

FRAMEWORK FOR WORKFORCE EDUCATION DEVELOPMENT FOR HEALTH PROTECTION IN SCOTLAND



Health
Protection
Scotland



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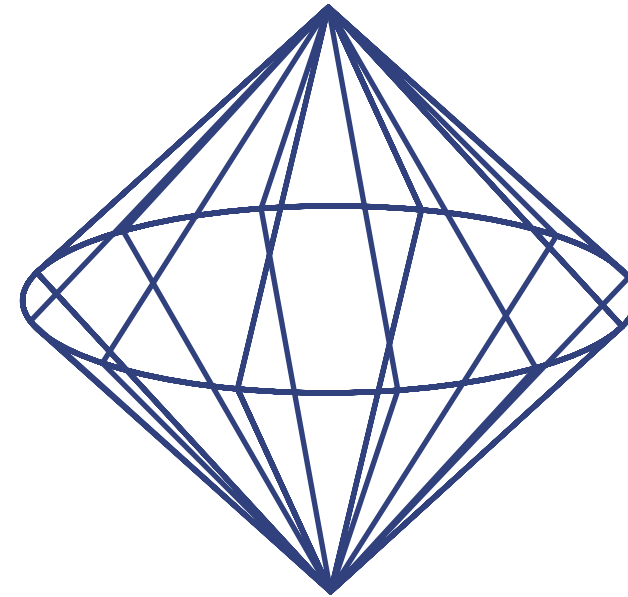
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Foreword

Health protection involves a community of very diverse organisations and individuals who provide health protection services. The level of input to health protection varies according to individual organisations' specific orientations and remits, but the contributions of all are greatly valued and urgently needed.

Enormous challenges face us in health protection in Scotland. Major threats to public health can be found across a range of issues, including communicable diseases, environmental pollution, the quality of food and drinking water, and chemical, biological, radiological and nuclear (CBRN) hazards. Health Protection Scotland (HPS), part of the National Services Scotland NHS Board, exists to co-ordinate the efforts of public health agencies across the sectors in Scotland to ensure a co-ordinated, consistent and effective response to these threats.

I believe it is crucial to the success of the endeavours of all the organisations and individuals involved in health protection in Scotland that we have a cohesive, integrated approach to education and training. This Workforce Education Development Framework marks our determination to ensure we have such an approach in place.

HPS worked in partnership with NHS Education for Scotland (NES) and a wide range of stakeholders to develop the framework, which encompasses the education and training needs of staff working in what has come to be called the 'health protection community' – the organisations and individuals that contribute to the provision of health protection services in Scotland. The content frames key areas on which education and training activity should focus. It also acts as the catalyst for the development of more detailed action plans at local level.

The framework has been subject to wide consultation, ensuring that it has gained widespread support. Its aim is not to address only the needs of specialists and practitioners whose remits focus largely or exclusively on health protection, but also to meet the needs of the wider workforce, who make a vital contribution to health protection services in Scotland.

Inevitably, action plans arising from a framework such as this are not resource-neutral. While much learning within health protection takes place without recourse to extra resources – the learning that arises from day-to-day work and discussions with colleagues and members of the public, for instance – quality education and training comes at a cost. Careful planning and scrutiny will be required to ensure that the resources organisations have at their disposal are best targeted to meet the agenda set out in the framework.

The document is the result of much hard work. I am grateful to all those who have contributed to its development and in particular NHS Education for Scotland, who have helped us to develop and refine its content. Their efforts have given us a strong framework from which to address the education and training needs of all staff involved in health protection. It is now up to the organisations involved in health protection, professional groups and individual members of staff, in partnership with HPS, NES and their stakeholders, to make the framework work in practice.



Dr Harry Burns
Chief Medical Officer

Executive Summary

Introduction

Public health in the United Kingdom is considered to be composed of three inter-related strands - health improvement, service support and design, and health protection. Health protection involves:

- ensuring the safety and quality of food, water, air and the general environment
- preventing the transmission of communicable diseases
- managing outbreaks and other incidents which threaten the public health.

Health protection is embedded in a wide legislative and policy context which incorporates European, international, Scottish and UK dimensions.

One of the key aims of Health Protection Scotland (HPS) is to support the development of a competent, 'fit for purpose' health protection workforce through promoting education initiatives. HPS contributes to the achievement of this directly through its operational role and on behalf of the main agencies participating in health protection through its wider responsibilities.

The aim of this Workforce Education Development Framework is to offer Health Protection Scotland and stakeholder organisations within the health protection community¹ in Scotland a basis from which they can build action plans for facilitating, delivering and evaluating workforce education development activity for their staff.

HPS has developed the framework in partnership with NHS Education for Scotland (NES) and a wide range of stakeholders. NES has agreed to facilitate the action planning process and will be working with HPS to progress this across Scotland.

¹ 'Health protection community', as cited in this framework, refers to organisations providing health protection services and other stakeholders with an interest in health protection issues.

Education and training needs

- Conducting a formal education and training needs analysis (ETNA) will be of benefit to the health protection community, but it will be up to individual organisations to consider whether this would be appropriate for them.
- Any ETNA for health protection should be planned alongside, and should articulate with, broader ETNAs carried out within the organisation.
- All staff working in the health protection community should have opportunities to address education and training needs through personal development planning based on the principles of fairness, openness and transparency, and have opportunities for structured reflection to enable them to identify strengths and weakness in their work practice and knowledge base.
- Teams in organisations providing health protection services will need support to define team learning needs and to set achievable and appropriate learning objectives that link personal with organisational objectives.
- Staff should be supported (in accordance with education and training budgets) to access appropriate courses in the higher/further education sectors and through professional bodies that lead to further qualifications relevant to their work.
- Organisations providing health protection services should have a positive focus on receiving and responding to comments and suggestions from members of the community. Many such contributions will indicate important staff training needs that can subsequently be addressed.

Executive Summary (continued)

Generic topics

- Education and training opportunities that focus on developing staff communication skills should be actively promoted, including the skills required to use information technology effectively.
- Appropriate media training will be necessary for selected staff.
- Staff involved in health protection work will need training to ensure they develop an ethos that reflects a strong population perspective.
- Staff should have access to training in delivering culturally sensitive services.
- Staff will need support and education and training opportunities to help them understand individual roles and team-working at local, regional, national and international levels, as appropriate.
- Leadership training opportunities should be provided for as many appropriate staff throughout the health protection community as possible.
- Staff will need support to develop and nurture skills in negotiating and influencing, change management, and report writing and recording.
- Organisations providing health protection services should be identifying the risk analysis training needs of staff across the workforce in a variety of posts.
- Organisations should encourage the development of an evidence-based culture based on a solid grounding of research and surveillance awareness and critical appraisal skills.
- An inclusive approach to statutory and mandatory training should be taken by the health protection community, based on an effective assessment and recording system that will identify those who need training, in which areas, and when, and a recognition that effective training needs to be offered on an ongoing basis.

- The health protection community should remain responsive to new needs for statutory and mandatory training as they arise.
- All staff entering new employment in organisations providing health protection services should undergo a period of appropriate induction and orientation.
- Ethical issues should form a central plank of education and training activity within the health protection community.
- Education about existing and developing law is necessary to give staff a solid understanding of the legal framework for health protection.

Health protection topics

- Agreement has been reached in recent years on the broad parameters for specialist training in health protection. Organisations providing health protection services should map the identified key areas of education and training need to existing posts to identify which groups of staff should be the recipient of which focused education and training activity.
- It will be for organisations providing health protection services to define the type, subject and level of education and training appropriate for different grades of staff.
- Any training provided for consultants and/or specialists should reflect the guidance set out in the report *Training in Health Protection for those wishing to work as Consultants or Specialists in Public Health in Scotland (Scottish Committee for Specialist Education and Training for Public Health, 2005)*.
- Core education topics that should be covered by NHS Board Health Protection Teams have been defined.

Change process and service modernisation

- HPS is aiming to facilitate the development of the Health Protection Network, which will help staff identify continuing professional education and training needs related to maintaining and developing good practice.
- New and developed roles have significant education and training implications, and appropriately qualified staff should be able to access education and training to support their role development.
- The clear education and training implications associated with the introduction of new technology should be recognised by organisations providing health protection services.

Supporting and developing staff and services

- The aim of organisations involved in health protection services should be to ensure staff receive appropriate support throughout their careers.
- A framework for staff support and supervision that promotes a competency-based approach to lifelong learning should be adopted, using competency statements issued by appropriate professional and national bodies (where possible) and reflecting current pay modernisation initiatives across the sectors.
- Organisations providing health protection services should remain alert to changes in service delivery that have an impact on workforce education development by facilitating appropriate education and training.

Monitoring quality and outcomes of education and training activity

- The aim of monitoring quality and outcomes is to make the best use of resources to ensure maximum effectiveness. Education and training activity should therefore be linked with organisational and local objectives and be rigorously quality assured and evaluated.

- It is suggested that delivery of education and training within the health protection community be benchmarked against a set of quality indicators and standards, such as the *Quality Assuring Continuing Professional Development (QACPD)* initiative (NES, 2000) or an equivalent standards framework.
- Education and training activity should be rigorously evaluated to ensure ongoing fitness for purpose.
- The public's evaluation of services should be monitored, thereby assessing the appropriateness of education and training activities in meeting their needs.
- Opportunities for flexible learning should be actively encouraged, including workplace learning, e-learning and 'shadowing' opportunities.
- All the communication mechanisms at the organisation's disposal should be used to increase staff awareness of education and training activities that are available to them.
- It is recommended that a centralised, standardised, secure electronic system for recording workers' participation in education and training activities should be developed within organisations.
- Organisations providing health protection services are encouraged to use their internal reporting systems to promote accountability for education and training activity.

