specialist practitioners provide leadership, advice and support, as required.

[1]Hunter D. The Diseases of Occupation. The English Universities Press. London. 1957.

Contents

1 | Executive Summary

This report presents the findings of a Project Working Group established by the Council for Work and Health Executive to take forward a project to develop a vision for occupational health practice and a consequent workforce plan to underpin the delivery of the vision.

The Working Group was established to:

- Define the UK population(s) to be addressed

- Consider the drivers for and constraints of provision of occupational health resources

- Conduct a review of the evolving UK health service and health education economies and the potential impact on provision and development of occupational health resources

- Map key stakeholders and the actions required to manage their expectations

- Secure support and future funding for the project

- Formulate the communications strategy in support of the outcomes of this work

The Working Group was chaired by Professor John Harrison and a list of members can be found at appendix 3.

An initial workshop scoped the project and established the philosophy, vision and principles (appendix 1). The Working Group used *the Population-Centric Workforce Planning* tool [appendix 2] as the framework for their approach, with particular focus upon defining the population[s] of concern for occupational health and conducting a strategic analysis of the environment.

A literature review, together with a series of structured telephone interviews was undertaken. A second stakeholder workshop with 30 participants in January 2013 was then held to test some of the emerging ideas and hypotheses. Key to the methodology was the development of a series of case studies that bring the clients and markets of the future to life.

In considering our target population of the future, our strategic analysis suggested that the current scope of 'working age population' should be extended to include those who are most likely to consume or benefit from occupational health advice over the next 20 years.

We identified these particular groups as:

- Those in the age range 16+ and in work

- Those with a higher risk of falling into worklessness

- Those with pre-existing conditions known to impact fitness for work

- Those living with or at risk of long latency diseases

- Those with increased prevalence of chronic disease [e.g. age 50+]

- People working in SMEs

- Employers and those involved in work and workplace design and planning

- Employee representatives

The strategic analysis also suggested that there would be three main driving forces for change in the organisation and delivery of occupational health services over the next 20 years:

- The economic situation and availability of funding

- Demographic shifts in the UK working population

- The pattern of chronic and long-term conditions

These three main drivers are supplemented by increasing globalisation, technological change and changes in the education and training of healthcare professionals.

The ten case studies illustrate a range of client groups and reflect changes in the way that occupational health will need to be delivered in the future.

A compelling case for the development and repositioning of occupational health has been made. This centres on the strategic themes of using the workplace to improve health and wellbeing, preventing work-related illness, delivering integrated care - particularly to those with long-term conditions, and managing sickness absence. They meet the needs of government and business by contributing to prosperity and the public health agenda and they are consistent with the philosophy of occupational health that good work is good for health, good for business and good for national prosperity. The case studies give examples of occupational health interventions that are consistent with these themes; they depict target populations and markets with the strategic analysis to provide an evidence base for a model of occupational health practice and service delivery.

The Working Group recommends the following actions:

1. This report has laid the foundations for taking forward stages 3 – 5 of the workforce planning approach (see appendix 2). We recommend that the Council for Work and Health lead the implementation of stages 3 – 5 to be completed within 12 – 24 months.

2. The Council implements a communications plan that has been developed in conjunction with this project, which engages key stakeholders and aligns our messages to promote a consistent vision of occupational health.

3. We recommend that the Council develop and implement a marketing campaign for occupational health which promotes the demand for occupational health and ensures there is sufficient capacity of suitably trained and competent practitioners to deliver the demanded evidence-based interventions.

2 | Introduction

This report presents the findings of a Working Group established by the Council for Work and Health Executive to take forward a project to develop a vision for occupational health practice and a consequent workforce plan to underpin the delivery of the vision. The project will take place in several stages, with a review of progress and findings at the end of each stage. This report is concerned with stages one and two (appendix 2) – establishing the change management approach and strategic analysis.

The changing demographics of the UK population, and in particular the working population bring the interface between work and health to the centre of political debate about how economic growth can be stimulated and maintained, as the demands for health care rise inexorably.

The Health and Social Care Bill brings significant changes to the commissioning of services by the National Health Service (NHS). Clinically led commissioners will require significant guidance from occupational health leaders regarding the needs of populations over the next 5 to 20 years if they are to make informed occupational health purchasing decisions and occupational health, in its widest sense, is to become a mainstream component of healthcare. However, this vision is not just concerned with the NHS, the monopoly supplier of healthcare in the UK. Although the NHS employs more than one million people, most people do not work in the NHS and neither do many of the professionals involved in occupational health. Occupational health is also much wider than healthcare, with a major emphasis on preventing conditions caused or made worse by work and improving the health and wellbeing of those at work. Employers have a collective responsibility and a business need to contribute towards the health and wellbeing of the working population. A current example of this in action is the Public Health Responsibility Deal[2], whereby a wide range of employers have undertaken to implement a range of initiatives, such as promoting physical activity, encouraging smoking cessation, healthy eating and the use of nationally accredited occupational health services. Unfortunately, most employers do not employ or use workplace safety or health specialists to advise on the assessment and control of risk to health from the workplace, or on opportunities to improve fitness and wellbeing. Small and medium-sized enterprises present a challenge to the vision of universal access to multidisciplinary occupational health resources (appendix 1). Commissioners of healthcare, including occupational health, will need to consider how partnership working with the private sector might address this.

Changes in Public Health England also present opportunities to shine a light on the demands placed on health budgets that are amenable to management in workplace settings. Workplaces are environments where most people spend most of their working age life. Work and the workplace are responsible for a number of acute and chronic health conditions and absences from work. The Health and Safety Executive[3] have reported that in 2011/12, there were 212,000 over-3-day absence injuries and 27 million working days lost due to work-related illness and injury. 1.1 million working people were considered to suffer from a work-related illness with around 450,000 new cases of occupational related ill health being reported annually. Over 12,000 deaths each year are estimated to have been caused by past exposures at work, mainly to chemicals and dusts. Creating safer and healthier workplaces clearly requires effective risk assessment and prioritising action to protect those workers at increased risk of becoming injured at work, or being affected by illness. However, workplaces are also rapidly becoming places where the lifestyle factors that contribute to the future burden of health can

be addressed as a sine qua non for keeping people economically active. There is increasing recognition of the need to address mental health at work and of the association between poor physical health and impaired mental health. Effective safety at work and good health at work depends on influencing and inculcating safe and healthy behaviours, both at work and at home. Occupational health or workplace health and wellbeing is, and will continue to be, an integral part of the UK's public health delivery. We need to ensure that strategists and commissioners are aware of and understand the contribution that the workplace has to make with regard to prevention of ill health and in supporting people with health conditions. In particular, businesses and health and wellbeing boards will need evidence-based information to guide them towards sensible occupational health resource plans for their working age populations.

To meet these challenges and opportunities, considerations must extend beyond those currently in work and to those who are capable of being in work. The Marmot review, *Fair Society, Healthy Lives, 2010* reinforces the aphorism that "good work is good for health and that worklessness is not," acknowledging that "the more favoured people are, socially and economically, the better their health." As one of six policy objectives he called for "fair employment and good work for all".

The ageing worker population means that the way long-term conditions are perceived and managed will become increasingly important determinants of employability. About 42% of 50-64 year olds, the bedrock of the productive workforce have at least one chronic disease or impairment. While they may not fit the 1948 definition of health - "a state of complete physical, mental and social wellbeing, and not merely the absence of disease or infirmity" - most will be fit for work. We must also ensure that the next generation of 50-64 year olds is more healthy and productive than the last. Scientific progress should mean that we are able to have a better understanding of disease processes, causal factors and of susceptibility to disease so that we can target workplace interventions. This will be particularly important for long latency diseases, such as occupational cancers. We will also need to gain a better understanding of the bio-psycho-social model of illness development and maintenance to reduce the principal causes of workplace morbidity - musculoskeletal and mental health conditions. We already know that the current state retirement age will increase and it is likely that it will continue to be revised upwards. As such, we must increasingly view the working age population as having no upper age limit. We need to gear workplace health and wellbeing initiatives to prepare working people for productive lives well into their seventies, as part of our vision for the next 20 years.

Occupational health professionals have a pivotal role in advising employers and employees of "what good work looks like," and creating the evidence base for defining what physical and mental capabilities are required to deliver it. They advise on improvements to work and the workplace to prevent illnesses caused by or made worse by work. They help describe the arrangements for preventing people from falling into worklessness, and rehabilitating them from worklessness. For employers they reduce costs by advising on mitigation of risks from the workplace or from work practices, minimising the impacts of health risks to the business in areas such as complying with the Health and Safety at Work Act and Equality Act, identifying work-related disease at the earliest point, facilitating early intervention and treatment, complying with health surveillance, and, where required, advising on statutory reporting of work-related disease. Of no lesser importance is their contribution to productivity as they

advise on optimum human and organisational factors to reduce work stress, ensure fitness for work, and the management competencies required to address worker attendance and sickness absence.

Just at the time when occupational health is becoming so important to so many and the evidence of cost effectiveness is compelling, the specialists within the occupational health team are under threat - fewer physician trainees are entering occupational medicine and there are similar challenges for nurses and the allied professions. The funding for training is unsustainable, the research base is diminishing and affordable access to comprehensive occupational health services for the majority of the UK's working age population is limited or non-existent.

Occupational health should be a mainstream function that is integral to protecting, maintaining and improving the health of the working age population. Long-term resource planning, and the underpinning training framework to deliver that resource over the next 5-20 years is as critical as the evidence-based pathways for managing work-health issues for the delivery of a healthy workforce, and a healthy economy.

