Faculty of Public Health

of the Royal Colleges of Physicians of the United Kingdom

Working to improve the public's health

Public Health Training Curriculum 2007

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PUBLIC HEALTH
Curriculum Guide

The curriculum consists of the following sections:

The entering public health page gives details of the requirements for entry to the run-through Public Health Specialty Training programme.

The curriculum statement defines the curriculum and its purpose.

The training pathway which outlines schematically the expected path through training for a normally progressing Specialty Registrar.

The Programme Delivery page describes the delivery of the public health training programme, educational method, learning experiences, induction, supervision and remediation.

The three dimensional model of learning which links the learning outcomes with the knowledge base, *Good Public Health Practice*, learning settings and phases of training.

The glossary lists words which may be unfamiliar together with their definitions/explanations.

The knowledge syllabus details all knowledge requirements which are assessed in the Part A examination for the Membership of the Faculty of Public Health (MFPH). Knowledge requirements are mapped to learning outcomes.

The learning outcomes framework presents all the core learning outcomes, categorised as follows:

General guidance to the use of the framework.
Ethical management of self and professionalism.

Nine key areas of public health practice including:

- 186 Learning Outcomes (18 ethical management of self; **121 core**; 46 trainee selected) grouped by key area and linked to
- the target phase of training for achievement
- the Knowledge Skills Framework (for trainees from disciplines other than medicine),
- suitable assessment methods
- knowledge base
- links to other key areas

Good Public Health Practice which maps *Good Public Health Practice* to learning outcomes.

Knowledge and Skills Framework Levels lists the core and specific dimensions which apply to other graduate trainees.

The Assessments page blueprints each learning outcome to assessment methods and describes assessment methods in detail with examples. It allows access to the relevant documentation including examination guide to the Parts A & B MFPH with sample questions, guidance to the development of a public health portfolio, workplace-based assessment forms and Annual Review of Competence Progression (ARCP).

The Log of changes lists all changes made to this document since 1 January 2007.

Entry to public health training

This short guide is written for those thinking of applying for a Public Health Specialty Training Programme. Public Health Specialty Training is multi-disciplinary and applications are welcomed from both doctors and graduates from other backgrounds.

What is Public Health?

Public health is concerned with the health of a population rather than individuals. It has been defined as 'the science and art of preventing disease, prolonging life and promoting, protecting and improving health through the organised efforts of society.' It is about promoting well-being, not just dealing with illness, and looks at the impact on health of social, economic, political and environmental factors as well as individual behaviour.

Public Health as a career

Public health is a great career for those who have a passion for improving health and reducing inequalities in health. Public health specialists work across organisations, particularly with local NHS organisations, local authorities and local communities, and in a variety of settings, from acute hospital trusts, and local health organisations, through to local authorities and the voluntary sector, on issues which affect health and well-being. Some examples of recent priorities for public health work include reducing smoking rates and protecting people from environmental tobacco smoke, looking at ways of reducing obesity, looking at ways to reduce alcohol consumption and new ways of delivering elderly care. This sort of work often has long timescales and results can take years to achieve but can have a lasting impact on improving health and tackling the causes of ill-health.

Application: timing

Entry into training may take one of several routes:

1. Most trainees will enter public health specialty training directly from completion of Foundation Programmes (or equivalent). Some of these may have spent four months in a public health Foundation year 2 slot but this is not a prerequisite. Entrants from disciplines other than medicine enter after a minimum of three years post graduate/post registration experience in service work in a health related field.
2. Trainees may apply to enter after a variable period in another training programme/career. Trainees may have changed their career plans or have spent time in a fixed term post having been unable to enter specialty training on first application. Transferable competence will be assessed on entry. This route applies only to medical graduates.
3. Some trainees may enter public health specialty training having spent some time in career posts which are not formally recognised for training. This route applies to medical and other graduates. Minimum eligibility criteria still apply. Transferable competence will be assessed on entry. Trainees entering through routes 2 & 3 will be required to fulfil the full elements for CCT but will have their equivalent competence assessed against the learning outcomes framework on an *ad personam* basis. This assessment may reduce the time estimated for completion of training if evidence can be provided for prior satisfactory achievement of learning outcomes.

Application: process

Guidance for application will be available through the MMC website www.mmc.nhs.uk deaneries and also from the Faculty of Public Health website www.fph.org.uk

Application: eligibility

<table>
<tr><th>Medical graduates</th><th>Other graduates</th></tr>
<tr><td>• Full GMC registration
• Completion of an F2 programme or equivalent</td><td>• A good first degree in a relevant discipline (equivalent to a 2:1 or above or a relevant higher degree or health related registration)
• At least three years post degree experience in a relevant setting</td></tr>
<tr><th colspan="2">For all applicants</th></tr>
<tr><td colspan="2">• Basic understanding of public health
• Awareness of the determinants of health/interest in reducing health inequality
• Commitment to public health principles
• Leadership, resilience and influencing skills
• Strategic outlook and vision
• Interest in the evidence base
• Good communication skills – listening, verbal, presentational and written
• Fluency in spoken and written English
• Non hierarchical and collaborative working style
• Significant numeracy and IT skills
• Desire to keep learning
• Self-motivation
• Professional integrity</td></tr>
</table>

Application: selection

Applicants will be shortlisted by a panel which includes lay representation and public health specialists. Shortlisting will be against the criteria stated in the person specification. Multi deanery assessment centres, with representation from participating programmes, will select candidates using a combination of validated numeracy and communication tests and a number of small panel based assessments.

More information

For more information about working in public health see also:

1 Pencheon D. Will you blossom in public health medicine? BMJ 1997;314:2

2 Gibbs S and Thalange N. Public health is good for you. BMJ 1999;319:2

3 Duff CH, Pencheon D, Thalange N, Kay L. The Anglia Public Health Fellowship – an innovative training opportunity. Arch Dis Child 2000;83:0-1.

4 Morris M, Bullock A, Cooper R, Field S & Thomas H. The role of basic specialist training in public health medicine in promoting understanding of public health for future GPs – evaluation of a pilot programme. Journal of Education for Primary Care (2001);12:430-6.

5 www.fph.org.uk

Curriculum statement

Curriculum coverage

The curriculum for specialty training in Public Health provides guidance for trainees, trainers and those considering entering the specialty. The curriculum describes all required components of training to lead to a certificate of completion of training (CCT) in public health; medical trainees (trainees with a background in medicine) will lead to a CCT in Public Health Medicine and normally lasts a period of five years. The Public Health Curriculum document supports a number of outcomes and may be accessed by a wide range of Public Health professionals. This document has been approved by PMETB for Public Health training that leads to a CCT in Public Health Medicine for medical trainees.

The curriculum provides a framework within which trainees and trainers can determine and understand the knowledge, skills, attitudes and behaviours which will allow a trainee to achieve the level of competence required of a specialist in the field. It has been future proofed by adhering to enduring principles of the practice of public health rather than the detail of the current system within which health and health care is delivered. The curriculum as developed should therefore be relevant through structural reorganisation and in different systems/cultures/countries.

The curriculum defines and describes the processes (recruitment, induction, assessment and remediation), phases of training, settings, learning methods and outcomes. Learning outcomes are divided into core (those which every trainee must have to gain a CCT) and trainee selected (these areas of optional special interest are available in addition to the core and allow development of special interest either in a particular area of public health practice or in a particular setting).

The curriculum covers the following broad competency areas:

- Knowledge requirements to underpin specialist public health practice.
- Principles of ethical and professional practice through *Good Public Health Practice*.*
- Curriculum core requirements described in nine key areas of public health practice.
  - Surveillance and assessment of the population's health and well-being.
  - Assessing the evidence of effectiveness of health and healthcare interventions, programmes and services.
  - Policy and strategy development and implementation.
  - Strategic leadership and collaborative working for health.
  - Health Improvement.
  - Health Protection.
  - Health and Social Service Quality.
  - Public Health Intelligence.
  - Academic Public Health.

The nine key areas relate to the three domains of public health practice (health protection, health improvement and service quality) and are derived from a description of what a consultant in public health is able to do, in what setting and how they deliver their service.

A consultant in public health in the UK

- is able to assess, measure, describe, promote and protect the health of a population, plan and evaluate health services in support of commissioning (or other methods of allocating resources), critically appraise evidence of effectiveness and develop and implement health policy in collaboration with health partners and other agencies;
- has a sound understanding of the sciences of epidemiology, statistics, health economics, social science, management studies, ethics and law;
- is competent in a range of academic, research, analytic, management, leadership, collaborative and strategic skills;
- communicates effectively with other individuals and agencies whose actions impact on the health of the population and has responsibilities for teaching in the field;
- is aware of their advocacy and influencing role within the wider family of health and health care services and practises with appropriate levels of judgement and confidentiality;
- is aware of their limitations in terms of knowledge, experience and skills and always practises

within these limits;

- has commitment to continuing personal and professional development and demonstrates reflective practice.

∗ *http://www.fph.org.uk/prof_standards/downloads/appraisals/B_GPHP.pdf*

Curriculum development

The content of the curriculum was developed from existing well established competency frameworks which have been in use by the Faculty of Public Health for many years and have guided our development of the RITA framework since 1998 and our Article 14 assessments. We have been supported by significant work for the UK Voluntary Register for Public Health Specialists and the Knowledge and Skills Framework under Agenda for Change, all of which work contributes to the wider view of public health specialist competence.

The curriculum was agreed through various committees of the Faculty of Public Health and approved by the Board. There has been wide representation of experienced practising public health consultants from many different areas of public health practice, senior public health specialists and representation from the trainee members. Our lead Dean and lay members have been involved throughout.

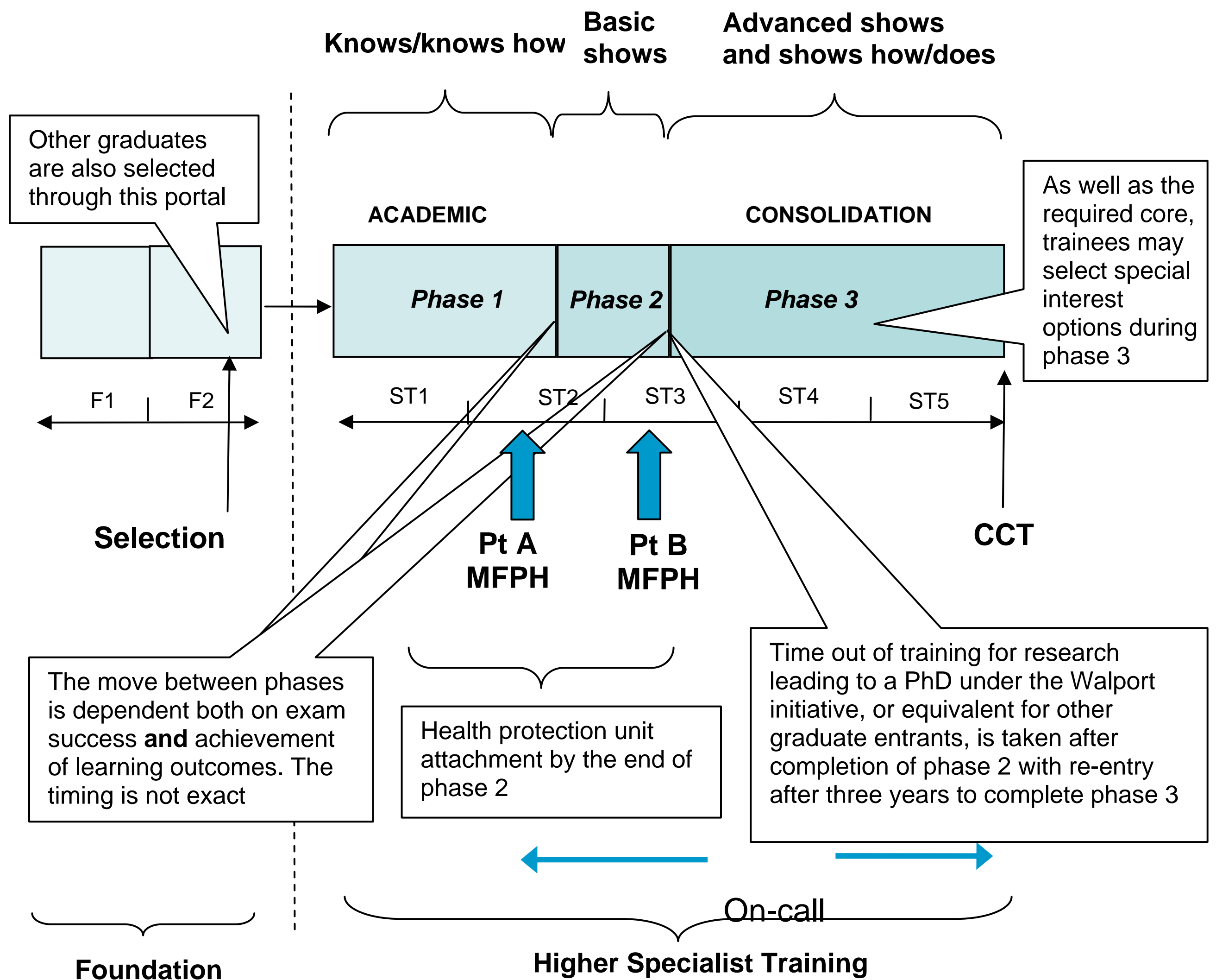
Responsibility for the curriculum development lies with the Academic Registrar, accountable through the Curriculum Committee to the Standards Committee of the Faculty of Public Health. The membership was widely consulted during development. The curriculum has been endorsed by CoPMED and by representatives of employers of public health specialists.

Equality and Diversity

The Faculty of Public Health will actively promote, and ensure compliance with, the requirements of relevant legislation, such as the: Human Rights Act 1998; Race Relations (Amendment) Act 2000; Disability Discrimination Act 1995, DDA 2005, Equality Act 2006 Special Educational Needs and Disabilities Act 2001; Data Protection Acts 1984 and 1998 and Gender Equality Duty (GED) 2007.

The Faculty of Public Health believes that equality of opportunity is fundamental to the many and varied ways in which individuals become involved with the Faculty; as members of staff and Officers; as advisers to and members of the Faculty's committees; as doctors/other graduates in training and as examination candidates. Accordingly, it warmly welcomes contributors and applicants from as diverse a population as possible, and actively seeks to recruit people to all its activities regardless of race, religion, ethnic origin, disability, age, gender or sexual orientation.