Executive Summary (continued)

Developing partnerships

- Organisations should strengthen links and partnerships with outside agencies to promote quality in, and widen access to, education and training opportunities.

Next steps...

- The framework needs to be dynamic and should be reviewed and updated after five years during its ten-year time frame.
- HPS and NES are proposing to take forward the implementation of the framework from April 2006, firstly over an 18-month period that will involve commissioning a pilot project to develop a methodology for an education and training needs analysis that can be used by health protection organisations to design an ongoing education and training programme that is systematic, affordable and appropriate to the needs of health protection service users, the organisation and the workforce.
- In the subsequent 18-month period, HPS and NES will commission education and training provision and delivery, develop and implement an appropriate method to assure the quality of education provision and delivery, monitor overall progress in implementing the action plan and report to the joint HPS/NES Steering Group and Health Protection Advisory Group.

SECTION 1

INTRODUCTION

1.1 Introduction

Health Protection is a term used to encompass a set of activities within the public health function. It involves:

- ensuring the safety and quality of food, water, air and the general environment
- preventing the transmission of communicable diseases
- managing outbreaks and other incidents which threaten the public health.

The profile of health protection has increased significantly in recent years with issues such as bioterrorism, healthcare associated infection and communicable diseases constantly being in the public eye. The quality of public protection from such hazards demands a 'fit for purpose' workforce educated and trained to the highest standards.

One of the key aims of Health Protection Scotland (HPS), part of the National Services Scotland NHS Board, is to support the development of this competent, 'fit for purpose' workforce through promoting education initiatives (see Box 1). HPS contributes to the achievement of this directly through its operational role (supporting and providing courses, for instance), and on behalf of the main agencies participating in health protection through its wider responsibilities (such as assessing the needs for training). In this latter role, it is overseen by the Health Protection Advisory Group (Appendix 1).

Box 1. Health Protection Scotland and workforce education development

Working in partnership with stakeholders such as NHS Boards, local authorities, NHS Health Scotland, NHS Education for Scotland, professional and academic organisations and other UK and European health protection agencies, HPS aims to:

- support providers of education and training in the development of material and courses dedicated to health protection
- help co-ordinate the health protection training of priority groups in the health protection community
- provide direct in-service training and education to priority groups in the health protection community
- participate in the development and provision of appropriate UK, European and international training schemes
- ensure that the potential and contribution of health protection services' workforces are maximised through securing education and training activity that meets assessed needs and enhances effectiveness.

The Scottish Executive has given HPS responsibility to work with partners, particularly NHS Education for Scotland (NES), to:

- promote the development of a competent and confident workforce in health protection
- build capacity in health protection for public health and health care staff, such as primary care workers and infection control nurses.

Workforce education development is central to the achievement of both these goals. Education development opportunities are therefore key to every individual working in organisations providing health protection services – otherwise known as the health protection community.

Despite this, no coherent national framework for workforce education development in health protection currently exists in Scotland. This document, jointly developed by HPS and NES, aspires to fill that gap.

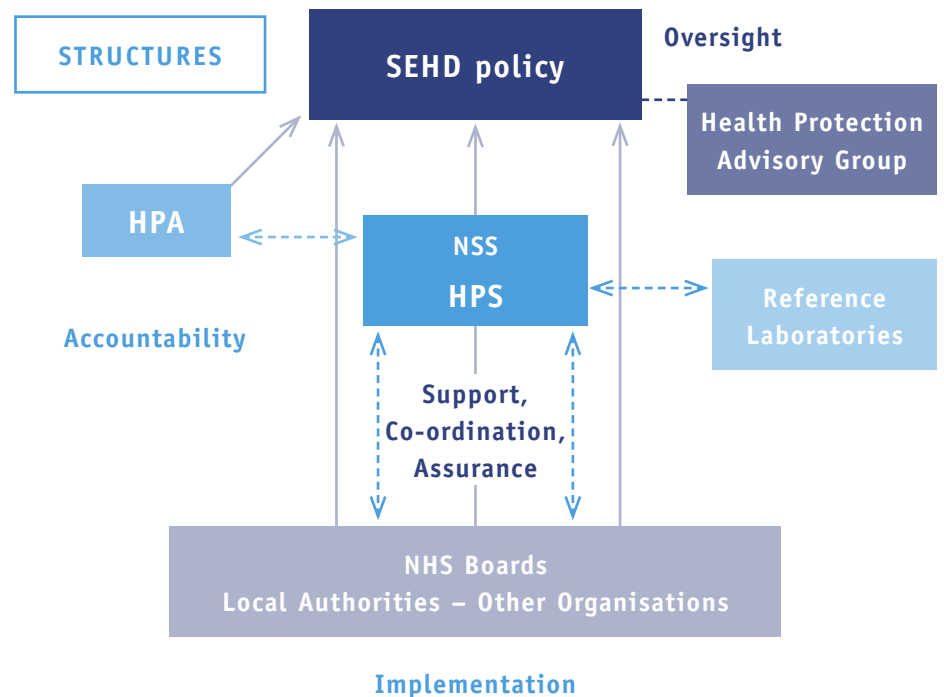
The aim of this Workforce Education Development Framework is to offer HPS and stakeholder organisations within the health protection community a basis from which they can build action plans for facilitating, delivering and evaluating workforce education development activity for their staff. This will help to ensure that staff can access appropriate education opportunities to enable them to develop their skills and knowledge.

The framework was developed following a wide process of consultation with relevant stakeholders. It addresses key areas of workforce education development activity that organisations should consider as they develop action plans for delivery of education and training programmes to take workforce education development in health protection forward. NES has agreed to facilitate the action planning process and will be working with HPS to progress this across Scotland.

Health protection institutional framework in Scotland

The health protection institutional framework is represented in Figure 1. Health protection and the remit of HPS are defined and discussed in Appendix 2.

Figure 1. Health protection institutional framework in Scotland



1.1 Introduction - continued

The health protection workforce – who the framework is for

In Scotland, the public health workforce employed in health protection is composed of three overlapping groups:²

- specialists: these public health professionals fulfilling health protection roles tend to work at strategic or management levels and may have a senior scientific function; they mainly work in NHS Boards, local authorities and national organisations
- practitioners: professionals who spend the major part or all of their time carrying out public health functions; they also mainly work in NHS Boards, local authorities and national organisations
- the wider workforce: workers in a variety of sectors who have a role in health protection as part of a wider remit; this workforce is located across a variety of organisations, with those employed in the NHS in primary care settings who have responsibilities related to immunisation and travel health having particularly significant roles.

Key disciplines in each of the three groups are detailed in Table 1.

² The definitions of workforce groups given here relate solely to this framework. A number of professional bodies are redefining the terms ‘specialists’, ‘practitioners’ and ‘wider workforce’, and changes will be reflected as the framework develops. Professionals with a specialist qualification currently may contribute to health protection services without specialising in health protection and while carrying out other duties in public health. These individuals are not classified as ‘specialists’ in health protection within this framework.

Table 1 Key disciplines in health protection workforce

Examples of specialists and practitioners

- Clinical Epidemiologist/Scientists and Consultant Epidemiologists
- Clinical and other Microbiologists
- Consultants in Public Health Medicine (CPHMs) (Communicable Disease/Environmental Health) and Generic CPHMs (participating in on-call)
- Emergency planning staff
- Environmental Health Officers
- Nurses: Community Nurses, Health Protection Nurse Specialists, Infection Control Nurses, Nurse Consultants, Nurse Epidemiologists
- Public Health Information Officers
- Specialists in Public Health
- Toxicology/Poisoning staff

Examples of wider workforce

- ‘Blue light’ services
- Dentists
- Environmental Protection staff
- General Practitioners (GPs)
- Health Promotion staff
- Health Visitors/Public Health Nurses
- Infectious Diseases Physicians
- Local authority planning, education and social work staff
- NHS managers
- Occupational Health/Health and Safety at Work staff
- Other clinical staff in, for example, accident and emergency, respiratory, intensive care, paediatric and genito-urinary medicine units
- Pharmacists
- Press Officers
- Prison Service staff
- Regional Analysts
- State Veterinary service and other veterinarians

Workforce education development

Ongoing workforce education development plays a major part in preparing staff in the health protection community to deliver effective, high-quality services. It is necessary not only to maintain performance, but also for individuals to achieve personal aspirations and meet professional requirements, and for teams and organisations to achieve their objectives.

HPS recognises the benefits of multi-professional education and training. This Workforce Education Development Framework provides a route map to multi-professional education and training, although it is recognised that there will be occasions when uni-disciplinary activity will be more appropriate.

The framework

The framework is presented in eight chapters:

- *The Policy Context*, which reviews the key initiatives that created HPS and those that impact on health protection work
- *Education and Training Needs*, at individual, team and organisational levels
- *Generic Topics*, key education and training issues relevant to all staff involved in health protection work
- *Health Protection Topics*, meeting the needs of staff in particular areas
- *The Change Process and Service Modernisation*, reflecting changes in the way services are designed and delivered
- *Supporting and Developing Staff and Services*, which outlines plans and standards for ongoing staff support and education

- *Monitoring Quality and Outcomes*, getting best use of resources to ensure maximum effectiveness
- *Developing Partnerships*, which sets out plans to develop relationships with key partners.

