

THE COUNCIL FOR WORK & HEALTH

Planning the future: Implications for occupational health; delivery and training



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

Planning the future: Implications for occupational health; delivery and training

This report represents the second 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)

Acknowledgments

This report has been compiled by a sub-group of the Council for Work and Health member representatives and chaired by Professor John Harrison. It follows on from the work of the first report *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.*⁽¹⁾

The consultations and workshops developed to progress this work invited contribution from the Council's members, representing health, legal, social care, voluntary, employer organisations and trade unions. Expert panels were set up to access occupational health expertise in practice and education from professions engaged in occupational health and safety.

The people involved in the Working Group are listed below and expert panel members are identified in Appendix 3. We could not have produced this report without their help.

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Foreword from Professor John Harrison

Chair of the Project Working Group

It could be argued that there has never been a more important time for occupational health as a key contributor to the health and wellbeing of working age people. As recognised in this report, the combination of a challenging economic climate and the health issues associated with demographic trends and current lifestyles has put into sharp relief the relationship between work and health. This has always been the cornerstone of occupational health practice. However, whereas the focus of occupational health practice was on compliance with health protection measures, there is an evidence base that links workplace health and wellbeing with organisational performance and productivity. It is essential, therefore, that the United Kingdom has sufficient occupational health resources to meet the demands of UK plc.



It has been an honour and a privilege to chair the Working Group that has overseen the production of the second report on occupational health workforce planning. We have worked with a range of experts in occupational health to examine what actions will be required to extend both the scope and reach of occupational health practice and to ascertain the training needs of a future occupational health workforce. It is clear that we will continue to need specialists and experts in the respective disciplines that make up the occupational health portfolio of practice. Although the world of work has changed, and will continue to change, we will ignore historical workplace hazards at our peril. History has taught us that such hazards have a habit of reinventing themselves. We also need the capability to predict, plan for and respond to new hazards and risks. It is also clear that there is considerable overlap of the competencies described in uni-disciplinary curricula and competency frameworks for occupational health practitioners. There is the potential, therefore, to develop our understanding of the benefits of what is meant by the term 'multi-professional working'. This will influence the development of models of occupational health delivery and training.

We have also been mindful of the changes that are envisaged for the delivery of healthcare in the UK. There are real opportunities to embed occupational health practice within these changes such that it is seen as, and can contribute to, the nation's public health. At the start of our work we agreed an important principle: there should be a demand for an occupational health resource from the public who understand it, value it, and know how to access it. An occupational health provision, operating at the margins of healthcare, can never realise this principle. Healthcare professionals must have at least a generic knowledge of occupational health to ensure that fitness for work and employability are recognised health outcomes. Similarly, we must ensure that employers understand how to access occupational health resources that will benefit their businesses based on assessment of need. Our vision is of a partnership such that the workplace becomes an integral part of healthcare delivery and that employers help to shape future delivery through mixed-market commissioning and procurement. Training of occupational health professionals should include an understanding of how their practice may be part of integrated care pathways. Training of managers and human resources should include workplace health and wellbeing and their role in facilitating it.

The biggest challenge has been to develop intelligence about the numbers of occupational health professionals currently in practice and to predict future requirements. We felt it was important to include estimates of workforce numbers, based on professional consensus, and these estimates should be the basis for immediate planning. We recognise that more work will be necessary in this area. A future report will address how new ways of working and the requisite skills will determine workforce composition.

The six recommendations contained in the report are intended to assist policy makers and leaders develop an occupational health provision that will support business and public sector organisations over the next 20 years. We have also indicated actions to be taken at organisational, managerial and practitioner levels that will make a difference to workplace health and wellbeing. It is our fervent hope that these outputs will enable a real and sustained change in the role played by workplaces in promoting and protecting our nation's health and productivity.

Message from Professor Diana Kloss MBE *Chair, Council for Work and Health*

The Council for Work and Health was created in 2009 after the publication of Dame Carol Black's *Review of the health of the UK working population: working for a healthier tomorrow*.⁽²⁾ It brings together the professional bodies that provide occupational health services to create an authoritative and representative single voice on health and wellbeing issues. It also provides an opportunity for co-ordinated and integrated working and facilitates information sharing.



The importance of work in maintaining good health in those of working age is now generally acknowledged, most importantly by successive governments. The role of the workplace in encouraging healthy living as a means of improving public health is recognised by Public Health England as one factor in trying to improve general health and reduce the burden on the National Health Service. There is a continuing need to prevent work-related disease and injury and in recent years the Health and Safety Executive has placed greater emphasis on preventing occupational disease than in former times. Sickness absence continues to be a heavy burden on the national economy and the Department for Work and Pensions in 2015 introduced a Government funded service called Fit for Work, which provides both a supportive occupational health assessment and general health and work advice to employees, employers and General Practitioners (GPs) to help individuals stay in or return to work (see page 29). Tax concessions are now granted to employers who finance treatments to assist employees to return to work at an earlier date if recommended by an occupational health professional.

For these reasons occupational health provision has achieved a higher profile and the shortfall in trained occupational health professionals has become acute. In response to this context, the Council established a small Working Group to report on the need for, and strategies to increase the numbers within, an occupational health workforce for the next 20 years. The report also stresses the need for health professionals, and in particular general practitioners, to be made aware in training of the effects of work on health and the importance of work as an outcome of therapeutic interventions for people of working age.

We are very grateful to Professor John Harrison for agreeing to chair this project, to Léonie Dawson for acting as research fellow, and to the members of the group, all of whom have given their valuable time.

Executive summary

- This is the second report of the workforce-planning project aimed at developing a vision for occupational health practice and detailing the future workforce needed to deliver that vision. It has been written for senior policy makers, commissioners of healthcare, decision-makers in occupational health training, as well as employers and managers in organisations. Demographic trends and the need for employers to seek greater efficiency and productivity savings mean that the provision of occupational health must change to meet the needs of the customers and beneficiaries of service.
- Our vision is of a partnership such that the workplace becomes an integral part of healthcare delivery and that employers help to shape future delivery through mixed-market commissioning and procurement.
- This report is concerned with the UK working population and statistics provided by the Office for National Statistics (ONS) relate to the economy, population and society at UK national, regional and local levels. It is acknowledged that references to bodies such as Health Education England, Public Health England and NICE are England-specific and that the Health and Safety Executive has a Great Britain remit. Where appropriate, references to legislation and guidance for the devolved administrations have been included.
- The project has been led by a Working Group, under the auspices of the Council for Work and Health. The scope of, and the method adopted for, the project has been described in the first report *Planning the future: Delivering a vision of good work and health in the UK and the professional resources to deliver it*. This earlier report and the full report of this Executive summary are available on the Council for Work and Health's website: www.councilforworkandhealth.org.uk/our-work
- While the first report focused on future occupational health needs, this report addresses the paradigm shift, describing the extending scope and reach of occupational health provision and occupational health practice, with implications for future delivery models, and defining the knowledge skills and competence levels needed.
- We found that there are three main driving forces for change in the organisation and delivery of occupational health. They are: the economic situation and availability of funding; demographic shifts in the UK population; and the pattern of chronic and long-term conditions. Other factors likely to be influential are increasing globalisation; the changing demands for services, such as the 24/7 culture; technological advances; and changes in the training and education of healthcare professionals.
- Our analysis underpins six recommendations for action in the report. These six clear recommendations, if implemented, will ensure that occupational health provision meets the future needs of people of working age, businesses and 'UK plc', and that prevention of ill health or early recognition of symptoms in the workplace can lead to effective occupational health interventions that will reduce latent disease, loss of productivity, use of healthcare resources and greater overall expense.
- In addition to discussing the changes required within occupational health, the report lays out the roles of employers, workers and providers of healthcare to effect a paradigm shift to a more knowledgeable and integrated approach to 'good work'.

The recommendations

A summary of the recommendations is listed below. For further detail and to see the recommendations in full go to Chapter Nine on page 62.

Recommendation 1

Extend mainstream healthcare provision to include the integration of occupational health, from commissioning and outcome measurements, through improved knowledge and understanding of clinical healthcare teams in hospital and general practice settings, to maintenance of work ability, to the referral of patients across the NHS/private interface to occupational health services.

Detaching occupational health from mainstream healthcare undermines holistic patient care.

The maintenance of work ability (a person's capacity to do the work tasks they are required to do) and return to 'good' work should be a key clinical outcome for all care pathways formulated for people of working age.

Recommendation 2

The Government should create incentives to encourage investment in healthy workplaces and the uptake of occupational health and wellbeing initiatives.

There is scope to remove the tax liability for a wide range of occupational health and wellbeing interventions aimed at preventative workplace health risk management, promoting work attendance and effective rehabilitation back to work.

Employers currently have to wait for 28 days to refer to *Fit for Work* and there is the potential to reduce this so that they can have rapid access to the Government service (see Chapter 5).

Insurance companies should be encouraged to work with employers to promote workplace health and wellbeing.

Recommendation 3

Ensure that employers understand the return on investment in occupational health and have access to the right professionals to create healthy and productive work and workplaces and reduce the risk of harm from badly designed or managed work and workplaces.

This is described more fully in Chapter 5 of the main report, with case studies presented in the first report to describe scenarios that employers may experience. We will revisit the proxy case examples for the workforce planning stage, to offer greater examples of scenarios and occupational health interventions.

Recommendation 4

Develop competency frameworks to ensure the capability of the multi-professional occupational health workforce through quality assured training.

We need an occupational health workforce with a distributed range of knowledge, skills and competencies.

A multi-agency approach is required to holistically address health and wellbeing in the workplace, advising employers and delivering the full range of preventative activities to ensure a working environment that is conducive to good health.

Recommendation 5

Develop models of delivery and workforce planning capability.

The planning of occupational health workforce needs is complex due to a number of factors, including:

- the proposed changes in future occupational health provision to deliver cost- and workforce-effective tailored services
- the breadth of models of delivery for the disparate needs of UK businesses
- a lack of workforce intelligence from the respective professions.

There is a need for a methodology to predict the match between requirements and supply.

Recommendation 6

Attract and train the required number of high calibre occupational health practitioners to meet predicted occupational health needs.

We must ensure that there are clear attractive career pathways to attract high calibre applicants in each of the professions in the future. The current shortfall must be addressed urgently.

There is a need to:

- promote occupational health as a career to attract candidates for specialty training
- encourage the training of non-specialist professionals for deployment into supervised roles
- explore the fast-tracking of specialist training
- deliver occupational health in a tiered approach, optimising the roles of experts and specialists and increasing the opportunities to deploy generic practitioners.

Occupational health

The term 'occupational health' is frequently misunderstood.

Occupational health professionals are concerned with advising employers about the prevention of work-related disease; and in this capacity, health professionals such as doctors, nurses, physiotherapists, occupational therapists, psychologists and counsellors work closely with Health & Safety officers, occupational hygienists and ergonomists. In this field knowledge of legal requirements and how to comply with them is a much-valued skill.

Occupational health professionals advise on fitness for work, both pre-employment and in employment.

They assist managers in adjusting work to the needs of workers with health conditions, in particular those who have a disability and are protected by the Equality Act.⁽⁴⁾

They give advice to employers about dealing with sickness absence and, if possible, returning workers to the workplace, which may include a process of rehabilitation.

Some health professionals provide treatments in the workplace, for example physiotherapy for musculoskeletal conditions or cognitive behaviour therapy for those with psychological problems.

A growing field of activity is the provision of advice to managers about health promotion and health and wellbeing programmes in the workplace.

The term 'occupational health' encompasses the full range of professionals involved in improving health and work (See Appendix 2). Occupational health should be considered a multi-professional specialism, where needs assessment identifies the profession(s) with the skills and competence to address the presenting issues and implement standards of good practice.

Work should not harm health. Figure 1 shows the occupational health journey. Good design at the outset reduces health risks. And while wellness and risk management must be promoted, there should be care for those harmed or made ill by work, including rehabilitation to support people back to 'good work'.

Employers can and should assume greater responsibility for protecting, supporting and restoring the work ability of their employees, thus reducing the burden on the NHS and benefiting from the increased productivity of their workforce.

They will need access to suitable and sufficient occupational health resources tailored to their business needs.

The World Health Organisation regards occupational health as a cost-effective investment for the prevention and control of non-communicable diseases and for mental health. The cross-government strategy *Health, work and wellbeing*⁽⁵⁾ contributed to the evidence base to support the aphorism 'Good work is good for health'.

Delivering the vision of 'universal access to multidisciplinary occupational health resources that deliver good health for working age people, businesses and ultimately the UK economy'⁽²⁾ therefore requires a new paradigm, namely using occupational health services for the:

- elimination or control of risk to health at work
- prevention of work-related ill-health and promotion of good health through good work
- prevention of non-work-related health problems and promotion of health and wellbeing using the workplace as a venue for awareness-raising, education and motivation for wellbeing behaviours
- early intervention for those who develop a health condition or disability
- cost effective recommendations for adjustments to support good work
- effective rehabilitation of people with impaired work ability whose work performance or attendance is affected
- improvement in the health of those who are out of work – so that everyone with the potential to work has the support they need to do so.

Interface between work and health

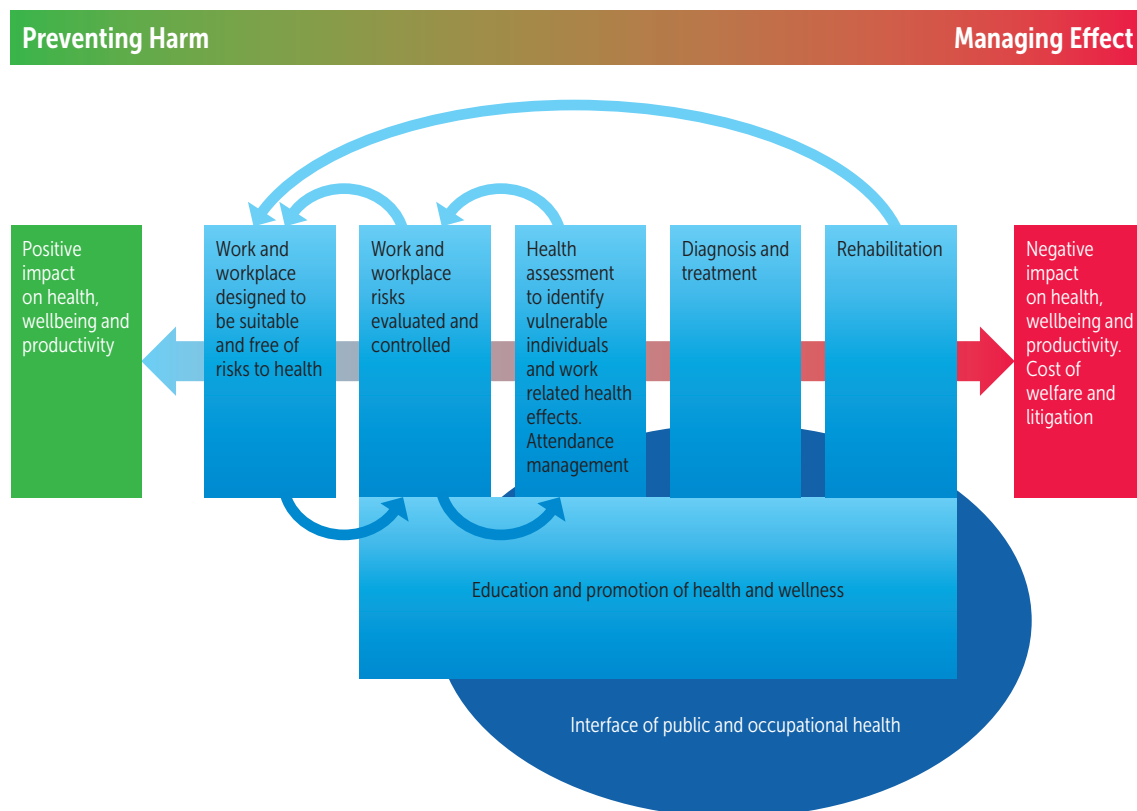


Figure 1: The occupational health role in the interface between work and health

This vision is also consistent with the NHS *Five year forward view*⁽⁶⁾, with a renewed focus on prevention, and the Health and Safety Executive (HSE) strategy for GB's health and safety system.⁽⁷⁾ A notable feature of the HSE strategy is that it does not concern the HSE alone: it is for everyone. The aim is to promote broader ownership of Health & Safety in Great Britain and to tackle the costs of work-related ill health by simplifying risk management.