In addition the Faculty of Public Health believes that equality and diversity issues must underpin the core competency areas for the curriculum statement in order to ensure quality public services.



- ST1 – ST5 refer to the years of training after Foundation, Training is continuous across the five years. (indicative)
- Entry into specialty training for medical graduates is normally straight from Foundation. Medical graduates may also be able to apply for competitive entry from fixed term specialty training posts and from career posts. Successful applicants from these routes will be assessed on an *ad personam* basis for transferable competence but will be required to pass both parts of the MFPH before adjustment of the training pathway. If successful, entry will be considered to have been at ST2 or ST3 as appropriate.
- Entry into specialty training for other graduates requires a good (2:1 or above) first degree or other professional health qualification or a higher degree in a subject relevant to public health plus a minimum of three years post first degree health related and relevant work experience. Individuals will be assessed for transferable competence.
- Other graduates may apply for entry into specialty training through the same portal as medical applicants. There is no national quota applied to either group.
- Entry for an individual from either group with Part A MFPH will lead to a reduction in training time.
- Entry from either group who has completed an appropriate postgraduate degree in Public Health will lead to a reduction in training time provided the appropriate competencies in Phase 1 can be evidenced.

- Most trainees undertake a course of formal academic study leading to Pt A MFPH. The course may be taken over one or two years. Part A may be taken at any time during phase 1.
- Some trainees may apply successfully for time during phase 3 to undertake a PhD (outside the Walport initiative). Two years of this may count towards a CCT provided all core competencies are also met.
- Time out of training, for example to gain experience abroad, may be granted at the discretion of the local Dean. Experience abroad during training can be counted towards training provided that it is part of an approved programme, is supervised and has prospective PMETB approval.

Programme Delivery

This section describes in detail the delivery of public health specialty training and describes the phases of training, the gateways between phases including examinations and the opportunity to develop special interests in areas of practice or settings for public health delivery[6].

Programme delivery is considered in ten sections

General information
Curriculum design
Model of learning
Knowledge
Recommended learning experiences
Educational strategies
Supervision
Feedback
Assessment
Remediation

General information

The curriculum builds on learning from both the undergraduate public health curriculum and generic competencies from the Foundation Programme curriculum, or from other experience in the case of Specialty Registrars from backgrounds other than medicine. The curriculum is designed so that the trainee gains orientation into public health on first recruitment, with early induction in settings in which public health is practised, then moves into academic study leading to satisfactory completion of the core knowledge/knows how requirements of the curriculum. During this phase, alongside academic study, simple service work allows the trainee to put knowledge into supervised simple practice in clearly defined areas using basic skills which are assessed in the workplace.

This knowledge and basic skills base is used as the platform from which the trainee enters the next stage of training during which generic communication, media training and health protection training[7], combined with further graded service work using core knowledge, leads to a second stage exam of practical show how skills in an OSCE format and further skills assessed in the workplace.

This skills platform allows the trainee to move into the final phase of training where skills are further developed and consolidated. There are opportunities for focussed optional special interests to develop in key areas and particular settings with specified learning outcomes. This opportunity for either consolidating core competency in generalist settings or developing skills in defined settings will reflect the broad profile of consultant level public health practice and ensure availability of an appropriately trained workforce.

Public health specialty training normally lasts five years. The training covers nine key areas of public health practice in the three domains of the public health and aspects of professionalism.

The nine key areas are: health assessment and surveillance; assessment of evidence of effectiveness; policy and strategy development; leadership and collaborative working; health improvement; health protection; health and social service quality; health intelligence; academic public health. The three main domains of public health are: health protection; health improvement and service quality.

[6] There are significant variations in the organisation of public health and health protection services across the countries of the UK and the DMS and the health context is determined through the devolved administration. It is recognised that interpretation of the curriculum will be required for implementation in each UK country.
[7] Health protection training may be undertaken at any stage in the first two phases.

On award of a CCT in public health (Medicine) the curriculum will have prepared the newly accredited trainee, once appointed as a consultant, to continue in reflective professional development, to engage with appraisal and revalidation with regular review of their own learning needs in the light of *Good Public Health Practice* (a direct adaptation of the GMC guidance *Good Medical Practice* used by public health specialists for appraisal and revalidation) and their personal goals for future consultant level practice.

Curriculum design

The curriculum is designed to ensure that trainees awarded a CCT have achieved all core learning outcomes defined in the learning outcomes framework. Learning outcomes are designed to allow the trainee to gain competence in all areas of practice expected of a newly qualified consultant in public health. A public health consultant should be able to:

* Quantitatively and qualitatively assess the population's health and health needs, including managing, analysing, interpreting, and communicating information that relates to the determinants and status of health and well-being and allows development of effective action.
* Critically assess the evidence relating to the effectiveness of health and healthcare interventions, programmes and services, apply this to practice and improve services and interventions through audit and evaluation.
* Influence the development of policies, implement strategies to put the policies into effect and assess the impact of policies on health.
* Lead teams and individuals, build alliances, develop capacity and capability, work in partnership with other practitioners and agencies and effectively use the media to improve health and well-being.
* Promote the health of populations by influencing lifestyle and socio-economic, physical and cultural environment through methods of health promotion, including health education, directed towards populations, communities and individuals.
* Protect the public's health from communicable and environmental hazards by application of a range of methods including hazard identification, risk assessment and the promotion and implementation of appropriate interventions.
* Support commissioning, clinical governance, quality improvement, patient safety, equity of service provision and prioritisation of health and social care services.
* Collect, generate, synthesise, appraise, analyse, interpret and communicate intelligence that measures the health status, risks, needs and health outcomes of defined populations.
* Teach and research in public health.

Further than this, the curriculum recognises that some trainees will wish to focus their competence development beyond the core either by taking their competence within a key area (or areas) a stage further (through optional special interest learning outcomes) or by refining their generalist skills within specific specialist settings. This reflects the broad church of public health practice which requires a working knowledge and practice of core competence but also requires consultants to practice in a wide range of settings, both in terms of organisation type and work focus which require specific and particular knowledge and skills. However, the curriculum is predicated on the basis that most public health practice is delivered in core NHS organisations, currently Primary Care Trusts in England/Health Boards in Scotland/Health and Social Services Boards in Northern Ireland/National Public Health Service (NPHS) in Wales and the regional/national tier of the NHS/DH, and the core learning outcomes are designed to ensure the delivery of an effective consultant workforce for these settings. Trainees will develop a working understanding of the delivery of healthcare in general practice, primary care, the acute hospital, he community and in partnership with other agencies.

The broad areas within which competence may be taken beyond the core through focussed learning are:

* Health protection.
* Health improvement.
* Health and social service quality.
* Public health information and intelligence.
* Academic public health.

The curriculum identifies these optional special interest learning outcomes. This focussed training can only be addressed in phase 3. The curriculum also recognises that some learning goals for highly specialised practice and experience in very specialist settings may need to be fulfilled through professional development beyond CCT.

The curriculum is also mapped against the Knowledge and Skills Framework competency domains. The NHS Knowledge and Skills Framework (KSF) lies at the heart of the career and pay progression strand of Agenda for Change. The NHS KSF is a developmental system that defines and describes knowledge and skills for NHS staff. It provides a single, consistent, comprehensive and explicit framework for review and development for all staff from a background other than medicine. Specialist public health training is open to both medical and other graduate entrants.

Model of learning

Introduction

The curriculum has been developed around a model of three phases of learning. These phases reflect an early induction and basic grounding in public health; acquisition of the knowledge base; basic skills training; consolidation of core advanced skills and an option for trainee selected components which will allow development of defined interest or practice within a specified setting. The curriculum has been designed to allow the trainee a graded or spiral progression through competency acquisition with increasing levels of complexity and responsibility, leading to an ability to integrate competencies across work areas to demonstrate complex consultant level practice. Passage between phases is dependent on success both in examinations and in satisfactory workplace based assessment.

The learning outcomes framework clearly identifies target phases of training for each learning outcome, its knowledge base, links to the KSF, related curriculum areas and assessment method.

Phases of learning

The three phases of learning are not defined by time but by successful acquisition of learning outcomes defined for each phase. Learning outcomes are linked to a target phase of training; this is the latest phase by the end of which the competency should be evidenced. This does not preclude early achievement.

Phase 1 combines early induction to training and introduction to basic core public health skills with acquisition of knowledge. The induction will include workplace and human resources policies and practice. Trainees may attend courses of academic study (or engage in self directed learning and other focussed courses) which will run across one or two years. Academic courses combine face to face teaching with self directed learning and this is complemented by workplace-based experiential learning, putting into practice early knowledge. This phase is assessed through examination (Part A MFPH), a two part examination testing knowledge through short answer questions and knows how through critical appraisal and a practical written exercise of a real public health problem.

During this phase trainees will also be assessed on small pieces of work using their developing academic base through reflective summaries and production of formal written documents for real life use (e.g. letters, reports, data analyses etc). Work based discussion and an adaptation of the mini clinical exercise will be used to assess analytic and data handling skills. Passage from phase 1 to phase 2 requires a pass at the examination for Part A MFPH **and** a satisfactory assessment in phase 1 learning outcomes in the workplace.

Phase 2 sees trainees begin to develop further their basic practical competence, typically through clearly defined service work which uses their knowledge base and applies this in increasingly complex practical settings. In this phase trainees will be expected to take the lead for simple areas of work and develop their skills of presentation and debate. During phases one or two trainees will spend three months (wte) on an attachment to a health protection unit or in health protection work and, when assessed as competent, will start out of hours duties. Out of hours experience does not begin until the knowledge base is secured, as evidenced through a pass at Part A MFPH and satisfactory local workplace based assessment of knowledge of on call procedures.

This phase of the programme is mainly delivered through work place based experiential learning assessed through presentation of written work and reflective log books; by direct observation and work based discussion with the trainer; through direct feedback from colleagues and by formal assessment of competence to be on-call. The end of this phase is completed after a satisfactory performance at the Part B MFPH **and** satisfactory assessment of phase 2 learning outcomes in the workplace.

Phase 3 allows the trainee to consolidate core skills in the practice of public health and to develop specific interests which will enhance career opportunity. This phase is again covered mainly by experiential learning with new advanced theoretical knowledge covered by formal courses and conferences, mainly at a national level (e.g. advanced critical appraisal skills, specialist health protection skills). Trainees are encouraged to use their study leave allowances to support their educational and career objectives.

This phase allows those trainees progressing well in training to select optional special interest learning outcomes to add to their core competence. These options will have been planned during phase two and through regular discussions between trainer, trainee and programme director. Some trainees will choose to remain within a generalist public health setting and consolidate their core skills. Some will wish to develop a defined interest which may require concurrent extended experience in a specific key area (e.g. health protection, health improvement etc) or may choose to consolidate and extend experience of general core public health within a defined placement setting (e.g. public health genetics). Phase 3 learning outcomes can be developed in these defined fields/settings. These trainee selected components will allow an individual to develop specific competence for defined practice or promote their generalist skills within specific settings (either a core NHS organisation or highly specialist location) thus enhancing their particular career aims.

Time out of programme, for example for Walport (or equivalent) academic training or relevant experience abroad, may be possible. This phase is assessed through multiple source feedback, work based discussion, direct observation of practice and the trainee's portfolio of work.

Knowledge

Public health skills are built on a knowledge base which is detailed in the MFPH Part A syllabus, including:

- Basic and clinical sciences including research method, epidemiological and statistical method, health needs assessment and evaluative technique.
- Disease causation and prevention including health promotion, screening, communicable disease and environmental hazard control and social politics.
- Organisation and delivery of health care including health intelligence.
- Knowledge of the law as it affects the population's health.
- Leadership and management skills including change management and health economics.

This knowledge base has been mapped to the nine key areas of public health practice and every learning outcome has a clearly identified knowledge base (other than those which define attitudes and behaviours).

Trainees may attend a formal academic course (generally leading to a Masters) or prepare for the examination under their own direction (including self directed study, programme led study groups, programme organised study courses, top up modules and exam familiarisation courses). A Masters is not a pre-requisite for a CCT in public health (Medicine). Academic courses generally run to university timetables and start in September/October of each year. The Part A MFPH is held twice yearly, in January and June. Trainees would normally be expected to sit this examination at the earliest opportunity depending on the length of their academic course.

Recommended learning experiences

Public health training programmes are delivered on a deanery or multi deanery basis. The delivery of training is overseen by a Training Programme Director. Each programme has a range of approved posts at Primary Care Trust/Health Board level into which new recruits will normally be placed during the first two stages of training. These posts are similar across the UK (although the terminology may be different).

All programmes also hold a number of specialist posts which are similar between programmes (e.g. health protection, academic public health, Department of Health/NHS regional tier[8], Public Health Observatory etc) which will allow trainees to develop special interests in defined settings. Several programmes also hold a number of 'national treasure' posts which are available by negotiation and/or competitive allocation during the final phase of training. These posts include highly specialist public health functions such as NICE, public health genetics units, central DH, other Government departments etc.

The Faculty of Public Health recognises that most consultants will work in a PCT/Health Board and therefore the majority of training and provision of key learning experience is in this setting. Some consultants practice public health in highly specialised areas, the greater proportion of who work in the Health Protection Agency. Trainees expressing interest in developing special interests and who move onto this path of Stage 3 training will be able to achieve additional learning outcomes in certain areas of the curriculum through trainee selected special interest options and experience specialist settings while also consolidating their more advanced core competence.

Whether trainees choose to develop focussed interests or not, all trainees are required to gain experience in at least two different training locations, in addition to health protection experience, in order to be exposed to a wide range of organisational cultures and public health issues. Recommended learning experiences in terms of potential vehicles and settings for demonstration of competence are included with each learning outcomes framework for the nine key areas of public health.

Public health settings

The majority of trainees will be placed initially in primary care trusts/health boards which will allow early exposure to routine public health practice. Trainees enrolled on an academic course are encouraged to integrate their knowledge of theory and practice of public health in the context of public health practice in their training location. During phase 1 or 2 the trainee will undertake a three-month attachment (or equivalent period) to a health protection unit or consultant in communicable disease control, where they are expected to acquire many of the public health skills to deal with health protection issues.