In response to the challenges described, UK occupational health leaders are becoming a more coherent force for change and positive action. Since its formation in 2011 the Council for Work and Health has facilitated a joined-up approach to cross-functional occupational health planning by bringing together the voices of the key actors, with the competencies and will to design and articulate the multidisciplinary occupational health priorities, and to champion the work streams to deliver on them.

3 | Background

This project builds on outputs from workforce planning workshops held in 2012. Fundamental to the modus operandi of the project has been an agreed vision, philosophy and set of principles that have grounded the future-focused work and which were developed at a stakeholder workshop held on October 15th 2012 (appendix 1). If the philosophy "good work and workplaces are good for health, good for business and good for national prosperity" is to be more than a mere aspiration and the vision of universal access to occupational health to create better health and business productivity is to become a reality; the clear articulation of the occupational health workforce needed to deliver that vision for UK workers must be a priority.

Integral to that articulation is clarity regarding the most efficient and productive way of providing universal access to consistently high quality occupational health provision. This requires an exploration of potential models of provision to anticipate capability supply challenges, training needs, and seamlessly juxtapose options within the landscape of professional career development; occupational health must be an attractive career route for the different professional groups engaged in the delivery of occupational health leadership and service.

The framework that has been adopted to shape the project is called *population centric workforce planning* (appendix 2). A fundamental focus for the framework is on target populations – **it starts with 'who' occupational health will need to help in the future**. Case studies are used as a method to bring the planning process to life. A second key aspect of the framework is the recognition that **workforce planning is a change management process**. This project is concerned with transformational change of occupational health practice. Helen Bevan states that 75% of change initiatives fail to achieve their objectives[4]. Key determinants of success are duration of change, performance integrity (the right mix of team members to deliver change), commitment and effort. The framework recognises that effective transformational change is not quick. There are six stages in the planning process; each stage may be subject to review before the final reality check and gap analysis. Commitment to change will require leadership from respective professional occupational health organisations as well as engagement with and support from grass roots practitioners. Finally, there must be a realistic appraisal of the time and resources required to sustain the change process.

The scope of the project to date has been stages one and two of the framework - defining the population(s) of concern for occupational health and conducting a strategic analysis of the environment that will influence workforce planning. The findings form the basis for moving forward to the remaining stages and make recommendations as to how this might be achieved. Subsequent stages will involve developing models of delivery of occupational health, defining the competencies that practitioners will need across the range of occupation health professions and defining the roles of a future occupational health workforce.

[4]http://www.institute.nhs.uk/quality_and_value/introduction/article_15.html

Accordingly, and with the support of the Executive Committee of the Council for Work and Health, a Working Group (appendix 3) was convened to:

* Define the UK population(s) to be addressed

* Consider the drivers for and constraints of provision of occupational health resources

* Conduct a review of the evolving UK health service and health education economies and the potential impact on provision and development of occupational health resources

* Map key stakeholders and the actions required to manage their expectations

* Provide a prospectus to secure support and future funding for the project

* Formulate the communications strategy in support of the outcomes of this work

4 │ Methods used

A feature of this project has been the use of scenario generation to draw together diverse sources of information to highlight important aspects of occupational health delivery, describe the population of interest, engage stakeholders and secure funding for the subsequent stages of the workforce planning project. A number of case studies have been developed to bring these issues and themes alive and 'make the case'. These are the personal representations of the 'essence of occupational health'. We are using them as symbols or to 'paint portraits' to show the real need of occupational health services in the future. They demonstrate the benefits we can bring if we effectively plan for the future. Key themes were identified via telephone interviews with members of the Working Group, further developed during a stakeholder workshop and finalised by a sub-group of the main Working Group.

A review of selected grey literature was carried out. To make the search more manageable it focused on key issues including:

- How the demographics of the UK population will change within the next 20 years

- How future health needs will change within the next 20 years, particularly around cardiovascular disease, obesity and diabetes, cancer, Alzheimer's and dementia, long-term conditions and infectious diseases

- How these changing demographics and future health needs will affect occupational health in the next 5, 10, 15 and 20 years

- How work will change

- How technology will change

- How the health system will change

- How workplace exposures and risks will change

- Whether, given all the above changes, occupational health can remain with the status quo

Given the above questions and themes, a search of journal articles would not have been practical. As well as a Google search of key terms, reports and work from a number of think tanks were analysed. Pieces from the King's Fund, the Nuffield Trust and the Work Foundation were used as they had particularly relevant insight around the questions guiding the literature search. Whilst there was a plethora of articles on technological changes and medical miracles, the literature review sought to ground itself in the theory of change management; in that, changes to occupational health would emerge from areas where there is the most pressure for change. As such, the unequivocal force of demographic changes, the increasing proportion of long-term conditions (including preventable conditions arising from work), the rising numbers of those employed by SMEs and in self-employment, and the financial pressures facing the NHS will influence the diffusion of innovation within occupational health and guide any potential strategy. Some long-term conditions may be caused by the conditions in workplaces, and so the prevention of exposures that could cause such health effects to occur would ease the future burden on the NHS, as well as preventing the suffering of those concerned and their families.

Telephone interviews were carried out by Carol Brooks of Prospect Business Consulting Ltd. Key stakeholders agreed to participate in semi-structured interviews to assist with defining the population, defining the strategic environment and stakeholder management / engagement. Information was obtained from 6 interviewees. The questions and themes identified in the semi structure interviews were then used to inform the key issues considered in the literature review and as the basis for the themes to be discussed at the stakeholder workshop.

A stakeholder workshop was held on January 8th, 2013. There were 30 participants. Outputs from the workshop were:

- Future clients / markets

- PESTEL analysis

- Stakeholders

- Shaping the future

- How do we take things forward?

The themes were then fleshed out and expanded by developing case studies.

The *case studies* present a series of scenarios that describe clients and markets of the future. Thus, the following conditions and issues were identified as important drivers of the occupational health market:

- Long-term conditions, such as diabetes, cancer, Parkinson's disease and dementia

- Work-related illness such as cancer, COPD, asthma, musculoskeletal conditions such as work-related upper limb disorders and back pain, and noise induced hearing loss

- Mental ill health and co-morbidities (alcohol, smoking)

- Obesity

- Physical impairment

- The ageing population

- Integrated care

- People capable of work but not in work

- Rehabilitation back to work

- Infectious and emerging diseases and changes in risk profile (for example nano technology and new chemicals)

- Ethnicity and health

- Use of new technology and other innovative ways to deliver healthcare

- New ways of working and service delivery

5 | Population definition and potential markets

The current scope of "working age population" could include all persons over 16 years that are potentially capable of paid work. It may still be appropriate to focus the attention of the Working Group on a narrower population in the first instance, say 16-65, noting that the UK population will have an increasing proportion of people over the age of 65 years over the ensuing decades who either wish to or have to work beyond this age. The age of pension entitlement is likely to increase accordingly, such that many more people will be at work in their 60s and 70s.

In addition, it was agreed to stratify the populations, identifying those who are most likely to consume or benefit from occupational health advice both now and in the next 5-20 years. For example:

- those with a higher risk of falling into worklessness

- those with pre-existing conditions known to impact fitness for work

- those with an increased prevalence of chronic disease (e.g. age 50+)

6 | Case Studies

Where does occupational health need to focus its activities and the provision of services in the next 5 to 20 years? What is the future market of our services?

The following 10 case studies provide a 'pen portrait or profile' of some of the typical people we see the profession providing a service for and the benefit that occupational health in the broadest sense will be able to bring. Occupational health is unique in that it addresses the wider questions of the health and wellbeing of the working population and provides holistic solutions. As the UK's workforce becomes older, more people will be susceptible to health effects caused or made worse by work, many will have multiple issues and conditions that will impact on work, we will need to think about 'working people' and their work and workplace rather than 'diseases'.

Case Study 1

Tracy, 32, baker has worked in a small bakery for 5 years. During the last year she has become aware of intermittent wheezing and shortness of breath, that disappears when she is away from work or when on holiday. When her symptoms are particularly bad, she has had some time off work, but most of the time she puts up with them. Her GP has prescribed her an inhaler, which gives her short-lived respite from her symptoms but they have not gone away. She is worried that, as a young woman, she is becoming disabled.

One in six cases of asthma in people of working age is either caused or aggravated by preventable work-related factors. Certain industries and trades carry a much greater risk such as vehicle paint sprayers, bakers, laboratory workers, certain workers in the chemical industry and those carrying out electrical soldering. Work-related asthma is preventable with provision of good multi-disciplinary occupational health services, including advice on risk assessment and on how to adequately control exposures to respiratory sensitisers such as flour dust, plus health surveillance on those who may be exposed. Many of the people exposed, like Tracy, work in SMEs with little or no access to occupational health. **SMEs currently account for 99.9% of all private sector businesses and employ 14.1 million people – only 1 in 10 small employees provide access to any occupational health provision, and even fewer have access to allied health professions.**

Work and the workplace are responsible for a range of chronic health conditions (including asthma) with around 450,000 new cases of occupational related ill health reported annually and it is estimated that at least 12,000 deaths each year are being caused by past exposure to working conditions.

We need to ensure that people like Tracy have access to good occupational health information and support. Tracy's employer should have training about occupational health conditions as part of the management of risk in the workplace. More importantly, employers like Tracy's should have access to appropriate occupational health specialists, to help assess and manage the risks to health in the bakery using good occupational hygiene practice to assess exposures and implement engineering and other controls to prevent Tracy from becoming sensitised to the flour dust in the first place. Research indicates that up to 80% of GPs do not record their patient's occupation in their notes. Tracy's GP should have core skills in occupational health and then should be able to refer to a specialist to confirm the diagnosis and arrange for intervention to prevent exposures in her workplace. There should be accessible and reliable sources of occupational health information.