Keeping pace with change is another theme that accords with the recommendations of this report; that is, ensuring that the occupational health workforce remains relevant to modern day working practices and business needs.

Accurate specialist occupational health workforce planning will be needed to model the future UK workforce. Multi-disciplinary practice will underscore service delivery, and training will include up-skilling managers, human resources professionals and the national healthcare workforce, in addition to a tiered approach to training occupational health practitioners.

New ways of working within a framework of integrated occupational health provision will affect the numbers of specialists required, and may lead to an overall decrease relative to the working population covered.

The UK workforce

Total employment grew 0.6 per cent in Quarter 3 (July to September) 2015 to reach 31.2 million, the highest level since comparable records began and 1.4 per cent higher than the same quarter 2014; while 1.71 million people aged 16 and over were unemployed (available for work and seeking employment).⁽⁸⁾

Technological advances, the ageing population, the increasing prevalence of long-term chronic conditions and the particular challenges of 'lifestyle diseases' caused by obesity mean that the UK must change the way it delivers occupational health to promote health and wellbeing in the workplace.

NHS resources are stretched and the workplace is a cost effective place to support people with long-term conditions, and to address lifestyle behaviours and choices that lead to ill health. Moreover, people who are in 'good' work use healthcare less.

Occupational health should become part of both mainstream healthcare and business strategy; the workplace and workplace health must become recognised as important contributors to primary, secondary and tertiary healthcare prevention. Healthcare workers need the knowledge and skills to engage with barriers and enablers to work, and the ability to refer to occupational health specialists as part of treatment or rehabilitation plans.

The workplace has a role in promoting good health, preventing the development of disease, and supporting people with long-term conditions. Being in employment and returning to work after illness or injury should be fully recognised as valuable health outcomes.

It is time for the NHS to work in partnership with the best of non-NHS occupational health expertise, not only to optimise the health and wellbeing of its staff but also to facilitate the occupational health dimension of patient care.

We must create healthy workplaces through good design and reduction of risk. The world of work is also changing with increasing numbers of small and medium-sized enterprises (SMEs) and self-employed workers, more home working, more people with portfolio careers and more people working on temporary contracts, many of whom are 'hard to reach' for public health and have poor access to occupational health.

Good health is good for business and for UK plc to have access to a productive working population with the physical and mental functional capacity to advance economic growth, we need to provide cost effective solutions.

Occupational health scope and reach

Figure 2 presents our analysis of how to extend the scope and reach of occupational health. It shows planning themes for developing the occupational health proposition, aligning these with service capability and accessibility and communicating with stakeholders.

The upper part of the graphic sets out themes to be addressed; the lower part describes actions to be taken (see also *Chapter Four*).

Planning themes to improve scope and reach	<ul style="list-style-type: none">• Improve business capability• Use technology• Ensure quality improvement• Address health and wellbeing in the workplace• Develop a healthy work culture• Promote work ability and rehabilitation• Engage healthcare professionals who do not work in the occupational health specialism• Improve accessibility of occupational health services• Promote health risk management• Educate specialist and expert occupational health practitioners• Educate non-occupational health professionals, managers and human resources• Educate the public
Actions to be taken	<ul style="list-style-type: none">• Develop a commissioning model for occupational health• Introduce credentialing in occupational health services• Ensure timely access to occupational hygiene• Ensure timely access to human factors• Ensure timely access to physical therapies (occupational therapy, physiotherapy)• Ensure timely access to psychological therapy• Revise marketing of occupational health• Include occupational health in integrated healthcare• Investigate the use of IT and new communication methods to increase the reach of occupational health• Extend reach of occupational health to SMEs and self-employed• Develop occupational health packages for home workers• Improve understanding of the occupational health needs of ageing workers• Promote national frameworks /charters, such as Public Health Responsibility Deal, Healthy Workplace Charter, Mindful Employer

Figure 2: Improving the scope and reach of occupational health in the UK

Occupational health practice

The drive to integrate quality occupational health into the workplace ethos requires actions to progress occupational health practice. The results shown in Figure 3 describe the planning themes identified in the research and subsequent actions.

Risk management implementation and training is seen as fundamental to practice, as is health promotion. Engaging managers and workers with skilled occupational health practitioners to create business-focused healthy working environments will be important to change working cultures. Actions address the importance of work design and prevention of ill health as well as improving support of people with ill health, work ability and work attendance.

Planning themes for occupational health practice	<ul style="list-style-type: none">• Health and wellbeing promotion and training in the workplace for managers and employees• Risk management training for managers and employees• Routine risk management implementation• Health and safety and wellness policy and practice implemented throughout businesses• Support/structure for those struggling in, or returning to, work• Ensuring a fair and consistent approach to ill health at work• Support for workers including employee assistance
Actions to be taken	<ul style="list-style-type: none">• Promote the importance of workplace health risk assessment• Promote the importance of reducing exposures and conditions that can cause occupational disease• Promote the importance of designing workplaces and systems to minimise occupational exposures to chemical, physical, biological and psychological stressors• Promote the use of the bio-psycho-social model• Improve ability to recognise workplace causation, to assess and manage common occupational illnesses and workplace health conditions such as cancer, occupational lung disease, musculo-skeletal and mental health conditions• Enhance capability to assess functional implications of medical illness• Work with other agencies to reduce stigma of mental ill health at work• Enhance capability to support long term conditions at work• Develop capability in vocational rehabilitation• Develop attendance management packages• Develop capability for implementation of workplace health and wellbeing

Figure 3: Themes and actions to be developed for future occupational health practice

Training and education

The shift to multi-professional occupational health should be supported by changes in training. Competency themes for training and education in occupational health are shown in Figure 4. Actions to be taken include ensuring that relevant disciplines have competency frameworks relating to the occupational health paradigm, and progressing improvements in specialist occupational health training.

Competency themes for training and education	<ul style="list-style-type: none">• Assessment of workplace hazards and exposures• Implementation of prevention and/or control strategies• Clinical occupational health• Legislation and standards• Health promotion• Workplace health and business approach• Influencing and impact• Professionalism in occupational health
Actions to be taken	<ul style="list-style-type: none">• Develop modules to deliver training in generic competencies• Ensure all disciplines have competency frameworks relating to the occupational health paradigm• Develop the provision of multi-professional training in occupational health• Ensure sufficient training places to supply the requisite numbers of occupational health specialists• Develop the role of the National School of Occupational Health in multi-disciplinary training and education

Figure 4: Competency themes and actions for training and education

The future occupational health workforce

The occupational health workforce planning process can only estimate numbers of practitioners once population needs, changing method of delivery and training requirements have been considered; detailed projections of numbers will be the subject of the next stage of this project.

This report highlights the current need to address insufficient numbers of occupational health specialists.

The estimated numbers of specialist practitioners in occupational health in each of the professions shown in Figure 5 have been included to demonstrate what an occupational health workforce to provide an equitable service for workers would look like today, based on areas of established and effective service delivery in the UK. These figures do not include all the individuals involved in the prevention of health issues in the workplace whose work often takes place outside of a clinical/health environment, for example safety specialists.

The figures reflect current data and serve to show how undermanned occupational health is.

It is important to point out that these figures are not recommendations for recruitment, but have been included to demonstrate the poor access to occupational health services for most workers, and to emphasise the need for urgent action to address current lack of capacity to deliver workplace health and wellbeing at a time when its importance has been recognised by government and industry.

The respective professional titles in the figure refer to accredited specialists.

Profession	Occupational Medicine	Occupational Health Nursing	Occupational Health Physiotherapy	Occupational Hygiene	Occupational Therapy	Ergonomist/ Human Factors	Practitioner psychologist
Current registered* numbers	710	3,200	400	152	200	380	300
Current ratio of practitioner to UK workers	1:44,000	1:9,700	1:77,000	1:203,000	1:155,000	1:82,000	1:103,000
Number required to deliver a quality service to the current UK workforce	1,200	10,000	13,200	1,150	9,000	2,500	10,000**

Figure 5: Calculations of current occupational health specialists to meet UK workforce need based on 2015 statistics

*Professionals who have achieved accreditation of Occupational Health competence, through either Chartered status, accreditation or HEI award
 ** This figure represents an estimate of psychologically-trained mental health professionals as a whole.

The third and final *Planning the future* report, which completes stages 5 and 6 of the population-centric methodology used to establish workforce planning needs, will explore the relationship between occupational health functions, requisite skills and numbers of practitioners.

It will address awareness of and access to information, workplace practices, the composition and functioning of occupational health teams, and the role of specialist practitioners within a diverse workforce that has a distributed and non-specialist knowledge and skill set. These are examples of factors that will determine the delivery of cost-effective occupational health services.

Consequent service delivery models will require a suitable and sufficient occupational health skill mix. The case studies introduced in the first report⁽¹⁾ will be revisited and used as examples for the workforce planning, to offer greater examples of scenarios and workforce calculations.

Chapter One: Introduction

This is the second report on the six-stage workforce planning project whose remit has been to determine the actions required to address the delivery of occupational health and the competencies of the occupational health workforce commensurate with the needs of UK plc over the next 20 years. It follows on from the first report, *Planning the future: Delivering a vision of good work and health in the UK*⁽¹⁾.

It is aimed at healthcare and business commissioners and planners and at occupational health educators, and presents the collective views of a wide range of stakeholders about future occupational health delivery and training needs.

Information has been collected and analysed using a range of methods including workshops, surveys, concept mapping, regression analysis and multidimensional scaling. It is the first in-depth and robust multidisciplinary piece of work that has consulted with and included the opinions from representatives of the majority of professional organisations concerned with occupational health practice.

A Population-Centric™ workforce planning model has been used (see *Appendix 1*). This is based on a change management approach and includes representatives from the professions involved in delivering occupational health, employers, unions, and patient groups. This approach to workforce planning focuses on the competencies needed to meet service user needs rather than on existing traditional roles.

This report is concerned mainly with stages 3 and 4 of the Population-Centric™ approach, which identify themes to develop the scope and reach of occupational health, and to ensure that the quality of occupational health practice is commensurate with the needs of consumers of services (Box 1).

It also begins to address the projected composition of a future workforce, with estimates of numbers of the different specialisms that constitute a multi-disciplinary occupational health workforce.

Consumers of occupational health services and advice:

- 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

Box 1: Consumers of occupational health services⁽¹⁾

The strategic analysis reported previously⁽¹⁾ indicated that there would be three main driving forces for change in the organisation and delivery of occupational health. They are:

- the economic situation and availability of funding
- demographic shifts in the UK population
- the pattern of chronic and long-term conditions

Other factors likely to be influential are:

- increasing globalisation
- the changing demands for services, such as the 24/7 culture
- technological change
- changes in the training and education of healthcare professionals.

This analysis underpins the six recommendations for action in the report. Taken together, they provide a framework for action that will ensure a coordinated approach to workforce planning.

Despite the fact that most occupational health practice occurs in non-NHS workplaces, it is essential that both NHS healthcare planners and commissioners and workplace occupational health commissioners/ procurers understand the importance of integrating workplace health provision into the national model of healthcare delivery. Work ability has been defined as a person's capacity to do the work tasks they are required to do.⁽¹⁾ Employers can assume greater responsibility for protecting, supporting and restoring the work ability of their employees, thus reducing the burden on the NHS. They will need access to suitable and sufficient occupational health resources tailored to their business needs.

This report will describe the components of occupational health practice and will relate them to the scope of practice and training needs of respective occupational health specialists. It will detail actions to be taken to improve service delivery and training. It will also make recommendations for the development of multi-disciplinary models of delivery and training through the identification of generic competencies within the respective training curricula and frameworks.

Ultimately, workforce planning is concerned with the provision of the correct numbers of practitioners to meet the needs of the beneficiaries, including UK plc. It is apparent that, although our analysis currently lacks the sophistication to confidently and accurately predict required numbers, there is an urgent need to attract recruits into occupational health to address current lack of capacity and to offset predicted losses due to retirement over the next five to ten years. The report recommends actions to be taken in relation to this, and sets out areas for future research and development to improve the workforce planning process.

Chapter Two: Method

The change management approach to workforce planning challenges the respective professions under the occupational health umbrella to adopt a needs-based approach to assessing:

- the future delivery of occupational health services
- the competencies that will be required to provide occupational health
- the numbers of practitioners needed

It also challenges planners and commissioners to work at a high level with so-called 'macro data', used strategically to plan the future workforce.⁽⁹⁾ Working with macro data involves the use of scenario planning, trend analysis, assessing the scale and type of resource needed, and conducting a gap analysis. For occupational health, historical trend analysis is also important with regard to demographic and training data.

With regard to the business of occupational health, research indicates a need to provide insights using scenarios, rather than data collection from the current workforce to plan future occupational health services. This will enable a fresh approach to service design and a more innovative use of skill mix to meet the needs of the future working age population in a cost effective manner. This approach is inevitably less precise and requires the following capabilities:

- tolerance of ambiguity
- organisational development and diagnostic skills
- comfort working with macro data
- judgement and deductive skills
- application of pragmatism and flexibility

The aim of this project has been to ask the right questions to create a consensual structure for developing the occupational health workforce. The ensuing workforce strategy will balance the relative importance of the different issues identified and provide a realistic and pragmatic way forward, accepting that there will be a need to accommodate changes over time.

Analysis of market development was undertaken using the Ansoff matrix (*Figure 7*). This is a strategic planning tool used by marketers to devise future growth strategies. The analysis produced planning themes to promote the scope and reach of occupational health in the UK.

Case studies

The first *Planning the Future*⁽¹⁾ report introduced case studies, created as 'proxies' for future occupational health markets. The case studies were developed with the intention to use them as representations to illustrate occupational health delivery. They depicted scenarios where modern occupational health interventions would benefit people of working age and, where relevant, the organisations that employ them (*Figure 6*). We will return to these case studies in the final report, which will focus on skill mix and workforce numbers.

The case studies used as proxies in the first report 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, musculo-skeletal conditions such as work-related upper limb disorders and back pain, and noise induced hearing loss
- Mental health conditions 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

Figure 6: Occupational health themes underpinning the case studies

Concept mapping

A concept mapping process was used in stages 3 and 4 of the Population-Centric framework. The basis of this established mathematical technique is to use regression analyses and multidimensional scaling to develop a series of maps.

For stage 3, major stakeholders such as workers, employers, clinicians and healthcare professionals involved in delivering workplace and occupational health were invited to take part in workshops and collaborations. Participants developed ideas into statements and then rated each in terms of importance and feasibility for:

- delivering effective future occupational health in terms of future scope and reach
- removing barriers and supporting people to remain in work or to return to work following illness or injury

Concept mapping was then applied to analyse and present the results graphically.

This process enabled the steering group to organise the data, identify inter-relationships, and group the statements into themes around a multi-dimensional model of work and health service delivery that would improve workforce and organizational performance.

Workforce planning

The themes identified in the concept mapping process formed the basis for workforce planning, in addition to informing a strategic plan for predicting the future occupational health workforce. This approach is similar to that adopted by the Centre for Workforce Intelligence (CfWI). The workforce planning framework used by the CfWI⁽¹⁰⁾ comprises four building blocks:

- Horizon scanning
- Scenario generation
- Workforce modelling
- Policy analysis

Horizon scanning was conducted during phase 1 of the Population-Centric approach. Scenario generation led to the production of the case studies. Workforce modelling is the subject of the following sections of this report. Policy analysis has been addressed during the analysis of future markets and occupational health provision.

Knowledge, skills and competencies

In stage 4 (assessing the knowledge, skills and competencies of a future occupational health workforce) a small expert group reviewed respective training curricula or competency frameworks for the following disciplines:

- Occupational medicine
- Occupational hygiene
- Occupational health nursing
- Psychology
- Occupational health physiotherapy
- Safety and health
- Ergonomics and human factors

Invited stakeholders categorised the competency statements and also rated each statement according to its relevance to their particular discipline and the typical degree of specialism associated with their current training provision in occupational health.

Concept mapping facilitated the depiction of training themes for occupational health professionals, as well as the identification of generic competency statements common to most, if not all, the professions.

The findings and recommendations presented in subsequent chapters of this report are collated from the data output from the workshops and the panels of occupational health professionals who participated in the concept mapping processes. They represent an interpretation of the opinions expressed by the participants supplemented by contextual information from the literature.