The framework sets out the broad areas in which education and training activity is likely to lead to more effective services through appropriate preparation of staff. It can be used as the framework for action plans detailing education and training activity at a variety of strategic, organisational and individual levels within statutory, independent and voluntary services.

1.2 Process

In line with its remit from the Scottish Executive Health Department (SEHD), HPS made a commitment to developing a workforce education development framework for the health protection community in Scotland. A sub-group within HPS was set up to look at education, and they approached NHS Education for Scotland (NES) to make enquires about the continuing professional development (CPD) strategy template NES had developed with service areas of NHSScotland (NES, 2002). The template was developed as part of NES' support for multi-professional developments and its ongoing promotion of the *Quality Assuring Continuing Professional Development* (QACPD) initiative (NES, 2000).

In discussion with NES, it was decided that rather than create a strategy exclusively for HPS, a national framework should be developed. This would act as a statement of intent on workforce education development for the health protection community in Scotland.

Agreement to progress the project was achieved, and a NES professional officer and NES-appointed external consultant were asked to work with a small editorial group (Appendix 3) to facilitate the process of developing an integrated Workforce Education Development Framework for Health Protection in Scotland.

The process has been governed by an ethos of inclusion and consultation. A seminar was held in February 2005 at which a cross-section of stakeholders in health protection were able to come together to set out their views on the way the framework should be developed. The NES template was endorsed as the foundation for the framework at this meeting.

The editorial group prepared a draft of the framework which went to wide consultation. This process culminated in a series of regional workshops held in Edinburgh, Aberdeen, Glasgow and Stirling in September 2005, at which representatives from NHS Boards, local authorities and other stakeholders were able to comment on and amend the draft.

The revised draft was then developed to capture the points raised in the consultation, and was approved by the Health Protection Advisory Group.

SECTION 2

THE FRAMEWORK

2.1 Policy Context

Public health in the United Kingdom is considered to be composed of three inter-related strands - health improvement, service support and design, and health protection. Health protection is embedded in a wide legislative and policy context which incorporates European, international, Scottish and UK dimensions.

UK and international health protection context

The **Health Protection Agency** was established in 2003 and is now a non-departmental public body. Its role is to provide an integrated approach to protecting all aspects of public health in England. In Scotland, it provides radiation protection and poisons services and supports and advises HPS when appropriate. Wales and Northern Ireland have their own organisational arrangements for health protection. Steps are being taken to formalise the co-ordination of the different UK health protection arrangements. HPA usually takes the lead in UK-wide matters such as an outbreak affecting more than one UK country. In issues related to bioterrorism, all four UK countries' health protection organisations must work within a UK framework, with HPA leading.

In Europe, a range of measures that impact on health protection has been introduced. Central to them is the establishment in 2004 of the **European Centre for Disease Prevention and Control (ECDC)**. This new EU agency will provide a structured and systematic approach to the control of communicable diseases and other serious health threats that affect European Union citizens. The ECDC will also mobilise and significantly reinforce the synergies between existing national centres for disease control. The centre is responsible for co-ordinating on behalf of member states, epidemiological surveillance, early warning and response systems, scientific advice and opinion and rapid reaction capacity to provide technical assistance during crises. The ECDC is based in Stockholm.

The European Commission's **European Environment and Health Strategy** (COEC, 2003) focuses on growing concerns over adverse health effects associated with environmental pollution. The overall aim of the strategy is to reduce diseases caused by environmental factors through developing a better understanding of the nature of the issues and by identifying health problems related to environmental degradation.

Children and young people are the focus of the **Children's Environment and Health Action Plan for Europe (CEHAPE)** (WHO, 2004). The CEHAPE aims to ensure that World Health Organization (WHO) European Region Member States put children's environmental health at the top of the political agenda by proposing child-specific actions for reducing or eliminating exposures to environmental risk factors.

Health protection policy context in Scotland

Public health in Scotland is driven by key Scottish Executive policy statements, including **Improving Health in Scotland – The Challenge** (SEHD, 2003). This report recognises that improving the health of Scotland's people calls for different policy strands and action programmes for improving health to be linked and, where possible, integrated. It also requires links among health service, local authority, education, social justice, environment, employment and sport provision. The report sets out to build upon existing programmes focusing on health improvement to describe four key 'themes' for action - early years, teenage transitions, the workplace and the community.

Also significant is **Partnership for Care** (SEHD, 2003b), which paved the way for the abolition of individual NHS Trusts. It developed further the value of partnerships between health professionals and patients and devolved power to front-line clinical staff, opening up exciting opportunities for all NHS Scotland staff in the development and promotion of new ways of delivering services.

More recently, **Delivering for Health** (SEHD, 2005) provides a route map for the new NHS in Scotland, focusing on key issues related to bringing general services closer to patients, focusing highly-specialised services in key areas, and meeting the challenges of an ageing population with progressively greater health and social care needs.

In relation to health protection, the Chief Medical Officer's (CMO's) **Review of the Public Health Function in Scotland** (SEHD, 2000) is a key policy. It includes a review of the communicable disease and environmental health function in NHS Scotland and advocates that local health protection resources, duly strengthened through medical, nursing and administrative team working, should remain within NHS Boards, working closely with their counterpart services (chiefly environmental health) in local authorities.

Following the publication of the CMO for England's report, **Getting Ahead of the Curve** (DoH, 2002), the Scottish Executive Health Department (SEHD) issued **Health Protection in Scotland – a Consultation Paper** (SEHD, 2002). This defined the background, scope, concerns and options to improve organisational arrangements. The reasons for carrying out a specific review of health protection arrangements in Scotland included a desire to:

- improve the capability to monitor and respond to the rapidly developing and widening variety of infectious and environmental hazards, especially those which may be due to bioterrorism
- ensure health protection organisations contribute maximally to the national commitment to improve health
- respond to public anxiety over issues such as MMR (measles/mumps/rubella) vaccination, the safety of the water and food supply and meeting increased expectations about the contribution of the health protection community to such issues

- ensure Scotland plays a full part in the new health protection arrangements being formed in the UK and the European Union.

Individual professional groups in Scotland have also addressed health protection in strategies designed to define professionals' unique contributions, including nurses, pharmacists and dentists.

The problems of dealing with healthcare associated infection (HAI) in Scotland have been addressed through a range of initiatives launched by the HAI Task Force to meet the commitments set out in **Preventing Infections Acquired While Receiving Health Care** (Scottish HAI Task Force, 2002). This action plan focuses on the urgent need for all healthcare workers to practise safe and effective health care based on fundamental principles of hygiene. The work of the Task Force has been extended until April 2008, signifying the implementation phase of this important work.

It should also be noted that a raft of legislation in the UK affects the function of the health protection community, including:

- Public Health (Scotland) Act 1897
- Health and Safety at Work etc Act 1974
- Race Relations Act 1976
- National Health Service (Scotland) Act 1978
- Disability Discrimination Act 1995
- Data Protection Act 1998
- Freedom of Information Act 2000
- Local Government (Scotland) Act 2003
- Health Protection Act 2004
- Civil Contingencies Act 2005.

2.1 Policy Context - continued

Emerging policy themes

Consistent themes emerging from polices have included the need for:

- more cohesion in health protection services, ensuring a consistent approach to common problems among NHS Boards, local authorities and other agencies
- better integration of health protection functions, including linking outputs from surveillance programmes more directly to resolving identified problems
- local, national and international networks to improve the effectiveness of health protection organisations and professional practice
- more accountability through improved clarity of roles and better alignment of health protection policy, resource allocation and performance management.

To meet these needs in Scotland, it was decided to establish a new organisation – Health Protection Scotland (HPS) – to work with Scottish and UK partners to improve the consistency, effectiveness, efficiency and transparency of the health protection function.

HPS replaced the Scottish Centre for Infection and Environmental Health (SCIEH). It takes a leadership and co-ordinating role, especially with regard to the key functions of surveillance, investigation, risk assessment, management, communication and managing public health emergencies. This complements overall Scottish Executive policy on the NHS, which seeks to achieve more effective services and better use of resources through increased collaboration among NHS agencies and single-system working. Single-system working in health protection is also currently being developed in England (with the creation of the Health Protection Agency (HPA)) and Wales (where the All-Wales Public Health Service has been established).

2.2 Education and Training Needs

While local and national policies will always be important drivers of workforce education development, the education and training needs of staff as they perceive them should also have a significant impact on the education and training developed in the health protection community.

Conducting an education and training needs analysis

Conducting a formal education and training needs analysis (ETNA) will be of benefit to the health protection community, but it will be up to individual organisations to consider whether this would be appropriate for them. Higher education institutions may be able to offer advice and support on taking this forward.³

New legislation, policies and guidance relating to health protection should be reflected in education and training needs analyses, particularly those that have statutory or mandatory training implications (see Chapter 2.3). Any ETNA for health protection should be planned alongside, and should articulate with, broader ETNAs carried out within the organisation.

The key elements of conducting a typical ETNA are set out in Appendix 4.

Options in keeping up-to-date

Service organisations and individual workers across all sectors are responsible for ensuring that skills, knowledge and competence remain up-to-date and fit for purpose. Workers are professionally accountable for their practice to the population, employers and, where appropriate, their professional regulatory body.