Trainees will discuss possible and suitable subsequent placements with their training programme director and deanery Specialty Training Committee to agree the placements that best meet with identified educational needs and career aspirations.

During Phase 2 and Phase 3, trainees will have the opportunity to undertake training in a variety of settings. This is intended to give them an opportunity to experience the breadth of public health practice. There will also be opportunities for concentrated practice in specialist areas of public health practice. Such concentrated practice could be undertaken in a variety of local and regional settings, including: strategic health authorities, local authorities, regional government offices, public health observatories, health protection agency, and academic institutions. Where appropriate trainees may gain experience outside the deanery programme in settings such as: Department of Health, Office of National Statistics, Health Protection Agency Centres, King's Fund, and National Institute of Health and Clinical Excellence. For trainees intending a career in international public health, training may be possible with WHO or other agencies abroad.

[8] Terminology varies between countries of the UK

The following sections detail the various models of learning available to trainees.

Learning from practice

From early stages of training, trainees undertake guided and supported service work with regular feedback on specific learning outcomes. Trainees, with their educational supervisor[9], develop an educational plan through which they identify specific outcomes to achieve, develop, negotiate and agree work in support of this. Trainees are given exam preparation practice in groups and individually.

Trainees spend the majority of their time in experiential work based learning through delivery of service work closely supervised by their supervisor. Initially this work is focussed around the needs of the population served by a PCT/Health Board. Trainees will apply their academic knowledge to public health problems of increasing levels of complexity and weight working both in an analytical capacity, formulating solutions and presenting results. The trainee will shadow their supervisor or other practitioner, providing elements of the overall task. With increasing responsibilities and independence, the trainee will take the lead for an area of work, ultimately integrating competencies to deliver consultant level practice

Concentrated practice

Some learning outcomes are best achieved or consolidated through periods of more focussed, repeated and directed practice which may be possible at any point during training and either in the service setting or by special arrangement.

The training programme director and deanery STCs determine training placements. Initially these will normally be in a primary care trust/health board and subsequently will take account of educational need and career aims. The later years of training will allow concentrated practice during a period of consolidation and development of special interests; this may require experience outside the deanery programme. Concentrated practice is also available as a routine during all phases of training for specific elements e.g. sophisticated data handling and development of major public health emergency management skills. Concentrated practice is also available as a part of a remediation plan.

Learning with peers

Trainees are encouraged to learn with their peers and particularly in the first two stages of training, will generally be placed alongside other trainees. Regional postgraduate teaching opportunities will allow trainees at different phases of training to come together for group learning. Examination preparation for both parts of MFPH will encourage the formation of self-help groups and learning sets. Self directed trainee groups are also encouraged to meet and work together as a peer group to develop and practice specific skills such as critical appraisal, presentation, on call debrief etc. Learning sets may be facilitated by public health specialists and senior trainees.

[9] For definition of the term educational supervisor see Glossary. All trainees have an educational supervisor overseeing their training progress and may be attached for specific pieces of work to a project supervisor.

Learning in formal situations

Formal learning in phase 1 is generally delivered through university based academic courses. In subsequent phases of training there are regional and national opportunities to attend courses and conferences which meet educational needs. Supervisors and trainees meet regularly on a formal basis to assess progress. Training programmes also offer regional training events which cover elements of the curriculum best learned as a cohort to support service based work (e.g. media handing, safe on call, reflective writing etc) and for examination preparation at an appropriate stage in training. Some programmes combine across deaneries to provide courses for trainees at specific phases of training. Training programmes link to their local public health CPD programmes/postgraduate meetings which afford opportunities for trainees to present.

Personal study

Study leave allocation is managed in accordance with CoPMED principles. During all stages of training, trainees have opportunity for study leave which may be taken as self directed learning to support educational objectives/examination preparation or to attend formal courses in support of their stage in training, special interests and career aims.

Specific teacher inputs

Supervisors work in settings where, normally, there are other supervisors. While every trainee is allocated a specific educational supervisor, there will be support and input from other supervisors and more senior trainees in that location. Some supervisors have particular expertise and trainees may either request placements with these individuals or undertake work that links across to them. Some supervisors will be involved in delivery of regional training packages in more formal settings, both to deliver teaching and training in skills and in concepts. Named academic supervisors[10] provide an academic focus to all elements of the trainees' educational progress including support in examination preparation, maintaining an academic rigour for service work and in encouragement to publish and disseminate their work. Academic supervisors provide more detailed training support for those trainees pursuing specialist training in academic public health, in effect acting as day to day trainers for this group. All supervisors are accredited for their training role and fully conversant with the requirements of the curriculum and with assessment method.

Each programme has a representative amongst the body of national examiners for the OSPHE who are able to bring expertise in process and performance to their trainees. The pool of examiners for Part A MFPH is too small to allow this but programmes will have an individual identified to take the lead in supporting a group through this element of training.

Proportions of time spent in various learning methods

Time in independent self directed learning may be used for examination preparation; appraisal, feedback and reflection; maintenance of personal logbook; reading. Across the five years a trainee would expect to spend up to 150 days in off the job programme education or in independent self directed learning. The remaining time would be spent in experiential learning. However, during phase 1 a greater proportion of time is spent in academic study and programmes will vary in how this is distributed across the first stage of training. This period is taken in lieu of formal study leave. The remainder of the five years, apart from annual leave, is spent in work based experiential learning which incorporates learning from practice, concentrated practice and learning with peers.

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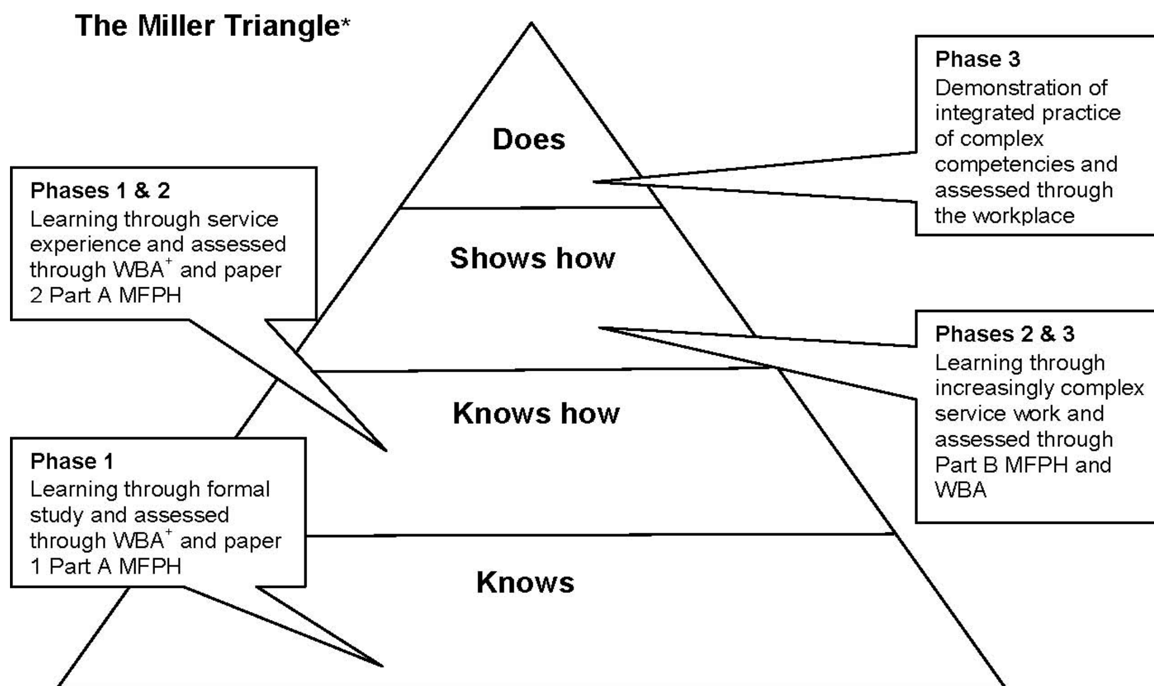
[10] For definition of the term academic supervisor please see Glossary

Educational strategies

The curriculum is designed to deliver staged achievement of learning outcomes through knows/knows how/shows how/does.

Core elements of what constitutes good public health practice have a strong focus in this curriculum, so that public health trainees will have an opportunity to demonstrate in actual service practice both the confidence and competence necessary to go on to develop increasing levels of expertise in their subsequent, more specialised professional practice.

Public health trainees are expected not only to know about good public health practice and show they can do it or apply it in a protected setting, but, over the length of the training programme, to undertake and actually do their daily work with required levels of knowledge and understanding and at increasing levels of complexity.



+ Workplace based assessment
* **Miller GE.** The assessment of clinical skills/competence/performance. *Acad Med* 1990;**65** (suppl):S63–67

Academic learning is mainly delivered through formal academic Masters level courses. Teaching/learning styles typically include didactic presentation of core knowledge, group based discussion and application of theory and self directed learning through peer led group work or individual study for written assignments.

Work based experiential learning is delivered through staged complexity of service work with regular feedback and opportunity for reflection. Mentoring support is given by an accredited educational supervisor, more experienced trainees or other senior public health professionals. All trainees have a learning contract, renewed on at least an annual basis and at every change of training location. Learning contracts encourage reflective practice through feedback on competence from multiple source feedback, observation of practical skills, discussions of work cases, mini case exercises and tutorials. Learning contracts also encourage reflective practice through trainee's ownership of their educational objectives, clear definition of their training needs and negotiation of experiences to meet these needs.

Supervision

The curriculum is designed to ensure graded learning and responsibility. All trainees have a designated educational supervisor. A project supervisor may take responsibility for supervising specific areas of work, overall responsibility remaining with the educational supervisor. Trainees will work with a level of supervision commensurate with their experience and level of competence. All trainees also have an academic supervisor who will support preparation for Part A MFPH, provide academic rigour for service work and encourage publication and dissemination of work. Educational supervisors are expected to meet regularly with their trainee to review the learning contract and current service work progress and learning. Regular three way meetings between trainee, academic and educational supervisors are encouraged. All supervisors are accredited appropriately for their level of supervision.

Immediate patient safety is a significant issue during the health protection element of training and out of hours work and indirectly in some specific areas of work such as development of patient pathways and services. Trainees are first on call out of hours from phase 2 and always supervised by a consultant second on call. Trainees are not allowed on call until they have fully passed the knowledge element of the curriculum (Part A MFPH), have passed a further specific knowledge test on emergency protocol and are training or have trained in a health protection unit.

Training placements will be required to comply with the European Working Time Directive and relevant health and safety at work standards. These will be assured through regular external quality assurance systems. Trainees will be expected to understand the limits of their own competence, in accordance with Good Public Health Practice, and to seek help when practising outside this.

Feedback

The curriculum expects that all supervisors and trainees understand and comply with the principle that regular and high quality assessment and feedback is essential for development of consultant level competence. Regular and timely feedback is an essential component of educational progress and development. The curriculum allows rich opportunity for the trainee to develop the ability to seek and act on feedback from a variety of sources. Trainees are also encouraged to self assess. This sets the foundation for compliance with Good Public Health Practice and subsequent revalidation.

Formative assessment and feedback takes place during the required regular service progress meetings between trainee and trainer which measures progress against agreed educational objectives and identifies further educational need and opportunity. Regular informal feedback is given by the trainer as tasks are delivered and formally at dedicated training feedback sessions. Trainees are encouraged to seek formative feedback on their public health practice from other colleagues both over specific pieces of work and more formally through 360 degree appraisal. The use of the portfolio templated summary sheet encourages a reflective approach, incorporating a section for trainer reflection, and requires discussion with the trainer before presentation as evidence to support signing off of competence in a particular area for the Annual Review of Competence Progression (ARCP).

Trainees will have an initial induction appraisal with their supervisor shortly after the start of any placement to identify and agree learning objectives. Progress towards these will be measured through a series of regular appraisals. Structured written feedback is an essential part of this process. At every change of placement an end of placement assessment will be followed by a three way handover – a meeting between the trainee and the old and new supervisor to discuss progress and further educational needs.

Trainees are encouraged to form study groups especially for preparation of the two examined components which are actively supported by supervisors and the Programme Director with opportunity for group and individual feedback.

Each phase of training has a clearly identified assessment blueprint which includes formal examination with work place based assessment and development of a portfolio log book of experience and reflection. Supervisors discuss their assessment of their trainee and formally offer their views on educational progress and further learning needs in their educational (service and academic) supervisors report at the ARCP.

Feedback in the form of examination mark breakdown is available from the Faculty of Public Health for trainees failing either part of the MFPH.

Evidence that feedback has been sought and responded to will form part of the annual ARCP, in accordance with the principle that reflective practice is a core element of consultant level competence.

Assessment

The full details of assessment method and the blueprint of assessment against learning outcomes can be found in the separate assessment section of the curriculum. This section briefly outlines the principles behind assessment in public health specialist training, lists the elements of assessment and describes the examinations for MFPH and the public health portfolio.

Assessment aims to determine progress towards a learning objective, identify learning experiences which will contribute towards achieving learning outcomes and confirm attainment of these outcomes. Learning outcomes should be assessed by more than one assessor at more than one time. Self assessment and reflective learning should be seen and developed as an integral part of professional life.

Elements of assessment

Knowledge (gained mainly in phase 1) is assessed through examination. Trainees demonstrate their application of knowledge in examination in phases 1 and 2 and in the workplace. This demonstration of knows and knows how provides the platform for the practice of public health. Shows how competence is assessed in the workplace by a variety of methods including multiple source feedback, work based discussion, direct observation of practice. Assessment may take place in a real life situation or in a simulated environment. At the end of training the trainee will need to demonstrate an acceptable level of performance where knowledge, understanding, skills and competences are integrated. Such performance should be robust under pressure, and be able to withstand the demands of increasing responsibility. This achievement will be signed off with recommendation for CCT. Integration of competencies in increasingly complex situations will be assessed in the final stages of training to assure that the trainee is able to practice at consultant level rather than simply in the delivery of more clearly defined projects.