Chapter Three: The role of the workplace in improving health and wellbeing in the working age population

The importance to the nation's health and prosperity of good occupational health has been recognised for many years. At an international level, the International Labour Organisation described the components of workplace occupational health provision.⁽¹¹⁾ The World Health Organization (WHO) has championed occupational health and regards it as a cost-effective investment for the prevention and control of non-communicable diseases and for mental health.⁽¹²⁾

Within the United Kingdom, occupational health has been increasingly considered to be a key component of workplace health and wellbeing. The cross-government strategy *Health, work and well-being*⁽⁴⁾ laid the foundations for current thinking about occupational health. It contributed to the evidence base to support the aphorism that 'Good work is good for health'⁽¹³⁾ and that worklessness is associated with poorer physical and mental health and wellbeing. The authors of the independent review found that work can be therapeutic and can reverse the adverse health effects of unemployment. More recently, the Marmot review⁽¹⁴⁾ concluded that employment status is a health determinant and highlighted the importance of employment in reducing health inequalities. The creation of fair employment and good work for all was one of six policy objectives identified by the report. There are links between health and wellbeing, individual performance and organisational performance.^(15,16)

Employment in safe and healthy workplaces is a pre-requisite for health and wellbeing at work. Occupational *illnesses* significantly outnumber occupational *injuries* in both number and cost to individuals and to society. HSE statistics show that around 13,000 people die each year from occupational lung disease and cancer as a consequence of past workplace exposures, primarily to chemicals, dusts and fibres.⁽¹⁷⁾ In addition, an estimated 2 million people working in 2014/15 were suffering from an illness they believed was caused or made worse by work, of which 0.5 million were new cases which started in that year.⁽¹⁸⁾ HSE has appointed a new Workplace Health Expert Committee to provide independent expert knowledge and advice on workplace health, recognising the need to consider the evidence linking workplace hazards to ill health. It will consider chemical and physical hazards and human, behavioural or organisational factors in the workplace (for example shift work) leading to physiological and psychological ill health.⁽¹⁹⁾

The ageing workforce and the economic shift (from manufacturing to service) mean that the effects of health on work in the UK are now a more significant focus than the effects of work on health. The number of people with some diseases will double over the next 20 years. For example, by 2030 there will be 17 million people with arthritis and 3 million with cancer. Meanwhile, the cost of 'treatment' within the NHS is outstripping ability to pay, and it is known that people who are in good work use healthcare less. Occupational health professionals have the ability to influence and improve the health of thousands of individuals by implementing preventative measures and changing practices and policies in the workplace, whereas general practitioners see patients one-to-one.

Two important national reviews of occupational health provision – *Working for a healthier tomorrow*⁽²⁾ and *NHS health and well-being*⁽²⁰⁾ – were commissioned as part of the cross-

government strategy. The review by Dame Carol Black⁽²⁾ highlighted the need for a change in attitude to ensure that employers and employees recognise not only the importance of preventing ill health, but also the role the workplace can play in promoting health and wellbeing. It also set out a new approach to supporting the health and wellbeing of working age people in Britain, for which a suitably trained and resourced occupational health workforce would be required.

There is a growing consensus that a paradigm shift in healthcare delivery is required, so that occupational health provision becomes part of mainstream work, healthcare and business strategy and the workplace and workplace health are recognised as key contributors to the prevention of expensive treatments at primary, secondary and tertiary levels. This multi-professional collaborative approach realises the earlier vision for the health of the working age population⁽²⁾ in:

- preventing illness and promoting health and wellbeing
- delivering early intervention for those who develop a health condition
- improving the health of those who are out of work (so that everyone with the potential to work has the support they need)

This does not mean that the NHS will be responsible for the delivery of most occupational health services, but that healthcare workers will recognise the contribution that occupational health provision in the workplace can make to the promotion of good health, the prevention of disease, and the support of people with long-term conditions. It also means that being in employment and returning to work after illness are fully recognised as key health outcomes. Therefore clinicians should have the knowledge and skills to engage with barriers to work, and the ability to refer to occupational health specialists as part of treatment or rehabilitation plans.

It has been a long-term aim of the NHS to be an exemplar with regard to the health and wellbeing of its employees. The review of the health and wellbeing of NHS staff produced recommendations aimed at improving organisational behaviours and performance, embedding staff health and wellbeing in NHS systems and infrastructure.⁽²⁰⁾ It is time for the NHS to work in partnership with the best of non-NHS occupational health experts, not only to optimise the health and wellbeing of its staff but also to facilitate the occupational health dimension of patient care.

The new paradigm for occupational health aligns with the HSE strategy for GB's Health & Safety system.⁽⁷⁾ A feature of this strategy is that it does not concern HSE alone: it is for everyone. The aim is to promote broader ownership of Health & Safety in Great Britain and to tackle the costs of work-related ill health by simplifying risk management. Keeping pace with change is another theme that accords with the recommendations of this report; that is, ensuring that the occupational health workforce remains relevant to modern day working practices and business needs.

This approach to occupational health is consistent with the NHS *Five Year Forward View*^(6,21), which envisages significant changes in the NHS delivery model with a renewed focus on prevention, including:

- incentivising and supporting healthier behaviours (including in the workplace)
- targeting prevention
- supporting people to stay in or get back to work
- promoting workplace health
- preventing, or at least reducing, exposures that can cause occupational disease by the use of good occupational hygiene practices.

The new Government funded service, Fit for Work,⁽²²⁾ enables GPs to refer their patients for occupational health advice after an absence from work due to ill health of 4 weeks. Employers can also make a referral if a GP has not already done so after 4 weeks sickness absence. Fit for Work provides both a supportive occupational health assessment and general health and work advice to employees, employers and GPs, to help individuals stay in or return to work. There are two elements to Fit for Work:

Assessment: Once the employee has reached, or is expected to reach, 4 weeks of sickness absence they will normally be referred by their GP or employer for an assessment by an occupational health professional, who will look at all the issues preventing the employee from returning to work;

Advice: Free, expert and impartial work-related health advice via a phone line and a website which is accessible to the public, including GPs, employers and employees.

- The primary referral route for an assessment is via the GP. Guidance for GPs makes clear that referral should be the default option, unless individuals meet the criteria for when referral may be inappropriate
- Employers may refer an employee to Fit for Work if the GP has not done so by the 4-week point, if it is appropriate. Online guidance sets out when it is appropriate for an employer to refer and what issues they need to take into consideration, including the need for employee consent
- Fit for Work provides a holistic or 'biopsychosocial' assessment that looks at non-health and non-work issues as well as those directly related to health or work
- Fit for Work assessments are completely different from Work Capability Assessments and are not linked to benefit payments
- Following an assessment, employees receive a Return to Work Plan containing recommendations to help support them to return to work more quickly and provide information on how to access appropriate interventions. Legislation allows employers to accept a Return to Work Plan as a statement for fitness for work; therefore a Return to Work Plan may be accepted in place of a GP fit note

- A tax exemption is available of up to £500 a year per employee on medical treatments recommended by Fit for Work or an employer-arranged occupational health service to ensure positive steps towards a return to work
- Fit for Work complements, and does not replace, existing occupational health services provided by employers. It will fill a gap in support where that currently exists, and benefits those employers who currently have limited in-house occupational health services.

The NHS Five Year Forward Review expects the NHS to work with Fit for Work to provide improved access to NHS services, to reduce the number of people who become unemployed and claim state benefits. There will be opportunities for occupational health professionals to become multi-specialty community providers (MCPs) within an expanded and re-fashioned primary care provision and new partnership working between the NHS and other employers.

To ensure that the private occupational health sector also champions this new paradigm, the Government should consider incentivising employers to create 'healthy workplaces' by extending additional tax relief. In addition, potential for effective occupational health can be explored through working with insurance companies, particularly in the area of sickness absence and return to work.

Delivery of the Black review's vision for the health of the working age population requires a multi-professional collaborative approach. The Council for Work and Health was established to facilitate such an approach and brings together the professional bodies which represent stakeholder groups to provide an authoritative and representative 'single voice' on health and wellbeing issues. It also provides an opportunity for coordinated and integrated working on issues which impact on health and wellbeing services, and facilitates information sharing to promote improvement. It was under the auspices of the Council that the Working Group was established to undertake the occupational health workforce planning project.

Healthy lives, healthy people ⁽²³⁾ presented a radical shift in the way in which public health challenges are tackled. The aim of the new approach is to 'reach across and reach out' to the people who need the most support, and the workplace provides a route in to some hard to reach groups.

Its life-course approach to health and wellbeing challenges grouped health interventions under five main headings:

- starting well
- developing well
- living well
- working well
- ageing well

The focus of living well is the reduction of premature deaths and illnesses by improving lifestyles and changing health behaviours. Typical examples relate to smoking and alcohol related health conditions, obesity and the importance of diet and exercise, and mental ill health. The workplace and work environments are critically important in achieving these aims. People who wish to, or need to, work must be well enough to be employable in a competitive jobs market. For people in good work, there is evidence of a virtuous cycle between health and wellbeing, engagement, resilience and productivity.^(13,24)

‘Working well’ highlights the importance of the health and wellbeing of working age people in supporting the economy and society. It is estimated that reducing working-age ill health has the potential to save the UK the equivalent of two-thirds of the entire NHS budget.⁽²⁾ In particular, there are opportunities to promote health and wellbeing at work to reduce the incidence and prevalence of mental ill health.

Globally, while the health and wellbeing of the workforce is taken into account in policy development relating to hazardous activities, the workforce is rarely considered in policies on climate change, trade and economic development, poverty reduction, or education.⁽¹²⁾ When considering how the workplace can contribute to the healthcare of the working population, interventions at different levels of complexity are possible:

- individual behaviours
- organisational culture and policies
- the relationship between organisations and communities

Culture shift at an individual level

The workplace may be used as a platform for the provision of information for health promotion and protection; for example, supporting national initiatives such as ‘Dry January’, National Stress Awareness Day, No-smoking Day, ‘Stoptober’, World AIDS day etc. This may be linked to company policies, such as smoke-free workplaces, substance misuse, Health & Safety and attendance management.

As musculoskeletal and common mental health conditions predominate as medically certificated causes of absence⁽²⁵⁾, companies may provide information and training to raise awareness about them. This can address the stigmatisation of illness in the workplace, especially with respect to mental ill health. Workers also need training in safe working practices as part of the control of exposures to hazards liable to cause occupational disease.

Culture shift at an organisational level

Some organisations recognise that good health and wellbeing is good for business. Over 300 organisations are signatories to the Public Health Responsibility Deal.⁽²⁶⁾ Most FT100 companies report on their health and wellbeing activities.⁽²⁷⁾ An integrated approach

to health and wellbeing at work combines attention to the promotion and support of physical and mental wellbeing with operational issues, such as work design, investing in ergonomics improvements and management, people performance, and organisational development. The Business in the Community Workwell model of health and wellbeing describes the inter-relationship of these factors, as well as the individual and organisational benefits that may be derived.⁽²⁸⁾

Health and wellbeing in the workplace is depicted as requiring good health, good work, good relationships and good support. Instrumental in the successful implementation of workplace health and wellbeing strategies is the organisational culture in which they exist, with the health and wellbeing of employees integral to business success, not an add-on.

Simply defined, Health and Productivity Management, or HPM, is a concept that directs corporate investment into interventions that improve employee health and business performance. It can also be described as the integrated management of health risks, chronic illness, and disability to reduce employees' total health-related costs, including direct medical expenditures, unnecessary absence from work, and lost performance at work - also known as 'presenteeism'.

American College of Occupational and Environmental Medicine, Health and Productivity Management Toolkit <http://hpm.acoem.org/abouthpm.html>

Box 2: The US concept of health and productivity management

From a public health perspective, it is the potential of the relationship between organisations and their local communities that is most powerful. In their 2010 report *Healthy workplaces: a model for action: for employers, workers, policymakers and practitioners*, the World Health Organisation (WHO) defined a healthy workforce as 'one in which workers and managers collaborate to use a continual improvement process to protect and promote the health, safety and wellbeing of all workers and the sustainability of the workplace through a needs analysis that considers:

- health and safety concerns in the physical work environment
- health, safety and wellbeing concerns in the psychosocial work environment, including organisation of work and workplace culture
- personal health resources in the workplace (support and encouragement of healthy lifestyles by the employer)
- ways of participating in the community to improve the health of workers, their families and members of the community'.

An example of how this might be achieved within healthcare settings is the development of the health promoting hospitals (HPH) network.⁽²⁹⁾ The network has been established to change the culture of hospital care towards interdisciplinary working and transparent decision-making with active involvement of patients and partners. It is also intended to evaluate health promotion activities, with the creation of an evidence base. This will be facilitated by the inclusion of standards and indicators for health promotion in existing quality management systems in hospitals and at a national level. Despite being part of health systems, hospitals do not always accept that health promotion is part of their function. However, there are many opportunities to fulfil this role given that they employ large numbers of staff, they interact with the public, they can reach a large section of the population, and generally information from them is trusted.

To realize the full potential of the comprehensive HPH approach for increasing the health gain of hospital patients, staff, and the community, HPH must be supported by:

- an organisational structure
- support from top management
- a management structure that embraces all organisational units
- a budget
- specific aims and targets
- action plans
- projects and programmes
- standards and guidelines

and other tools for implementing health promotion into everyday business. This must be supported by evaluation and monitoring, professional training and education, research and dissemination.

A similar argument can be made for the involvement of other workplaces. Although not responsible for delivering healthcare, organisations may carry out health promoting activities as part of their control of workplace hazards or their engagement strategy. This may extend to the families and friends of employees. An example of this in the UK is the Public Health Responsibility Deal, where many private and public sector organisations have pledged to implement one or more workplace health promotion initiatives, including supporting employees with chronic conditions and promoting good mental health.⁽²⁶⁾

The WHO Global Plan of Action on workers' health 2008-2017⁽¹²⁾ has strategic aims (Box 3) and specific areas of focus. These areas are:

1. Healthy workplaces
2. Occupational and work-related diseases
3. Essential interventions for workers' health

Global Plan of Action on Workers' Health

- devising and implementing policy instruments on workers' health;
- protecting and promoting health at the workplace;
- improving the performance of and access to occupational health services;
- providing and communicating evidence for action and practice; incorporating workers' health into other policies.
- Essential interventions for workers' health

Box 3: The WHO Global Plan of Action on workers' health 2008-2017

The achievement of healthy workplaces requires addressing work-related chemical, physical, biological and psychological risks; the promotion and support of healthy behaviours; and the broader social and environmental determinants of health. This extends the classical model of occupational health, which has previously been focused on workplace hazards and risks, to a more holistic biopsychosocial model of health.

Whilst occupational health practice must protect workers from hazardous workplace exposures and unsafe working practices, it also has an important role in reducing the global burden of ill health due to non-communicable diseases. The data on current burden of deaths and illness in GB caused by the working environment⁽¹⁸⁾ indicates the need for a much greater focus on this area and HSE are developing a new strategy called Helping Great Britain Work Well⁽³⁰⁾, made up of six themes; acting together, tackling ill-health, managing risk well, supporting small employers, keeping pace with change and sharing our success. Two campaigns have been launched by occupational health professional bodies with the aim of increasing the awareness of industry to the huge burden of occupational diseases in the UK.

- The British Occupational Hygiene Society (BOHS) launched the 'Breathe freely' campaign in April 2015. The purpose of the initiative is to prevent occupational lung disease in the construction industry. It is a collaborative initiative targeted specifically at managers and site supervisors within the construction industry, and aims not just to raise awareness of the problem of lung disease within the construction industry, but also to effect action by providing practical solutions through the sharing of best practice and encouraging implementation of effective exposure control. At the heart of the Breathe Freely initiative is a new worker health protection management standard, a tool to help employers reduce health risks, raise standards and keep them high. See <http://www.breathefreely.org.uk/> for further details.
- The Institution of Occupational Safety and Health (IOSH) launched the 'No time to lose' campaign on occupational cancers in November 2014. The initiative calls for a collaboration of government and employers to beat occupational cancer. See <http://www.notimetolose.org.uk/> for further details.