Workforce education development is about more than studying courses in higher and further education institutions. The workplace is becoming increasingly recognised as a core setting in which learning takes place. There are many resources through which

individual workers can update their knowledge and skills in work settings – accessing journals and online sources, meeting and discussing issues with colleagues, in-service training activities and experientially through day-to-day work practice, for instance. In addition, national competency frameworks are emerging in relation to specific areas of practice, and these may act as benchmarks against which staff can assess their current performance and education and training needs.

Several organisations and resources have been introduced in recent years to support workers to keep up-to-date with current knowledge and develop their practice in a range of subjects, including health protection, through the application of reliable research evidence. These include:

- the Scottish Health Protection Information Resource (SHPIR)
- NHS Scotland e-Library
- Health Protection Scotland
- Health Protection Agency.

Their effect can be evidenced in the collection and collation of data that help to inform best practice, indicate future research priorities, and assist in the management of public health incidents.

Personal development planning and education and training needs

Personal development planning (PDP) is one of the means through which staff can reflect on their learning needs with their line managers and also focus on organisational objectives. Similar systems are in operation throughout the different sectors involved in health protection work.

³ HPS is commissioning a pilot project to develop a methodology for an education and training needs analysis that can be used by health protection organisations – see ‘Next Steps’, page 34.

2.2 Education and Training Needs - continued

A significant part of the PDP (or equivalent) process focuses on individuals' perceptions of their own education and training needs and how they relate to team, organisational and national needs and priorities. All staff working in the health protection community should have opportunities to address education and training needs through personal development planning based on the principles of fairness, openness and transparency (see Chapter 2.3), and have opportunities for structured reflection to enable them to identify strengths and weakness in their work practice and knowledge base.

The introduction of the Knowledge and Skills Framework (KSF) of Agenda for Change to the NHS in April 2005 significantly supports personal development planning and provides a framework for career development and review (see Appendix 5 for an explanation of how the framework articulates with the six 'core dimensions' of the KSF).

Setting learning objectives

Teams need to set learning objectives that reflect the complex functions they perform and which articulate with European, national and local strategic aims. Mechanisms of care delivery and practice are changing, particularly as a consequence of initiatives such as Agenda for Change, Single Status and the European Working Time Directive, and teams need to focus on the specific education and training issues that will help them respond to the changes in a way that brings maximum benefits to the population. Teams in organisations providing health protection services will need support to define team learning needs and to set achievable and appropriate learning objectives that link personal with organisational objectives.

Courses

There are several courses in Scotland that incorporate health protection elements. Most of these involve a mix of academic and work-based learning and some also involve online and e-learning resources.

Staff should be supported (in accordance with education and training budgets) to access appropriate courses in the higher/further education sectors and through professional bodies that lead to further qualifications relevant to their work. Places are likely to be determined according to local and service needs and budget allocations.

Listening to the population

Active involvement of the public in health protection depends on the ability of staff in the health protection community to listen and respond to people's views and concerns. Organisations providing health protection services should have a positive focus on receiving and responding to comments and suggestions from members of the community. Many such contributions will indicate important staff training needs that can subsequently be addressed. Formal surveys and representations of the public's views of services will also contribute to determining training need.

The education and training needs of staff identified to respond to people's comments and suggestions should be addressed on an ongoing basis.

2.3 Generic Topics

There are particular topics that are relevant to the education profiles of all staff in the health protection community, regardless of the area in which they work. These 'generic' topics, as opposed to topics that are specific to health protection (see Chapter 2.4), can either fit into an accredited course of study geared towards gaining academic credit, or can be studied less formally as part of a worker's personal development plan (or equivalent).

The following offers examples of topics which, while 'generic' as defined above, have significant implications for the delivery of health protection services. A variety of education and training opportunities focusing on these topics should be available to staff.

Interpersonal skills

Education and training in relation to interpersonal skills should aim to promote the development of individuals with skills across a range of fronts, including:

- communication and working with communities
- team-working
- leadership and management
- negotiating and change management
- report-writing and recording information.

Communication and working with communities

Communication is at the core of everything staff do, and consequently is a core issue for the Workforce Education Development Framework.

Health protection involves a wide spectrum of activity in communication and working with communities that calls for varying degrees of competence. This includes:

- the ability of all staff to be informative and courteous in their interactions with members of the public
- the ability of identified staff to accurately construct and disseminate messages from a disparate range of sources throughout the health protection community in a way that meets the information needs of a wide constituency
- the ability of specialist members of staff to explain and educate the public about highly complex health protection issues.

Education and training activity will need to be similarly wide to ensure that staff are able to address public concerns and remain engaged with the health protection agenda. Opportunities that focus on developing communication skills should be actively promoted, including the skills required to use information technology effectively. Appropriate media training will also be necessary for selected staff.

Health protection has a strong population perspective. Staff involved in health protection work will need training to ensure they develop an ethos that reflects this underpinning principle. Working with communities requires sound understandings of relevant legislation such as the Race Relations Act, the Disability Discrimination Act, the Freedom of Information Act, the Åarhus Convention (UNECE, 1998) (from which many European Union Directives have been issued) and education and training activity aimed at helping staff understanding should be offered. Staff should also have access to training in delivering culturally sensitive services.

2.3 Generic Topics - continued

Team-working

Team-working is integral to the effective operation of the discipline of health protection. Health protection operates in a multi-national, multi-sectoral, multi-agency and multi-professional environment that calls for highly developed team-working skills. What impacts on one nation, sector or agency may well impact on others.

Team-working training will be essential in determining how effectively staff in the health protection community work in partnership, communicating with each other, planning jointly and adopting a teamwork ethos that places health protection of the population at the centre of service planning, delivery and evaluation.

All staff have a part to play in the ongoing development of these teams. They will need support and education and training opportunities to help them understand individual roles and team-working at local, regional, national and international levels, as appropriate.

Leadership and management

Leadership training opportunities should be provided for as many appropriate staff throughout the health protection community as possible, as people who develop strong leadership skills in terms of managing self and others are likely to be innovative, effective workers in health protection.

Negotiating and change management

Health protection involves organisations from diverse sectors whose remits involve different agendas and priorities. Staff at all levels within the health protection community need to be able to develop positive partnerships across these sectors. This requires skills in negotiating and influencing to ensure services provide best outcomes for communities. Staff will need support to develop and nurture these skills.

Following on from this, staff will require effective change management skills to ensure that changes in practice, roles and policies are effected and sustained.

Report-writing and recording information

Accurate and clear report writing and recording are important not just for legal reasons, significant as they are; they are also essential mechanisms in providing effective and safe communication and services to the public, and in increasing the effectiveness of multi-professional teams. Staff throughout the health protection community should be supported through providing access to education and training activities focusing on:

- report writing
- new ways of recording information using IT systems
- complying with national, professional, legislative and local guidance
- the legal framework for recording and reporting.

Risk analysis

Risk analysis is a generic term used to cover risk assessment, risk management and risk communication, and is pivotal to health protection services.

The World Health Organization⁴ defines the three elements of risk analysis in the following way.

- **Risk assessment** The scientific evaluation of known or potential adverse health effects associated with human exposure to hazards. It involves four steps: identifying the known or potential health effects associated with a particular agent, behaviour or set of circumstances; characterising the hazard, quantitatively and qualitatively; assessing the degree of risk associated with exposure to the hazard; and integrating hazard identification, characterisation and assessment into an estimate of the adverse events likely to occur in a given population.

⁴ See <http://www.who.int/foodsafety/micro/riskanalysis/en/> and relevant linked pages.

- **Risk management** Risk management has three levels: policy; service delivery/ management; and practice (directed at individual cases and settings). It also has four components: preliminary risk management activity, including establishing a risk profile; evaluation of risk management options; implementation of the risk management decision; and monitoring and review.
- **Risk communication** An interactive process of exchange of information and opinion on risk among risk assessors, risk managers and other interested parties. It is an integral and ongoing part of risk analysis activity that ideally should involve all stakeholders from the outset. Effective risk communication requires an ability to inform the public and professionals about actual or potential risks to their health openly and appropriately.

The WHO Risk Analysis Framework is set out diagrammatically in Figure 2.

Figure 2. WHO Risk Analysis Framework



Source: <http://www.who.int/foodsafety/micro/riskanalysis/en/>

Organisations providing health protection services should be identifying the risk analysis training needs of staff across the workforce in a variety of posts. Staff require an understanding of the dimensions to risk, including:

- health risk
- financial risk
- reputation risk
- political risk.

In certain areas of health protection services, specialists will take responsibility for defined aspects of risk analysis activity.

Evidence

HPS utilises research and surveillance activity to produce evidence for action.

Organisations providing health protection services will require staff with a wide range of expertise in relation to evidence, varying from the ability to locate, analyse and evaluate evidence sources, to commissioning, developing and implementing research and surveillance work.

The health protection community should encourage the development of an evidence-based culture based on a solid grounding of research and surveillance awareness and critical appraisal skills. Education and training activities should focus on:

- introduction to research and surveillance, to provide a basic understanding of the principles
- how to analyse and appraise research and surveillance evidence
- how to perform literature searches/reviews
- how to attain or develop scientific skills.

2.3 Generic Topics - continued

These activities will provide a bridge between experiential and research-based knowledge and the formation of evidence-based policy and guidance, which can only be achieved through effective knowledge management systems.

In addition, the health protection community should:

- pursue close links with higher and further education providers (see Chapter 2.8)
- encourage and support staff who demonstrate interest in research and surveillance issues
- provide support for individuals wishing to develop their research and surveillance expertise.