Public health trainees are expected to demonstrate the maintenance of performance in increasingly varied, challenging and less controlled situations. Therefore learning outcomes will need to be demonstrated and assessed more than once, often several times, to confirm progression. The assessment blueprint ensures that all learning outcomes are sampled a number of times across the whole training pathway as appropriate.

Training portfolio

Trainees will keep a portfolio of experience to support claims of competence through cross referencing backing evidence against learning outcomes claimed, with a description of the context for the work and a reflective summary of the whole. The trainee is encouraged to log each area of work/experience into a standard format which records the aims, methods, results and outcomes supported by personal reflection on the lessons learned. This portfolio will allow audit of each learning outcome against each piece of work recorded as evidencing the learning outcome. The trainee will also maintain a record of out of hours calls, action taken and learning. The portfolio will be presented at each ARCP for scrutiny. The portfolio provides a comprehensive record of the package of assessment for each trainee.

Examinations

The MFPH consists of the Part A and the Part B examinations.

Part A

The Part A examination is intended to test a candidate's knowledge, understanding and basic application of the scientific bases of public health. The examination syllabus is blueprinted against the core learning outcomes in the curriculum. The examination consists of two papers taken over two days. The examination must be passed in order to progress from phase 1 to phase 2 and before starting out of hours duties.

In paper one candidates answer 10 compulsory short answer questions across the range of the knowledge syllabus. Paper two tests a candidate's basic skills in critical appraisal, distillation of information from supplied material, data manipulation and preparation of a written brief in some form.

Part B

The Part B examination is designed as a show how assessment of the candidate's ability to apply relevant knowledge, skills and attitudes to the practice of public health. It takes the format of an OSCE with six scenarios or stations. The OSPHE (objective structured public health examination) assesses the ability of the candidate to apply relevant knowledge, skills and attitudes to the practice of public health.

It requires candidates to show that they can integrate the theoretical and practical aspects of their learning. The OSPHE tests five core practical competencies in each of six independently assessed scenarios.

The three domains of public health are represented across the six scenarios.

The Part B must be passed in order to progress from phase 2 to phase 3 and normally with two years full time equivalent training left.

Remediation

A normally progressing trainee would expect to complete specialist public health training within five years (wte). Some trainees will progress more slowly and may require targeted support. Remediation is tailored to the individual and to the particular milestone or learning outcome causing difficulty. Principles are: early identification of difficulty and particular need; focussed support to address identified need; regular monitoring and feedback to avoid surprises; appropriate evidence of progress supports all decision taken. Remediation is particular to the trainee and will be under the overall direction of the Programme Director. The educational supervisor will be pivotal in targeting remediation.

Assessments are carefully and fully integrated and problems may be identified at any time in training. There are also specific checkpoints at which the need for remediation may be identified. These include examinations, regular work based assessments and ARCP.

Examination checkpoints

Trainees would normally be expected to sit the Part A MFPH within 12 to 18 months of starting training. Trainees are normally allowed four attempts at the Part A. Failure at Part A should enable the trainee to identify, from feedback provided by the examiners, gaps in knowledge and/or written presentation skills. A remediation plan at this stage will include targeting weak areas and attendance at a formal revision course. Failure at the second and subsequent attempts should identify the need for highly structured practice with specialist support and additional time built into the training plan for revision.

Part B MFPH is designed to be taken and passed with at least two full years of training left during which consolidation of competence and acquisition of advanced competence may be achieved. Failure at Part B should follow the suggested procedures as outlined for failure at Part A above, including attendance at a preparation/communication skills course and targeted training with a trainer experienced in Part B preparation. Trainees will normally be allowed no more than three attempts at Part B.

The training pathway indicates that the full MFPH would normally be gained around half way through training. Significant delay in passing Part A or Part B will clearly defer this milestone and should be taken into consideration at ARCP. The ARCP panel may choose to use this as a deciding factor in recommending to the postgraduate dean whether the trainee should progress further on the training programme.

Work based assessments checkpoints

Regular in service assessments may identify difficulty with particular learning outcomes. Each phase of training has a set of ascribed learning outcomes which, when satisfactorily achieved together with the appropriate part of the MFPH, allow passage into the next phase of training. Where progress with learning outcomes is slow the supervisor should allow targeted practice with close and regular supervision. If necessary, a short placement with a specialist supervisor may be agreed with the programme director for very specific and regulated projects with clearly defined objectives and timelines. This will allow triangulation of assessment within a highly structured and controlled training environment and between assessors. Difficulty with skills may be addressed through formal courses as a part of targeted training. Problems identified with attitudes and behaviours will trigger discussion with the educational supervisor and referral to the programme director if unresolved. In some circumstances a change of placement may resolve the problems.

ARCP checkpoints

The ARCP is typically held at annual intervals throughout specialist training. Trainees are expected to submit supportive evidence through their structured portfolio to indicate they have achieved a particular learning outcome. ARCP panels always include an external assessor who is an experienced trainer from another programme.

Failure to progress and failure to achieve milestones may result in the ARCP panel recommending targeted training to achieve specific learning outcomes over a prescribed period. Trainees failing examinations should normally be seen at the next available ARCP panel for a formal and documented discussion of their further need for support.

An ARCP outcome 2 allows for targeted training with clearly identified objectives. An ARCP outcome 3 requires the trainee to repeat a period of training and extends the time to CCT. Progress against such recommendations should be monitored at frequent intervals and normally at least six monthly for a further formal review.

The ARCP panel will take progress in learning outcomes alongside examination results to determine whether a trainee should remain in training. The decision will also take into account the range of remediation opportunity made available and a triangulation of assessment both in methods and assessor.

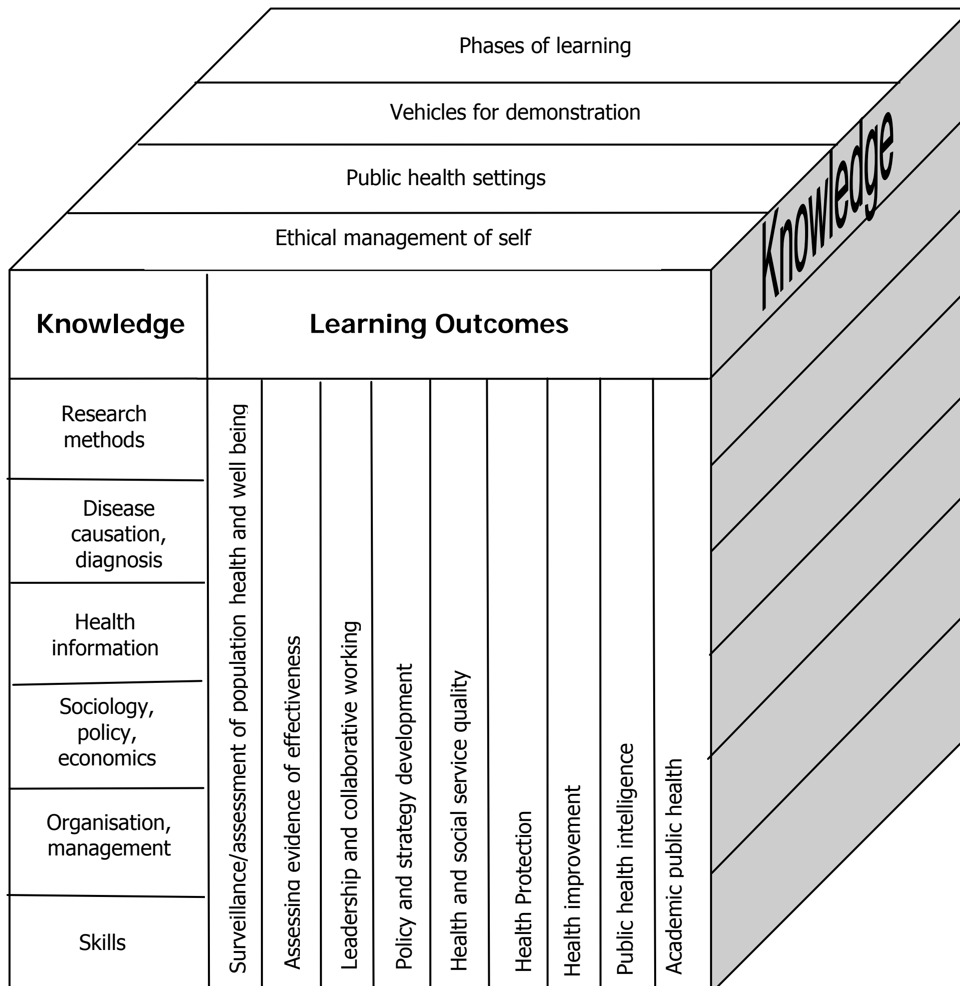
Equality and Diversity

The Faculty of Public Health will actively promote, and ensure compliance with, the requirements of relevant legislation, such as the: Human Rights Act 1998; Race Relations (Amendment) Act 2000; Disability Discrimination Act 1995, DDA 2005, Equality Act 2006 Special Educational Needs and Disabilities Act 2001; Data Protection Acts 1984 and 1998 and Gender Equality Duty (GED) 2007. The Faculty of Public Health believes that equality of opportunity is fundamental to the many and varied ways in which individuals become involved with the Faculty; as members of staff and Officers; as advisers to and members of the Faculty's committees; as doctors/other graduates in training and as examination candidates. Accordingly, it warmly welcomes contributors and applicants from as diverse a population as possible, and actively seeks to recruit people to all its activities regardless of race, religion, ethnic origin, disability, age, gender or sexual orientation.

In addition the Faculty of Public Health believes that equality and diversity issues must underpin the core competency areas for the curriculum statement in order to ensure quality public services.

Three Dimensional Model of Learning
(linking knowledge base with learning outcomes within a public health context[11])

This model shows schematically the inter relationship between the knowledge base (shown on the side face in six domains), the learning outcomes (shown on the front face in the nine key areas of public health practice) and professional behaviours/public health contexts and learning phases (shown on the top face). The model explores how each part of the three elements cross cuts the other two.



[11] This model is adapted from the Phrubik cube developed by the Public Health Resource Unit, Oxford, and Skills for Health to support the development of a career framework for public health for all levels of staff involved in the delivery of health and health care services.

A Public Health Training Glossary

Word or phrase	Meaning
360 degree appraisal	See multi source feedback assessment.
Academic supervisor	A trainer with responsibility for assisting the training to prepare for the MFPH examination, to develop a habit of academic rigour in service work, and to produce work of a standard suitable for peer review, presentation and publication. Each trainee is allocated an individual academic supervisor, who usually remains the same for the duration of training.
Academic tutor	See academic supervisor.
Achievement (applied to a project)	The nature and extent of change brought about as a result of a project. This may range from incremental change to transformational change. Phase 1 achievement - Displays knowledge of management change theory. Phase 2 achievement - Can manage incremental change. Phase 3 achievement - Can manage small transformational change.
Activity	A set of tasks related either by topic, dependencies, data, common skills, or deliverables.
Advocacy	Speaking out on issues of concern to the public's health. Advocacy usually related to organised activism.
AfC	Agenda for Change. A new pay system for nearly all NHS employed staff across the UK that replaces the previous Whitley Council system.
Annual review	The means by which a trainee's progress through the training programme is reviewed by a ARCP panel accountable to the postgraduate dean and operating on behalf of the deanery Specialty Training Committee.
Appraisal	An individual and private planned review of progress, focusing on the trainee, achievements and future activity. It allows training needs to be identified and is primarily concerned with development.
ARCP	Annual Review of Competence Progression. A written record of the trainee's progress. It records core information about the trainee, achievement of competencies and learning outcomes, assessment and subsequent decisions, and confirmation that training has been satisfactorily completed. It is required as part of the evidence needed to recommend the award of the CCT on completion of training.
ARCP panel	A panel, accountable to the postgraduate dean and operating on behalf of the deanery Specialty Training Committee, that undertakes an annual review of each trainee. It decides on the trainee's progress and training needs.

ARCP Outcomes	Form R records core information about the trainee. ARCP Outcomes are records of assessment and subsequent decisions made by the ARCP panel: • Outcome 1 states that progress since the last annual assessment was satisfactory. • Outcome 2 states development of specific competences required – additional training time not required • Outcome 3 states that inadequate progress by the trainee – additional training time required • Outcome 4 states that the trainee is released from the trianing programme – with or without competences. • Outcome 5 – Incomplete evidence presented – additional training time may be required • Outcome 6 Gained all required competences • Outcomes 7-9 are outcomes for trainees out of programme or not in training.
ARCP process	The formal method by which a trainee's progress through the training programme is recorded. ARCP is not an assessment – it is a review of competence progression. Towards the end of each training year an ARCP panel is convened to review the assessment documentation for each trainee. The panel is required to make a judgment, based on the assessment material, that leads to the issue of an ARCP outcome.
Assessment	A regular process that collects evidence about progress towards a goal and makes a judgment about whether this goal has been reached. It determines whether trainees can move from one stage of training to the next or whether they have reached an appropriate standard for certification. Assessment is primarily an educational activity whose main purpose is to provide information about progress in learning and about the environment and activities that support it. Valid and reliable evidence is required for this process to be acceptable and able to be documented.
Assessment - formative	Assessment that is designed to provide immediate, contextualised feedback and thereby enhance the learning process. It occurs when teachers feed information back to students in ways that enable the student to learn better, or when students can engage in a similar, self- reflective process. It is most helpful when information is focused on the task, not the student, and when students learn to undertake regular self-assessment.
Assessment - summative	Assessment that attempts to summarise student learning at some point in time, e.g. the end of a course. It usually involves taking standardised tests or examinations.
Assessment - multi source feedback (MSF)	A workplace based assessment of a trainee's attitudes and behaviour, obtained by collecting the opinions of other professional colleagues using standardised and validated questionnaires. The assessed trainee receives anonymous feedback about his or her performance.
Attitude	A settled opinion or way of thinking.
CCT	Certificate of Completion of Training. It is awarded by PMETB (or the UK Public Health Register for non-medical trainees) upon receipt of evidence of satisfactory completion of training from the ARCP panel and Faculty Adviser.
Competence	The ability to carry out a task or activity well enough to meet a specified standard.