The focus on occupational and work-related diseases continues to represent a significant aspect of the occupational health role. The changing world of work means that the UK is predominantly a 'white collar' working environment.⁽³¹⁾ Nonetheless manufacturing, construction and artisan activities still employ large numbers of workers and the workplace remains a significant cause of illness and disease. The Department for Work and Pensions maintains a long list of prescribed diseases⁽³²⁾ that includes occupational cancers, poisons, infections, overuse injuries and respiratory diseases. Work-related musculoskeletal and mental health conditions are the commonest disorders reported to the Occupational Physicians Reporting Activity (OPRA) scheme run by the University of Manchester.⁽³³⁾ The challenge for occupational health is to reduce the incidence of such diseases and illnesses through workplace interventions to prevent, or at least minimise, hazardous exposures. This requires a multi-disciplinary team effort, ranging from strategic procurement policies or work arrangements, to good workplace design using systematic methods and following ergonomics principles, control measures, and monitoring of the environment and the workers.

Work-related disease may lead to payment of state-funded compensation or benefits associated with changed employment status. It is important to be able to diagnose such conditions accurately, and occupational health practitioners should work with agencies such as HSE to develop diagnostic and exposure criteria which enable healthcare providers to diagnose and report them.

Estimates of the global burden of disease may be used to shape policy for the prevention of occupational and work-related diseases. Currently many of the costs are borne by the country and the NHS. There could therefore be a case, however challenging, for examining schemes used in other countries to explore if the costs of compensation and healthcare could more effectively be apportioned to those employers responsible for them. This would provide a greater incentive to improve the working environment for those responsible for employment and reduce the burden on the state and taxpayer.

The case for positioning occupational health delivery within the national healthcare delivery framework is to ensure that the workplace becomes a pivotal environment in which to promote and maintain the health of the working age population. Essential interventions for workers' health (classical health risk management, sickness absence and rehabilitation, chronic disease management and health promotion) (*Figure 3*) require leadership from healthcare and industry to create a partnership between organisationally-based occupational health services and occupationally health-aware (and trained) health practitioners in primary and secondary care.

Globally only 15 per cent of workers have access to specialised occupational health services.⁽³⁴⁾ In the UK occupational health services are provided by large private and public sector employers. Consequently only about 40 per cent of the UK's total workforce have access to specialist occupational health advice and management, but this varies considerably by company size. For example, more than half of employees of very large firms (500+ employees) have access to occupational health compared with just 10 per cent of employees of small firms (up to 50 employees).⁽³⁵⁾ Providing occupational health to the

more than 2 million companies that are categorised as small or medium-sized enterprises (SMEs) has been a longstanding challenge.⁽³⁶⁾ By extending occupational health awareness and expertise into primary and secondary care, it will be possible for future integrated care pathways to include the workplace and to incorporate work ability and employment status as recorded and auditable health outcomes. This, coupled with effective marketing of occupational health, could extend the reach into these unsupported work environments.

Our vision, reflecting the recommendations of Dame Carol Black⁽²⁾ and Sir Michael Marmot⁽¹³⁾, is a world where every worker can access timely, safe, effective, high quality occupational health advice. An example of a marker of quality is the Safe, Effective, Quality Occupational Health Service (SEQOHS)⁽³⁷⁾ accreditation of occupational health services from the Faculty of Occupational Medicine, developed in response to *Working for a healthier tomorrow*⁽²⁾, which advocated clear standards of practice and formal accreditation of all providers who support people of working age. It should be noted this example of accreditation is healthcare focused; other professions engaged in occupational health may explore similar quality schemes. The Faculty has indicated that over 25 per cent of the UK workforce are now covered by SEQOHS accredited services.

While access to services might be via the place of work, remote 24/7 access for workers could be made possible with new developments in technology such as telephone or video communication, apps and emerging tools. This would also facilitate access for adults who would like to be employed. In addition, suitably trained occupational health practitioners will deliver workplace-consistent mainstream healthcare for workers with chronic conditions or those who are returning to work after acute illness.

Chapter Four: Making occupational health marketable to UK businesses and organisations

The UK occupational health market is estimated to be worth £557 million in 2015.⁽³⁸⁾ This represents an increase of 27 per cent since 2010⁽³⁹⁾, with the public sector making up 54 per cent of demand. Over the next five years the value of outsourced occupational health services is projected to increase by 29 per cent in real terms, in both public and private sectors.

Commercial occupational health providers report that occupational health services are commissioned for two prime reasons:

- to enhance performance of the organisation
- to ensure compliance with regulations or policy

It is necessary, therefore, to present occupational health as affordable and cost effective to organisations and good for their business.

Of course, markets can change. Analysis of market development was undertaken using the Ansoff matrix (*Figure 7*), a strategic planning tool that is used by marketers to devise future growth strategies⁽⁴⁰⁾.

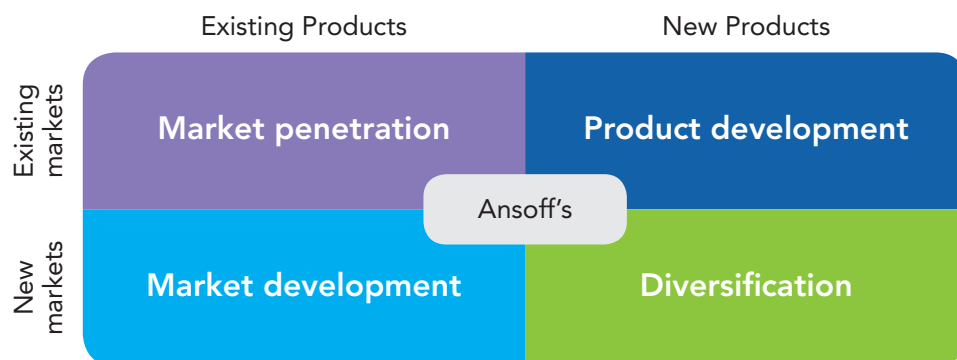


Figure 7: The Ansoff matrix

The matrix depicts four growth alternatives:

- *Market penetration* represents increasing market share in the current market
- *Market development* means expanding into new markets using existing products or services
- *Product development* involves creating new products or services targeted at existing markets
- *Diversification* refers to introducing new products or services into new markets

The use of the Ansoff matrix, coupled with the population-centric workforce planning approach, has helped to develop a scope and reach for occupational health which will aid in predicting future models of service delivery, workforce numbers and skill mix.

The research identified the following themes:

- Tailoring occupational health to different businesses, whatever their size
- Introducing a workplace health and wellbeing culture
- Applying a staged approach to effective health and wellbeing practice
- Education

Tailoring occupational health to different businesses, whatever their size

Business capability

There is potential to develop new markets by

- working with insurance companies (particularly in the area of sickness absence, return to work, prevention of illness and deaths from poor working environments)
- including occupational health services into the public health agenda
- introducing integrated care plans in primary and secondary care.

In addition to strengthening the more traditional private sector recruitment, occupational health services could position themselves to be commissioned by NHS England or local authorities, in conjunction with Health and Wellbeing Boards. This could include the joint strategic needs assessment (JSNA) to support the workplace element of integrated care plans.

Developing a business-based public health culture for organisations will help to penetrate existing markets as well as developing new markets in large, medium and small organisations, varying the health and wellbeing delivery model according to their size and purchasing power. Market development ideas include the potential for NHS occupational health services and private sector entrepreneurs to expand their provision to the small and medium-sized enterprise (SME) market, which is largely untapped mainly due to lack of awareness of occupational health and affordability.⁽⁴¹⁾

There is a clear need to develop the occupational health proposition and the business case for investing in occupational health, with quality measures to encourage uptake of cost-effective services. In addition, occupational health services must be engaged to address the problem of health-related worklessness. This is likely to remain a UK government priority as part of a strategic re-shaping of welfare expenditure, linked to the reported health benefits of being in supported employment and the associated benefits to national prosperity.

Use of technology

Technology has the potential to assist both product development and diversification. It cannot replace site visits and workplace inspections, but will provide improved tools to

support investigations. The use of the internet, smartphone apps and various sensors or monitoring devices will enable new ways of delivering either established services or new products.

Technology will also influence training and quality assurance of practice. Telephone and web-based occupational health resources have demonstrated value; the Health4work advice line was a government-funded service for SMEs that has now been incorporated into Fit for Work⁽²²⁾ launched in 2015. Electronic experiential learning audit & benchmarking (EELAB)⁽⁴²⁾ is an example of an internet-based training tool for occupational physicians linked to a developing database associated with the OPRA reporting scheme.⁽³⁴⁾ The VitalSigns app⁽⁴³⁾, developed by Imperial College Healthcare NHS Trust, is an example of how public health issues may be combined with useful workplace information to encourage downloading and usage of the app. Telemedicine and telehealth will enable access to expert advice irrespective of geography, which will enable future cost-effective deployment of the occupational health workforce.

We now live in an era where purchasers are used to shopping online and being able to conduct consumer research before deciding to purchase. Occupational health must develop a strong online presence, learning from the leaders in online delivery such as commercial retail operations. A resource, accessible via PC or smartphone, that contains information about occupational health, the different professions within occupational health, tools to carry out risk assessments, information about providers and customer ratings and the ability to contact specific providers would take occupational health into the world of e-commerce and potential markets.

Technological advances will stimulate and assist occupational health research and the development of evidence-based practice. For example, these recent developments in the field of occupational hygiene:

- The concept of the Exposome has been defined as ‘being composed of every exposure to which an individual is subjected from conception to death’. Cherrie et al⁽⁴⁴⁾ have postulated that ‘omics’ biomarkers, particularly those of metabolites and proteins in the body (metabolomics and proteomics), may be used in the not-too-distant future to measure the Exposome, and that small, low-cost sensors linked to smartphones or the internet will be developed and used to do this.
- Niven⁽⁴⁵⁾ has described a paradigm shift in the regulation of chemicals. The old way used studies on laboratory animals. The future, she suggests, is with human pathways: new in-vitro approaches, toxicogenomic technologies and computational tools that provide insights into toxicological adverse outcome pathways (AOPs) of the adverse effects observed in laboratory animals.

Quality improvement

There were wide-ranging ideas about quality improvement initiatives.

The wider use of holistic, task-specific risk assessment tools, such as those provided on the HSE web pages, would empower people in the workplace to assume responsibility for

identifying and implementing improvements. This would change the relationship between occupational health professionals and workers, with occupational health practitioners assuming a greater leadership and coaching role as well as providing expert advice and support. There would be an increased role for appropriately trained and competent generalists in workplace health and wellbeing, which would widen the workforce base.

The development of workplace needs analysis tools would assist market penetration and potentially market development, coupled with effective marketing of occupational health services.

Data collection, assisted by use of technology, would permit regular and effective audit of practice and service provision. This in turn would facilitate product development, such as health and wellbeing 'passports' containing wellbeing profiles and other monitoring data, empowering individuals and allowing long-term tracking of wellbeing, even if workers change jobs.

Introducing a workplace health and wellbeing culture

Health and wellbeing in the workplace

A working environment where risk to the health and wellbeing of staff is well managed is important in delivering high productivity and high quality services. Individuals need to feel safe and supported at work; workplace stressors such as high job demand, low control at work, lack of support, role conflict, relationship issues and change, high levels of critical incidents, bullying and harassment must be addressed at organisational level. Emotional needs of workers are addressed through flexible working practices that take account of work-life balance and home needs, for example the needs of carers.

The ageing UK workforce, a rising prevalence of non-communicable diseases, and the support of people with some form of disability as defined by the Equality Act 2010⁽⁴⁾ will be all be important components of occupational health and management practice, leading to partnership working with other healthcare and welfare providers. Physical and mental good health should be supported, as advocated in the Business in the Community Workwell model.⁽²⁸⁾ Health monitoring, as part of a risk management and health and wellbeing programme, can detect early adverse health effects for action to prevent illness and reduce absenteeism and 'presenteeism'. Employment must be seen as an important health outcome and return to work prioritised for people who are out of work yet employable. Good work is good for health and good for business.⁽¹³⁾

Developing a healthy work culture

A recurring theme is workplace culture. The ideal is a positive workplace culture that promotes health, wellbeing and safety and encourages a participatory approach between managers and employees. A culture that encourages and facilitates workers to understand illness and disability in others, and to support affected people, will impact on sickness absence and return to work. Empowering workers to take personal responsibility for

their lifestyle choices would be an extension of a workplace requirement for workers to take responsibility for their safety at work. Workers also need a safe environment where they can speak up about possible health and safety risks, report problems and question practices without fear of punishment.

Occupational health incorporates primary and secondary prevention, complementing services such as sickness absence management, often procured by organisations in isolation. Leadership and an ability to influence and drive organisational development and culture must become an essential and integrated component of attendance management packages.

Applying a staged approach to effective health and wellbeing practice

Promotion of work ability and rehabilitation

The biopsychosocial approach of occupational health underpins its contribution to the health and wellbeing of individuals at work and to marketing the specialism. Occupational health practitioners should be advocates at an individual and population level to optimise health and wellbeing at work. Integration of occupational health service functions within wider organisational processes, and within healthcare generally, will maximise the efficacy of interventions.

Workers, managers, human resources professionals and healthcare practitioners must understand the complementary contribution of occupational health services to the promotion of work ability (an individual's ability to work) and thus work engagement, performance and health. Effective assessment of work ability requires a multi-disciplinary team approach and should be risk-based. Timely access to quality-assured, suitably trained practitioners for functional capacity evaluations, advice and treatment should be part of the multi-disciplinary provision.

The clinical aspects of rehabilitation must be coordinated with non-clinical attendance management. Holistic employee assistance might take the form of fast track access to relevant therapies; access to counsellors and therapists supporting mental health in the workplace, physical rehabilitation to improve strength and stamina in preparation for a return to a physically demanding job; or welfare advice, such as for financial or legal problems. Mediation services may be required when a workplace dispute creates a barrier to a return to work. Pastoral care or support from a coaching and mentoring service may also be advantageous. In some cases, employers may use their occupational health provider to provide partial or full rehabilitation as part of the overall return-to-work service. Alternatively the employer may offer financial assistance to supplement NHS or private sector provision, particularly where there is a business need to avoid undue delay.

Since the formation of the NHS, occupational medicine and occupational health interventions have been separated from conventional healthcare provision, placed instead in the domain of industry and within departments of work rather than health. This is the case internationally. The inclusion of employment and sickness absence in the *Public*

health outcomes framework⁽⁴⁶⁾ marked a change in perceptions. There is now a challenge to market occupational health to primary and secondary healthcare providers and to public health practitioners, and to include the workplace in delivering good health outcomes.

As the NHS reviews its models of healthcare delivery, there are opportunities to include occupational health within integrated care pathways. National priorities include the physical and mental health and wellbeing of patients and, although the current priorities have a very narrow focus, they are synergistic with workplace health and wellbeing goals. Return to work and avoidance of falling out of work due to ill health are legitimate priorities, given the impact such outcomes have on health inequalities and welfare costs. By including occupational health considerations into the determination of income streams, this would incentivise healthcare professionals to use measurable targets that include 'return to work'. These targets may also be used as an essential component of appraisal, revalidation or other performance management systems, and evidence of return on investment. This could create a new culture within the NHS that establishes the maintenance of patients' work ability as part of 'business as usual'.

Occupational health specialists can support discharge plans. A worker's vocational tasks should be assessed and included in any treatment plan developed by a GP, hospital consultant or other healthcare professional, utilising the Fit Note⁽⁴⁷⁾ and/or the Allied Health Professions *Advisory fitness for work report*.⁽⁴⁸⁾ Return-to-work outcomes should be measured and reported on; patient related outcome measures (PROMS) have the potential to transform integrated occupational health and care.⁽⁴⁹⁾ Standards contained within primary and secondary care performance frameworks should be developed to become part of the commissioning process when assessing best value for NHS expenditure. A vehicle for enabling this new approach might be Commissioning for quality and innovation (CQUIN).⁽⁵⁰⁾

Accessibility of occupational health services

Occupational health advice should be available and accessible to everyone.

Currently only about 40 per cent of the working population have direct access to an occupational health service through their employing organisation, even fewer to comprehensive occupational services. The main consumers are likely to be people in employment, particularly managers. Services should also be made accessible to people out of work and trying to obtain employment, to individuals who wish to understand their own health, and to managers with responsibility to protect and support people at work.

In the future, occupational health advice and support will become available via multi-channel provision. The establishment of Fit for Work⁽²²⁾ is a step in this direction. To extend the reach of occupational health, it is essential to understand and respond to the needs of SME employers, the self-employed, and potentially even the unemployed. Early evidence-based vocational rehabilitation should be routinely and equitably available for people wishing to return to their original job, or to a different job, in the same employing organisation, or a new or different one.⁽⁵¹⁾ Fast-track and easy access to occupational health advice and interventions would help to reduce the number of people that become unemployed because of a health-related decrease in work ability.