Case Study 2

> **Matt, 60, works in a factory assembling marine engines** and has a bad back. His back has troubled him, on and off, for some years and he has had time off work because of it. His job involves **lifting and moving heavy loads** and manipulating them during the assembly of the engines. He is worried about the prospect of retirement and he would like to keep working for as long as possible. However, he has been under increasing pressure from his boss, who says that he is becoming slow. As a result he feels quite stressed.

In the UK, one third of the population will be over 60 by 2033 – increasingly many people will have to work beyond current retirement ages either by choice or necessity. There are many myths about employing older workers. Evidence indicates that individual attitudes and skill sets, rather than age, per se, are the important determinants of performance. For older employees, pre-retirement advice will need to be adapted. 4th and 5th decade working courses could provide health coaching, advice on physical activity and careers advice, as well as guidance on planning finances.

80% of the adult population will suffer with back pain at some time in their working lives. Back pain and other musculo-skeletal aches and pains are the single biggest cause of sickness absence. As well as the cost to the individual in terms of pain and discomfort, there is also a huge financial cost to employers resulting in lost working days, increased sick pay and reduced productivity. The TUC estimate that British businesses lose **4.9 million days per year of employee absenteeism through work-related back pain.** The cost of back pain to the exchequer is estimated to be in the region of **£5 billion per annum.** Evidence suggests that appropriate occupational health advice and particularly early access to ergonomic intervention during work and workplace design can reduce the occurrence of back pain and the associated human impact and costs. Good ergonomic design and the implementation of improved material handling techniques and technology could not only help to minimise the health impact but also improve productivity.

Matt needs rapid access to therapies to help him manage his chronic back pain and his current stress, which may include exercise, regular breaks, manual handling updates, psychological support and workplace stress management training. He should also be able to access appropriate occupational health advice that will analyse the functional impact of his symptoms with a view to suggesting adjustments, negotiate change with Matt and his boss and offer case management support until the changes have been established.

Matt's boss will need training to understand the specific needs of the older worker and to be aware of how simple work adjustments or mechanical material handling aids, could help Matt continue to be healthy and effective at work. He also needs access to specialist advice and support on work and workplace design to prevent other workers suffering problems in future. Matt's manager needs to learn to avoid age stereotypes, and consequent age discrimination, by being given positive information about the characteristics and skills of the older worker and to ensure that employment decisions are evidence-based, with the help of occupational health advice.

Case Study 3

John, 25, call centre operative in the complaints section. He suffers from obsessive-compulsive disorder (OCD). He feels under a lot of pressure to meet targets and he works long days. His GP has told him that he is suffering from anxiety and he has been referred for cognitive behavioural therapy. However, the waiting time for NHS treatment is over 8 weeks and he is worried that he may have to take sick leave in order to cope.

More than one million people now cite mental or behavioural problems in support of claims for sickness benefits – a rise of more than 200,000 in a decade. It is estimated that each year **one in six workers in England and Wales is affected at any one time by anxiety, depression and unmanageable stress.** Research by the Chartered Institute of Personnel and Development finds that it is not just absence that hits business. Most people with poor mental health continue to work yet may struggle with concentration, making good decisions and providing effective customer service. It is estimated that this 'presenteeism' costs UK businesses £15.1 billion per year in reduced productivity, while mental health related sickness absence costs £8.4bn.

OCD is estimated to affect about 1.2% of the population. The presence of symptoms may interfere with work because of the impact of obsessive thoughts or the need to carry out ritualistic behaviours. The social impact of OCD may lead to the development of other mental health problems, such as depression.

John's type of work may mean he is experiencing job strain, the combination of high job demands and low control at work, which has been associated with a more than a 20% increase in coronary heart disease. The World Health Organisation estimates that by **2020, depression will have become the second leading cause of disability in the world** – the workplace is a key and cost effective environment to address this. John's employer should be aware of the guidance on mental health at work, such as "No Health Without Mental Health" and the "Time to Change" campaign funded by the Department of Health. Using the approaches advocated, the employer can help to minimise job strain on all employees and minimise the impact on mental health. John needs to be able to understand his underlying condition and how it might affect him at work. OCD may be treated using cognitive behavioural therapy (CBT) and it is important that the workplace component forms part of this. Many occupational health practitioners are skilled in CBT techniques or will have access to a trained therapist or occupational psychologist. His employer needs to know what adjustments could be made to assist John. Easy access to specialist occupational health information and advice is required. If working in the call centre proves to be impossible, John needs advice and help to find and move to a more suitable job.

Case Study 4

Dipti, 45, secretary is now finding work difficult because her eye sight has deteriorated. She is overweight and has type 2 diabetes, high blood pressure and raised serum cholesterol, for which she now takes a multitude of tablets. She feels that she is starting to fall apart.

There are **2.9 million people who have been diagnosed with diabetes in the UK** and a further **800,000 suspected undiagnosed.** By **2025, it is estimated that five million people will have diabetes** in the UK. Type 2 diabetes is up to **six times more common in people of South Asian** descent and up to three times more common among people of African and African-Caribbean origin. By 2031, ethnic populations will make up 15% of England and 37% in London. The workplace is an ideal environment to assist employees with long-term chronic conditions and all employees benefit from strategies for controlling diabetes because these strategies can also reduce the risk for, or help to manage, other chronic diseases, including heart disease, stroke, high blood pressure, and obesity. Provision of targeted education addressing diabetes and work, coupled with easy access to clinical expertise in the workplace should be part of an integrated care pathway for this condition.

In England **65% of men and 58% of women are either obese or overweight.** Obesity reduces your life expectancy by around nine years on average and is responsible for 9,000 early deaths each year in England. Around one in five cases of heart disease are attributed to obesity. Obese workers take more sick days, have longer sick leaves and incur greater productivity losses than do non-obese workers.

A study (by John Hopkins Bloomburg School of Public Health) found that only 44% of general practitioners reported success in helping people lose weight – workplace programmes can tackle obesity on a daily basis by encouraging a healthy diet and active lifestyle among employees through an organisational culture of health and wellbeing and specific health promotion campaigns. Because most employees spend more than a third of their waking hours at the worksite, the workplace has a unique opportunity to provide health and wellbeing information and in facilitating healthy behaviours. For example, her company could have an active travel policy to encourage walking or cycling to and from work. There could be lunchtime walks. There might be women only sessions sponsored by the company at a local gym. There might also be groups of workers that play competitive sports or that organise sporting events. There should be healthy eating options in the staff canteen, with calorie labelling of foods.

Dipti needs to understand her underlying health condition and how she can take control to improve her health and wellbeing. She needs access to information that includes health at work. She needs to become more active and to eat healthily. Her ethnic background means that she is at an increased risk of developing a metabolic syndrome and she might have benefited from health and wellbeing advice from an early age and when she first started work.

Dipti's eyesight problems might be related to her diabetes or may be age related. She will have regular eye checkups because of her diabetes, and she is also eligible for regular eye tests because she works all day at a computer. The ergonomics of her place of work should be assessed. The management of her diabetes, high blood pressure and raised cholesterol should be holistic and integrated and the care pathways should include her occupational health and promoting her work ability.

Case Study 5

Milos, 48, CEO of a biotech company in Cambridge. His company employs 50 staff. He is frustrated by the high turnover of staff, which is disruptive and costly to his business. He wants to improve productivity and demonstrate that his company is an attractive place to work. He would like to improve staff morale. He has considered doing something about health and wellbeing but is unsure what.

Every year 140 million working days are lost to sickness absence and employers pay sick pay and associated costs of £9 billion a year.

PriceWaterhouseCoopers have shown that wellness programmes have a positive impact on intermediate and bottom-line benefits. In their report *Building the case for wellness*, 45 out of the 55 case studies that they studied showed a reduction in sickness absence and 18 an improvement in staff turnover.

Milos needs to implement a tailored health and wellbeing strategy based on (a) a health needs analysis of his workers, and (b) an assessment of the health risks to which his employees could be exposed. He needs to look at introducing tangible benefits linked to health and wellbeing such as flexible working; health eating/free healthy food in the canteen; "Me" time; fitness programmes to on-site gym or discounted membership of local gyms; address any health and safety concerns by providing user friendly health and safety information and procedures, and he needs to demonstrate commitment to staff via suitable and sufficient workplace risk assessments and transparent health risk management.

The Foresight Mental Capital and Wellbeing project identified five ways to mental wellbeing, akin to "five fruit and vegetables a day". A health and wellbeing programme that encourages the following individual actions is supported by an extensive review of published literature: Connect, Be active, Take notice, Keep learning, Give. These five actions are incorporated into the Workwell model developed by Business in the Community.

Case Study 6

Margaret, 53, is a manager of a construction company. Her team have raised concerns about their working conditions and exposures to dust. Following a diagnosis of lung cancer in one of their colleagues, their unions have highlighted the HSE data on chronic obstructive pulmonary disease and lung cancer from exposures to crystalline respirable silica dust when cutting stone. The employees are concerned that their work involving cutting stone may be exposing them to levels of dust that will cause cancer. Margaret knows she has a duty to understand the risks and ensure that her employees are protected.

323,000 people are diagnosed with cancer each year and 109,000 are of working age – at the same time survival rates are improving. At least 8,000 deaths and a further 14,000 cancer registrations are estimated to be related to or caused by work conditions; these are all potentially preventable with the provision of good occupational health and safety and occupational hygiene services on how to prevent, or control adequately, exposures to the cancer-causing agents concerned. Research shows that cancer patients have better outcomes at work if they receive support early on to consider how cancer and its treatment might affect their working lives. **More than 4 in 10 people who are working when diagnosed have to make changes to their working lives after being diagnosed.** Research shows single mothers are more likely to be disadvantaged in several areas. They tend to have lower educational levels and a higher likelihood of reporting ill health or disability. They may be low income earners and there tends to be a higher incidence of poverty in the group.