Competence to practice	The whole range of knowledge and skills that are needed to carry out the job in all its complexity, including the exercise of professional judgement.
Core curriculum area	A key area which is deemed central to the practice of all aspects of public health.
Complex (applied to a project)	A complex project is one in which the issue is influenced by a number of other factors, the more external influences the more complex. The nature of the external influences may be more or less well defined, the less well defined the external influences the more complex the project. There may be interactions between the influences and again complexity increases as the interactions are less well defined. Phase 1 complexity - Complicated by the influence of at least two external factors. Phase 2 complexity - Complicated by two or more external factors the influence of which is not completely defined. Phase 3 complexity - Complicated by a number of factors whose influence and interaction is uncertain.
Curriculum	An integrated learning programme. The curriculum describes the objectives of training, expressed in terms of learning outcomes, and how they will be assessed.
Deanery	The designated area of responsibility of a postgraduate dean. In the UK the organisation of postgraduate medical and dental education is organised through Deaneries. England has 14 Deaneries, Scotland four and one Deanery covers each of Wales and Northern Ireland.
Does	Once trainees have gained knowledge (know) and applied this in theoretical (know how) and controlled(show how) situations, they are then expected to become competent in integrating these skills to enable them to practice safely in real life situations (do).
Education	The process of learning or teaching. It includes any activity that supports the development of professional practice.
Educational supervisor	A trainer with overall responsibility for planning, co-ordinating and supervising the training of a trainee. Each trainee is allocated an individual educational supervisor, who usually remains the same for the duration of training. The educational supervisor may co-ordinate the work of other designated trainers as the trainee rotates through a variety of training experiences, e.g. attachments to different training bases.
Experience	Obtaining knowledge and/or skill through seeing or doing things.
Expertise	A high level of knowledge or skill.
Faculty Adviser	The person with responsibility, on behalf of the Faculty of Public Health, for promoting and maintaining high standards of professional competence and practice in public health within each NHS region or UK country. On behalf of the postgraduate dean, sits on trainee appointment panels and ARCP panels, completes and maintains ARCP forms, and advises on CCT dates in the light of retrospective recognition of training. On behalf of the Faculty, provides advice to those who are interested in pursuing a career in public health, assesses the suitability of training locations, and facilitates external Faculty visits to review the training programme.

Incremental change	A change process where each new element follows in a logical and predetermined way and builds on what went before e.g. having two chiropodists where there used to be one; opening another clinic; commissioning new equipment; opening a new building; spending more money on the same thing. This is the sort of change that used to happen in NHS annual programmes.
Involvement	A measure of the contribution made by the trainee to the project. Phase 1 involvement - Participated or collaborated in a project. Phase 2 involvement - Contributed significantly to a project. Phase 3 involvement - Led or managed a project.
Key curriculum area	A thematic grouping of learning outcomes (and assessments) within the curriculum, each specialising in a specific part of the curriculum. Trainees are required to complete training in all key curriculum areas.
Knowledge	Information about a subject which has been obtained by study or experience.
Knows	A trainee who knows part of the public health knowledge base will be able to demonstrate this knowledge on assessment (for example by examination)
Knows how	Once knowledge has been acquired (knows) it is applied to answering a question, solving a problem or undertaking a task. This more than simply repeating knowledge gained (knows how).
KSF	NHS Knowledge and Skills Framework. Defines and describes the knowledge and skills which NHS staff need to apply in their work in order to delivery quality services. It comprises six dimensions: communications; personal and people development; health, safety and security; service development; quality; and equality, diversity and rights. It provides a single, consistent, comprehensive and explicit framework on which to base review and development for all staff and design new roles to respond to changes in service delivery. It also contributes to decisions about pay progression under Agenda for Change.
Learning	The activity of obtaining knowledge.
Learning experiences	Practical activities that can result in acquiring new knowledge or skills.
Learning outcomes	Training objectives defined as part of the curriculum. These define what the trainee will know, understand, describe, recognise, be aware of, and be able to do at the end of the training programme.
Magnitude (applied to a project)	Magnitude describes the size of a project. Bigger projects influence more stakeholders who are more disparate; by comparison small projects affect a limited number of people who are more homogeneous. Phase 1 magnitude - A small population which is relatively homogeneous in make up. Phase 2 magnitude - A population that has more complex make up, e.g. multiple age groups, social groups, or ethnic groups. Phase 3 magnitude - A large population with disparate make up spread over a wide area, like a whole district or part of a region.
MFPH/DFPH	Membership/Diploma of the Faculty of Public Health. The MFPH consists of the Part A and Part B (OSPHE) examinations. Success in the Part A examination leads to election into Diplomate Membership, and success in the Part B examination leads to election into full Membership of the Faculty of Public Health.

MFPH Part A	A written examination which forms the first part of the MFPH. The examination is intended to test a candidate's knowledge and understanding of the scientific bases of public health. Candidates are expected to have acquired specialist knowledge and skills in public health, and to show a clear understanding of the principles and methods of related disciplines, notably applied statistics, behavioural sciences, health economics, and management.
MFPH Part B	An oral examination, consisting of an OSPHE, which forms the second part of the MFPH. It requires candidates to show that they can integrate the theoretical and practical aspects of public health practice.
OSPHE	Objective Structured Public Health Examination. An oral examination, based on a series of real life scenarios, which is designed as a 'show how' assessment of the ability of the candidate to apply relevant knowledge, skills, and attitudes to the practice of public health. It forms the Part B examination for Membership of the Faculty of Public Health.
Performance	The ability to carry out a task or activity.
Phase	A grouping of activities that leads to a major milestone.
PMETB	The Postgraduate Medical Education and Training Board PMETB is an independent statutory body which is responsible for promoting the development of postgraduate medical education and training for all specialties across the UK.
Postgraduate Dean	The person with overall responsibility for the appointment and training of Specialty Registrars (StRs) in specialty training and for establishing training contracts with NHS Trusts in accordance with national guidelines. The dean also appoints training programme directors and sits on the deanery Specialty Training Committee.
Project	A piece of planned work or activity that is completed over a period of time and intended to achieve a particular aim.
Project supervisor	A person responsible for overseeing a specific piece of planned work being undertaken by a trainee.
Remediation	Action taken to remedy a situation where a trainee has failed to achieve expected learning outcomes. It may include targeted training to achieve specific learning outcomes within a defined period, together with frequent monitoring of progress.
Service tutor	See educational supervisor.
Shows how	Building on knowledge (knows) and an ability to apply knowledge in theoretical situation (knows how), trainees are then expected to demonstrate they can apply this to real problems in small scale or simulated situations. This is the application of knowledge in controlled settings (shows how).
Skill	The ability to carry out a task or activity well, usually because one has practised it.
Specialist curriculum area	A key area of specialist experience which forms a major part of the practice of some areas of public health.
Specialty Registrar (StR)	See trainee.
Specialty Training Committee	The committee which supervises and manages the delivery of the training programme and to whom ARCP panels report. They are based in each deanery and accountable to the postgraduate dean.
Syllabus	An outline and summary of topics and subjects to be studied, usually leading to an examination. It forms part of the knowledge base for the curriculum.
Task	A piece of work, especially one done regularly.

Trainer	See academic supervisor and educational supervisor.
Trainee	A trainee in public health.
Training	The process of learning the specific skills and procedures needed to do a particular activity or job, and to produce and/or develop a workforce.
Training phase	A period of time during which trainees are expected to have achieved a specified set of training objectives. The curriculum is delivered over three phases of training.
Training phase 1	The period of time (normally a maximum of two years) up to demonstration of a secure public health knowledge base, typically achieved by success in the MFPH Part A examination. By the end of phase 1, trainees will have achieved learning outcomes in simple situations.
Training phase 2	The period of time (typically six to nine months) between demonstration of a secure public health knowledge base and demonstration of the core public health skills examined by the MFPH Part B examination. By the end of phase 2, trainees will have achieved learning outcomes in moderately complex situations.
Training phase 3	The period of time after award of MFPH to CCT. By the end of phase 3, trainees will have achieved learning outcomes in highly complex situations.
Training policy	A written policy that prescribes the structure of an acceptable training programme and/or location. This will include arrangements for academic and service supervision, provision for trainer development, facilities expected in a training location, induction programmes for new trainees, requirements for learning frameworks (contracts), on-call arrangements, opportunities for external attachments, arrangements for rotation between training locations, study leave, and performance assessment and review processes.
Training programme	A structured period of training designed to culminate in the award of a CCT. It is managed by the programme director.
Training Programme Director	The person within each deanery responsible for managing the training programme in public health. Also acts as a co-ordinator and communicator between trainees, the postgraduate dean, the local Specialty Training Committee, the Faculty of Public Health, and the personnel (human resources) department in the Trust or Trusts that employ trainees.
Training setting	The location where a period of training takes place. Most public health training will take place in general training posts in a primary care trust, health protection unit, or academic public health department, though arrangements differ in Scotland, Wales and Northern Ireland. There are a wide variety of other potential training settings, some of which are particularly suited to gaining experience in specialist curriculum areas. These include statutory authorities, acute and specialist trusts, strategic health authorities, public health observatories, cancer registries, clinical networks (including the Royal Colleges), government offices of the regions, and the Department of Health.
Transformational change	A change process where the end point is not known even though the general direction is clear e.g. most NHS reorganisations.
UK Public Health Register	The UK Public Health Register is an independent multidisciplinary register which ensures that only competent specialist public health professionals are registered and that high standards of practice are maintained.

Walport initiative	Academic Clinical Fellowship posts which allow trainees to set aside time to develop academic skills in research and/or teaching leading to the award of a higher degree. Up to three years academic time is permitted.
Weight (applied to a project)	A measure of the importance or seriousness of a project, usually indicated by who has to sign it off. Phase 1 weight - A simple issue signed off by a single manager. Phase 2 weight - An intermediate issue that might be signed off by a sub-committee or committee. Phase 3 weight - A substantive issue signed off at board level.

Learning Outcomes Framework

This document details the expected learning outcomes for all trainees in Public Health wishing to achieve entry via CCT to the GMC Specialist Register or the UK Public Health Register. Learning outcomes are grouped into nine themes (Key Areas):

1. Surveillance and assessment of the population's health and well-being
2. Assessing the evidence of effectiveness of health and healthcare interventions, programmes and services
3. Policy and strategy development and implementation
4. Strategic leadership and collaborative working for health
5. Health Improvement
6. Health Protection
7. Health and Social Service Quality
8. Public Health Intelligence
9. Academic Public Health

The curriculum is delivered over three phases of training:

For each learning outcome the target phase of training is given. The target phase is the last point at which the learning outcome should be achieved. It does not preclude achievement at an earlier phase. However, many of the learning outcomes identified for phase three involve work of complexity for which experience and competence might accumulate over a longer period.

Phase 1

The period of time (normally a maximum of two years) up to demonstration of a secure public health knowledge base (knows and knows how). In addition, by the end of phase 1 (of which knowledge is a component and typically assessed by success in the MFPH Part A examination) trainees will achieve learning outcomes in simple situations (assessed in the service environment) for example: those which are complicated by the influence of at least two external factors; involve a small population which is relatively homogeneous in make up; involve simple issues (e.g. can be decided by a single manager); are demonstrated as part of a larger project led by others. The total period of time in phase 1 would normally allow one year full time equivalent, in three university terms, on an academic course plus a further year in early service work. Trainees who take their academic course in a modular structure across two years would achieve the same service level experience across that period of time. A secure knowledge base is an essential requirement to train effectively in public health and must therefore be evidenced through examination early in training.

Phase 2

The period of time (typically six to nine months) between demonstration of a secure public health knowledge base/know how and demonstration of the core public health skills examined via the MFPH Part B (OSPHE – objective structured public health examination) and further demonstration of competence in the service environment. The Part B MFPH can only be attempted after success at Part A. In addition, by the end of phase 2 trainees will achieve learning outcomes in more complex situations for example: those which are complicated by two or more external factors the influence of which is not completely defined; involve a population that has more complex make up, e.g. multiple age groups, social groups or ethnic groups; involve intermediate issues (require a committee or subcommittee to make a decision); are demonstrated where the trainee is making a significant contribution to a larger project led by others or leading a smaller project. The very nature of public health practice may mean that trainees may be gaining some phase 2 competencies during phase 1, when they may start to put into practice their expanding knowledge base in pieces of service based work. The move into phase 3 is conditional upon success in Part B MFPH and achievement of the learning outcomes designated for this phase.

Phase 3

The period of time after award of MFPH to CCT (typically 24-30 months). By the end of phase 3 trainees will achieve learning outcomes in complex situations for example: those which are complicated by a number of factors whose influence and interaction is uncertain; involve a large population with disparate make up and spread over a wide area such as a whole district or part of a region; involve a substantive issue (require senior management or multi-agency decision making). This phase includes opportunity to develop optional interests and competence in more specific areas of practice or further experience in specialist settings. This range of options will allow a diversity of public health practice to flourish and will support career opportunity. For a normally progressing trainee, consolidation of core competence would require the full indicative period identified for this phase. A rapidly progressing trainee would be able either to develop a special interest and higher competence or might complete training at an earlier stage. It will be made clear in the assessment package that satisfactory completion of training is not simply a signing off of individual learning outcomes but will also require evidence both of experience of several settings as the context for competence and of integration of competencies to evidence performance at consultant level. Competence in this phase is assessed in the workplace through a variety of methods.

All trainees satisfactorily completing this curriculum will be awarded a Certificate of Completion of Training (CCT) in Public Health (medicine). This applies both to those trainees who choose not to add optional special interest learning outcomes and to those who do.

Each key area of public health practice is presented in a standard format

1. A general descriptor of the area of practice.
2. **X**a Learning experience This section broadly delineates the expected learning outcomes in each of the three phases of training. It describes potential vehicles and settings for demonstration of competence in the particular area of public health practice.
3. **X**b Links to KSF This section gives the broad links to the Knowledge and Skills Framework which applies only to trainees from backgrounds other than medicine (see below).
4. **X**c Knowledge base and knows how This section outlines in general terms the knowledge and knows how needed to underpin required learning outcomes. The detailed knowledge requirements are listed in the syllabus for Part A MFPH.