Health risk management

A considerable proportion of occupational health practice, including case management of sickness absence, is driven by the need for compliance. A powerful approach to engaging boards and executives in proactive decision-making would be to introduce standards against which the performance of organisations and occupational health practitioners is judged based on statutory requirements, civil law judgements, or authoritative guidance on best practice. Guidance from HSE, for example on hazard and risk control, or the Chartered Institute for Personnel and Development (CIPD) on sickness absence management should shape organisational policies and procedures. Mediation to resolve workplace grievances and disputes should also become part of the organisational health landscape as a means of improving mental wellbeing.

There are opportunities to penetrate the market by demonstrating how occupational health practitioners can assist organisations to develop organisational policies more closely aligned to public health and social care policies, implement risk management, and ensure best practice, cost effective and efficient processes that eliminate unnecessary bureaucracy.

Introducing incentives for employers to provide early access to treatments may be appropriate, should the State follow other countries' practice of placing responsibility on employers to meet the costs of ill health attributable to work.

Education

The education of healthcare professionals (HCPs) in workplace health and wellbeing must be introduced early in training and tiered to different levels of expertise. Currently greater numbers of HCPs engage in basic occupational health training, going on to undertake generic, basic level occupational health work upon entering the specialism. Only a small minority progress to specialist and expert training within their professional groups.

Many aspects of occupational health can be addressed by people with a fundamental understanding of the principles, an ability to give generic advice, and knowledge of when and how to signpost to more specialist advice. A generic occupational health workforce will be supported and led by practitioners trained to specialist/expert level, who will be required for complex workplace assessments and interventions, to engage with organisations, and to oversee practice. Up-skilling of staff to technician level to support the occupational health workforce is also required.

Educating specialist and expert occupational health practitioners

The quality of occupational health provision must be underpinned by competency frameworks relevant to the disciplines under the occupational umbrella. Some already exist; others are yet to be developed. The progression of training and the development of a generic competency framework in occupational health are discussed in Chapter 5.

A particular challenge for training future generations of occupational health specialists will be to attract good candidates from the pool of undergraduate practitioners, requiring

the inclusion of relevant occupational health teaching in the respective undergraduate curricula to raise awareness of the discipline and of its relevance in delivering the nation's future public health.

- New training modules will need to be developed, based on research.
- Relevant occupational health teaching will include the design of healthy workplaces as part of a systems approach with an emphasis on risk management, so that the removal (or reduction) of one risk does not exacerbate another (e.g. air quality vs. thermal comfort).
- The training should incorporate business focus, so that implementation addresses productivity needs.

The creation of a suitably trained and accredited multi-professional workforce will enable much greater flexibility in the delivery of occupational health, and thus the development of occupational products and markets.

Sub-specialisation to produce experts in the field in different industry areas such as healthcare, transport, construction, retail, energy etc. will create valuable (albeit limited) national resources to support strategic and high level implementation of health and wellbeing policies, as well as leadership in clinical governance and practice.

Educating non-occupational health professionals, managers and HR

Within mainstream healthcare there is more work to be done to deliver training to GPs about occupational health generally and the use of the Fit Note⁽⁴⁷⁾ in particular. Additional training and support in introducing the Allied Health Professions *Advisory Fitness for Work Report*⁽⁴⁸⁾ across the appropriate professions, mainly physiotherapy and occupational therapy, will also facilitate timely provision of advice on fitness for work. A separate but linked piece of work should be undertaken regarding the competencies of secondary care practitioners, including hospital doctors in training and hospital consultants.

There is also scope for raising levels of awareness and competence amongst non-clinical practitioners and managers, for example in carrying out stress risk assessments or generic workstation ergonomic assessments, or implementing Fit Note recommendations.⁽⁴⁷⁾ Health & Safety practitioners represent a considerable resource in the workplace; many organisations employ a safety professional to fulfil the legal requirement to have access to a competent person in relation to health and safety.

The UK has reduced the number of deaths from injury at work, and in 2014 had the best EU record in this field; but with 100 times more deaths from occupational diseases than occupational injury, there is a compelling argument to raise the competency requirement to address occupational health issues and promote closer working amongst the wider occupational health team (including health and safety officers) - healthcare workers, human resources staff and managers.

Educating the public

Part of the strategy for mainstreaming occupational health, and improving health and wellbeing in the workplace, will be raising levels of awareness of the discipline among the general public. The starting point should be primary and secondary education levels. The National Curriculum should contain elements of occupational health as part of preparing for life and work, developing health behaviours to support a sustained working life, and promoting the concept that being in good employment is as beneficial to health as not smoking and drinking alcohol sensibly. Teachers should be encouraged to deliver consistently correct and appropriate messages about health, safety and wellbeing, supported by approved educational resources.

The creation and development of lay champions would help promote good workplace health and wellbeing, both in the workplace and out into the community - for example, countering negative myths that surround Health & Safety.

Occupational health leaders, through the Council for Work and Health, should engage with Public Health England to work with the Department for Education to incorporate aspects of occupational health into teacher training and into the National Curriculum.

Actions recommended to extend the scope and reach of occupational health

Occupational health should be accorded the same priority as safety, and routinely included in board level business strategies of companies of all sizes.

Workshop participants and wider consultees identified the following actions as important and straightforward to implement:

- ensure timely access to therapies
- develop a multi-professional occupational health provision
- promote both health **AND** safety in organisations
- support people with long-term conditions in the workplace
- assist GPs in the use of the *Fit Note*⁽⁴⁷⁾

Effective access to and use of occupational health systems would be realised through all quadrants of Ansoff's matrix (*Figure 7*), in particular market penetration through improved workplace health and wellbeing support. Opportunities exist for occupational health services to expand existing contracts or service agreements, discussing the value of health and wellbeing solutions with their clients with an emphasis on primary and secondary prevention, not just supporting people with work-related illnesses and/or sickness absence management.

Stakeholders identified other issues of high importance but more challenging to implement, including:

- equality in access to occupational health, particularly for SMEs
- the adoption of good practice in work health surveillance programmes

The challenge of improving occupational health awareness in NHS and private healthcare is ongoing; evidence is building of the cost effectiveness of including a worker's vocational tasks in care pathway programmes and using work ability as a standard healthcare outcome, utilising occupational health specialists for advice and expert opinion in more complex cases. For example, it would be relatively straightforward to develop resources to support consideration of work issues when planning treatments and care pathways for patients. Such a resource has been developed for cancer patients by Macmillan Cancer Support.⁽⁵²⁾

Chapter Five: Occupational health practice

The fundamental occupational health approach begins with the prevention of ill health. As shown in Figure 1, this requires:

- understanding the relationship between work and health
- the ability to determine and implement interventions to secure the promotion of good health
- the prevention of ill health
- the detection and treatment of ill health
- an appreciation of who to approach.

Figure 8 illustrates a multi-dimensional model of work and health service delivery designed to improve workforce and organisational performance. The model demonstrates the interaction between critical dimensions in the delivery of health and work services:

- the causes of health and work issues
- the application of interventions in promotion, prevention and treatment
- who should be involved in the delivery of health and work services

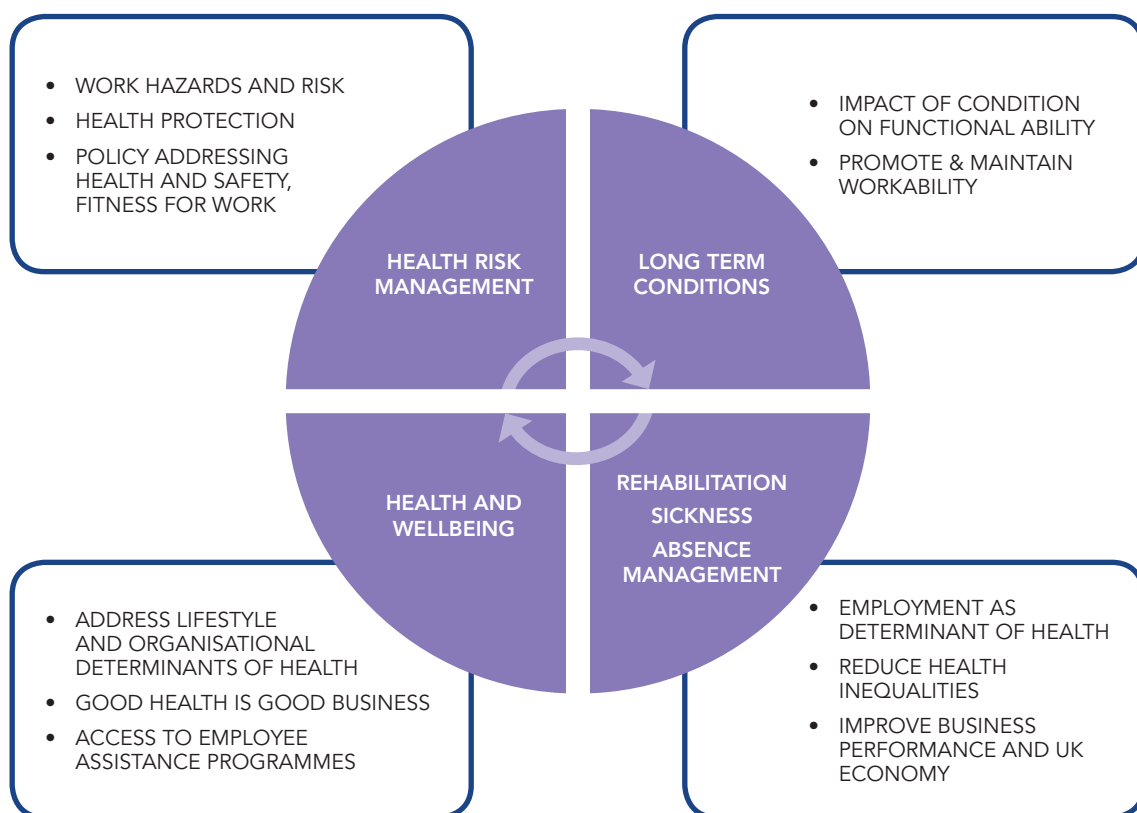


Figure 8: The paradigm shift to mainstreaming occupational health

Which work issues require occupational health trained practitioners?

Occupational health practice involves the ability to understand and adequately assess a variety of physical, chemical, biological, ergonomic and psychological workplace hazards, to evaluate the likely risk to health, and to implement cost-effective control measures, within the context of the organisation involved, the individuals in the organisation and the wider stakeholders. Occupational health is fundamentally a preventative specialty and should be involved with workplace design from the outset.

Our analysis has identified three areas of activity which must be developed for future occupational health practice. These are health risk management, health promotion, and employee sickness support and attendance management.

Health risk management

Compliance with Health & Safety legislation and guidance remains an important area of practice. A thorough awareness and knowledge of UK Health & Safety legislation is a pre-requisite for ensuring a safe and healthy working environment. In addition, awareness and knowledge of European directives may be necessary. Occupational health risk management, through assessment and the development, implementation and monitoring of policy and procedure concerned with the identification of workplace hazards and risks, helps managers fulfil their statutory and mandatory duties. This in turn avoids costs arising out of subsequent control failures leading to injury, illness and loss of productivity. Work policies should include a Health & Safety component and impact assessment.

Workforce training in risk management ensures that workers:

- understand how to assess risks to health and prevent the occurrence of ill health or injury arising out of working practices
- can recognise relevant workplace hazards
- know how to use control measures correctly; for example, understand workplace exposure limits or how to undertake safe manual handling
- receive accessible and appropriate Health & Safety advice.

Employees should be fully engaged in the risk assessment process and in the development of safe working practices arising from it. Hazard identification should be a shared and collaborative responsibility and action plans should be agreed between workers and managers.

Workplace risk assessment should be carried out by competent assessors in line with regulations. These include the Control of Substances Hazardous to Health Regulations 2002 (COSHH), the Control of Asbestos Regulations 2012 (CAR), the Control of Lead at Work Regulations 2002 (CLAW) and the *Workplace (Health, Safety and Welfare) Regulations 1992*.⁽⁵³⁾ The assessment process includes identifying potential or actual exposures to hazards and their possible health effects; evaluating the adequacy of current control measures; recommending further measures as per HSE guidance; determining

appropriate improvements and how they can be implemented; and regular review to ensure continuous improvement.

Assessment may be linked to participation in the design of work equipment or activities - jobs should fit people, not vice versa. Advising on process re-engineering, with a view to eliminating hazards and investing in risk control and mitigation, is a high priority in the prevention of ill health. Job design includes not only ergonomic assessment, but also working arrangements and other human factors such as fatigue that may increase health risks and likelihood of ill health or injury. An established method of workplace risk assessment involves the following elements:

- **Anticipation** of all of the health hazards to which the employees could be exposed in a particular workplace;
- **Recognition** of the potential effects that different levels of exposures to each health hazard, and combinations of exposures to different health hazards, could have on the health of the employees;
- **Assessment** of the actual exposures of the employees to the various health hazards under the particular circumstances of the workplace scenario;
- **Adequately controlling** the exposures of the employees to the various health hazards in accordance with (a) the hierarchy of control, (b) the principles of good practice, and (c) any relevant exposure limits that have been set; and
- **Regular reviews** of new information on health effects, the continuing effectiveness of the current control measures, any evidence of ill health developing in the employees etc.

Where there is a possibility of ill health developing despite control measures in place, monitoring programmes should be implemented including occupational hygiene, incident management and health surveillance. The occurrence of a workplace injury or disease should be investigated thoroughly and reported either internally or externally, depending on the circumstances.

Health promotion

The implementation of health and wellbeing initiatives in the workplace centres on awareness, understanding, skills development and empowerment. Organisational leaders and managers must engage in health and wellbeing. For managers, engagement may begin with a business imperative such as improving attendance, so that they learn how to help employees remain in or return to work. Learning and development initiatives for managers should include how to support their workers, manage teams in ways that will enhance engagement and well-being⁽⁵⁴⁾, and prevent and reduce stress. Managing employees with a long-term condition should become part of every manager's skill set.

Awareness and understanding of mental ill health is coming to the fore as mental illness becomes the principal cause of impaired performance and work absence. The National

Institute for Health and Care Excellence (NICE) guidance *Promoting mental wellbeing at work*⁽⁵⁵⁾ highlights how staff and managers can work in partnership to improve mental wellbeing within the workplace through taking a positive organisation-wide approach. HSE has developed web-based guidance on stress at work⁽⁵⁶⁾ including stress management standards,⁽⁵⁷⁾ and the Chartered Institute of Personnel and Development (CIPD) has produced a framework for line managers *Line management behaviour and stress at work*⁽⁵⁸⁾ which sets out the management competencies for preventing and reducing stress at work.

General awareness and understanding of mental health and its physical impact is important for all workers. They must be able to recognise the early signs and symptoms of stress and take appropriate action such as relaxation and modifying working practices. Many organisations are now investing in training in resilience, mindfulness and 'mental health first aid'. Many also invest in employee assistance programmes. Since their introduction to the UK during the mid-1980s, the Employee Assistance Programmes (EAP) have become established. The EAP sector comprises several thousand directly employed and contracted counsellors, psychologists, mediators and other mental health professionals delivering a range of interventions designed to improve the mental wellbeing of both employees and their dependents. An understanding of the manifestations of a range of chronic conditions that might be present in the workplace is also required. For example, with the increasing prevalence of diabetes, there should be education in recognising and managing a hypoglycaemic episode or stroke in a co-worker.

Signposting to health and wellbeing resources, many of which are web-based, is instrumental in empowering and enabling workers. Developing a workplace culture that promotes physical activity, healthy eating, weight management, stress and anxiety management, and behaviours to promote emotional resilience will encourage workers to take responsibility for their health. Links to online resources and local or national agencies will help people seeking advice on topics such as life skills, change management, psychological therapies and long-term conditions. Peer support or 'buddy' schemes are good examples of workplace self-support mechanisms.

Employee sickness support and attendance management

Effectively supporting people at work whose illness may be affecting their performance, or helping people return to work after a loss of work ability, can make the difference between a timely return to work or a move to chronic sickness absence and possibly to benefits.