Margaret needs advice from a multidisciplinary occupational health team. Following the principles of sound occupational hygiene practice, the workplaces and working conditions in her company need to be reviewed. Where employees are exposed, then an assessment will need to be made of levels of dust, where appropriate measuring personal exposure and comparing to the Workplace Exposure Limits published by HSE. Where levels are elevated, action will be required to prevent or control exposures. This may involve changes to work equipment, work practices or personal protection. Employees that may have been exposed to elevated levels of dust may require medical evaluation or counselling. Any individual with lung cancer needs advice and support from Macmillan and their employing organisation. This will enable an informed choice about when and how they will return to work.

Occupational health practitioners can supplement the work of Macmillan by ensuring that evidence-based decisions about fitness for work are taken, linking knowledge of the illness with functional ability and the needs of the job. The Disability Rights Commission (DRC) reported that 82% of callers with cancer complained of unfair treatment at work following diagnosis and that their employers were failing to make reasonable adjustments. This is despite guidance from the Chartered Institute for Personnel and Development (CIPD) *Cancer and Work - Guidelines for employers, HR and line managers*. A survey by CIPD found that 73% employers do not have a formal policy for managing employees with cancer and many organisations do not emphasise the importance of provision of information or support. Breast cancer is considered to be a disability under the Equality Act 2010. However, more than 20% employers surveyed were unaware of cancer being considered to be a disability.

Case Study 7

Dawn, 52, self-employed and a carer for her dependent mother. Dawn has built up a successful business working from home as a part-time bookkeeper for several small businesses in her locality. She has just been diagnosed with Parkinson's disease. She does not know how she will cope in the future.

One person in every 500 has Parkinson's and most are diagnosed over the age of 50. Changing patterns of employment mean that an increasing proportion of the working population are employed in small enterprises where there is no ready access to occupational health support and almost **4.2 million people of these are currently self-employed** like Dawn. Around 6 million people provide unpaid care in the UK in April 2001 and 45% of carers are aged between 45 and 64. By 2037, it is anticipated that the number of carers will increase to 9 million. In 2001, 1.2 million men and 1.6 million women aged 50 and over in England and Wales were providing unpaid care to family members, neighbours or relatives. This represents 16% and 17% of older men and women respectively.

Dawn needs initial information from her GP and referral to specialist nursing advice and her local Parkinson's disease network for advice and peer support. Her GP will refer her to occupational therapy and physiotherapy as her symptoms become apparent. As a self-employed worker she will need to access occupational health input privately. She may be able to get some free advice through the government sponsored Health and Work Website. Adviceline due be launched in October 2014. For example, she needs advice on arranging her job to take account of the functional impact of the Parkinson's disease with provision of working aids, information technology solutions and scheduling her working hours to match her optimal performance hours. We need to look at innovative models of access and delivery including via social media and the internet using smart phones and telehealth.

Case Study 8

Steve, 25, unemployed is a veteran of Afghanistan. He was injured during active service and he now has a prosthetic limb. He was discharged by the army with a pension. He managed to find two short-term jobs in the security industry but he is now unemployed. He suffers from depression. He has approached the Citizen's Advice Bureau for help.

The veterans community is a wide and disparate population estimated to be over 10 million people in the UK. The MOD seven stages of medical care is designed to rehabilitate personnel back to duty, but multi-professional packages of support are required to help injured or unwell military veterans to achieve employment in civilian life.

There are over 6.9 million people of working age living with a disability, which represents 19% of the working population. Occupational health can help workers with a disability by advising on changes aimed at removing barriers to employment, linked to a fundamental understanding of the relationship between health and work, and of the functional requirements of various job activities. There are currently 1.3 million disabled people in the UK who are available for and want to work.

The skills of occupational health professions are also applicable to helping those, like Steve, who are out of work get back into work. Rehabilitation specialists can optimise function followed by a multi-professional assessment to establish his needs and barriers to work. He should be able to get help via Job Centre Plus working in conjunction with the Royal British Legion's 'Civvy Street' and other services to develop a programme of support and possibly retraining. Occupational health support provided via his GP could include functional and psychological assessment of abilities and provision of support with workplace adaptation; this would feed into careers advice.

Case Study 9

David 50, is a Local Authority Director who sits on a health and wellbeing board. There are concerns about rising levels of obesity amongst fire fighters and impact on operational fitness. He wants to commission a health and wellbeing support programme that uses fire fighters as health and wellbeing champions for the local community.

The standard of physical fitness for fire fighters is high. There is a requirement to climb a 13.5 metre ladder, drag a heavy dummy around a course whilst wearing full protective equipment, perform a ladder lift simulator test, perform an enclosed space test and demonstrate the ability to assemble and carry equipment. To maintain this level of fitness requires a level of training that might be considered to mitigate against the development of obesity. However, a Loughborough University study found 53% of firemen were overweight and 13% were obese. In England 24% of men and 26% of women are obese. In the United States, fire fighters have the third highest prevalence of obesity of 41 male dominated occupations. A recent research paper in the American Journal of Industrial Medicine has highlighted five themes that might be relevant to the occurrence of obesity: (1) fire station eating culture; (2) night calls and sleep interruption; (3) supervisor leadership and physical fitness; (4) sedentary work; and (5) age and generational influences.

David speaks to his occupational health team who develop a programme that links requirements for operational fitness of fire fighters, the five themes identified in the research and the specific health needs analysis for the community. The occupational health team work in partnership with the public health team based in the Local Authority. They use health beliefs and change management models to create a shared sense of purpose around obesity and wellbeing. A range of interventions are commissioned that will improve overall fitness as well as weight loss. The emphasis is on making the interventions fun and promoting a community approach to facilitate sustainable activities. A key element is role modelling by the fire fighters. This motivates the fire fighters as health and wellbeing champions as well as encouraging the local community. The team identifies metrics to monitor success and to feedback to the participants. The initiative is covered by the local press and there is a high level of involvement. The Health and Wellbeing Board is impressed with how a workplace-based project can be extended to involve the local community in a way that is mutually beneficial.

Case Study 10

> **Gillian, 40, Human Resources Director** working for a Local Authority has a big problem with high levels of frequent short-term absences in the workforce. Absence rates have been running at around 10%, with the most common reasons for absence being mental ill health and musculo-skeletal conditions. She is determined to halve the current agency bill of £150,000 per annum.

The Office for National Statistics reports **that 131 million days were lost due to sickness absence in the UK, in 2011**. The trend, since 2003, is for sickness absence levels to fall. On average, about 4.5 days are lost for each worker and the most common reasons for absence are minor illnesses, such as coughs and flu-like illnesses. The cause of absence associated with the greatest number of days lost is musculoskeletal illness. The percentage of hours lost in the public sector is higher than in the private sector: 2.6% compared to 1.6% respectively. Workforces with a higher percentage of women workers and which are larger (over 500 workers) and have older workers tend to have higher absence rates. The North East of England and Wales were the regions of the UK with the highest sickness absence rates. Thus, there are many social and cultural reasons that lie behind sickness absence rates that should be considered when planning a programme to reduce absences rates.

A case management approach has been shown to be effective in reducing sickness absence rates, using various models. In Scotland, OHSxtra used case managers working alongside occupational health professionals. Workers were able to access physiotherapy, occupational therapy, cognitive behavioural therapy and counselling. **Evaluation of the scheme estimated savings of £1.66 for every £1 spent,** with 99% workers who had been struggling at work remaining at work. The *Return2health* sickness absence initiative, led by the occupational health service at the University Hospital Southampton NHS Foundation Trust comprised a multidisciplinary rehabilitation programme aimed at staff absent from work for more than 4 weeks. **The proportion of greater than 8 week absences fell giving a difference in improvement in the rate of return to work by 8 weeks of 9%, compared to a control Trust.** This equates to a considerable opportunity cost saving and actual savings where agency staff are used to cover absences. For SMEs that have high MSD sickness absence and who cannot afford case managers, rapid access to physiotherapy has shown a savings on investment of 3:1. (Ref: http://www.csp.org.uk/professional-union/practice/evidence-base/physiotherapy-works/occupational-health).

With the help of occupational health, Gillian implements a case management approach to sickness absence management and a new temporary worker approval system. She issues new guidance and training of managers in sickness absence management. The company adopt evidence-based health and wellbeing initiatives and the result is that absence rates fall to below the average for large public sectors organisations in the locality. Gillian halves the agency bill within 12 months.

7 | Strategic analysis of the environment

The purpose was to describe and identify strategic factors that could have an impact on the overall direction of occupational health provision. This needs to be taken into account together with the case studies when designing future service and workforce.

7.1 PESTEL analysis

In the telephone interviews and in the stakeholder workshop, the standard business analysis tool PESTEL (Political, Economic, Social, Technology, Environmental, Legal) was used. The results are summarised in appendix 5. They include a mixture of fact and informed opinion about changes anticipated in the workplace, the nature of work and the working environment.

7.2 Driving forces for change

On the basis of our analysis, we believe there will be three main driving forces for change in the next 20 years; finance, demographics and chronic and long–term conditions.