The learning outcomes for each key area are presented in tabular form which links specific competencies with their target phase for achievement, the related KSF competency, suitable assessment methods, the Part A MFPH syllabus and related curriculum areas

Learning outcome

This covers the skills, attitudes and expertise expected of a Consultant in Public Health and outlines what the trainee will know, understand, describe, recognise, be aware of and be able to do at the end of training. Some learning outcomes use words such as 'complex', 'weight' etc which are defined in the glossary and give a fuller description of the level of attainment expected. The learning outcomes framework should therefore be read in conjunction with the glossary.

Target phase of achievement

This is the point in training by which most trainees must achieve the outcome. It does not necessarily preclude a trainee achieving outcomes earlier but may act as a trigger for remediation if the outcome is significantly delayed. Where a target phase indicated covers multiple phases, the trainee is expected to provide evidence of achievement at each level.

Link to related KSF competency

Public health specialty training is a multi-disciplinary programme, open to graduates from medicine and other disciplines. Trainees from backgrounds other than medicine are employed under Agenda for Change Terms and Conditions. The NHS Knowledge and Skills Framework (KSF) lies at the heart of the career and pay progression strand of Agenda for Change; linking the KSF requirements to this new curriculum is therefore essential. The NHS KSF is a developmental system that defines and describes knowledge and skills for NHS staff. It provides a single, consistent, comprehensive and explicit framework for review and development for all staff from a background other than medicine. Each learning outcome is linked to a KSF competency at the level required by the end of training.

http://www.dh.gov.uk/PolicyAndGuidance/HumanResourcesAndTraining/ModernisingPay/AgendaForChange/fs/en

Suitable assessment methods

Each learning outcome will be assessed by multiple methods and by multiple assessors. Suitable methods are outlined. These are described further and blueprinted in the curriculum section on assessment/examination. The Assessment blueprint can be found at http://www.fph.org.uk/training/downloads/assessment/FPH_assessment_blueprint.pdf

Knowledge base

The knowledge base necessary for public health consultant level practice is outlined in the public health knowledge syllabus and is not included in the learning outcomes framework. Each learning outcome is mapped to a relevant part of the knowledge syllabus which is also included as a separate section in this curriculum.

Related curriculum areas

Each learning outcome is cross referenced to other key areas.

The full learning outcomes framework is preceded by a section on *Good Public Health Practice* which describes the behaviours and attitudes necessary for professional practice.

Learning Outcomes: Ethical management of self and Professionalism

The Faculty of Public Health has adapted the GMC document *Good Medical Practice* for public health consultant practice. *Good Public Health Practice* describes the professional behaviours and values which underpin public health practice and apply both to medical and other graduate public health consultants. The document can be found at:
http://www.fph.org.uk/prof_standards/downloads/appraisals/B_GPHP.pdf

On completion of training it is expected that the public health consultant can work with clinical practitioners rather than function as a clinician. Some medically qualified public health consultants, especially those working in health protection, may undertake work of a clinical nature. This work will be governed by *Good Medical Practice* *http://www.gmc-uk.org/guidance/good_medical_practice/index.asp* and the documents should be used alongside each other. There may be aspects of health protection work that involve direct interaction with individuals who have, or who have been exposed to, communicable and environmental hazards (and their relatives and carers). When practising in clinical areas and with patients, *Good Medical Practice* must also be integrated into training within the limits of professional competence.

	Learning outcome	**Link to related KSF competency**	**Suitable assessment methods**
EMS 1	Recognise and work within the limits of professional competence including working within the limits of personal clinical competence when dealing with individual patients	C2:3	**See Blueprint**
EMS 2	Be willing to consult colleagues	C2:3	**See Blueprint**
EMS 3	Keep clear, accurate and contemporaneous records including clinical record as necessary	C1:4	**See Blueprint**
EMS 4	Keep colleagues well informed when working in partnership including referring appropriate clinical issues	C1:4	**See Blueprint**
EMS 5	Establish and maintain trust by listening to and respecting others' views including giving patients and others the information they need in a way they can understand	C2:3	**See Blueprint**
EMS 6	Treat others with courtesy	C2:3	**See Blueprint**
EMS 7	Respect the rights of the public and patients to be involved in choices	C6:3	**See Blueprint**
EMS 8	Treat information about patients as confidential. If in exceptional circumstances you feel you should pass on information without a patient or an individual's consent, or against their wishes, you should follow agreed guidance on confidentiality and be prepared to justify your decision	C2:3	**See Blueprint**
EMS 9	Treat colleagues fairly and maintain the public's trust through avoidance of unfounded criticism	C2:3	**See Blueprint**
EMS 10	Respect skills and contributions of colleagues and maintain professional relationships and effective communication in multi disciplinary teams	C2:3	**See Blueprint**
EMS 11	Be readily accessible to the public and colleagues when on duty including arranging suitable cover	C6:3	**See Blueprint**
EMS 12	Pay regard to efficiency while not discriminating against individuals/populations	C6.2	**See Blueprint**
EMS 13	Keep knowledge and skills up to date, including regular audit, appraisal and reflective learning	C2:2	**See Blueprint**
EMS 14	Practise safely including assuring professional indemnity, safeguarding the public from others' unsafe practice, adhering to safe management practice through maintenance and development of an environment and culture that improves health, safety and security	C3:2	**See Blueprint**
EMS 15	Deal with complaints fairly and co-operate with enquiries into practice	C5:2	**See Blueprint**
EMS 16	Demonstrate probity in professional and personal practice	C2:2	**See Blueprint**
EMS 17	Seek and follow advice where health concerns may affect practice	N/A	**See Blueprint**
EMS 18	Work within a value system appropriate to pubic health advocacy	C6:3	**See Blueprint**

Demonstration of *Good Public Health Practice* is expected of all trainees at all phases of training and assessed at regular intervals including at ARCP. General behaviours are listed below. Others are included in the relevant learning outcomes framework for a specific key area (8.7, 8.8, 9.10, 9.11, 9.12 and 9.13).

Areas of public health practice

Many of the generic learning outcomes in the first four competency areas are applicable to key areas 5 to 9 which cover systems within which public health is practised. The section describing potential settings for demonstration of competence in KA 1 to 4 details the possible settings in which generic competence may be demonstrated. These learning outcomes are therefore not repeated in the learning outcomes frameworks for KAs 5 to 9 For example, undertaking a health needs assessment, the learning outcomes for which are detailed in KA 1, can be applied in several settings such as health protection, health improvement etc.

The core learning outcomes for KAs 5 to 9 are complemented by a number of additional learning outcomes listed in the optional special interest section. All trainees are required to achieve all core learning outcomes for all nine areas of public health practice. The special interest learning outcomes are optional. These options may be selected by trainees making good progress and aiming at a more focussed area of practice after CCT. Special interest learning outcomes are designed to be gained alongside core learning outcomes and are therefore not identified separately on the training pathway schematic.

A detailed list of the various groups with whom a public health consultant might work while demonstrating any of the competencies in the nine key areas has not been included. Such a list would not be fully comprehensive and might therefore suggest exclusion rather than inclusion. Trainees and trainers should think broadly across the range of groups to allow learning experience in different contexts to include the disadvantaged, different age groups, different client groups, different organisations etc.

To jump straight to key areas click the links below:

1. Surveillance and assessment of the population's health and well-being
2. Assessing the evidence of effectiveness of health and healthcare interventions, programmes and services
3. Policy and strategy development and implementation
4. Strategic leadership and collaborative working for health
5. Health Improvement
6. Health Protection
7. Health and Social Service Quality
8. Public Health Intelligence
9. Academic Public Health

Key area 1

Surveillance and assessment of the population's health and well-being

This area of practice focuses on the quantitative and qualitative assessment of the population's health, including managing, analysing, interpreting, and communicating information that relates to the determinants and status of health and well-being. Integral to this is the assessment of population needs and its relationship to effective actions.

1a Learning experiences

By the end of phase 1, trainees will be expected to assess and describe the health status and determinants of health of a defined population by measuring, analysing and interpreting appropriate routine and ad hoc mortality, morbidity data, and subjective health status.

By the end of phase 2, trainees will be expected to have assessed the status, health needs and determinants of health of a (sub) population systematically for a known reason. This will demonstrate use of appropriate qualitative and quantitative methods, including comparison over time, place and person. It will also demonstrate the ability to accurately describe and clearly communicate findings to others and translate surveillance results and assessment into appropriate recommendations for action.

By the end of phase 3, trainees will be expected to demonstrate that action has taken place as a result of their assessment of health status and needs. If no action has occurred then they will understand why and have developed alternative strategies. Trainees will have been assessing health status throughout their training and will have accumulated evidence that they are proficient in the use of a broad range of types of health data in a range of settings.

Potential vehicles for the demonstration of this competence area include:

- Gathering, analysis and presentation of data for a health report.
- Data set manipulation and analysis.
- Development, administration and analysis of questionnaires.
- Board reports.
- Health needs assessment.
- Geographic mapping of health indicators.

Potential settings for the demonstration of this competence area:
By the end of training trainees will be expected to have worked with the following types of health data: mortality, morbidity, cancer registry, local, national and international communicable disease notifications and laboratory data, demographic, hospital episode statistics and health survey. They will be expected to have done this in a setting where they can demonstrate the contribution made to decision making at a Board / Senor Management level within a health or partner organisation. They will need to have analysed data by geographical levels, by sub-populations, by time and by risk factors.

1b Links to KSF

IK2: Information collection and analysis
C6: Equality and Diversity

1c Knowledge base

Populations; collection of routine and ad hoc data; demography; life-tables; population projections; population structure and fertility, mortality and migration; the significance of demographic changes for the health of the population and its need for health and related services.

Sources of routine mortality and morbidity data, including primary care data, collection and publication at international, national, regional and district levels; biases and artefacts in population data; methods of classifying health and disease, appreciation of the importance of consistency in definitions and (public health) language. Methods used to measure health status; notification and registration systems; data linkage within and across datasets.

Use of information for health service planning and evaluation; specification and uses of information systems; common measures of health service provision and usage; the uses of mathematical modelling techniques in health service planning; indices of needs for and outcome of services; the strengths, uses, interpretation and limitations of routine health information; use of information technology in the processing and analysis of health services information and in support of the provision of health care.

Learning outcomes: Key area 1. Surveillance and assessment of the population's health and well-being

	Learning outcome	Target phase	Link to related KSF competency	Suitable assessment methods	Link to knowledge base[1]	Related curriculum areas
1.1	Show awareness of available data to describe the health status and determinants of a local population and compare with other populations using appropriate statistical and standardisation techniques and identify localities or groups with poor health	1	IK2:3	See Blueprint	1.1.1 to 1.1.9, 1.1.19 to 20, 1.1.35, 1.3.1 to 1.3.8, 1.3.10	KA 7, 8
1.2	Undertake a brief health needs assessment for a defined population for a specific purpose using appropriate qualitative or quantitative methods and make recommendations for action	2	IK2:3	See Blueprint	LO 1.1 plus 1.1.27 1.1.29 to 31 1.3 (all)	KA 7, 8
1.3	Use a range of methods of assessing morbidity and burden of disease within and between populations, both as ad hoc analysis and as part of systematic health surveillance.	3	IK2:3	See Blueprint	1.1 to 1.3 4.4.5	KA 7, 8
1.4	Analyse data of populations in specific geographical areas and in particular groups of people in order to assess health status, health inequalities, determinants and different needs to support prioritisation of action.	3	IK2:4	See Blueprint	1.1 to 1.3	KA 8
1.5	Use a range of routine information sources and surveillance systems including, as a minimum, mortality, hospital admission, census, primary care, communicable disease, cancer intelligence data, reproductive and sexual health data, and government surveys to support public health activity	3	IK2:3	See Blueprint	As KA 1.1 plus 1.1.27, 1.1.29 to 31, 1.3 (all)	KAs 6, 7, 8
1.6	Use qualitative and ad hoc or local survey data	3	IK2:4	See Blueprint	1.1.27, 1.1.29 to 31, 1.4	KAs 7, 8
1.7	Undertake a health needs assessment for a defined population for a specific purpose and demonstrate that this work has been considered at a high level in a relevant organisation	3	C6:3 IK2:4	See Blueprint	LO 1.1 + 1.1.27, 1.29 to 31, 1.3 (all), 5	KAs 3, 4, 7
1.8	Undertake an assessment of the health impact of a policy or project for a defined population and demonstrate that this work has been considered at a high level in a relevant organisation	3	C6:3 IK2:4	See Blueprint	1.3.17	KAs 3, 4, 7
1.9	Quantify inequalities and inequities within and between populations in valid ways which make sense to the relevant audience/commissioner.	3	C6:3	See Blueprint	1.3.6, 1.3.10	KAs 1, 5, 8

[1] Numbers link either to Key Areas (KA), learning outcomes (LO) or to the Part A syllabus

Key area 2

Assessing the evidence of effectiveness of interventions, programmes and services intended to improve the health or wellbeing of individuals or populations

This area of practice focuses on the critical assessment of evidence relating to the effectiveness and cost-effectiveness of public health interventions, programmes and services including screening. It concerns the application of these skills to practice through planning, audit and evaluation.

2a Learning experiences
Examples to support training and assessment By the end of phase 1, trainees would be expected to understand and apply critical appraisal techniques within simple, well-defined contexts (for example writing a briefing on the evidence for a single, non-contentious issue). Findings and recommendations will be communicated to limited audiences. By the end of phase 2, trainees would begin to incorporate multiple types of evidence into their recommendations; begin to take a greater lead in the incorporation of evidence into practice and apply this competence in a wider range of situations; and appropriately communicate findings to a wider range of audiences. For example provide support to the development of a business case for a defined service. By the end of phase 3, trainees would be expected proactively to seek out opportunities for using evidence to influence decisions. They would be working with highly complex issues and would be influencing the deliberations of senior decision-makers. For example, through the development of systems and processes for delivering evidence-based recommendations; the supervision of others; horizon scanning or prioritisation. It is expected that trainees at phase 3 will be using evidence to influence change effectively by incorporating fully the competencies of leadership, surveillance, public health intelligence, and strategy and policy development. **Potential vehicles for the demonstration of this competence area include**: • Evidence-based policy briefings (for boards, committees, public health colleagues or the public). • Writing or appraising business cases. • Health Needs Assessment. • Press release. • Master's level dissertations or assignments. • Clinical or public health audit. • Development of clinical guidelines. • Calculation of population costings for a new technology. • Commissioning plan. • Health improvement strategy/policy/programme. • Peer reviewed publication. **Potential settings for the demonstration of this competence area**: By the end of training trainees will be expected to have undertaken at least three assessments of evidence (one in each phase of training) including critical appraisals of the following study types: ecological, qualitative, aetiological, interventional, and economic. These assessments must vary by setting (e.g. acute hospital, community health care or other setting such as local government), or risk factor or sub-population so as to encourage a broad experience of assessing evidence.
2b Links to KSF
C1: Communication; C4: Service Improvement, C5: Quality IK2: Information Collection and Analysis IK3: Knowledge and Information Resources HWB1: Promotion of health and well being and prevention of adverse effects on health and wellbeing G5: Services and Project Management

2c Knowledge base
Design and interpretation of studies: skills in the design of research studies; critical appraisal of published papers including the validity of the use of statistical techniques and the inferences drawn from them; ability to draw appropriate conclusions from quantitative and qualitative research. Screening: principles, methods, applications and organisation of screening for early detection, prevention, treatment and control of disease.