Preparing a support plan starts with a discussion between the worker and their manager about how the illness affects their functioning at work. The support plan should take into account the job specification, the work environment, home circumstances, prognosis and side-effects of treatment. The manager may need to take advice from occupational health to help develop the support plan. A biopsychosocial assessment of individual needs, including an assessment of function in relation to work activities, should be carried out by a competent practitioner who understands the relationship between health and work as well as the organisational context of both problems and solutions. Guidance is available for managers on supporting workers with long-term conditions from HSE⁽⁵⁹⁾,

the Department of Health⁽⁶⁰⁾ and the King's Fund⁽⁶¹⁾, which will help managers work with employees to identify bespoke measures to support particular conditions, tailored according to ethnic and cultural backgrounds.

Return to work plans are best made collaboratively between the individual, the manager, human resources and the GP. The *Fit Note*⁽⁴⁷⁾ or *AHP Advisory Fitness for Work Report*⁽⁴⁸⁾ may be the starting point for a return to work plan in organisations without access to occupational health advice. Rehabilitation plans must take account of treatment plans, including the prescription of medication, and should be reviewed over time. Involving GPs in return to work planning and implementation is important.

To deliver cost-effective solutions, organisations should action reasonable adjustments recommended by an occupational health service wherever possible. However, there may be debate as to what constitutes 'reasonable' and a case conference involving relevant stakeholders may be an effective method of reaching a consensus.

Occupational health also has an advocacy role in verifying when workers need to have time away from the workplace to attend medical or therapy appointments and endorsing the practice as part of reasonable adjustment.

Many organisations now adopt a case management approach to support their attendance management policy. Competent case management will coordinate the support process and explore timely rehabilitation, modified or restricted duties or, where appropriate, redeployment to an alternative role. Case management may be supported by an occupational health specialist calling on members of a multidisciplinary team, which might include occupational physicians, occupational health nurses, occupational health physiotherapists, occupational therapists or psychologists. Expertise in vocational rehabilitation will assist this approach.

Chapter Six: Training the occupational health workforce

This chapter describes the main competencies required for working in the field of occupational health.

Practitioners who have undergone core training within their individual professions will need to undertake further professional development to develop the competencies required to understand the complex relationship between work, health and wellbeing. For many of the professions, competencies are documented in training curricula or syllabi, approved by their regulatory and professional bodies. It is apparent on comparing the macro- and micro-details of various competency frameworks that there is considerable overlap in competency requirements. Examples of overlap include: knowing, understanding and using legislation, professional practice relating to occupational health, research, leadership, and national public health drivers relevant to the work environment. There is therefore the potential to redesign training to include a mixture of multidisciplinary and single-discipline courses.

There are already examples of some occupational health modules being shared among the occupational health professions. The MSc in Occupational Health programme at the University of Birmingham is a good example of a course designed for a multidisciplinary audience. Manchester University provides a more limited mixed course for occupational physicians and occupational hygienists. However, there is limited evidence of national commitment to a multidisciplinary approach to developing and delivering occupational health training.

Our research has identified four primary and eight secondary generic competency areas for occupational health training (*Figure 4*). These span the majority of the competency frameworks of professions working in occupational health and provide a rationale for designing generic training modules for a multidisciplinary audience. They could form the basis for delivering foundation training in occupational health to a broad base of healthcare practitioners and non-clinical stakeholders in occupational health. Subsequent specialist and expert training would be provided for higher level roles in occupational health disciplines.

Workplace health risk management

Assessment of workplace hazards and exposures

Professionals working in occupational health provide a problem-solving approach to work-relevant health issues. They identify issues that may present a hazard to health, assess exposures and the likely risk of harm, and then advise on measures to eliminate or control the risk. Reasonable adjustments can be financially viable and cost-saving through prevention of injury.

Competencies relate to the prevention and management of specific diseases and health conditions. Within this cluster, competencies for joint training include identification of hazards, assessment of risk, advice on management of health risks, measurement and monitoring, accurate recording, and recognising when to appropriately refer onward to specialists.

Implementation of prevention and/or control strategies

Competence in risk assessment and implementation of preventative or control strategies may be seen as a progressive process, allowing for joint training with managers, HR staff and Health & Safety representatives as well as multi-professional generic and specialist healthcare teams. Through sharing of training, participants may better understand their own role and responsibilities as well as the roles played by other specialists skilled in Health & Safety and occupational health, such as occupational hygienists, ergonomists, occupational health physiotherapists, occupational therapists and psychologists.

Several competency areas are particularly suited for joint training at both basic and expert levels. These include identifying risks and their associated health hazards, providing advice to management, and effective use of processes.

Fitness for work

Clinical occupational health

Occupational health encompasses health promotion, health screening and education (including pre-placement and routine assessments relating to fitness for work), health surveillance, travel health, emergency healthcare and treatment services. Training in causal links in disease, the impact of multiple factors on health, and the reciprocal effects of work on health puts occupational health practitioners in a position to advise on effective work ability support and return to work programmes. Many people living and working with long-term conditions require timely support to manage exacerbations of their condition and dips in their ability to manage their lifestyle. For many, rapid access to a brief intervention of skilled support can prevent long-term sickness absence or even retirement due to ill health.

Shared training among occupational health teams and healthcare practitioners supports early identification of health deterioration, allowing for simple advice or rapid referral on to experts to prevent decline. An important goal of training is the appreciation that maintaining or restoring the ability to work is a valuable health outcome.

Legislation and standards

Training in legislation, national guidance and standards is essential for occupational healthcare teams and stakeholders; the employer, management, human resources and union representatives are also potential audiences. The subject matter is common to all disciplines and an ideal common ground for the development of multi-professional training, helping people to appreciate other perspectives.

Competent occupational health practitioners are ideally placed to help managers to support their workforce by understanding and operating within national legislation such as the Equality Act⁽⁴⁾, data protection and Health & Safety regulations and guidance.

Health education and wellbeing

Health promotion

Public health today is everyone's responsibility. Awareness training is important for line managers to increase their knowledge and understanding of health issues and their ability to respond confidently and in a timely fashion to staff in distress. The workplace is recognised as the ideal environment to promote healthy lifestyle choices, raise awareness, and signpost to expert advice and support for those with common health conditions. Workplace features that can lead to improved staff health and prevention of stress include:

- positive team culture
- supportive manager
- positive contribution
- being kept informed
- healthy menu options in work canteens, which may provide direct access to hard-to-reach communities to improve diet and nutrition
- men's health awareness
- promoting the health and wellbeing of migrant workers

The workplace can also facilitate sustainable peer support through initiatives such as smoking cessation support groups, weight loss champions, and lunchtime exercise buddies.

However, health promotion in the workplace is more than this. Reference has already been made to the BITC Workwell model for health and wellbeing⁽²⁸⁾ and the holistic approach to health and wellbeing at work. Health promotion at work must include attention to work design, working relationships, and the culture of the organisation. Because of their training to assess and influence all these areas within an organisation, occupational health practitioners are well placed to exercise leadership in workplace health promotion.

Workplace health and business approach

Occupational health straddles the health/business management interface and provides a communication and intermediary role. Organisations need practitioners skilled in assessing, advising and managing both health and business needs, for which biopsychosocial and business management competencies are essential. Workplace health interventions will only be effective if both needs are addressed. Practitioners must understand the work and business environment and how managers analyse and understand problems, and must be able to communicate the legislative requirements and business advantages of their recommendations to managers in their language and in a way they understand.

Leadership and quality

Influencing and impact

Occupational health practitioners must be competent in producing sound business plans and reports which demonstrate quality assurance, effective use of technology, management of resources and return on investment. To be fully effective they must also employ communication and influencing skills, training for which is becoming more prevalent at undergraduate level.

A multi-professional environment is the optimum setting to learn best practice in developing a cost-effective, broadly based and non-discriminatory approach to supporting organisations and workers, and will drive consistently high quality. Practitioners across the occupational health spectrum need the skills to persuade organisations of the importance of nurturing optimal potential for work in those with short- or long-term health conditions.

Professionalism in occupational health

Healthcare practitioners are obliged to continue their professional development throughout their career. For occupational health practitioners, consolidation of their undergraduate training and advancement to specialist skills requires focus on professional knowledge, behaviour and skills in occupational health and safety, based on the needs of the organisation, enhanced through learning in a multi-professional environment.

Priorities for training

Future uni-disciplinary occupational health training must incorporate all these areas of training to provide the necessary basic skill set for specialists and experts. The balance of training will vary from discipline to discipline; the emphasis on health risk management, fitness for work, and health education and wellbeing will be determined by the respective roles within the occupational health team. However, specialists should have awareness and understanding of all three, and also receive training in leadership and quality.

Interestingly, health promotion and the public health agenda was rated a low priority in the consultation process, indicating that additional multi-professional awareness-raising and training is required.

Chapter Seven: Skill mix and capacity issues

The occupational health workforce of the future will be multi-professional, drawing from a range of professions. However, the lack of national registers of occupational health practitioners and the changing nature of UK occupational health provision makes determining future workforce numbers challenging.

A calculation from Finland, based on rural need for primary-care-based occupational health services, provides a potential benchmark for a multi-professional team⁽⁶²⁾ (Figure 9).

Profession	Total number	Availability (for % of served workforce)	Density	
			Number of workers per staff member	Number of workers per staff person-year
Physician	457	99	2 250	7 312
Nurse	646	100	823	1 253
Physiotherapist	253	97	2 765	3 721
Psychologist	93	47	6 602	NA
Occupational hygienist	6	5	- ^b	NA
Technical expert	28	20	-	NA
Agricultural expert	278	88	143 ^c	NA
Optician	16	13	-	NA
Nutrition therapist	16	13	-	NA
Assisting personnel	823	100	2 180	NA
Total	2 616	-	374	-

^a Assuming 50% on full time basis and 50% on 1/3 part-time basis.

^b Calculation of density not relevant due to low absolute numbers.

^c Calculated for 40,000 farmer clients.

Figure 9: The density of human resources available for occupational health services in Finnish primary health care units (from Rantanen 2005 p13)

What is unclear from this study is the level of training in occupational health of the healthcare practitioners. As the services are primary care based, it is likely that the physician is a general practitioner with general awareness training. The ratio of physicians to workers is 1:2,250, which is consistent with a basic occupational health provision to workers in rural areas. The provision of occupational health nursing, physiotherapy and psychology staff is high compared to the UK.

Estimates of occupational health coverage of the UK working population are based on numbers of practitioners registered with their professional bodies. Current numbers provided by the professional bodies of some occupational health practitioners in the UK are shown in Figure 5. The estimates of numbers of specialists required have been provided by the professions and are based on current occupational health practice, rather than a future-orientated vision of practice. They reflect current concerns about the difficulties in recruitment and the quality of training of specialists, and about the likely impact of the demographics of the respective professions on future numbers.

The UK working population is just over 31 million people.⁽⁶³⁾ Therefore, the current ratio of occupational practitioners to workers is as follows:

Occupational physicians	1:44,000
Occupational health nurses	1:9,700
Occupational health physiotherapists	1:77,000
Occupational hygienists	1:203,000
Occupational therapists	1:155,000
Ergonomists	1:82,000
Occupational health psychology/mental health workforce	1:103,000

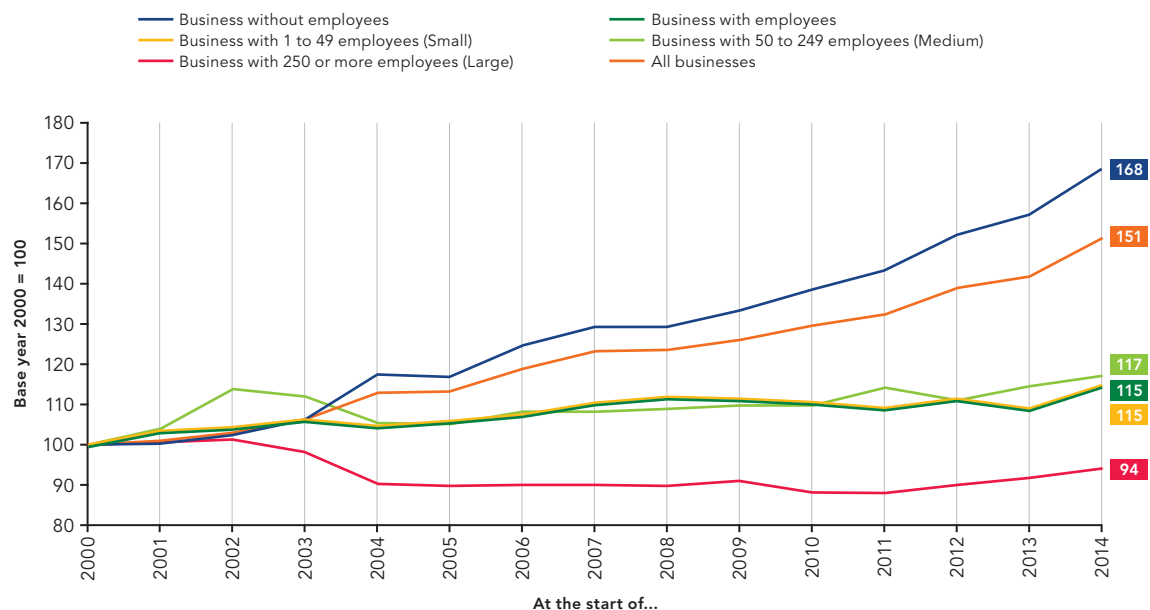
In reality, occupational health provision is mainly limited to workers employed in large organisations.

Guidance on NHS occupational health provision suggests that there should be one consultant (specialist) occupational physician for at least 10,000 workers.⁽⁶⁴⁾ Across the UK this would require at least double the current number of specialist occupational physicians. The Faculty of Occupational Medicine has indicated that 37 new trainees per year over the next 5–10 years will be required to maintain current numbers of specialists, replace physicians retiring in the same period, and address additional full time equivalent (FTE) staff needs due to changes in availability of funding by employing organisations.⁽⁶⁵⁾ Currently about 15 are recruited per year. In the longer term it is estimated that some 1,211 specialists will be required, an increase of approximately 130 per cent.

Analysis of NHS occupational health nurse provision in London found one nurse per 1,200 FTE staff in the NHS workforce. This ratio is higher than historical guidance from the Royal College of Nursing (RCN) which advocated one occupational health nurse to 1,000 staff. However, research from RCN reviewed the merits of both top-down and bottom-up planning and advised that there is no single right way to predict the correct skill mix.⁽⁶⁶⁾ Methods of estimating workload are controversial; and it seems that professional judgment is as good as any other method as long as it is applied systematically and underpinned by appropriate knowledge and skills.

A new model is needed to more accurately estimate future numbers of occupational health practitioners. It should be based on the predicted occupational health needs of UK plc, methods of delivery, and the future skill mix of the occupational health workforce. In addition to calculating workforce need, it should also incorporate analysis of working environments.

Large organisations (employing over 250 workers) have by far the highest sickness absence rates, particularly in the public sector, and need access to an occupational health workforce to protect their business interests. However, numbers of large organisations in the UK have declined relative to 2000, with a relative rise in the number of small and medium-sized enterprises (SMEs) and self-employed businesses. Figure 10 illustrates the trends.



* In 2003 Primary Care Trusts and National Health Service Trusts were reclassified from the private sector to the central government sector.
Source: BIS Business Population Estimates for the UK and Regions 2014 and ONS GDP data

Figure 10: Relative changes in business sectors since 2000

This has implications for future provision, as more workers will be found in sectors that have poor access to occupational health services and do not employ occupational health professionals.

SMEs will be targeted by the new Government funded service, Fit for Work⁽²²⁾. The service is likely to require additional occupational health nurses, occupational health physiotherapists and occupational therapists.

Fit for Work enables GPs to refer workers who have been, or are likely to be, absent from work due to ill health for more than four weeks for occupational health advice, rehabilitation advice and return to work planning. Employers can also make a referral if a GP has not already done so after 4 weeks sickness absence. The advice will be mainly telephone-based; however, it may be necessary to refer some workers for face to face assessments. The service will also provide an online library of advice on health conditions, health at work or away from work, employment guidance, a live chat facility, the ability to post questions, and FAQs.

The service is intended to complement existing occupational health services. There are potential links to the NHS Expert Patients Programme⁽⁶⁷⁾, developing an 'expert workers' programme by including occupational health and employment-related information and support.

The self-employed group holds the largest workforce in the UK, with 4 million businesses making up 76 per cent of private sector business.⁽⁶⁸⁾ This group does not have access to Fit for Work, but takes the fewest days off sick. Most of these workers access healthcare through their GP.