7.2.1 Finance

There will be huge financial pressures on government agencies, including the NHS, as we adapt to care for an ageing population. Appendix 4 shows the massive funding gap the NHS is facing. The solutions to these pressures are not restricted to cost control and radical changes in the delivery of healthcare will be required. This presents opportunities for occupational health to position itself within mainstream healthcare. Work and the workplace can be used to promote health and wellbeing through healthy lifestyles, health risk management and supporting people with long-term conditions as part of integrated care pathways, in addition to the historical role of safeguarding workplaces. Improvement to working conditions is important to prevent injury and disease and also mitigates the effects of work-related illness, helping to keep people active in work for longer. The protracted economic downturn is likely to continue for some years. Companies will need to analyse carefully how they can secure economic advantage; there is an opportunity to develop and present the business case for health and wellbeing at work and the contribution of occupational health.

Independent of this, the balance of economic power is predicted to move eastwards and western economies are striving for greater competitiveness. Spending on welfare benefits will reduce and there will be pressure to reduce the costs of sickness absence. Whilst spending on healthcare has been relatively protected, demographic changes will force healthcare delivery to change in order to contain costs and make up funding gaps. It is time for occupational health to be recognised as a key component of general healthcare and the maintenance of an active and productive working age population. This would mean the NHS working with other employers to deliver the working well public health agenda[5], the Health and Safety Executive strategy[6], the national programme for long-term conditions[7], the Boorman recommendations[8] and the Government response to the Black / Frost independent review of sickness absence[9].

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[5]Healthy Lives, Healthy People: Our strategy for public health in England. TSO, London. November 2010
[6]http://www.hse.gov.uk/strategy/
[7]https://www.gov.uk/government/policies/improving-quality-of-life-for-people-with-long-term-conditions
[8]Boorman S. NHS health and well-being: final report. London: Department of Health; 2009.
Available from: http://www.nhshealthandwellbeing.org/FinalReport.html
[9]Fitness for work: the Government response to 'Health at work – an independent review of sickness absence'.
Department of Work and Pensions. January 2013.

7.2.2 Demographics

The second primary driving force will come from demographic changes. The King's Fund estimates the following trends:

- Over the next 20 years the population in England is predicted to grow by 8 million to just over 61 million, 4.5 million from natural growth (births – deaths), 3.5 million from net migration.

- By 2031, ethnic populations will make up 15% of the population in England and 37% of the population in London.

- By 2032, 11.3 million people are expected to be living on their own, more than 40% of all households.

- By 2032, life expectancy will increase to 83 years for men and 87 years for women. Healthy life expectancy is growing at a similar rate, suggesting that the extra years of life will not necessarily be years of ill health.

- Over the next 20 years the population aged 65-84 will rise by 39% and those over 85 by 106%.

- The Office for National Statistics estimated that over the past decade, an increasing number of older people (those aged 65 and over) are in work. In October to December 2010

    - 2.7% (270,000) worked full-time, up from 1.2% (106,000) in January to March 2001.

    - 6.1% (600,000) worked part-time, up from 3.4% (306,000) in January to March 2001.

Age group	Numbers by mid-2012	Numbers by mid-2032	Percentage change	2011 census
0-14	9,332,300	10,399,600	11	9,386,200
15-64	34,697,300	37,182,000	7	34,991,400
65-84	7,812,500	10,896,600	39	7,536,300
85+	1,264,400	2,609,700	106	1,193,300
Overall population	53,106,500	61,087,900	15	53,107,200

7.2.3 Chronic and long-term conditions

The third main driving force will be chronic and long-term conditions and the health issues arising from obesity.

In England 24% of men and 26% of women in England are obese, while 65% of men and 58% of women are either overweight or obese. However, the rate of increase in obesity prevalence has been slowing over recent years. A study by John Hopkins Bloomberg School of Public Health found that only 44% of primary care physicians reported success in helping obese patients lose weight and that primary care physicians identified nutritionists and dieticians as the most qualified providers to care for obese patients. Workplaces and work cultures are being used increasingly to address this challenge.

Fewer people are dying from cancer in the UK despite an increase in the numbers being diagnosed, according to figures from the Office for National Statistics. Nearly 323,000 people are now diagnosed with cancer each year. Data for 2001-03 showed there were 403 new cases of cancer for every 100,000 men and 343 per 100,000 women in the UK. Those figures increased to 431 per 100,000 men and 375 per 100,000 women in the 2008-10 analysis. At the same time the death rates fell from 229 to 204 per 100,000 men and 161 to 149 per 100,000 women. There are varying estimates of the rates of deaths due to occupation. Cancer Research UK has published summaries of studies of UK, France and Nordic populations[10]. The UK study estimates that 8% cancer deaths in men and 2% in women were due to occupation. Further analysis has concluded that 4% all cancers in the UK in 2010 were linked to occupation[11]. The HSE report that lung cancer and mesothelioma remain the commonest forms of cancer leading to death, exposure to asbestos being the principal cause[12]. Other causes, such as exposure to respiratory crystalline silica, solar radiation, mineral oils and diesel engine exhaust, painting and welding are relevant to looking at future trends. Diseases caused by exposures to these are all potentially preventable by the application of good occupational hygiene practice and compliance with occupational exposure limits. Some studies have indicated a link between shift work and breast cancer[13]. The conclusions remain controversial because of methodological problems, but Denmark has designated twenty years of night work as a compensatable cause of breast cancer[14]. There is uncertainty about the potential health effects of nanomaterials. Different routes of absorption are possible. Inhalation is a focus of scientific interest because there is evidence that inhaled nanomaterials have the potential to cause inflammation. In addition, epidemiological studies suggest that inhalation of air containing high concentrations of nanoparticles are at increased of cardiovascular disease[15].

[10]http://www.cancerresearchuk.org/cancer-info/cancerstats/causes/lifestyle/occupation/occupation-and-cancer-in-the-uk
[11]Parkin DM. Cancers attributable to occupational exposures in the UK in 2010. Br J Cancer, 6 Dec 2011; 105 (S2):S70-S72; doi: 10.1038/bjc.2011.487
[12]http://www.hse.gov.uk/statistics/causdis/cancer/
[13]http://www.cancerresearchuk.org/cancer-info/healthyliving/cancercontroversies/shift-work/
[14]http://www.bmj.com/content/338/bmj.b1152
[15]http://www.hse.gov.uk/nanotechnology/understanding-hazards-nanomaterials.htm

Musculoskeletal conditions are common self-reported causes of work-related illness. The HSE report that the Labour Force Survey of 2011/12 found that they accounted for almost 41% of all work-related illnesses. However, the incidence is reducing and there has been a downward trend since 2001. Manual handling, awkward or tiring positions and keyboard work are the main cited causes[16] and are likely to continue to be important workplace hazards. With the application of good ergonomic principles to work and workplace design, many of these illnesses are preventable. However, with an ageing population, musculoskeletal conditions such as osteoarthritis and other joint degenerative diseases will become more prevalent and require addressing in the workplace.

In comparison, the prevalence of work related stress reported in the Labour Force Survey is almost as high as that of musculoskeletal conditions, accounting for 40% of all work-related conditions in 2011/12[17]. In this data collection, the HSE uses the term "stress" to include stress, anxiety and depression. The industries with the highest rates are largely public sector: healthcare, education, public administration and defence. Cited causes include work pressures, lack of management support and bullying and harassment. The public sector is undergoing continual change and the next decade is likely to see continued pressures on jobs linked to the economic downturn and organisational change linked with demands from demographic changes.

Alzheimer's Society have estimated that there are 800,000 people living with a form of dementia, and that the figure will be one million by 2021. It usually affects people over the age of 65 years, although there are 17,000 people younger than this in the UK that are affected by it[18]. In 2002, a study commissioned by the Alzheimer's Association estimated that Alzheimer's disease would cost the American economy $61 billion, almost double the amount estimated only four years previously[19]. This was based on calculations for an estimated four million people in the USA suffering from Alzheimer's disease, with a projected fourteen million sufferers by 2050. The costs were broken down into the cost of family care giving ($36.5 billion) - absenteeism, productivity losses and replacement costs - and the business share of health and long-term care expenditures for people with Alzheimer's disease ($24.6 billion). In the UK, the latter costs will fall mainly on the state or on individuals funding their own care.

[16]http://www.hse.gov.uk/statistics/causdis/musculoskeletal/
[17]http://www.hse.gov.uk/statistics/causdis/stress/index.htm
[18]http://www.alzheimers.org.uk/site/scripts/documents_info.php?documentID=106
[19]http://www.alz.org/national/documents/report_alzcosttobusiness.pdf

7.3 Technology

Technological changes have had a great impact on the workplace. One of the biggest changes to workplace technology in recent years is the explosion of personal information technology ranging from personal computers (PCs) to laptops, netbooks, Personal Digital Assistants (PDAs), tablets and smartphones. Although these devices can improve many aspects of our working lives, they introduce additional ergonomic challenges for the workplace and work design. To counteract long hours spent at workstations, office desks and chairs are becoming more user-friendly and are designed to offer greater movement as well as support for good seated posture. A workstation assessment may recommend a standing desk, and desks incorporating walking machines are available to provide cardiovascular activity throughout the day.

Work relevant upper limb disorders (WRULD) are a risk of poorly setup workstations or repetitive and intricate activity such as smart phone use.

To overcome such problems, international ergonomics standards (adopted as British Standards) have been developed to provide guidance for employers on how to procure and implement such technology effectively and efficiently whilst protecting the health of their employees.

The Institute for the Future, in California, predicts that smart machines will begin to dominate our lives as they replace humans for certain tasks and augment our capabilities for others. Developments in areas such as biotechnology and nanotechnology will also create new processes, materials and potential risks. An era where everything is programmable is just around the corner. The ability to collect large amounts of data about every aspect of life will pose challenges about its analysis and interpretation. Social media using multimedia technologies will continue to transform the way we interact and communicate. An example is the web site "Patients like me". People send information about their conditions and how they have been treated. This enables benchmarking of treatments as well as sharing information about how conditions affect them and what support is available and effective. People will become part of multiple, complex and fluid networks where information of varying quality and provenance will be able to move rapidly. It will be necessary to discern the accuracy and reliability of such information. Telemedicine and tele-health will come to the fore, again with opportunities for occupational health. The new technology will enable true global marketplaces to become the norm reinforcing the need for 24/7 operations. UK occupational health will need to assume an international perspective if it is to remain relevant. New skills founded on ways of thinking, communicating and inter-relating with technology will be essential.