Learning outcomes: Key area 2. Assessing the evidence of effectiveness of health and healthcare interventions, programmes and services

	Learning outcome	Target phase	Link to related KSF competency	Suitable assessment methods	Link to knowledge base[1]	Related curriculum areas
	Learning outcomes to be achieved at each phase of training *Trainees must demonstrate competence at least three times during training in contexts where the complexity, weight, magnitude, involvement and achievement (see glossary) are appropriate for the phase of training*					
	Finding and retrieving evidence					
2.1	Generate an appropriate question in order to assess the evidence	1, 2 & 3	IK2:4	See Blueprint	1.1.19, 1.1.21, 1.4.6	KA 9
2.2	Use health and non-health evidence from formal research and other sources to answer a defined question, taking into account relative strengths and weaknesses of evidence used	1, 2 & 3	C4:3	See Blueprint	1.1.19, 1.1.21, 1.1.35 to 40, 1.4.6	KA 1
2.3	Make use of others in finding and retrieving evidence (e.g. librarians, information specialists)	1, 2 & 3	IK3:1	See Blueprint	As above + 5.1	KA 4
2.4	Define a literature search strategy with appropriate inclusion and exclusion criteria to find relevant evidence to answer a question	1, 2 & 3	IK3:1	See Blueprint	n/a	KA 9
2.5	Clearly document methods used in finding and retrieving evidence	1, 2 & 3	C1:3	See Blueprint	n/a	KA 9
	Assessing evidence					
2.6	Filter and refine searches to select appropriate evidence, incorporating the hierarchy of evidence	1, 2 & 3	IK2:4	See Blueprint	1.1.35 to 40	KA 9
2.7	Use an appropriate framework to critically appraise evidence	1, 2 & 3	IK2:3	See Blueprint	1.1.21	KA 1
	Synthesising evidence – formulating justifiable recommendations					
2.8	Formulate a balanced, evidence-based recommendation explaining key public health concepts using appropriate reasoning, judgement and analytic skills in a public health setting	1, 2 & 3	C4:1 HWB1:3 IK2:3	See Blueprint	1.1.35 to 40	KAs 3, 4, 7
2.9	Provide options for decision makers	1, 2 & 3	HWB1:4 C5:4	See Blueprint	n/a	KAs 3, 4
2.10	Communicate recommendations orally and in writing in order to influence decisions	1, 2 & 3	C1:3 C4:1	See Blueprint	6.3	KAs 3, 4

	Learning outcome	Target phase	Link to related KSF competency	Suitable assessment methods	Link to knowledge base[1]	Related curriculum areas
	Learning outcomes to be achieved at least once during training					
	Finding and retrieving evidence					
2.11	Find, retrieve, select and assimilate sufficient appropriate evidence to answer a question in a short space of time (i.e. within hours)	2	IK3:2	See Blueprint	5.1.4	KA 4
	Assessing evidence					
2.12	Understand the need for and be able to undertake a rapid appraisal of evidence (i.e. within minutes/hours not days)	3	IK2:4	See Blueprint	5.1.4	KA 4
2.13	Undertake scoring of the quality of at least one quantitative and one qualitative study and its design	1	IK2:4	See Blueprint	1.4.4 to 1.4.6, 4.1.35	KA 9
2.14	Use an appropriate framework to critically appraise each of the following types of study: ecological, qualitative, aetiological, interventional, and economic.	1	IK2:3	See Blueprint	1.1, 1.2, 1.4, 4.4	KA 9
2.15	Assess the evidence for proposed or existing screening programmes, using established criteria	1	IK2:3	See Blueprint	2.2	KA 1
	Synthesising evidence – formulating justifiable recommendations					
2.16	Rapidly ascertain key public health information from a range of documents (eg briefings, policies, news reports) and use it appropriately and in relation to wider public health knowledge to communicate key public health information orally	2	HWB1:4	See Blueprint	5.1 to 5. 3	KAs 3, 4, 8
2.17	Work with others to generate consensus where there is conflicting evidence or an evidence gap	2	G5:4	See Blueprint	5.1	KAs 3, 4
2.18	Use evidence-based recommendations to influence decisions	3	G5:4	See Blueprint	5.1	KAs 3, 4
2.19	Incorporate relevant legal and ethical frameworks into assessment of evidence	3	IK2:4	See Blueprint	5.1 to 5.3	
2.20	Demonstrate a proactive approach to identifying issues where a review of evidence is likely to make a difference	3	C5:4 G5:4	See Blueprint	5.1 to 5.3	KAs 3, 4

[1] Numbers link either to Key Areas (KA), learning outcomes (LO) or to the Part A syllabus

Key area 3

Policy and strategy development and implementation

This area of practice focuses on influencing the development of policies, implementing strategies to put the policies into effect and assessing the impact of policies on health. A policy is a principle adopted that governs and guides strategy. A strategy is a formally planned set of actions taken over a long term to address a particular issue.

3a Learning experiences
By the end of phase 1, trainees will comprehend how public health policy is developed and implemented. They will be able to analyse, in a theoretical context, the effect of policies on health. They will be familiar with national policy for major public health issues. They will devise strategy for problems of low weight and complexity. By the end of phase 2, trainees will begin to address more complex strategic problems. By the end of phase 3, trainees will translate national policy into local action, explain the implications and health impact of policy and strategy. They will create and justify policy and strategy for problems of high weight and complexity communicating appropriately for lay, managerial and professional audiences. **Potential vehicles for the demonstration of this competence area include:** • Preparing a health impact assessment. • Developing a local policy. • Writing a paper for a Board meeting or equivalent. • Leading the local implementation of a national policy. **Potential settings for the demonstration of this competence area:** By the end of training trainees will be expected to have worked on policy analysis, development and implementation in each of the three public health domains (health protection, health improvement and service quality). Trainees will be expected to appraise the evidence and values that underpin policies and must demonstrate clear understanding of related strategies. Understanding and development of policy and strategy may relate to local, national or international aspects of health.
3b Link to KSF
C4: Service improvement C5: Quality HWB1: Promotion of health and well being and prevention of adverse effects on health and wellbeing G5: Services and Project Management
3c Knowledge base
Theories of strategic planning. Principal approaches to policy formation, implementation and evaluation including the relevance of concepts of power, interests and ideology. Knowledge of major national and international policies relevant to public health. Methods of assessing the impact of policies on health.

Learning outcomes: Key area 3. Policy and strategy development and implementation

	Learning outcome	Target phase	Link to related KSF competency	Suitable assessment methods	Link to knowledge base[1]	Related curriculum areas
	Learning outcomes to be achieved at least twice during training					
3.1	Display awareness of current national public health policies	1 & 3	HWB1:4	See Blueprint	4.3.8	KA 4
3.2	Recognise the need for policy work to address problems	1 & 3	C5:4 G5:4	See Blueprint	4.3.8	KA 4
3.3	Identify the key issues which must be addressed when developing policy options	1 & 3	C5.4 C6: 3 HWB1:4	See Blueprint	4.3.8	KA 4
3.4	Propose evidence-based policy options for solving problems and develop appropriate strategy	1 or 2 & 3	C4:1 HWB1:3	See Blueprint	4.3.8	KA 4
3.5	Collate and interpret information and advice from clinical/ other colleagues to inform policy or strategy	1 or 2 & 3	HWB1:4	See Blueprint	1.1.19, 1.1.21, 1.1 35 to 39, 1.4.6	KA 4
3.6	Make appropriate changes to policy and/or strategy proposals in response to discussion with stakeholders	1 & 3	HWB1:4	See Blueprint	5.1 (all), 5.2.2	KA 4
	Learning outcomes to be achieved at least once during training					
3.7	Develop a strategy, based on personal identification of a desired future state, to deliver change from a present unsatisfactory position.	3	HWB1:4	See Blueprint	5.3	KA 4
3.8	Develop a plan to secure the resources required to implement a strategy successfully	3	G5:4	See Blueprint	4.4.3	KA 4
3.9	Overcome problems that arise when implementing a plan or strategy	3	G5:4	See Blueprint	4.3.7, 5.2.7	KA 4
3.10	Analyse the process and outcomes of policy implementation	3	G5:4	See Blueprint	1.3	KA 4

[1] Numbers link either to Key Areas (KA), learning outcomes (LO) or to the Part A syllabus

Key area 4

Strategic leadership and collaborative working for health

This area of practice focuses on leading teams and individuals, building alliances, developing capacity and capability, working in partnership with other practitioners and agencies, and using the media effectively to improve health and well-being.

4a Learning experiences
By the end of phase 1, trainees will understand different styles of leadership and work effectively as part of a team, showing insight into their own behaviour within teams in different settings. They will display a professional commitment to ethical practice. They will understand the theory of management and change management and manage straight forward projects. By the end of phase 2, trainees will be part of a multi-disciplinary team, working with and involving other stakeholders as appropriate. They will display critical self appraisal and reflective practice. They will be able to manage projects, manage change and handle uncertainty, the unexpected, challenge and conflict in an appropriate manner. They will have experience of working with the media. By the end of phase 3, trainees will manage more complex change management situations, understanding and managing the conflict involved and negotiating solutions. They will show appropriate leadership styles in different settings, including multi-agency settings. They will use appropriate communication and advocacy skills in a variety of public health settings, listening and responding appropriately. They will be expected to demonstrate the appropriate management of people and financial resources. **Potential vehicles for the demonstration of this competence area** • Working effectively as part of team. • Chairing a multi-disciplinary meeting. • Leading a public health project. • Successfully completing a change management project. • Identifying and engaging stakeholders in projects to improve the public's health. • Working with the media. **Potential settings for the demonstration of this competence area**: By the end of training trainees will be expected to have developed leadership skills in each of the three domains of public health and to have worked collaboratively with more than two of the following agencies/organisations: local authorities, regional departments of government and/or national government, consumer groups and clinicians. The leadership contribution in each setting must be clearly demonstrated by tangible outcomes of delivery and /or demonstrable skill development. Competence is this area may also be demonstrated through work in international public health.
4b Link to KSF
C1: Communication, C2: Personal and People Development C4: Service Improvement, C5: Quality, C6: Equality and Diversity HWB 1: Promotion of Health and Wellbeing; Prevention of Adverse Effects on Health and Wellbeing G5: Services and Project Management

4c Knowledge base
Understanding individuals, teams/groups and their development: Motivation, creativity and innovation in individuals, and its relationship to group and team dynamics; personal management skills; theories and models of management, leadership and delegation; principles of negotiation and influencing; principles, theories and methods of effective communication (written and oral) including mass communication; The theoretical and practical aspects of power and authority, role and conflict. Understanding organisations, their function and structure: the internal and external organisational environments - evaluating internal resources and organisational capabilities; identifying and managing internal and external stakeholder interests; structuring and managing interorganisational (network) relationships, including intersectoral work, collaborative working practices and partnerships; social networks and communities of interest; assessing the impact of political, economic, socio-cultural, environmental and other external influences. Management and change: critical evaluation principles and frameworks for managing change; issues underpinning design and implementation of performance management against goals and objectives.

Learning outcomes: Key area 4. Strategic leadership and collaborative working for health

	Learning outcome	Target phase	Link to related KSF competency	Suitable assessment methods	Link to knowledge base[1]	Related curriculum areas
	Leadership – achieving change with and through people					
4.1	Demonstrate insight into own leadership style and personality type and preferences in different circumstances	2	C2:3	**See Blueprint**	5.1 to 5.3	All
4.2	Display critical self-appraisal and reflective practice	2	C2:3	**See Blueprint**	5.1 to 5.3	All
4.3	Use effective and appropriate leadership styles in different settings and organisational cultures taking account of the differences between elected and appointed roles	3	C2:3	**See Blueprint**	5.1 to 5.3	All
4.4	Develop a vision and communicate that effectively to other key stakeholders	3	C1:4	**See Blueprint**	5.1 to 5.3	All
4.5	Demonstrate appropriate presentation communication skills, including descriptions of complex issues, in typical public health settings	2	C1:4	**See Blueprint**	5.1 to 5.3	All
4.6	Communicate the concept of risk in terms of health/ financial/ reputational and political risk	2	C1:4	**See Blueprint**	5.1 to 5.3	All
4.7	Demonstrate appropriate listening communication skills in a typical public health setting	2	C1:4	**See Blueprint**	5.1 to 5.3	All
	Operational management – managing people, resources and process					
4.8	Manage a project to successful completion within available resources and timescales	3	G5:4	**See Blueprint**	5.1 to 5.3	All
4.9	Demonstrates effective team working in a variety of settings	2	C2:3	**See Blueprint**	5.1 to 5.3	All
4.10	Demonstrates an understanding of how to use different methods of financial management	3	G4:1	**See Blueprint**	5.1 to 5.3	All
4.11	Guide and support staff, monitor work, receive, give constructive feedback and develop staff	3	C2:3	**See Blueprint**	5.1 to 5.3	All
4.12	Balance the needs of the individual, the team and the task	3	C2:3	**See Blueprint**	5.1 to 5.3	All
	Change management					
4.13	Analyse appropriately a situation or project and identify the steps required to achieve change	2	G5:3 C5:4	**See Blueprint**	5.1 to 5.3	All
4.14	Display leadership within a team and a multi-agency setting	3	C4:3	**See Blueprint**	5.1 to 5.3	All

	Learning outcome	Target phase	Link to related KSF competency	Suitable assessment methods	Link to knowledge base[1]	Related curriculum areas
4.15	Handle uncertainty, the unexpected, challenge and moderate levels of conflict in an appropriate and sensitive manner including communicating effectively in a potentially hostile or emotive situation.	2	C5:4	See Blueprint	5.1 to 5.3	All
4.16	Handle major levels of conflict in an appropriate and sensitive manner	3	C1:4	See Blueprint	5.1 to 5.3	All
4.17	Negotiate and influence in a multi-agency arena	3	HWB1:4	See Blueprint	5.1 to 5.3	All
	Collaborative working – working with partners and stakeholders to achieve change					
4.18	Identify and engage relevant stakeholders for a project to improve public health	2	C5:4 G7:2	See Blueprint	5.1 to 5.3	All
4.19	Work in partnership with other agencies on problems of high complexity	3	C6: 3 HWB1:4	See Blueprint	5.1 to 5.3	All
4.20	Work collaboratively with the media to communicate effectively with the public	2	C1:4	See Blueprint	5.1 to 5.3	All

[1] Numbers link either to Key Areas (KA), learning outcomes (LO) or to the Part A syllabus

Key area 5

Health improvement

This area of practice focuses on promoting the health of populations by influencing lifestyle and socio-economic, physical and cultural environment (including sustainable development) and health education directed towards populations, communities and individuals. It involves a theoretical and practical understanding of health improvement in order to work with, and possibly direct, health improvement specialists.