The delivery of workplace health and wellbeing will require a broad-based workforce suitably trained to deliver the new paradigm for 'good work'. Previous sections set out the attributes that future services must acquire if they are to extend the implementation of health and wellbeing initiatives, define the main types of intervention and who would deliver them. Boorman⁽⁶⁹⁾ describes the issues as occupational health becomes more diverse, including emerging breeds of practitioners, and compares the specialism with orchestras of varying sizes and comprising players with different skills, working together to create the desired effect.

The size of the overall occupational health workforce will depend on the assessed needs of the target population (i.e. the working age population) and the degree of market penetration and development. It will also be determined by the attrition rate of the population. This may be due to retirement or career change and may be affected by the competing demands of other healthcare sectors (*Figure 11*).

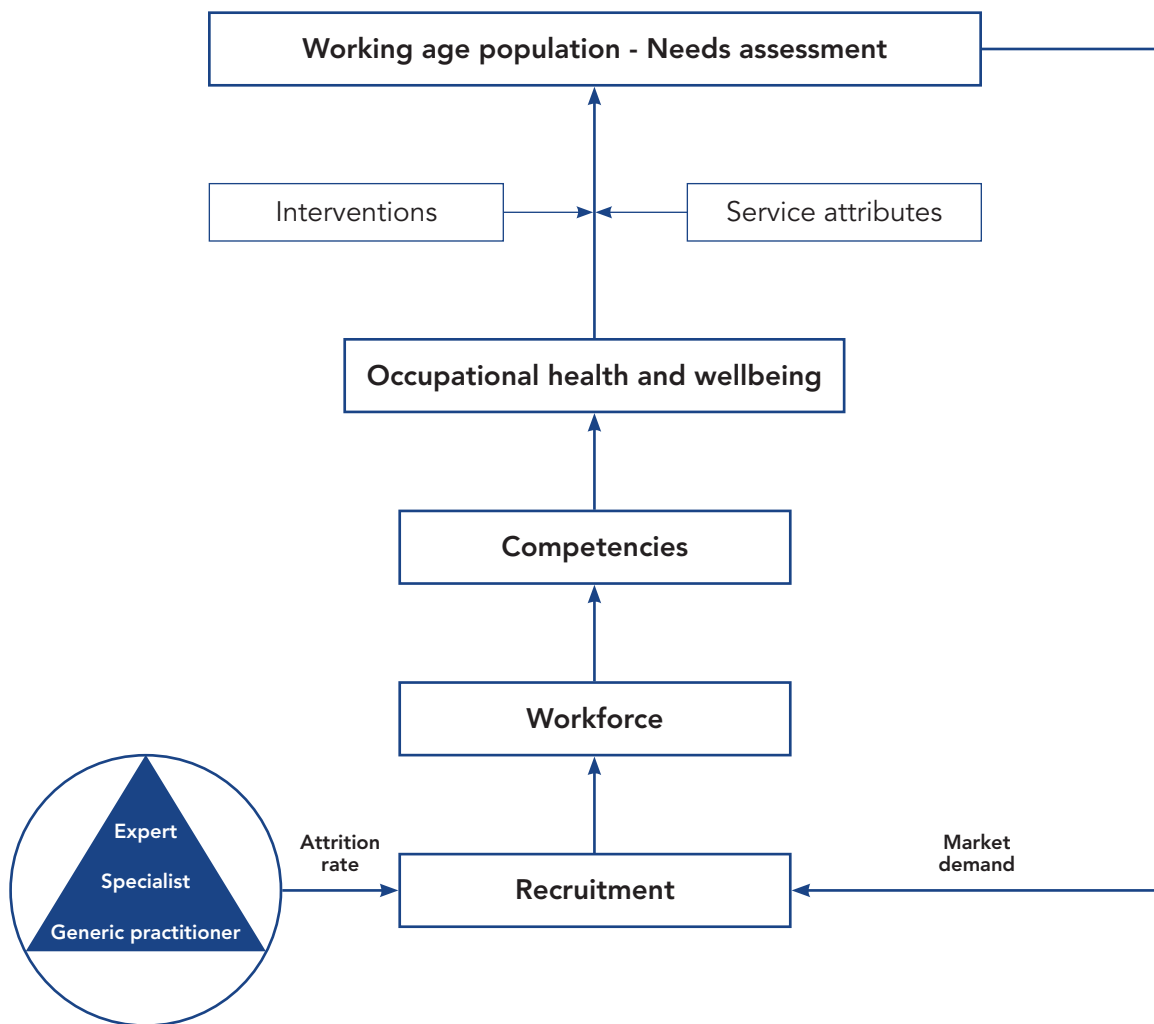


Figure 11: Population needs-based workforce planning in occupational health

Chapter Eight: Aligning the occupational health workforce with existing and future national healthcare arrangements

The healthcare provider landscape is set to change. The NHS Five Year Forward View⁽⁶⁾ envisages a sea-change in NHS healthcare delivery to address the funding gap. Change in delivery is also necessary to address changing demographics in the UK population, changing patient expectations and changing patterns of disease.

The NHS Five Year Forward View makes reference to the *health and wellbeing gap* and the *care and quality gap*.

The former refers to the need to redouble efforts to bring preventive medicine to the fore. Investment in prevention should maintain progress in extending healthy life expectancies. This is important, not only to avoid diverting NHS resources to the treatment of preventable diseases and illnesses, but also to enable people to maintain their work ability beyond the current age where they can draw their pensions. It is inevitable that the state pension age will continue to increase and there will be an expectation and a need for people to continue in paid employment for longer. The latter refers to re-shaping care delivery and making better use of technology.

The paradigm shift in occupational health (*Chapter 4*), which envisages occupational health as part of mainstream healthcare delivery, is perfectly aligned with the vision for the NHS. This convergence will be important for national healthcare delivery and for the future resilience of occupational health. The NHS Five Year Forward View describes new models of care in the form of primary and acute care systems and multi-specialty community providers. Occupational health should be a theme in both models. Similarly, occupational health and the role of the workplace should feature in the development of the 'hospital of the future' as set out by the Future Hospital Commission in its report to the Royal College of Physicians.⁽⁷⁰⁾ In this new model of care, preparing for seven-day healthcare provision for patients in hospital and in the community, hospital services would operate across the healthcare economy. Continuity of care would become the norm. Such a vision presents challenges to the current occupational health workforce in terms of workforce capacity, but also opportunities to deliver timely and effective care and support to workers at, and linked to, their place of work.

The NHS Five Year Forward View also depicts the NHS supporting Fit for Work (*Chapter 8*) with a view to improving access to NHS services for conditions such as musculoskeletal complaints and mental health conditions to reduce 'downstream' costs arising from claiming employment-related benefits. Providing tax incentives for employers offering their employees workplace health programmes conforming to NICE guidelines⁽⁷¹⁾ is also being explored. There may be real incentives, therefore, encouraging employers to work in partnership with the NHS and Department for Work and Pensions in future healthcare provision. This is a potential win/win situation, providing support to workers with health conditions in the workplace and facilitating rapid access to assessment, diagnosis and treatment for workers when this is required.

A previous recommendation for a realignment of NHS occupational health services⁽⁷²⁾

did not achieve the desired outcome. Consequently there remains a need for further reorganisation of services to deliver high quality occupational health to the NHS workforce in particular.

'One size fits all' will no longer be appropriate. The vision is for the adoption of models of care that best suit local circumstances. The Dalton review⁽⁷³⁾ has recommended that ambitious organisations with a proven track record of achievement should be encouraged to expand their reach and have a greater impact. Linked to this is the proposal to develop a new credentialing process to recognise successful organisations to assist the commissioning of services. This philosophy should be applied to occupational health services and provision.

The Faculty of Occupational Medicine has extended the vision to create regional hub-and-spoke organisations consistent with the 'future hospital'.⁽⁷⁴⁾ Large NHS trusts and Clinical Commissioning Group consortia would work together to commission for effective occupational health services, utilising economies of scale and maximising the use of scarce specialist resources. Services would be aligned to Fit for Work, providing timely access for workers, and would resource physical, psychological and non-medical support at points of need. Specialist occupational health practitioners would be located at regional centres supporting a broader non-specialist team across a wide area. Super-specialisation of the regional hubs would permit the establishment of lead centres for research into health and wellbeing, with a focus on the evaluation of new models for delivering health and work advice.

Effective commissioning of occupational health services will be essential. Commissioning must be informed and coordinated on behalf of local communities, and should reflect an occupational-health-influenced joint specific needs analysis. Integration with healthcare – highlighted by the King's Fund⁽²¹⁾ – should be taken into account. Alignment with mainstream healthcare will also be an important step towards addressing a developing crisis in recruitment and retention of occupational health practitioners.

A possible commissioning model might include commissioning standards set by independent professional bodies, or a new joint occupational health body. Credentialing of occupational health services could be effected by expanding the role of existing accreditation systems such as SEQOHS,⁽³⁸⁾ the existing accreditation scheme for occupational health services developed by the Faculty of Occupational Medicine and the Royal College of Physicians. Other professions could develop similar models, and a scheme that reflects the diversity of professions in occupational health might then become an ISO standard auditable by International Register of Certificated Auditors (IRCA) accredited auditors.

Recruitment into specialist training is currently inadequate and will not replenish the existing workforce with suitably trained practitioners. There is an urgent need to develop career profiles that will attract high calibre applicants. Availability of training posts and in-service training should be reviewed in the context of the changing healthcare economy, which could provide exciting opportunities for innovative ideas involving the NHS and non-NHS employers.

Chapter Nine: Recommendations

The research findings that underpin this report have been presented in a format that is intended to help commissioners and planners, as well as professional and business leaders, to develop a clear understanding of how occupational health — that is to say, the promotion and maintenance of the health and wellbeing of people at work — will be an important facet of a modern national healthcare system. Reference has been made to the necessity for the UK National Health Service to change its ways of working if it is to remain both relevant and affordable. Similarly, occupational health has to change. The paradigm shift described in this report will require everyone engaged with the assessment, protection and promotion of work ability to review and realign their practice.

The ageing population, the increasing prevalence of long-term chronic conditions and the particular challenges of ‘lifestyle diseases’, for example the obesity epidemic, mean that the UK must change the way it delivers occupational health and promotes health and wellbeing in the workplace. In addition, we must create healthy workplaces through good design and reduction of risk. Good health is good for business, and if ‘UK plc’ is to have access to a productive working population with the physical and mental functional capacity to advance economic growth, we must provide cost effective solutions. We need to improve the scope and reach of occupational health practice and ensure that there is an occupational health enabled workforce that will lead to improvements in the health and wellbeing of the working population.

Our six key recommendations represent a distillation and consolidation of the most important findings from the large amount of data collected in the research. The findings represent the views of representatives of member organisations of the Council for Work and Health. The Working Group and members of the Council believe that the implementation of the specified actions will have the greatest effect on improving workplace health, productivity and the health of the nation. As such they present a unique resource on which to base plans to take forward occupational health provision in the UK.

Recommendation 1: Occupational health should be integrated into mainstream healthcare provision

Putting this recommendation first represents the importance we have accorded it.

Return to work should be a clinical outcome for care pathways formulated for adults who need or wish to work. Clinical healthcare teams in hospital and general practice settings should have access to, and be able to refer to, competent advice to facilitate appropriate return to ‘good’ work. Employers require advice about fitness for work and provision of reasonable workplace adjustments to supplement the role of the Fit Note⁽⁴⁷⁾.

Commissioners of health and care resources (and of occupational health services) require tools to facilitate the assessment of need. They must also select cost-effective solutions with demonstrable return on investment. Commissioning occupational health should be included in patient pathway planning, and a return to function (including engagement with work) should be a performance measurement.

An occupational health commissioning model will provide a means to assess the business case for occupational health provision and to select quality-assured interventions. Credentialing⁽⁷⁵⁾ is a recognised NHS service set of performance criteria⁽⁷⁴⁾ which could be established for occupational health services as a means of benchmarking providers against criteria that characterise high performing organisations. Credentialing should then be used by commissioners to assist in selecting occupational health providers.

Recommendation 2: The Government should create incentives to encourage investment in and uptake of occupational health and wellbeing

There should be further financial incentives for employers to provide workplace clinical support for workers with long-term conditions and access to physical and psychological therapies.

Currently there are limited tax incentives encouraging use of physiotherapy for the treatment of work-related injuries and occupational health referrals for employees taking (or likely to take) sick leave for more than four weeks. There is scope to remove the tax liability for a wide range of occupational health and wellbeing interventions aimed at promoting work attendance and effective rehabilitation back to work. There is also potential to reduce the current sickness absence trigger to provide rapid access to services and help prevent sickness absence through effective early occupational health advice and intervention. This would benefit not only employers but also the NHS, as it would reduce demand on over-stretched services. Incentives should only be given for evidence based practices, e.g. as recommended in NICE or Scottish Intercollegiate Guidelines Network (SIGN) guidelines.

Insurance companies should be encouraged to work with employers to promote workplace health and wellbeing through initiatives such as the *Workplace Wellbeing Charter*.⁽⁷⁶⁾

Healthcare professionals should have clear SMART (specific, measurable, achievable, results-focused and time-bound) targets relevant to their profession. For example, these might include goals such as 'return to work' as a component of recovery for working age people.

Recommendation 3: Ensure that businesses have access to the right professionals to reduce the risk of harm from work and workplaces

Good work is good for health. In order to be able to create healthy working environments and to prevent any harmful aspects of work, businesses need clear guidance on the level of expertise required to provide competent advice on hazard identification, control of workplace risks to health, and addressing relevant non-work health determinants.

Assessment of health and wellbeing should be holistic and should incorporate work design, processes, and physical, chemical, ergonomic and psychological exposure in the work environment.

The high incidence, both of work-related health conditions (musculoskeletal, common mental health, long term conditions, cancers, lung diseases, stress, and conditions associated with obesity), and of fatalities from occupational cancers and lung diseases, demands the involvement of a competent multidisciplinary occupational health workforce to reduce relevant workplace exposures and to monitor health.

Illnesses and diseases arising from exposure to specific hazards will require dedicated specialist occupational health practitioners. For example, workers affected by work-based chemical hazards will require a multi-professional approach which may include occupational hygiene, occupational medicine, occupational health nursing, thoracic physicians with a special interest; ergonomics and human factors specialists, occupational health physiotherapy, occupational therapy, and safety practitioners.

Cost-effective solutions are fundamental to ergonomics interventions at both design and hazard identification stages. Access to the properly trained practitioners using effective evidence-based working practices will also provide value for money and may add value to organisations. Training in return on investment (ROI) or human resource (HR) issues should be included to enhance multidisciplinary working involving business teams.

Occupational health specialists should work collaboratively to market occupational health and provide practical and customer-friendly advice on how to access advice and interventions and who to approach for help.

Recommendation 4: Develop multidisciplinary competency frameworks and relevant training programmes to extend the capability of the occupational health workforce

We need an occupational health workforce with a distributed range of knowledge, skills and competencies. A multi-agency approach is required to holistically address health and wellbeing in the workplace and to deliver the full range of preventative activities to optimise work ability.

Employers need advice on how to promote and maintain the good health of their workers and how to manage workers' illness.

The early detection of illness may be part of workplace risk reduction programmes. Absence from work attributed to ill health must be managed effectively.

Generic training should be delivered for access by managers and HR as well as the multidisciplinary occupational health team where possible, to enhance mutual understanding of roles and cooperative working for the benefit of people of working age, employers and communities.

There will be a continuing need to train experts within the respective specialisms to work alongside and support a range of practitioners with different generic competencies.

Competency frameworks for case management to support attendance management and for organisational health leadership must be developed.

Functional capability assessments to assess the impact of medical conditions on fitness for work should be standard practice. This will require specific enhancement of the capacity to carry these out.

People living with long term conditions can then be proactively supported to contribute their knowledge and skills at work, through advice on rehabilitation back into work and implementation of workplace adjustments, underpinned by objective evidence of functioning.

An internationally recognised measure is the Work Ability Index⁽⁷⁷⁾, first developed in Finland, which is particularly relevant for ageing working populations.

Non-medical occupational health training, for example in law and ethics, must be developed so that it is accessed and delivered on an equal footing with medical training and its availability is aligned to need and market demand.