Occupational delivery systems are likely to build on existing examples of innovative communication channels, such as telephone-based services, such as the telephone triage service provided by Physiomed™ [20], use of Skype™ or similar voice over internet protocol software and multi-channel web-based services, such as the Health for Work Adviceline™ [21] for SMEs funded by the Department of Work and Pensions. It is possible that the proposed Independent Assessment Service[22] (Health and Work Service) could feature some of these innovations.

[20]PhysioMed. http://www.physiomed.co.uk/index.php
[21]Health for Work Adviceline http://www.health4work.nhs.uk
[22]http://www.health4work.nhs.uk/blog/2011/11/independent-assessment-service-signing-off-on-long-term-sickness

7.4 Education and Training

Changes in the education and training of healthcare practitioners are likely. The creation of Health Education England (HEE) and its sub-committees called Local Education and Training Boards (LETBs) will stimulate change in the current models of training in England. Funding for post-graduate training will come from HEE. LETBs will be concerned with training for all healthcare practitioners, not just medical practitioners and there will be increasing pressure to gear training towards multi-disciplinary team orientated healthcare delivery. The review of the training of doctors (Shape of Training) has made recommendations to equip doctors to care for an ageing population, largely outside hospitals and as part of such teams. Health Education England has agreed to support a Faculty of Occupational Medicine-led initiative to establish a national school for occupational health, which will commence in August 2014. This will raise the profile of occupational health and the quality of training of occupational health practitioners. This could be the vehicle for integrating the training of a variety of occupational health disciplines, setting national standards and quality managing the delivery of training.

In allied professions there are examples of established programmes. For example, the training and development of occupational hygienists uses peer-reviewed modules that are linked to an internationally transferable qualification system at Technician level. These can be supplemented by Master's degree courses to lead to professional level qualifications, but this training and qualifications system needs to be expanded rapidly in order to cope with the anticipated worldwide demand. In particular, there is a critical need for more postgraduate courses and students creating an opportunity to integrate this into multi-disciplinary occupational health training. The Chartered Society of Physiotherapy, with members of its specialist occupational health group, have developed an occupational health competency framework for physiotherapy that has been presented to the Council for Work and Health[23]. This 60 page document defines four levels of behaviours and knowledge and skills in occupational health, which are broadly aligned with the educational qualification descriptors for a Bachelor, Master and Doctoral degrees.

Whilst models of delivery and future competencies for occupational health professionals will be the focus of subsequent stages of the project, and are outside the scope of this stage, it is clear that strategic decisions about training the future workforce must have a wide focus encompassing the multidisciplinary nature of provision and the wide range of stakeholders in the workplace health and wellbeing agenda. Training must be adequately resourced and the recent decline in the numbers of training posts must be reversed to ensure future workforce capacity.

[23]http://www.acpohe.org.uk/competency-framework-0

8 | Implications of this strategic analysis for the demand and supply of occupational health services

- Carrying on as normal will not be an option, with pressure for change coming from the top, through employers seeking greater efficiency and productivity savings, and through demographic trends.

- Occupational health has an opportunity in both helping with prevention and management of chronic conditions, but may have to decide the level at which it incorporates preventative wellbeing strategies into its arsenal. Workplace health and safety and health risk management could be part of a holistic approach to workplace health and wellbeing.

- With care being increasingly moved into the community, some occupational health services will need to follow. Occupational health will need to be effective in engaging with local health and wellbeing boards and clinical commissioning groups.

- Occupational health services will similarly need to engage independent providers, employee representatives and employers as users of the services, particularly those with in-house occupational health services.

- As the health system is moving resources towards prevention and care rather than medicine, occupational health will need to review the knowledge and skills required of the multidisciplinary workforce including behavioural psychologists, therapists, physiotherapists, etc.

- Occupational health will need to consider the implications of 7 day working for GPs and hospitals and potential demand from employers for 24/7 support.

- The dominant model is becoming the integrated care pathway. Occupational health needs to position itself so that it is cemented in that model for all relevant cases.

- Occupational health will need to position itself as a major player to tackle obesity.

- Cancer may likely be a manageable condition in the next 20 years with a number of key advances in genomics in recent years making treatments more effective. If there will be more people in the workplace managing cancer, occupational health will need to be ready to support people in the workplace.

- Other work-limiting conditions will be overcome or slowed with additional research and advancing medicines, leading to more people with complex conditions remaining in work.

- More people are working from home, and this trend will continue. Teleconferencing will become ubiquitous and with smart phones, tablets and other communication devices becoming more advanced, coupled with the cost, efficiency and productivity pressures facing the NHS, occupational health will need to make best use of this emerging technology. Jeremy Hunt recently announced 7 telehealth pathfinders, and an article

in the Guardian highlighted that "NHS Direct's experience of telehealth started in 2008 when it was commissioned by NHS South East Essex to assess the benefits of telehealth by managing 80 patients with chronic obstructive pulmonary disease (COPD). An evaluation of the pilot, which ran until March this year, showed that 94% of patients said the equipment was easy to use; 83% felt it had helped them; and 84% wanted to continue with the service. In addition, the average number of 999 calls made each month by the patients using the telehealth service was down by 72% and the number of visits made by those patients to their GP had reduced by 56%. Large scale, fully managed telehealth pilots managed by NHS Direct for 300 COPD patients in Leeds and Hull, backed with innovation funding from NHS East of England, yielded similarly positive results".

- In the next 20 years, nano-patches for vaccinations – which have been already trialled with success – may be more effective and already implemented in the health system. This may drastically change the role and resources of occupational health in terms of administration of flu vaccines etc.

- In addition, precision medicine will revolutionise our ability to predict, prevent, monitor and treat a range of conditions[24]. There will be investment in education and training in genomics.

- Along with the improvement in technology comes an increased use of patient data to improve services. The Government is currently consulting on patients having to opt-out to have their records used for approved research. Informatics and health informatics is growing rapidly and websites such as Patients like me are pioneering patient-driven data. Occupational health must develop strategies to collect and use data to meet the demands of stakeholders and improve service delivery.

- There will also be a need to build capability for multi-disciplinary services that can adapt to technological and demographic changes and function to mitigate and prevent illness caused or made worse by work. Occupational health, in its broadest sense, must rise to the challenge posed by Dame Carol Black to move away from silo working and become a fully-fledged and integrated range of specialties.

- The key statistics that have been identified in this report will need to be consistently and clearly communicated to demonstrate the need for health and work services. Some of these key facts are provided in appendix 7.

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[24]Couzin-Frankel 2011; Ioannidis et al 2011. Cited in *Introducing Health Education England: our strategic intent,* 2013.

9 | Conclusions

Building on a clear philosophy, vision and set of principles to underscore the practice of occupational health over the next 5 - 20 years, progress has been made in initiating a change management process that will define an occupational health proposition for the UK. It has been evident during this project, and in the workshops held in 2012, that there is not a large majority view about what occupational health is and which populations should be served. This paper has defined occupational health in broad terms consistent with the belief that there will be a strong future for a co-ordinated and integrated multidisciplinary specialty, possibly linked to an emerging College for Work and Health. It is accepted that the term occupational health may not be entirely acceptable nor the most understandable for a marketing strategy that needs to actively promote the considerable and wide ranging benefits of specialist workplace interventions. The choice of a suitable name and brand will remain a challenge. *(Vide infra)*

There does, however, appear to be a consensus that change is necessary and future occupational health practice, or whatever we choose to call it, will be multi-disciplinary. There is an appetite for change.

There appears to be agreement that occupational health should be concerned with the working age population and that this includes people in employment from the age of 16. Evidence shows that an upper limit is not required. However, it will be pragmatic to focus on people over the age of 50 with regard to supporting ill health and preparing for work beyond 65 years of age. People working in SMEs and people at risk of worklessness should be priorities. The latter would include anyone exposed to a workplace hazard that could lead to a health limiting accident or illness.

There is concern at the persistently high level of occupational illness that is related to working conditions and a need for a range of multi-disciplinary occupational health professions to advise on their prevention and control. With regard to prevention we must prioritise the control of exposures in the work environment that may give rise to ill health by ensuring the application of sound occupational hygiene and ergonomic principles to identify hazards, assess risk and implement prevention and control measures. We must also target employers, unions and people new to the workplace and continue to impress on them the need to address occupational health. We should do more to raise public awareness of the 12,000 preventable deaths each year from exposures to hazards in the work environment, as well as the 450,000 new cases of occupational related ill health being reported annually.

Inclusion of people that are out of work, but capable of work, is controversial. There appears to be two schools of thought. The first is that occupational health should be involved in helping people get back into the workplace, as unemployment is associated with increased morbidity and mortality, compared to people in employment. Helping people return to employment addresses health inequalities. Occupational health practitioners are well placed to use their knowledge and skills to advise about return to supported work. The other school of thought is that occupational health practitioners are employed to advise people in employment. It is not realistic to extend a responsibility for advising about fitness for work to people that are unemployed. In resolving this issue, it will be important to distinguish between occupational health as a function of what practitioners do and occupational health as a concept that promotes health and wellbeing via employment as part of the public health agenda. Given that this report is looking ahead 20 years, the likely changing role of occupational health practitioners deserves attention. At this stage in the workforce planning process, it is

appropriate to highlight this issue only. Subsequent stages will address access to occupational health resources and models of delivery and the roles of the future occupational health workforce.