Statutory and mandatory training

Statutory training activities are those required by law. *Mandatory* training activities are those the government, statutory organisations, employing organisations and/or professional regulatory bodies/Royal Colleges decree are compulsory for all staff (or groups of staff). For instance:

- it is *statutory* for identified staff to have training in Control of Substances Harmful to Health (COSHH) regulations, as set out in the Health and Safety at Work Act 1974, revised in subsequent regulations
- it is *mandatory* for all staff to have induction training in healthcare associated infection within the NHS, as set out in the *Framework for Mandatory Induction Training in Healthcare Associated Infection (HAI) for NHSScotland*, published by the Scottish Executive and NES (SEHD/NES, 2004).

This workforce education development framework is not the place to attempt to define all statutory and mandatory training requirements for staff involved in health protection work across Scotland. It is recommended, however, that an inclusive approach to statutory and mandatory training should be taken by the health protection community, based on an effective assessment and recording system that will identify those who need training, in which areas, and when, and a recognition that effective training needs to be offered on an ongoing basis.

Topic areas for statutory and mandatory training change over time, and the health protection community should remain responsive to new needs as they arise. Health protection is an area that inspires a large volume of legislation and policy, protocol, guidance and framework documents, so vigilance is required to ensure new initiatives are identified and translated into appropriate training activities.

All staff entering new employment in organisations providing health protection services should undergo a period of appropriate induction and orientation. Organisations and teams should ensure appropriate staff members have opportunities to access induction activities in both education and work-based settings during the early months of employment.

Ethico-legal issues

There are major ethical challenges in the public health and health protection arenas. Ethical issues must be considered not only from the population level, but also at individual level. Significant issues of confidentiality and access to information consequent to the Freedom of Information Act 2000 arise at the latter level, while the former raises issues relating to public access to information and collecting information from population groups.

Understanding some of the key issues in ethics will help staff at all levels to cope with the challenging situations they face on a day-by-day basis. Ethical issues should form a central plank of education and training activity within the health protection community.

Education about existing and developing law is necessary to give staff a solid understanding of the legal framework for health protection. Organisations providing health protection services should also be aware of the risk of litigation and the training implications it presents, and the training requirements in terms of enforcement and compliance with statute relevant to many health protection services.

2.4 Health Protection Topics

The Faculty of Public Health, Royal Environmental Health Institute for Scotland, the UK Public Health Alliance, the UK Voluntary Register for Public Health Specialists and other professional groups have in recent years reached agreement on the broad parameters for specialist training in health protection. Recently, the model has been accepted for practitioner training. Key areas of knowledge and core principles of health protection have been defined, with the following topics being identified:

- the nature, causes and occurrence of major communicable and non-communicable diseases due to infectious and non-infectious environmental hazards
- principles of the modes of transmission, latency, incubation periods, exposure, herd and individual immunity
- principles of primary, secondary and tertiary prevention programmes (including vaccination and immunisation) as they relate to major communicable and non-communicable diseases due to infectious and non-infectious environmental hazards
- principles, methods, application and effectiveness of screening for the early detection and prevention and control of major communicable and non-communicable diseases due to infectious and non-infectious environmental hazards
- the nature of outbreaks and incidents and how they are managed
- methods employed in assessing, investigating and communicating risks to health and well-being, including long-term exposure to non-infectious environmental hazards
- public health aspects of emergency planning and managing environmental/chemical and radiological incidents, including the roles and legal responsibilities of people and organisations involved in protecting the population's health and well-being
- the law relating to public health protection.

Acquisition of this knowledge base will enable specialists and practitioners to:

- contribute to the management of an outbreak
- participate in an actual or simulated chemical, radiological or other major incident
- deal with the public health consequences of single cases of communicable disease
- communicate advice on threats to health to a wide audience.

It will also enable them to develop competence in:

- surveillance and assessment of the population's health and well-being
- promoting and protecting the population's health and well-being
- developing quality and risk management within an evaluative culture
- developing collaborative working for health and well-being
- developing health programmes and services and reducing inequalities
- developing and implementing policies and strategies to improve health and well-being
- working with and for communities to improve health and well-being
- developing strategic leadership to improve health and well-being
- using research and development to improve health and well-being
- ethically managing self, people and resources to improve health and well-being.

It would be prudent for the health protection community to ensure that these areas have a strong influence on the choice of education and training topics for specialists and practitioners in health protection, while continuing to recognise the importance of targeted activity on other aspects of health protection work which, while less common, call for skilled and informed practice. Organisations providing health protection services should map these key areas of education and training need to existing posts

to identify which groups of staff should be the recipient of which focused education and training activity. The mix of training needs will reflect different services and their priorities.

Consequently, a range of staff within the health protection community will require education and training on core elements of health protection work, such as:

- communicable disease
- immunisation
- environmental health
- aspects of chemical, biological, radiological and nuclear (CBRN) events
- risk analysis
- surveillance.

It will be for organisations providing health protection services to define the type, subject and level of education and training appropriate for different grades of staff.

Training in health protection for consultants and/or specialists

A sub-group of the Scottish Committee for Specialist Education and Training for Public Health, chaired by HPS, was commissioned to prepare a report setting out the key training areas appropriate for those:

- required to perform duties within on-call in health protection rotas in NHS Scotland
- seeking registration on the Voluntary Register as a Generalist Specialist in Public Health via the portfolio route
- seeking to become a consultant in health protection
- seeking registration on the Voluntary Register as a Defined Specialist in Public Health.

Any training provided for specialists at these levels should reflect the guidance set out in the report **Training in Health Protection for those wishing to work as Consultants or Specialists in Public Health in Scotland** (SCSETPH, 2005).

NHS Board Health Protection Teams

Some core education topics that should be covered by NHS Board Health Protection Teams have been defined. They are shown in Box 2.4.1 (overleaf).

2.4 Health Protection Topics - continued

Box 2.4.1 Core education topics for NHS Board Health Protection Teams

Communicable diseases

Respiratory infections: TB, meningococcal infection, diphtheria, legionellosis.

GI infections: VTEC, salmonella, cryptosporidium, norovirus.

Blood-borne-viruses: Hepatitis B and C, HIV.

Zoonoses: rabies.

HAI: MRSA, antimicrobial resistance, iatrogenic vCJD.

VHF

Investigation: microbiology, epidemiology and environmental control measures: screening for communicable disease, environmental health services, food hygiene, immunisation, travel and port health, infection control, post-exposure prophylaxis, public health law, travel health services.

Flu, SARS and other contingency plans.

Incident and outbreak management.

Environmental hazards (including chemical, radiological and nuclear hazards)

Jointly with partners, monitoring those chemical hazards and their routes of exposure most likely to cause significant damage to the local population's health.

Jointly with partners, respond to risks to health identified from the above.

Follow-up those with significant exposures to an environmental hazard likely to damage health.

Jointly with partners, manage any environmental pollution and chemical incidents with an impact on health.

Assess the impact of the quality of the environment on health.

Deliberate release of biological, chemical, radiological and nuclear hazards

Ensure ability to detect features of unusual illness due to those agents most likely to be used in a deliberate release.

Investigation and management of outbreaks and incidents of unusual illnesses.

National smallpox plan.

NHS response to packages alleged to or known to contain a biological agent.

Special control measures related to deliberate release incidents, including the decontamination of those exposed to a biological or chemical hazard and community evacuation or containment.

The management of an incident due to a deliberate release.

2.5 The Change Process and Service Modernisation

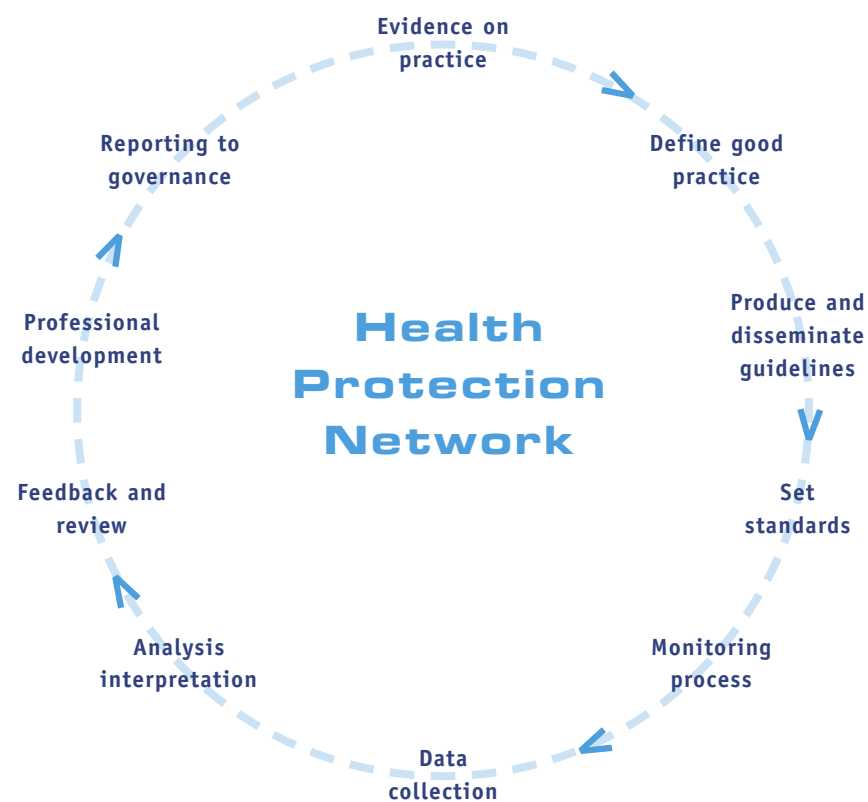
Change and service modernisation are affecting services across the health protection spectrum. It is crucial that education and training activity focuses on supporting staff as they face and implement change and develop services. This will include activity and training in the following areas.