Adequate resource is required to support the development of national curricula, recognition of the professions competent to manage key areas, and an 'umbrella' faculty to coordinate and support training posts. It will be necessary to work with regulators where relevant, to ensure that accredited training programmes are aligned to both market and public health needs.

Recommendation 5: Develop models of delivery and workforce planning capability

A salient finding in this report is the complex nature of planning occupational health workforce needs. This is due to a number of factors, including a lack of consensus on future occupational health provision and models of delivery, and a lack of workforce intelligence from the respective professions.

A methodology is needed to balance requirement and supply. Data gathering systems will be needed to collect information on the numbers and demographics of specialists and non-specialists working in the occupational health arena.

Innovative service examples, in which individuals with only basic training and working under the guidance of qualified specialists deliver cost- and workforce-effective tailored services, will support a design model that takes account of different skill mix permutations which could potentially deliver a safe and effective occupational health service for a given set of workplace hazards, risk assessments and organisational needs.

Finally, better intelligence will be required about the future supply of the occupational health workforce – what will future careers look like and how will occupational health compete with other healthcare professions?

Recommendation 6: Attract and train the required number of occupational health practitioners

We must ensure that attractive career pathways are in place to draw high calibre applicants to each of the occupational health professions in future.

This report has highlighted the critical state of occupational health in the UK, the ageing occupational health workforce, and the lack of training opportunities and career motivation. The report has also acknowledged the difficulties faced in identifying the future occupational health workforce.

Employers of occupational health specialists already report difficulty in recruiting suitably qualified practitioners. This current shortfall must be addressed urgently. There is a need to promote occupational health as a career to attract candidates for specialty training. Given the urgency of the situation, we must also explore the fast-tracking of specialist training, giving recognition to previous training and/or relevant experience in occupational health practice.

Where competent specialists are not available, vacant posts may be given to inadequately trained generic practitioners with poor knowledge and skills in the field of occupational health, damaging the reputation of the specialism.

The potential for growing multi-professional teams and refining skill-mix can be exploited. A tiered approach to delivering occupational health should be promoted, optimising the roles of experts and specialists and increasing opportunities to train and deploy generic practitioners. Many activities currently undertaken by specialist occupational health practitioners can be delivered by trained technicians; improved multi-professional training will allow for practitioners to cover more than one area of occupational health competently and refer to other specialists when appropriate and where they are available.

The balance between capacity and demand is challenging in an area new to workforce planning. Even the more traditional areas of health are experiencing capacity problems, and matching supply to demand will require collaboration between public and private sectors, given the propensity for practitioners to move between them.

Figure 5 shows the numbers of specialists from each profession working in occupational health and indicates current workforce requirements. While it does not include all the individuals involved in the prevention of health issues in the workplace whose work often takes place outside of a clinical/health environment, it highlights the urgent need to progress the recommendations for occupational health, mainstream basic occupational health knowledge and skills, and progress occupational health workforce planning in the next stage of this project.

This change in practice is already under way, with employee assistance programmes offering support via the workplace. New ways of working within a framework of integrated occupational health provision will affect the numbers of specialists required. Multi-disciplinary practice will underscore service delivery, and training will include up-skilling managers, human resources professionals and the national healthcare workforce in addition to a tiered approach to training occupational health practitioners.

Figure 5 also shows how the next stage of the project must consider the potential of skill-mix.

Although it is important to emphasise that there is no workforce intelligence as yet and these numbers are estimates, they support the report's recommendation for a workforce with a range of expertise in occupational health, and health and industry workers with foundation level knowledge and skills.

Greater engagement with occupational health among employers and their workforces will eliminate the need for large numbers of specialists, as healthcare organisations and industry and commerce put in place measures to manage the causes of work-related ill-health, identify early signs of ill-health, and design the work and its environment to enable workers to work productively without injury. These measures, alongside timely commissioning of occupational health specialists, will reduce the incidence of work-related disease, prevent unnecessary deaths caused by work, and reduce sickness absence.

Chapter Ten: Important actions for stakeholders

It is clear that there are many stakeholders who will have a responsibility for taking forward the actions identified by the research and the recommendations in the previous chapter.

In Figure 12, actions relating to key areas of the report - occupational health needs, occupational health practice and occupational health training - are presented in the following stakeholder groupings:

- Policy makers/standard-setting bodies/legislative bodies/commissioners
- Workplace decision makers/human resources/workers' representatives
- Training providers
- Occupational health (OH) and healthcare practitioners



Figure 12: Areas of action for the future

Policy makers/standard-setting bodies/legislative bodies/commissioners

High level national initiatives that will affect the future reach of occupational health must include a change in the mindset of healthcare practitioners with regard to the importance of the workplace in healthcare delivery and the support of the working age population throughout their working lives. Examples of stakeholders for this are NHS England and the Department of Health, as well as the Academy of Medical Royal Colleges and the professional bodies for the nursing profession and the professions allied to medicine.

The Health and Safety Executive has chosen tackling ill health as one of the six themes in its strategy for action through to 2020⁽³⁰⁾. There will be an opportunity to work with HSE to promote good occupational health practice. Many workplace stakeholders are supporting their members through publications and online guidance; the Confederation of British Industry (78), the Institute of Directors (79), the Chartered Institute of Personnel and Development (80), the Trades Union Congress (81). They and other workers' representative organisations such as British Chambers of Commerce and the Federation of Small Businesses must be engaged to ensure full understanding of the role and cost benefit of occupational health.

There is a need for a new body bringing together all the players, a commission for occupational health that would promote good occupational health practice in organisations — in particular, extending this to SMEs — and provide guidance for organisations wishing to procure occupational health services. The composition might mirror the United States Department of Labor Occupational Safety & Health Administration⁽⁸²⁾ advisory committees, whose membership is balanced between workers' representatives and employers as well as other qualified individuals. Consideration should be given as to the most appropriate host. Government must take a lead and ensure adequate funding to ensure effective discharging of the envisaged role.

The legislative framework underpins much of occupational health practice. Compliance with Health & Safety and employment regulations may be the primary reason for a business to engage an occupational health service or professional. Opportunities to explore the wider aspects of health and wellbeing at work may subsequently develop.

An important driver for the uptake of occupational health, linked to health and wellbeing at work, will be the development of a national framework for occupational health and the promotion of charters such as the Workplace Wellbeing Charter⁽⁷⁶⁾. There is considerable support for the Charter, as evidenced by its adoption in London (Healthy Workplace Charter⁽⁸³⁾) and its promotion by the British Heart Foundation⁽⁸⁴⁾ and the Workplace Challenge⁽⁸⁵⁾.

Credentialing of occupational health services (*Chapter Nine*) will assist commissioning and procurement of services by organisations. The Dalton Review⁽⁷³⁾ recommended that a credentialing process for assessing NHS trusts should be developed building on Care Quality Commission and Monitor ratings. Credentialed organisations would be listed on the respective websites. As a minimum, occupational health services should be safe, effective and quality assured. Accreditation schemes exist to facilitate this. However, there is a market need for a bespoke accreditation scheme to develop a credentialing process

for occupational health services. Consistent with an age of online purchasing, this could be linked to an interactive website containing user ratings and feedback.

The establishment of the National School of Occupational Health by Health Education England has marked an important step in the development of multi-disciplinary training in occupational health. The role and scope of the School must be developed to take forward the training recommendations from this research. Non-medical training of occupational health professionals needs coordination and quality assurance to deliver a suitably trained occupational health workforce for the future.

Training providers

There is a variety of training pathways and occupational health training providers. Training is currently mostly uni-disciplinary and is regulated by different bodies; for example, clinical disciplines are regulated by one of the General Medical Council, the Nursing and Midwifery Council and the Health and Care Professions Council respectively. Training for non-clinical professions, such as occupational hygiene and ergonomics and human factors, is regulated by their respective professional bodies which award members their chartered and specialist status.

There is a need for a collaborative approach to address provision of training posts to deliver the required specialist numbers.

- The Council for Work and Health is the multi-disciplinary forum that includes the relevant stakeholders and should take the lead to collect training information from its member organisations, using the forum to facilitate working with training commissioners, training providers and employers to inform the delivery of training.
- Health Education England is responsible for commissioning training posts in the NHS; there is a need to make the case for the establishment of NHS-based training posts for occupational health nursing, occupational health physiotherapy and occupational health-related occupational therapy, as well as for occupational medicine.

Education purchasers use Health and Wellbeing services for occupational health placements. However, much training occurs outside the NHS as part of employers' commitment to protect the health and safety of workforces. This requires organisations to provide either training posts or access to workplace placements to complement academic training courses. An innovative approach is needed, involving a public/private partnership to encourage investment in training for mutual benefit.

Where private sector training exists, businesses fund the majority of training costs. The establishment of rotational training possibly centred on NHS recruitment, with trainees moving between public and private sector training posts, would provide excellent training opportunities and would spread the costs and the risk of the investment. This could be supplemented by the provision of training attachments to organisations unable to commit to establishing training posts but willing to offer time-limited training experience.

However, it would be essential to ensure that burdensome 'red tape' and bureaucracy were minimised to reduce barriers to the participation of the private sector.

A strategic approach to the development of training curricula and the delivery of training is necessary. Access to quality-assured skills training will be essential.

- Basic occupational health training should be an integral part of all clinical healthcare curricula.
- Certificate, diploma, degree and masters level training options should be available to supply a workforce with a range of levels of expertise.
- The development of modular generic training will improve access to training.
- The recruitment of non-specialists who can be trained to higher levels while working in service posts will be attractive to employers who currently struggle to recruit specialists.
- The ability to train flexibly, over varying timescales and in different locations, will assist recruitment of occupational health practitioners. Permitting the accumulation of educational credits from different training courses would also assist professionals to choose a more gradual or part-time training when following a formal training route is not possible.

The National School of Occupational Health should work with the respective regulatory bodies and training providers to identify flexible training options. In addition, opportunities for multi-disciplinary training should be explored to promote shared learning and the development of common training stems with subsequent specialisation.

Workplace decision makers/human resources/workers' representatives

There is now a considerable weight of evidence to support investment in health and wellbeing at work. There are also many excellent resources to assist organisations to implement workplace risk assessments and attendance management policies. Companies must ensure that they suitably train personnel to take advantage of existing knowledge and expertise.

Larger and specialist companies often develop their own in-house technical specialist resources, whereas smaller companies may have to buy in some or all of their provision. There is evidence that some companies, particularly small ones, may be unaware of their occupational health needs and of the business case for investment.⁽⁴¹⁾ Membership organisations, such as the British Chambers of Commerce, CIPD and the Federation of Small Businesses, should promote the advantages of occupational health expertise, using marketing materials developed by occupational health professional bodies. Specific packages supporting best practice occupational health needs assessment, such as attendance management policies or how to assess and control workplace hazards, will help company decision makers determine their purchasing requirements. Education in the value of occupational health must include board level. The desirability of using accredited

occupational health services should be advocated by the membership organisations, as well as by NHS England, the health departments of devolved administrations, and the Department of Work and Pensions.

Practitioners

A future occupational health workforce will include a broader-based population with distributed competencies, equipped with core knowledge and skills aligned to the paradigm shift in occupational health practice and supported by smaller numbers of specialists and experts. The biopsychosocial model of practice should underpin clinical practice and work outcomes should feature in planning care pathways.

There must be greater consideration of what people actually do for a living and what barriers prevent a successful return to work. Healthcare practitioners with foundation occupational health training will ensure that they always include questions about the workplace in their clinical history taking and can give general advice about fitness for work in relation to the underlying health condition. This should be supplemented by signposting to specialty-trained practitioners for detailed advice and planning workplace adjustments.

A fundamental feature of clinical occupational health practice will be the ability to perform functional capability assessments (physical and/or psychological) linking the impact of illness to the ability to work and supporting the worker to remain in work where appropriate, even when not fully fit for their role.

Prevention of ill health is fundamental to occupational health disciplines. It is incumbent on uni-disciplinary practitioners to ensure that they understand the roles of other members of the occupational health multi-disciplinary team. Workplace risk assessment remains the cornerstone of occupational health practice and the legal framework, and should be promoted in organisations. Most companies will not have a full range of occupational health expertise as part of the core occupational health team. Consequently, it may be necessary to enlist the assistance of professional colleagues for specific risk assessments and control of hazards. The ability to identify cost-effective solutions to specific workplace problems is important in maintaining long-term relationships with employing organisations.

Occupational health services should review their skill mixes and be prepared to deliver multi-disciplinary occupational health interventions. They should ensure that practitioners understand the potential role of other members of the occupational health team with respect to their generic and specialist training.

While some contracts for occupational health services may be restricted to focusing on sickness absence management and rehabilitation back to work, there is an increasing awareness of the need to address leadership in health risk management and wellbeing in organisations and its correlation with productivity. Occupational health should be marketed accordingly, so that it can be presented as helping organisations address both compliance and performance cost-effectively. Professional organisations should assist in this marketing via conferences, articles and mutually agreed position statements. The Council for Work and Health is well placed to lead such developments.

Appendix 1: The Population-Centric™ approach to workforce planning



Gap analysis, reality check
Planning for implementation



Defining roles and future workforce



Defining knowledge, skills and competence levels



Design service delivery models



Population definition / Strategic environment



Establishing the change management approach

**STRATEGIC FRAMEWORK FOR WORKFORCE
PLANNING—The Population-Centric™ approach**

Appendix 2: Role descriptions of key professionals engaged in occupational health

Occupational health

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

Employee Assistance Professionals

Counsellors, psychologists, mediators and other mental health professionals working in employee assistance programmes deliver a range of clinical interventions designed to improve the mental wellbeing of both employees and their dependents. They support mental health in the workplace and contribute to reducing sickness absence and improving productivity.

Human factor specialists and ergonomists

The prime focus of ergonomics and human factors is prevention through the design and evaluation of tasks, jobs, products, environments and systems to optimise human wellbeing and overall system performance. Practitioners also analyse risks and redesign tasks to prevent future problems and facilitate a return to work.

Occupational health nurses

Occupational health nurses provide advice and support on the management of health and wellbeing in the workplace. There are four main areas of focus; health leadership and management, fitness for work, health risk management and employee wellbeing. Occupational health nursing practice remains sustainable through the ongoing development of good practice standards and quality assurance.

Occupational health physicians

Occupational physicians are able to help employers significantly reduce the business risks around employee health using medical expertise to assess fitness for work, advise on workplace adjustments, prevent ill health and promote health and wellbeing. They play a key role in rehabilitation by advising on optimal treatment strategies.

Occupational health physiotherapists

Occupational health physiotherapists assess and treat conditions in the workplace to facilitate fast and full recovery and a return to normal work and function. They promote and protect health and wellbeing through workplace risk assessment, measurement and advice on work demands. They help reduce absence and increase productivity.

Occupational hygienists

Occupational hygienists use science and engineering to prevent ill health caused by the work environment. They identify potential exposures and assess the risks to health. Occupational hygienists help to control these risks by designing out the hazards, or applying engineering or other controls to reduce exposures to the minimum.

Occupational therapists

Occupational therapists work with people experiencing difficulties from physical, mental, cognitive or social factors. Adopting a person, task, environment approach and using evidence based tools, they analyse and plan a person's fitness to work, providing interventions and solutions to achieve a sustainable return to work outcome for employee and employer.

Psychologists

Psychologists who specialise in work and health prevent work-related ill-health and promote organisational and individual health and well-being. They work at strategic level to reduce risk by the design of psychologically effective practice and policies; advising on management practices that improve staff wellbeing. They design and deliver behaviour change programmes to improve wellbeing.

Other professions working in occupational health include:

Mental health support workers,

Occupational health technicians,

Vocational rehabilitation specialists,

Welfare practitioners,

Workplace Health & Safety professionals.

Others involved in the prevention of health issues in the workplace often provide interventions outside the traditional environments.

Appendix 3: Further acknowledgments

The Expert Panel, who contributed to the analysis of profession-specific competency frameworks relating to occupational health and established the baseline data for the generic competencies consultation, comprised:

		Representing:
Jayne Moore		Faculty of Occupational Medicine
Jane White	} jointly	Institute of Occupational Safety and Health
Jo Carter		
Terry McDonald		British Occupational Hygiene Society
Dave O'Neill		Chartered Institute of Ergonomics and Human Factors
Nicola Hunter	} jointly	Association of Chartered Physiotherapists in Occupational Health and Ergonomics
Jan Vickery		
Karen Royle		British Psychological Society
Anne Harriss		Occupational Health Nursing Higher Education

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