Strategic analysis of the future has highlighted a large number of potential influences on occupational health practice and service delivery. In particular, economic, demographic and condition specific factors will have powerful influences. There is a real opportunity for occupational health to make the business case for improving working environments to prevent illnesses caused by poor work conditions; and productivity improvements from health and wellbeing interventions based around the workplace and employment.

However, to do so will require active marketing of occupational health, coupled with evidence-based proposals for cost effective interventions. There is also a need to engage more effectively with employers and trade unions, especially with those responsible for designing work systems and workplaces. Should occupational health continue to be called occupational health? What range of disciplines is included? What is the occupational health proposition? How can the proposition be made relevant for the changing world of work, where technological changes, new ways of working and globalisation will impact on practice and service delivery. How will occupational health ensure that it can respond to new markets and new challenges? The launch of the Government's Health and Work Service currently scheduled for October 2014 will provide access to occupational health advice via an advice line and to an occupational health assessment for those who have been out of work for more than four weeks. This will change the perception of occupational health within healthcare and the labour market. It will be interesting to see how existing occupational provision aligns itself to the new service. Will the relationship be symbiotic or competitive? How can the capacity of the occupational health workforce be increased to ensure resourcing of all methods of occupational health delivery in the future? How can the production of new practitioners be stepped up without compromising quality of training? How can we ensure high quality training for all members of the occupational health team?

A compelling case for the development and repositioning of occupational health can be made. It centres on the strategic themes of prevention of work-related illness, health and wellbeing, integrated care, particularly of long-term conditions, and sickness absence management. They meet the needs of Government and business by contributing to prosperity and the public health agenda and they are consistent with the philosophy of occupational health that good work is good for health, good for business and good for national prosperity. The case studies give examples of occupational health interventions that are consistent with these themes; they depict target populations and markets with the strategic analysis to provide an evidence base for a model of occupational health practice and service delivery.

Having made the case, the next steps are to explore models of delivery of occupational health and to describe the competencies that will be necessary to meet the occupational health challenges. This will inform the development of a people plan for occupational health based on what will be delivered, how it will be delivered and how occupational health teams and the wider healthcare sector will work together. This will be the subject of future reports.

Appendix 1 | Philosophy, Vision and Principles

This vision, philosophy and set of principles have grounded the future-focused work and whole project. They were developed at a stakeholder workshop held on October 15th 2012.

Philosophy

Good work is good for health, good for business and good for national prosperity.

Vision

Universal access to multidisciplinary occupational health resources delivers good health and good business for the working age population.

Principles

1. Occupational health arrangements include people and other resources - they address non-medical and medical barriers to remain in or return to work and advise on ensuring that workplaces are safe and health inducing environments.

2. Effective leadership is essential to ensure the appropriate positioning, marketing and delivery of occupational health.

3. The multidisciplinary occupational health workforce is trained in unified core competencies including leadership - they are accredited to a standard that reassures the public*.

4. The need for an occupational health resource is such that there is a demand for it by a public who understand it, value it, and know how to access it.

5. Occupational health resources are affordable and sustainable.

6. An occupational health professional input on functional capability is an integral part of health decision-making in people of working age.

7. Decisions on the design of work systems and workplaces take account of current occupational health knowledge and standards.

*The public includes... people of working age, their employers and advisers (medical and non-medical) who we work in partnership with to achieve this philosophy.

[Source – Developed and agreed at a Stakeholder workshop held on October 15th 2012 and refined by the Working Group; Principle 7 added subsequently]

Appendix 2 | the Project framework

Stage 06

Gap analysis, reality check
Planning for implementation

Stage 05

Defining roles and future workforce

Stage 04

Defining knowledge, skills and competence levels

Stage 03

Design service delivery models

Stage 02

Population definition / Strategic environment

Stage 01

Establishing the change management approach

> **STRATEGIC FRAMEWORK FOR WORKFORCE
> PLANNING**—The Population-Centric™approach
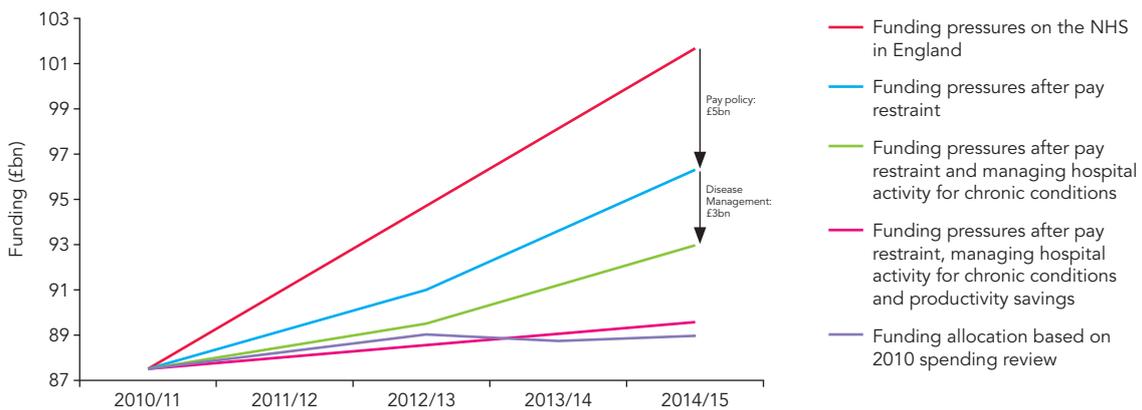
Appendix 3 | Members of the Working Group

John Harrison	Chair
Richard Heron	Society of Occupational Medicine/Faculty of Occupational Medicine
Keith Johnston	Syngentis
Anna Harrington/Kate Kyne	Association of Occupational health Nurse Practitioners
Leonie Dawson	Chartered Society of Physiotherapy
Julia Skelton	College of Occupational Therapy (Specialist Section for Work and Vocational Rehabilitation)
Tom Stewart	Institute of Ergonomics and Human Factors
Roger Alesbury	British Occupational Hygiene Society
Mike Goldsmith	Commercial Occupational Health Providers Association
Emma Donaldson-Feilder	British Psychological Society
Surinder Kumar	NHS Health at Work Network
Vanessa Hebditch	Communications Adviser

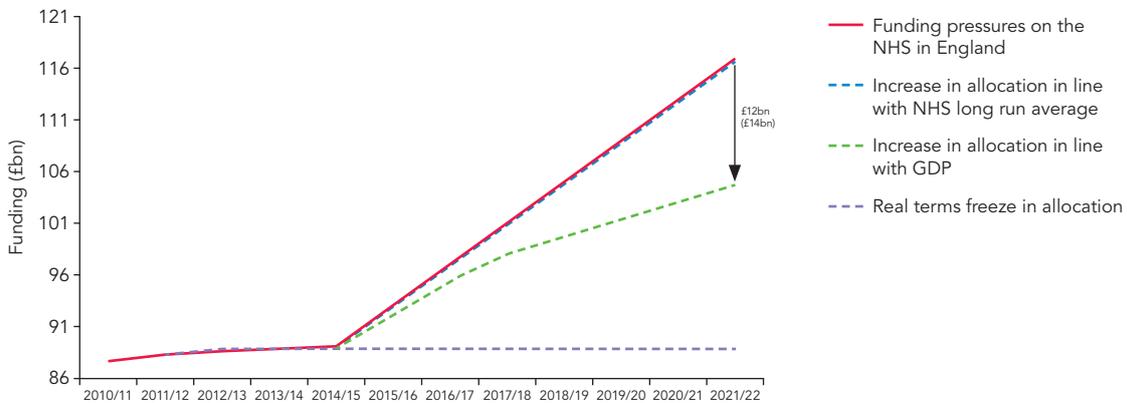# Appendix 4 | Analysis of the funding gap for the NHS

Finances will be one of the three main driving forces for change in the next 25 years. The NHS has been asked to find £20 billion in "efficiency savings" by 2015. Although occupational health is not provided through the NHS the funding issues for the NHS will impact on the whole of society, including employers.

Even if the 'Nicholson challenge' is met, the Nuffield Trust has estimated that there could be a further £54billion needed for the NHS. (see below)
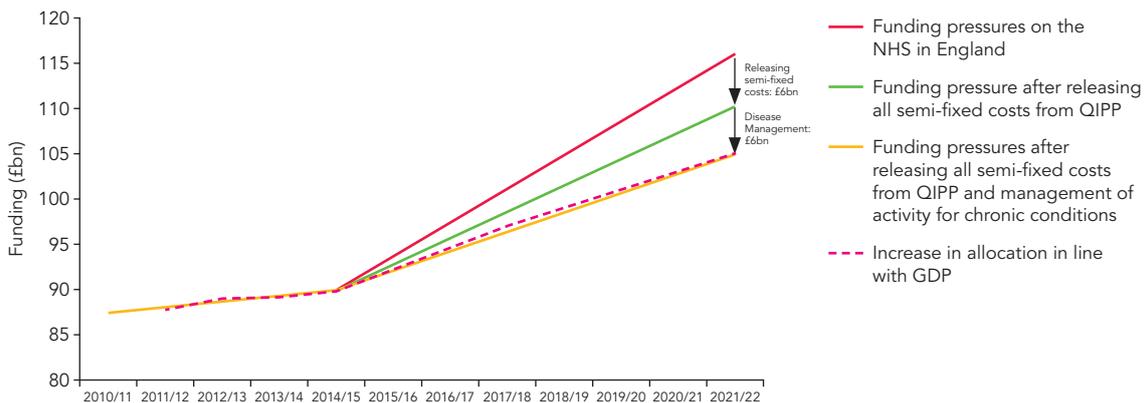
CLOSING THE GAP IN 2014/15

Pay policy: £5bn

Disease Management: £3bn

- Funding pressures on the NHS in England
- Funding pressures after pay restraint
- Funding pressures after pay restraint and managing hospital activity for chronic conditions
- Funding pressures after pay restraint, managing hospital activity for chronic conditions and productivity savings
- Funding allocation based on 2010 spending review

FUNDING GAP IN 2021/22 UNDER THREE SCENARIOS FROM THE IFS

£12bn (£14bn)

- Funding pressures on the NHS in England
- Increase in allocation in line with NHS long run average
- Increase in allocation in line with GDP
- Real terms freeze in allocation

FUNDING GAP IN 2021/22 UNDER THREE SCENARIOS FROM THE IFS

Releasing semi-fixed costs: £6bn

Disease Management: £6bn

- Funding pressures on the NHS in England
- Funding pressure after releasing all semi-fixed costs from QIPP
- Funding pressures after releasing all semi-fixed costs from QIPP and management of activity for chronic conditions
- Increase in allocation in line with GDP

Appendix 5 | PESTEL Analysis

a) Feedback from stakeholder workshop re population definition and potential markets

A summary of the views expressed is presented.