Developing networks of good practice

HPS is aiming to facilitate the development of a network of professionals engaged in health protection with a view to supporting the ongoing process of defining and supporting good practice. The network will be overseen by a steering group of representatives from the key professional disciplines involved in health protection. It will work through multi-disciplinary groups focusing on specific topic areas such as blood-borne viruses and zoonoses.

The Network will function through a standard cycle, as shown in Figure 3.

Figure 3.



As can be seen, the Health Protection Network will help staff identify continuing professional education and training needs related to maintaining and developing good practice. Experience of developing managed clinical networks in Scotland suggests that education and training activity should be multi-agency in nature and should focus on:

- helping staff to understand their roles in delivering multi-agency interventions
- developing staff interpersonal skills (see page 19).

Developing new roles within teams

Changes in the way staff work are creating opportunities for some workers to develop and extend their knowledge and skills in providing and leading key services. In addition, workforce planning initiatives are creating new roles in a variety of areas. New and developed roles have significant education and training implications. Appropriately qualified staff should be able to access education and training to support their role development.

Introducing new technologies

New technology is accelerating developments in the way health protection services are organised and delivered. The clear education and training implications associated with the introduction of new technology should be recognised by organisations providing health protection services. To aid in this process, HPS has commissioned two scoping projects, the first on informatics, the second on knowledge management. The latter considers the development of the following.

- *The Scottish Health Protection Information Resource (SHPIR)* – a web-based compendium of guidance on good practice in health protection that will be integrated into the development of the Health Protection Network, particularly with regard to evidence-based standards and processes for defining good practice.

- *The creation of web-based health protection portals* – NES is already applying the lessons learned from the development of web-based specialist portals for cancer and cerebro-vascular disease to HAI. There is agreement in principle to extend this model to immunisation and other areas of health protection.
- *The development of on-line access to library resources* – the HPS library already participates in the NHS Scotland e-library. This will continue and will be linked to NES specialist portal development.

2.6 Supporting and Developing Staff and Services

This Workforce Education Development Framework emphasises the importance of optimal support and supervision being provided for all staff in the health protection community. A framework for support and supervision that promotes a competency-based approach to lifelong learning, linked as appropriate to the KSF and local authority frameworks, will go some considerable way to achieving this aim. This approach should therefore be adopted, using competency statements issued by appropriate professional and national bodies (where possible) and reflecting current pay modernisation initiatives across the sectors.

Organisations providing health protection services should remain alert to changes in service delivery that have an impact on workforce education development by facilitating education and training for appropriate staff in response to:

- new legislation, hazard warnings, guidelines, protocols and standards as they emerge
- new equipment and health technologies that become available
- new methods of service delivery designed to improve the health and well-being of the population.

The aim of organisations involved in health protection services should be to ensure staff receive appropriate support throughout their careers, including the following:

- access to programmes that promote study skills
- access to appropriate formal education programmes
- support for trainees and students
- support for newly qualified and newly recruited staff
- access to supervision and support throughout working lives

- access to specialist (possibly external) supervision and support for those in specialist roles
- commitment to honouring 'protected time' for education and training as appropriate for individual staff groups, with recognition of the need to put adequate backfill arrangements in place
- support for the development of professional forums
- promotion and support for leadership development
- promotion and support for an evidence-based culture
- learning from mistakes.

2.7 Monitoring Quality and Outcomes of Education and Training Activity

Selectivity about the kinds of education and training activities provided or facilitated by the health protection community is essential. Factors that need to be taken into account in relation to all potential activities include personal responsibility, team resources and organisational needs, as well as the following.

- What are the potential benefits to the health and well-being of the public of offering or facilitating the education and training activity for staff?
- What are the potential benefits to staff of offering or facilitating the education and training activity?
- What type of education and training activity is appropriate for the subject, and what is its duration and frequency?
- Is the activity quality assured?
- For which staff would the activity be most appropriate?
- How should the activity be evaluated?
- What kind of resources will be required over the short, medium and long terms as a result of the activity?
- Where will the activity take place, and how frequently?
- How readily can staff be released from regular duties to take part in the activity?
- What are the financial and other resource implications of running the activity?
- Is the activity more cost-effective if arranged locally or collectively?
- What level of competence is a pre-requisite of undertaking the activity? Is there a competency framework for benchmarking?
- Does the activity carry academic or professional credit, and can its articulation with levels of the Scottish Education and Qualifications Framework (SCQF) (SQA et al, 2001) be demonstrated?

The aim of monitoring quality and outcomes is to make the best use of resources to ensure maximum effectiveness. Education and training activity should therefore be linked with organisational and local objectives and be rigorously quality assured and evaluated, using the following processes.

Workforce Education Development Framework approval process

This framework development process was agreed by the Health Protection Steering Group for Scotland. Future developments of the framework will be subject to approval by the new Health Protection Advisory Group, which has a remit to oversee and report to the Chief Medical Officer about health protection in Scotland (see page 37).

Quality indicators and standards

It is suggested that delivery of education and training within the health protection community be benchmarked against a set of quality indicators and standards.

Education and training activity evaluations

Education and training activity should be rigorously evaluated to ensure ongoing fitness for purpose using the following processes:

- each education and training activity should have defined learning outcomes
- participants should be asked for their views on issues such as: appropriateness of the activity to their needs and expectations; process and content of the activity; quality of delivery; potential impact of the activity on enhancing the health and well-being of the population; further education/training/activity required
- the effectiveness of activities for individual staff should be assessed through personal development planning (or equivalent) and review processes and team and organisational learning plans review, to ensure the activities' continuing fitness for purpose

- the public's evaluation of services should be monitored, thereby assessing the appropriateness of education and training activities in meeting their needs; comments and responses to public satisfaction exercises received by the health protection community should also be monitored for indications of how education and training activity should develop
- outcome evaluations should be explored.

Widening access to education and training activity

Clearly, education and training does not necessarily need to be 'course' based. Opportunities for flexible learning should be actively encouraged, including workplace learning, e-learning and 'shadowing' opportunities.

All the communication mechanisms at the organisation's disposal, including meetings, newsletters, noticeboards, e-mail and the intranet, should be used to increase staff awareness of education and training activities that are available to them.

Recording education and training activity

It is recommended that a centralised, standardised, secure electronic system for recording workers' participation in education and training activities should be developed within organisations. This would complement individual and local team records. Examples of robust systems have been developed in other organisations; for instance, NES has set up a database to record staff undertaking the Cleanliness Champion education programme in NHS settings.

Reporting education and training activity

Organisations providing health protection services are encouraged to use their internal reporting systems to promote accountability for education and training activity and transparency and fairness in the disbursement of local education and training budgets.

2.8 Developing Partnerships

This Workforce Education Development Framework is all about making the best use of resources in the health protection community to provide education and training activities that will help staff to enhance the health and well-being of the population. This can be achieved through the measures set out in the previous chapters, by sharing good practice in health protection services, and by tapping on the wealth of knowledge, skills and experience possessed by staff, particularly those with specialist expertise.

But while the talent in organisations providing health protection services is recognised and respected, links and partnerships built with a number of outside agencies are also greatly valued. These partnerships should be strengthened and improved to promote quality in, and widen access to, education and training opportunities. They include the following.

Government bodies

- Scottish Executive
- Other UK Health Departments
- Skills for Health

International bodies

- European Centre for Disease Prevention and Control
- Centers for Disease Control, US
- World Health Organization

Statutory bodies

- Health and Safety Executive
- Health Protection Agency
- Scottish Environment Protection Agency
- Food Standards Agency
- Care Commission
- Scottish Water Boards
- Scottish Prison Service
- Police
- Fire services
- HM Coastguard
- HM Armed Forces

NHS Scotland bodies

- NHS Scotland Health Boards
- NHS Scotland Special Health Boards
- NHS Scotland Property and Environment Forum

Local authority bodies

- Convention of Scottish Local Authorities/Local Authorities Co-ordinators of Regulatory Services (COSLA/LACORS)
- Society of Local Authority Chief Executives (SOLACE)
- Individual local authorities
- Community councils

Professional bodies

- Professional organisations
- Trade unions
- Regulatory bodies
- Royal Colleges
- Veterinary bodies
- Environmental health bodies

Education providers

- Higher education institutions
- Further education institutions
- Private education providers
- Schools

Voluntary and independent sector

- Charities and community groups
- Patient and public representative groups
- Equipment manufacturers and pharmaceutical industry

Others

- Politicians – councillors, MSPs, MPs
- The media

Next Steps...

This document presents the first Workforce Education Development Framework for health protection in Scotland. The framework is a beginning, not an end. Organisations providing health protection services need to put it into action through appropriate planning and participation. The next stage will be for the health protection community to establish implementation groups to produce action plans to progress the delivery of quality-assured, health protection-focused education and training.

The framework needs to be dynamic and should be reviewed and updated after five years during its ten-year time frame. A mechanism for evaluating its effectiveness will be developed in partnership with NHS Education for Scotland to inform and support the first review process.

HPS and NES are proposing to take forward the implementation of the framework from April 2006, firstly over an 18-month period through the following processes.

- Gaps in the competencies and skills required by the workforce will be identified through undertaking structured education and training needs analyses and defining the best education methods of addressing these.
- The first step will be to develop a methodology for the education and training needs analysis, and HPS is commissioning a pilot project for this purpose. The aim is to produce a tool that can be used by health protection organisations to design an ongoing education and training programme that is systematic, affordable and appropriate to the needs of health protection service users, the organisation and the workforce. HPS and NES will enter into discussions with stakeholders on how the tool will be implemented, and it is hoped that the pilot will be completed within a nine-month period.
- Second, HPS and NES will discuss with stakeholders how to group the health protection community for the purposes of carrying out the ETNA, whether on an organisational, regional or national basis. In parallel with this, work will be taken forward with UK and Scottish partners to review current provision of postgraduate education in health protection. Close liaison will be maintained with other groups that are currently reviewing the public health workforce.
- The current capability of education providers and in-service training programmes to facilitate required developments will be assessed.
- An action plan will be drawn up for HPS and NES, specifying how the two organisations and their stakeholders will target their resources in education and training and how they will be integrated with other HPS-led initiatives.
- Close liaison with Scottish and UK partners in health protection will continue on these issues.

The work will then progress over the succeeding 18 months through:

- leading the commissioning of any required education and training provision and delivery
- developing and implementing an appropriate method to assure the quality of education provision and delivery and current training initiatives
- monitoring overall progress in implementing the action plan and reporting to the joint HPS/NES Steering Group and Health Protection Advisory Group.

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APPENDICES

Appendix 1

Health Protection Advisory Group

Remit

The remit of the Health Protection Advisory Group is:

'To advise the CMO and National Services Scotland on matters relating to health protection and on the effectiveness and efficiency of the health protection function in Scotland and to support the establishment and ongoing corporate development of Health Protection Scotland.'

Membership (October 2005)

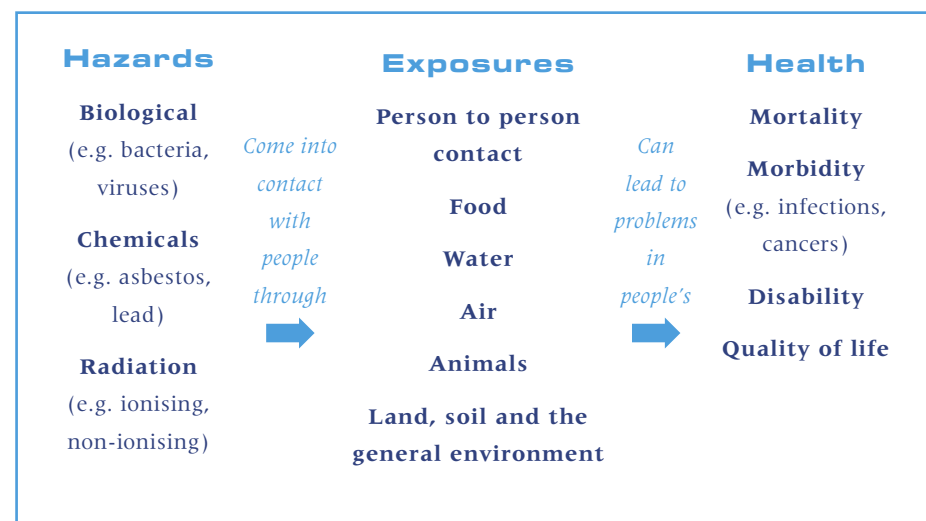
Member	Organisation	Member	Organisation
Jim McEwen	Chair	Vincent McKeown	Health Protection Nurse Specialists
George Brechin	Chief Executives' Group	Andrew Millar	Health Protection Scotland
Tim Brett	Health Protection Scotland	Dilip Nathwani	Royal College of Physicians
Adam Bryson	National Services Scotland	Andrew Riley	Directors of Public Health
Martin Donaghy	Health Protection Scotland	Charles Saunders	Scottish Partnership Forum
Martyn Evans	Scottish Consumer Council	Sybil Solomon	Infection Control Nurses' Association
John Froggatt	Scottish Executive	Jim Thomson	Food Standards Agency
Campbell Gemmell	Scottish Environment Protection Agency	Anne-Maree Wallace	Faculty of Public Health
Mary Hanson	Scottish Microbiological Forum	Lesley Wilkie	Scottish Executive
Jeremy Hawker	Health Protection Agency		
Robert Howe	Society of Chief Environmental Health Officers/REHIS		
Alan Hutchison	Reference Laboratories Working Group		
Eric Jackson	COSLA		

Appendix 2

Background to Health Protection in Scotland

Health protection is the branch of public health that seeks to protect the public from being exposed to hazards that damage their health, and to limit any impact on health when such exposures cannot be avoided. Figure A2.1 outlines the types of hazards, the main ways people can come into contact with them, and how their health can be affected.

Figure A2.1. Hazards, exposure and health



Health protection involves:

- ensuring the safety and quality of food, water, air and the general environment
- preventing the transmission of communicable diseases
- managing outbreaks and other incidents which threaten the public health.

It overlaps in its actions with the other two branches of public health: health improvement, and health service design and delivery.

Organisations providing health protection services carry out the following functions.

- Surveillance*
Monitoring the health of the population and relevant hazards and exposures.
- Investigation*
Investigating why and how people fall ill because of exposure to hazards and what preventative measures can be taken.
- Risk assessment*
Estimating the probability of the health of a community being damaged from exposure to a hazard.
- Risk management*
Putting in place measures which reduce the risk of exposure to hazards and the impact they have on health.
- Risk communication*
Informing the public about the risks to their health and what they individually or collectively can do to reduce them.
- Emergency response and management*
Responding to incidents and outbreaks to reduce cases of illness and other consequences to a minimum.

Remit of Health Protection Scotland

Health Protection Scotland (HPS) has been created to:

...work, in partnership with others, to protect the Scottish public from being exposed to hazards that damage their health, and to limit any impact on health when such exposures cannot be avoided.

HPS is seeking to achieve this by:

- ensuring a consistent, efficient and effective approach in the delivery of health protection services by NHS and related agencies
- co-ordinating the efforts of public health agencies in Scotland in health protection, especially when a rapid response to a major threat is required
- helping increase the public understanding of and positive attitudes to public health hazards and facilitating their level of involvement in the measures needed to protect them
- being the source in Scotland of expert advice and support to government, the NHS, other organisations and the public on health protection issues
- helping to develop a competent health protection workforce through education and training
- improving the knowledge base for health protection through research and development.

HPS' focus is on the deployment of evidence-based interventions to deal with ongoing or acute challenges to health from communicable diseases or environmental hazards. It is the operational arm of the national health protection response, working with the health protection community locally to ensure their effectiveness.

HPS' functions are:

- monitoring hazards and exposures affecting the people of Scotland and the impact they have on their health
- co-ordinating national health protection activity
- facilitating effective responses to outbreaks and incidents
- supporting the development of good professional practice in health protection
- monitoring the quality and effectiveness of health protection services
- developing and implementing research and development into health protection priorities
- providing expert impartial advice on health protection
- promoting the development of a competent and confident workforce in health protection
- commissioning national reference laboratories.

HPS aims to create a modern, stronger and more coherent set of health protection arrangements in Scotland. The service complements local resources and builds on the public health assets Scotland already has. In this way, the people of Scotland will be better protected from new and current threats to their health.

Remit of NHS Boards

Currently, there is no formal statement of NHS Boards' health protection remit. In the coming months, based on discussions about the quality assurance of NHS Boards' activities in this area, the following remit is proposed.

Appendix 2 - continued

‘To protect the population from hazards which endanger their health by preventing, controlling or reducing exposure to these and limiting damage to health when such exposures occur by jointly working with their partners, especially local authorities:

- monitoring, detecting and responding to infectious and environmental hazards, significant exposures to them and their subsequent impact on health
- ensuring activities related to the above contribute maximally to improving the public health, especially by preventing and managing the risks to local communities
- responding to public anxiety and meeting expectations about the contribution of the health protection community by informing it about such risks and by maintaining an effective dialogue and communication with the public and their representatives
- ensuring local agencies play a full part in Scottish, UK and international health protection arrangements, especially when managing incidents and outbreaks
- striving to continuously improve the efficiency and effectiveness of policy, service delivery and professional practice involved in health protection.’

Quality assurance of health protection activity

A prime consideration in establishing HPS was to ensure greater consistency and cohesion in the delivery of health protection services (especially in the NHS) across Scotland. As such, part of HPS’ remit is to monitor the quality and effectiveness of NHS organisations’ health protection systems. This will entail the development of quality assurance programmes for these systems with reports being submitted to individual NHS Boards and to the Chief Medical Officer via the Health Protection Advisory Group. A Working Group is currently defining how the programme will be developed and introduced.

Appendix 3

Editorial group

Professor Mary Henry OBE	Nurse Director, Health Protection Scotland (HPS Lead)
Liz Gillies OBE	Director of Healthcare Associated Infection Education Initiatives, NHS Education for Scotland (NES Lead)
Dr Martin Donaghy	Medical Director, Health Protection Scotland
Professor George Morris	Senior Scientific Adviser, Scottish Executive Health Department
Ruth Robertson	Adviser in Environmental Health, Health Protection Scotland (Project Lead)
External consultant:	
Alex Mathieson	Freelance Writer and Editor, Edinburgh

Appendix 4

Education and Training Needs Analysis (NES 2003)

The aim of education and training needs analysis (ETNA) is to identify the education and training needs of the organisation and individuals through a process of consultation with staff, service users and others. This creates the opportunity to design an ongoing education and training programme that is systematic, affordable and appropriate to the needs of service users, the organisation and the workforce.