- The unemployed who COULD work e.g. those people with mental health illness
- Could the customer be the Government?
- Could we link to the employment service?
- Focus on barriers to employment
- Long-term conditions linked to lifestyle factors and link to employers
- Long-term conditions linked to e.g. physical impairment
- Throughout working life, which could be 16/18 – 65/75 i.e. working age, but is this the appropriate term?
- The changing work environment will provide different opportunities and we need a different business model for accessing occupational health services
- Market linked to integrated care pathways and the interface between educational and social development
- Markets outside of the UK long-term
- Unhealthy workplaces
- "Unfitness", whether medical or motivational
- Where we can support people to become the "working well"
- Specific types of occupation

b) PESTEL analysis

Political

- Public sector reforms impacting on the NHS, and the potential role of Clinical Commissioning Groups and Health and Well-Being Boards
- Public sector reform impacting on access to benefits and the drive for people to be in work/employed
- A push towards rehabilitation
- Increased retirement age
- Recession and not knowing how/when recovery will occur
- Difficulty in gaining interest of the politicians
- Election cycle
- Impact of political approach, such as reinforcing a link between responsibility and individual health status and the "cost" of health status to the employer as well as individual
- Awareness/knowledge of occupational health among politicians and civil servants
- Timely access to interventions at time of need
- Incentivising workfulness rather than worklessness
- The workplace is a place where general health can be implemented for good
- Legislation and the EU

Economic

- Increasing "casual" nature of work, with many changes in job and career
- Increasing global workplaces
- Little cash to invest in training the workforce
- Insurers will want to know who has future risk
- Sickness and absence
- Vocational rather than university education
- Business case promoted to employees and the public purse, extending what's in it for (?them)
- Poor management, lack of training in management
- Long-term conditions
- Changing workforce – employment status – legal protection, non-contract
- Prove/market CBA/ROI of occupational health
- Impact on "bottom dollar"
- Increasing self-employed
- Possible increase in manual workers and manufacturing
- Decreasing benefits bill

Sociological

- Increasing diversity of the population
- Cultural differences
- Recruitment issues in specific groups in the future e.g. doctors
- The need to look at different models of delivery linked to different models of workforce
- The ageing population and the impact on the ageing workforce
- Increases in complexity of need in the workforce (related to age)
- Rising levels of poverty
- Increasing stress levels in the population
- A more risk averse society
- Increasingly litigious
- Health issues are increasingly emotive
- Increasing interest in public health and the social benefit of being in work
- New and emergent diseases related to occupations and work in general
- Occupational health not a "sexy" specialty
- Not on the undergraduate curriculum
- The need to focus on employment as a number of activities and not just employment
- Re-energising the local community for local interaction – to relieve concerns of remote working
- Change the pattern of work – possibly working across jobs within a working week
- The "blame culture", "fault culture"
- Loyalty to organisation
- Skills of the employee

Technological

- Development of drugs (to manage conditions)
- New technology can mean new risk
- Increasing access to technology to assist people working at home as well as to support people in the workplace
- Technology enables people to work for longer periods and therefore are less likely to take breaks
- Increasing focus on high tech and research type work and the impact on the type of workforce
- New types of work bring new hazards
- Working with new materials brings new hazards
- Increasing access to healthcare support through technology, such as telehealth techniques for diagnosis and consultation
- The potential to integrate everyday technology into support, such as the use of smartphones
- Home/remote working
- Blackberries/iPhones – always available
- Hot-desking
- Adaptability to technology changes – rapid rate

Environmental

- Pressure on the environment, such as improvements in air quality and emissions
- Decreased health status in adolescents (future workers), psychological and obesity
- Accessibility; to working environment, buildings, toilets
- Economic location
- Migration
- Physical workplace is reducing, more virtual interactions, teleconferences etc.
- Philosophical approach to work needs changing e.g. multiple employments

Legislative

- Need to keep a watch on where European legislation related to the workplace is going
- The Black/Frost report
- Equality Act
- Employment law
- Increased retirement age

Appendix 6 | A description of the roles of the Council member organisations

Membership of the Council comprises representatives from:

- Association of Chartered Physiotherapists in OH and Ergonomics (ACPOHE)

- Association of Occupational Health Nurse Practitioners (AOHNP UK)

- Association of Occupational Health Technicians

- British Occupational Hygiene Society (BOHS)

- British Psychological Society (BPS)

- British Society of Rehabilitation Medicine (BSRM)

- Chartered Society of Physiotherapy (CSP)

- Commercial Occupational Health Providers Association (COHPA)

- College of Occupational Therapy (COT) - Specialist Section for Work and Vocational Rehabilitation

- Defence Medical Services

- Faculty of Occupational Medicine (FOM)

- Institute of Ergonomics and Human Factors (IEHF)

- Institution of Occupational Safety and Health (IOSH)

- International Institute of Risk and Safety (IIRSM)

- NHS Health at Work Network

- Royal College of General Practitioners (RCGP)

- Royal College of Nursing (RCN)

- Society of Occupational Medicine (SOM)

- UK Rehabilitation Council (UKRC)

- Vocational Rehabilitation Association (VRA)

Appendix 7 | Key facts about occupational health

Occupational health is provided by teams of multidisciplinary specialists that between them:

- prevent work-related illnesses
- identify and manage the risks and exposures that cause work-related ill-health
- create working environments that enhance workforce wellbeing and engagement
- provide early interventions for those who develop a health condition
- support attendance and absence management
- use the workplace to promote individual health and wellbeing

It is distinctive because it offers a holistic approach that focuses on the person, the workplace and the business rather than a disease.

Why is occupational health important?

Good occupational health services help individuals stay healthy and save businesses money.

Occupational health can play a major part in revitalising the UK's economy by enabling people to continue to work despite health problems, supporting people back into work more quickly and effectively after ill-health, and reducing sickness absence. It can help enhance organisational productivity by increasing the health, wellbeing and engagement, and thereby performance, of employees.

Cost-benefit analysis studies show that investing in occupational health yields positive results. A study commissioned by the Department of Work and Pensions and undertaken by PriceWaterhouseCoopers found that the most modest figure for the return on investment from occupational health services and wellness programmes was a return of £2.50 for every £1 spent.

Occupational health professionals have the ability to influence and improve the health of thousands of individuals by changing workplace practices and policies compared with general practitioners who see patients on a one to one basis.

Research shows that occupational health services can be very cost effective, and make a positive impact on the probability and frequency of accidents, sickness absence and ill health in the workplace.

It has been demonstrated that a pro-active occupational health service can help to improve the overall morale of staff.

There is a strong evidence base showing that work is generally good for physical and mental health and wellbeing.

Occupational health – the external environment

The ageing population in the UK means that people will need to carry on working, as they get older. We need a radical rethink as to how we support people to continue working. The workplace is the ideal environment to address health issues, support those with long-term conditions and provide a holistic approach.

– Approximately 70% of the population does not currently have access to occupational health services.

– SMEs account for 99.9% of all private sector businesses in the UK. Only 1 in 10 small employers provide employees with access to occupational health services compared with 8 in 10 large employers.

– Around one-third of the population will be over 60 by 2033. By this time life expectancy will have increased to 83 for men and 87 for women.

– 65% of men and 58% of women are overweight or obese.

– Since 2001, there has been an increase of over 21% in the number of home workers - around 13% of people now work from home. There is also a trend for a more transient workforce and more flexible labour contracts - we will need to rethink the support needed for these workers.

– 15 million people currently live in England with a long-term health condition – the workplace is the ideal environment to address these health issues.

Occupational health – the stats

– 175 million working days in Britain are lost due to ill health annually – occupational health can reduce sickness absence and support people so that they return to work more quickly.

– After only six weeks' sickness absence, almost one in five people will eventually leave paid employment.

– Every year about 400,000 people in the UK report work-related stress at a level they believe is making them ill. By 2020 depression will have become the second leading cause of disability in the world – the workplace is a key and cost effective environment to address this issue.

– 80% of the adult population will suffer with back pain at some time in their working lives – early interventions via a multidisciplinary occupational health service can support people to stay at work.

– 12,000 people die from occupational diseases in the UK – many more than the 200 who die from accidents.

– Of the 12,000 occupational disease deaths, around 4,000 are the result of previous exposure to asbestos, another 4,000 are from COPD as a result of workplace exposures, and the final 4,000 are from occupational cancers due to exposures at work to carcinogens other than asbestos.