Carrying out this kind of exercise requires fairly sophisticated skills, and specialist expertise may need to be tapped from within and outwith the organisation. The exercise will nevertheless provide important information from the front-line of services on the education and training issues staff and service users most value.

There are many different ways to conduct an ETNA, but most methods tend to reflect six key elements.

1. Consultation

Managers, supervisors, workers, service users and the public will need to feel their views on the design, delivery and evaluation of education and training activity have been properly canvassed and taken into account. Consultation can take many forms – focus groups, questionnaires and face-to-face interviews, for example. But it is wise not to over-estimate how wide the consultation process can be; smaller units may be able to seek views from all staff and some service users, but representative samples may have to be identified for larger organisations.

2. Information analysis

Reliable and valid means of sifting information from consultations are needed to arrive at logical conclusions for action. Some data collection tools (such as 'tick box' questionnaires) will need only fundamental arithmetical skills, but more complex methods (such as semi-structured interviews) will require sophisticated analysis. There are well-tested qualitative data analysis software packages available for purchase that allow analysis of interview and questionnaire information. Examples include Formic (www.formic.co.uk), Q-Nudist and Atlas/ti (www.socresonline.org.uk/3/3/4.html)

3. Feeding back to interested parties

When the information has been gathered and analysed, it is important that conclusions are fed back to the participants to check for accuracy. All of the organisation's communication systems – staff meetings, education seminars, newsletters, memos, intranet and team briefings, for instance – can be used for this purpose. Allowance should also be made for time for people to respond to ideas.

4. Setting an action plan

Having achieved general agreement that the analysis has identified education and training needs that will help to improve services and assist the organisation to meet its goals, a course of action can be planned. Key people within and outwith the organisation can be identified to assist. Managers, supervisors, workforce representatives, trade union officials, health and safety officials, risk management personnel, human resources staff and finance managers, service users, members of the public, education institutions and accrediting bodies are examples of the kinds of expertise that can be accessed to inform the process.

5. Dissemination and consultation

The action plan will be more suited to the needs of the organisation, the workforce and service users if it has their endorsement. A further period of consultation in which the action plan is disseminated to representative individuals for analysis and comment will help to ensure that the final version of the plan is truly fit for purpose.

6. Delivery and evaluation

The plan can then be put into action and the resultant education and training programme (and individual activities within it) evaluated. Further activity to match education needs to service-user and organisation needs can be launched periodically, beginning with the process of 'consultation'.

Appendix 5

Agenda for Change Knowledge and Skills Framework

Agenda for Change, the new NHS pay and conditions framework, was introduced to the NHS across the UK on 1 December 2004. It represents the biggest review of pay and conditions for all staff (excluding doctors and dentists) since the NHS' inception.

The new system introduces the Knowledge and Skills Framework (KSF) as the foundation for describing and redesigning future roles in nursing, midwifery and other professions. The focus within the KSF is very much on the individual practitioner and his or her knowledge, skills and development potential.

It is crucial that the Workforce Education Development Framework reflects and complements the framework Agenda for Change and the KSF present. Together, KSF post outlines⁵ and pay gateways⁶, the annual review and personal development planning mechanisms within the NHS and the Workforce Education Development Framework provide the foundation for career progression and professional development for all affected staff.

⁵ The KSF post outlines describe the skills and knowledge practitioners require to undertake defined roles. They help practitioners identify development needs and provide guidance on appropriate pay bands for individual jobs.

⁶ Nine pay bands are described in the pay gateways, each with three parts consisting of a series of progressive steps.

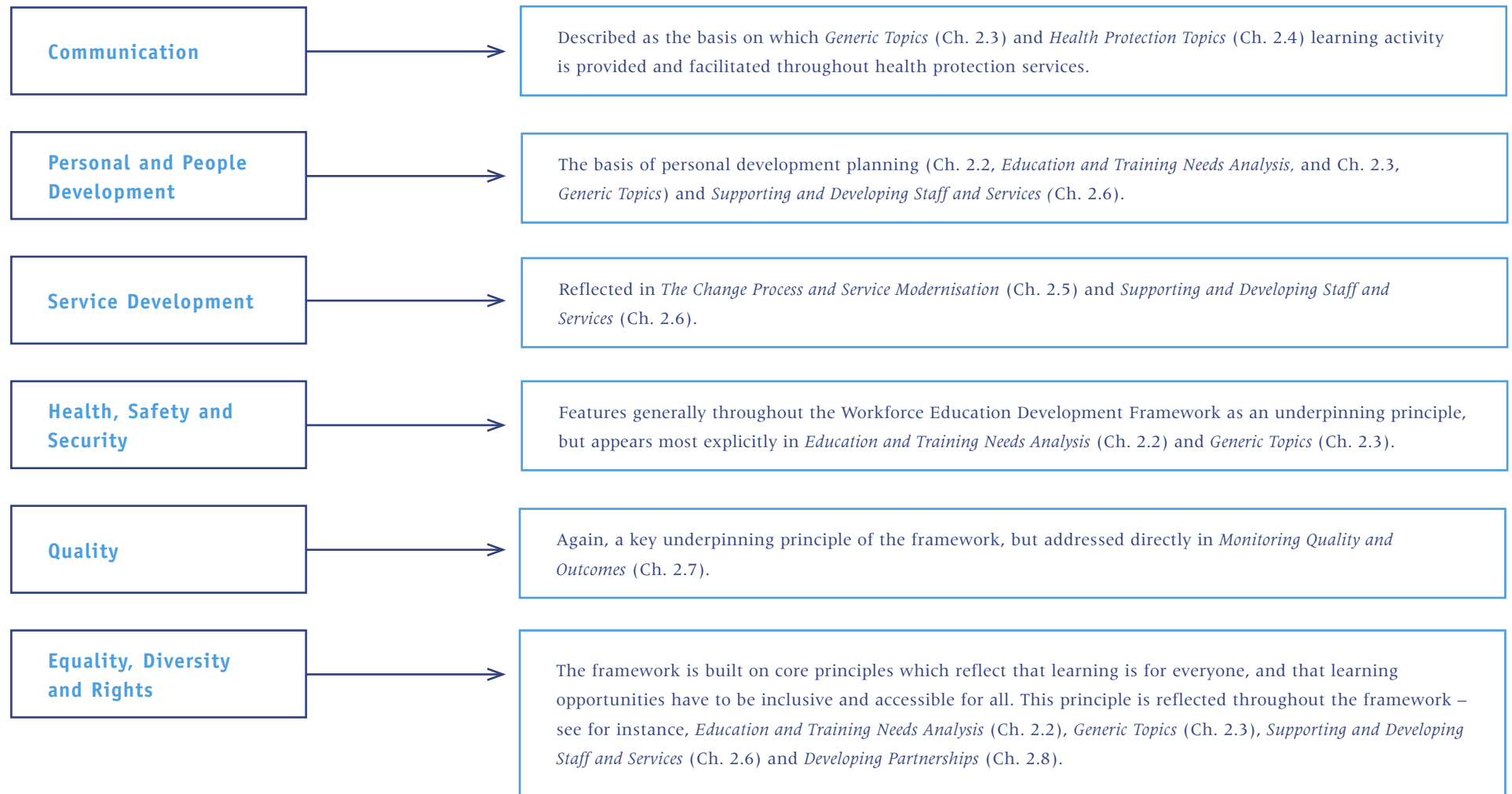
Linking Agenda for Change and the Workforce Education Development Framework

Agenda for Change and the KSF are based on six 'core dimensions':

- communication
- personal and people development
- service development
- health, safety and security
- quality
- equality, diversity and rights.

Figure A5.1 shows how each of these dimensions is reflected within the Workforce Education Development Framework.

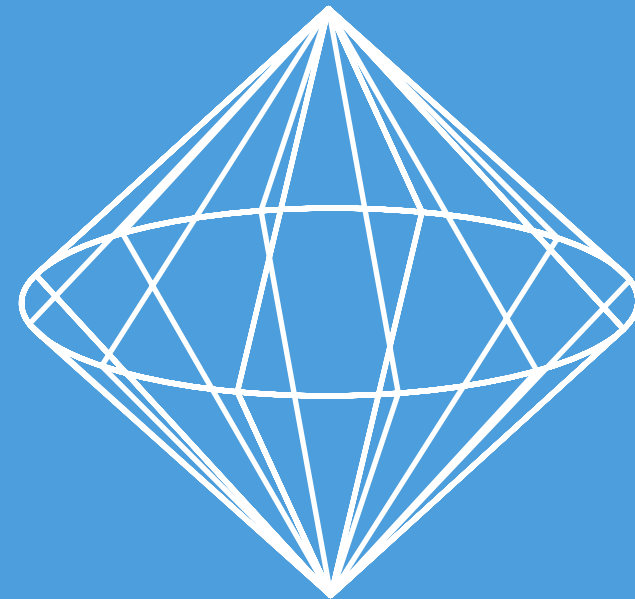
Figure A5.1 Agenda for Change core dimensions and the Workforce Education Development Framework



Notes

The background is a complex, abstract composition of various blue tones. It features a grid of vertical and horizontal bands, some with fine halftone patterns. Overlaid on this are several large, semi-transparent circular and oval shapes, some with dashed outlines. A faint, white line-art figure of a person is visible in the center-right, appearing to be in a dynamic pose. The overall aesthetic is technical and futuristic.

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