5a Learning experience
By the end of phase 1, trainees would be expected to have acquired a firm knowledge base and be able to engage in critical debate with informed colleagues on health improvement. By the end of phase 2, trainees have started working to apply this knowledge to improve the health of local populations including working in teams to analyse the need for health improvement, plan health improvement activities, implement and communicate those plans. By the end of phase 3, trainees would be involved in increasingly complex health improvement activities, including community development activity, work with other professionals and understanding barriers to health improvement measures. **Potential vehicles for the demonstration of this competence area include**: • Briefings for boards, committees, colleagues on health improvement issues. • Proposals (business cases) for health improvement activities. • Reports and evaluations of health improvement activities showing ability to reflect on own contribution and relate practical experience to theory. • Logs of joint projects undertaken (probably in assistant capacity) with health improvement specialists. • Elements of Masters submissions. • Peer reviewed publications. **Potential settings for the demonstration of this competence area**: By the end of training trainees will be expected to have undertaken health improvement/community development work in both a health care setting, a community setting (which may be work led by non-health organisations such as local government) and in the context of health protection. Trainees must demonstrate their personal contribution to a specific programme or intervention, and how it is perceived by users and/or the press. They will have considered the health improvement needs of at least one marginalized or disadvantaged group. For simpler health improvement activities (such as producing a limited local health improvement programme or writing a press release) it is to be expected that the trainee will have taken a lead role before completing training. For others such as community development programmes or national policy development it is only expected that they have been sufficiently closely involved with the processes to understand what the issues are and how more experienced colleagues approach them.
5b Link to KSF
C4: Service Improvement C6: Equality and Diversity HWB 1: Promotion of Health and Wellbeing; Prevention of Adverse Effects on Health and Wellbeing G5: Services and Project Management

5c Knowledge base
Principles and practice of health promotion and education including models of behavioural change, definitions of health (physical, mental and social), principles of sustainable development. Ethical and political issues underlying responsibility for health. Determinants of health. The prevention paradox. Role of regulation, legislation and fiscal measure in promotion of health. Evaluation of health education activities including outcomes, appropriateness of different methods, limitations and strengths of RCT type and qualitative approaches. Risk reduction versus harm minimisation. Social marketing theory (diffusion of knowledge). Theory and practice of community development. Strengths and weakness of community development approaches. Practical problems of community development. Place of professional in community development.

Learning Outcomes: Key Area 5. Health Improvement

	Learning outcome	Target phase	Link to related KSF competency	Suitable assessment methods	Link to knowledge base[1]	Related Curriculum Areas
5.1	Debate the relative importance of individual and society decisions for health and ethical issues relating to health improvement	1	C6:2	See Blueprint	2.1, 2.3 to 2.6	KA 3
5.2	Debate the theory of community development and action	1	C6:2	See Blueprint	2.1, 2.3 to 2.6	KA 4
5.3	Debate the strengths and weaknesses of a variety of health improvement interventions directed at large populations including social marketing	1	HWB1:3	See Blueprint	2.1, 2.3 to 2.6	
5.4	Assess and communicate the need for health improvement in a defined community, presenting a case for action/inaction in response to the presenting health problem	2	C6:2	See Blueprint	As above plus KA 1	KA 1
5.5	Develop and implement a plan to address a health improvement need in a defined community making clear the theoretical base for a proposal and developing a business case for an activity	3	C6: 3 G5:4 HWB1:4	See Blueprint	As 5.1, 4.3.8, 1.1.19, 1.1.21, 1.1.35 to 49, 1.4.6, 5.1, 5.2.2, 4.4.3, 4.3.7, 5.2.7	KA 4
5.6	Evaluate a health improvement intervention, defending outcomes and methods chosen, identifying strengths and limitations of intervention, communicating findings and making recommendations	3	C6:3 HWB1:4	See Blueprint	2.1, 2.3 to 2.6 plus KA 3	KA 2
5.7	Influence a community development project or action demonstrating understanding of relationships with the community and community development staff including issues of power and politics	3	C6:3	See Blueprint	2.1, 2.3 to 2.6 plus KA 4	KA 4
5.8	Apply the theoretical models of behaviour change for the general population and high risk/ hard to reach groups	3	C4:3	See Blueprint	2.7	KAs 2, 4
5.9	Influence professional groups outside public health in giving advice to and making brief interventions with patients/clients on health behaviour issues.	3	C4:3	See Blueprint	2.7 and KA 4	KA 4
5.10	Play an active role in engaging the public in solving their own health problems	3	HWB1:4	See Blueprint	2.7	KA 4

[1] Numbers link either to Key Areas (KA), learning outcomes (LO) or to the Part A syllabus

Optional Special Interest Learning Outcomes

	Learning outcome	Target phase*	Suitable assessment methods
5.11	Contribute to formulation of policy/ legislation having a bearing on population health at a national or regional level (as appropriate to the country).	3	**See Blueprint**
5.12	Apply understanding of a range of organisations and their different cultures and perspectives to bring about effective health improvement activity	3	**See Blueprint**
5.13	Lead or make a significant contribution to a major public health media campaign demonstrating an understanding of appropriate theory and applications of social marketing and mass communication	3	**See Blueprint**

* All learning outcomes for special interest options would be expected to be gained in phase 3

Key area 6

Health protection

This area of practice focuses on the protection of the public's health from communicable and environmental hazards by the application of a range of methods including hazard identification, risk assessment and the promotion and implementation of appropriate interventions to reduce risk and promote health.

6a Learning experiences
By the end of phase 1, trainees will have a firm knowledge base for communicable disease and environmental hazard control including both general and specific settings. They will also have a working knowledge of the principles of emergency planning. Drawing conclusions from surveillance, the trainee will be able to participate in simple risk assessment and understand the complex nature of risk communication. By the end of phase 2, trainees would be expected to use data on exposure, potential health effects and outcomes for common hazards to address a real life health protection problem, accessing expertise and other resources as necessary. They would be able to integrate hazard identification, characterisation and assessment into risk assessment for a commonly occurring hazard. The trainee will be exposed to a range of health protection issues and start to demonstrate competence in managing these. They would also be able to meet the educational requirements for commencing supervised on call and have experience of supervised out of hours emergency work. By the end of phase 3, trainees would be expected to be able to pull together different types of complex data to draw conclusions for disease control, environmental and chemical hazards control as well as health improvement in the health protection context. They will be able to demonstrate and integrate all public health skills in a health protection context including health intelligence, assessment of effectiveness, policy development, leadership and risk communication and have undertaken health improvement and health service quality work. Trainees will recognise and work within the limits of their professional competence in relation to out of hours emergency work. **Potential vehicles for the demonstration of this competence area:** • Workplace based assessment e.g. on-call scenarios. • Scenario based exercises. • Reports (including Outbreak/incident reports) and peer reviewed publications. • Presentation of material at peer groups, internal peer audit or external meetings or conferences. **Potential settings for the demonstration of this competence area:** By the end of training trainees will have dealt with a broad range of communicable disease and environmental incidents and threats to health in both health care and community settings, including participating in the management of a significant outbreak. Work overseas or work relating to aspects of international public health protection will also provide opportunity to demonstrate competence in this area of practice.
6b Link to KSF
C1: Communication C2: Personal and People Development C4: Service Improvement HWB 3: Protection of Health and Wellbeing IK2: Information Collection and Analysis G5: Services and Project Management

6c Knowledge base
Epidemiology (including microbial epidemiology), and biology (including microbiology) of communicable diseases. Health and social behaviour: in relation to risk of infectious and environmental diseases. Environment: environmental determinants of disease and their control; risk and hazard; legislation in environmental control; environmental monitoring; factors affecting health and safety at work; occupation and health; transport policies and health impact assessment for environmental pollution; chemical incident management. Communicable disease: definitions, surveillance; methods of control; the design, evaluation, and management of immunisation programmes; outbreak investigation including the use of relevant epidemiological methods; causes, distribution, natural history, clinical presentation, methods of diagnosis and control of infections of local and international Public Health importance; organisation of infection control; international aspects of hazard control, national and international public health legislation and its application. Health protection service issues: the development, commissioning and evaluation of the services required for protecting health, including sexual health, TB, immunisations, infection control, antibiotic resistance, occupational health, travel health and screening and the need for services in particular settings and in high risk groups (e.g. prisons, with asylum seekers, in dental health).

Learning outcomes: Key area 6. Health protection

Health protection is practised in a number of different settings and contexts. Many competencies in other key areas are essential for health protection practice and are not repeated here. These include KAs 1 and 8 for surveillance and KA 4 for communication. It is important for training breadth to ensure that, during phase 3 of training, some core competencies are developed in a health protection context as the three months during phase two spent in a health protection unit may not be enough time to cover this. (Examples are when health protection is just one element of a holistic approach e.g. settings like prisons or schools; risk groups like asylum seekers or intravenous drug users; diseases such as asthma or COPD; services like sexual health etc or when health intelligence, health improvement or service improvement skills are applied to problems related to communicable or environmentally related diseases in general service based work).

Some essential health protection experience cannot be guaranteed during the three month attachment (e.g. outbreak investigation/management) and may instead be covered during phase 3.

Some competencies will be further developed by doing on-call. On -call does not start until phase 2, requiring a firm knowledge base. The specific competencies to be assessed for competence to start out of hours on call are detailed separately.

	Learning outcome	Target phase	Link to related KSF competency	Suitable assessment methods	Link to knowledge base[1]	Related curriculu m areas
	Risk Assessment					
6.1	Identify known or potential health effects associated with a particular hazard relevant to health protection which is common in a population	1	HWB3:2	See Blueprint	2.1.2, 2.3 to 2.6	KA1
6.2	Characterise the hazard identified, both quantitatively and qualitatively	2	HWB3:3	See Blueprint	1.1.10 to 1.1.12, 1.4	KAs 1, 8
6.3	Assess the degree of risk associated with exposure to a hazard commonly found in a population	2	HWB3:3	See Blueprint	1.1.10 to 1.1.12	KAs 1, 2
6.4	Integrate hazard identification, characterisation and assessment into an estimate of the adverse events likely to occur in a population, based on a hazard commonly found in that population	2	HWB3:3	See Blueprint	1.1.10 to 1.1.12	KAs 1, 2
6.5	Be able to complete a risk assessment for a hazard not commonly found in a population, drawing on external expertise as appropriate	3	HWB3:3	See Blueprint	1.1.10 to 1.1.12	KAs 1, 2
	Risk Communication					
6.6	Describe complex issues clearly to individuals, groups and communities	2	C1:4	See Blueprint	6.3	KA 4

	Risk Management **(a) Interventions –managing risks to health**					
6.7	Meet the educational requirements for commencing supervised on call *Particular standards to be reached before commencing on call are identified in a separate document*	2	C2:3	**See Blueprint**	2.2 to 2.7	KA 4, GPHP
6.8	Meet the educational requirements for undertaking on-call as a generic consultant in public health (operating within limits of own professional competence and with the advice of a medical consultant who specialises in health protection available at all times)	3	C2:3	**See Blueprint**	2.2 to 2.7	KA 4
6.9	Ask appropriate questions to recognise a problem when presented with a health protection challenge	2	HWB3:3	**See Blueprint**	2.2, 2.6	KA 4
6.10	Interpret the answer received and recognise the need to ask for relevant advice where appropriate	2	HWB3:3	**See Blueprint**	2.2, 2.6	KAs 1, 2
6.11	Identify and confirm the risks and possible exposures	2	HWB3:3	**See Blueprint**	1.1.10 to 1.1.12, 2.2, 2.6	KA 1
6.12	Describe the organisation of infection control and apply effective and appropriate procedures and policies to reduce risk	2	HWB3:3	**See Blueprint**	1.1.10 to 1.1.12	KA 4
6.13	Advise on and co-ordinate public health action required in the light of existing local & national policies and guidelines	2 or 3	HWB3:3	**See Blueprint**	2.6	KAs 4, 5, 8
	(b) Interventions – incident management					
6.14	Describe the general principles of emergency planning and managing a major incident	2	HWB3:2	**See Blueprint**	2.6	KA 4
6.15	Participate in and make a significant contribution to the investigation of an incident/outbreak including preparation of final report	2 or 3	HWB3:3	**See Blueprint**	2.6	KA 4

[1] Numbers link either to Key Areas (KA), learning outcomes (LO) or to the Part A syllabus

Optional Special Interest Learning Outcomes

	Learning outcome	Target phase*	Suitable assessment methods
6.16	Integrate different types of data, using complex data sets, or collection of ad hoc data to draw appropriate conclusions for disease control, environmental and chemical hazards control and health improvement	3	**See Blueprint**
6.17	Lead or take a major role in the investigation and management of a significant incident, to include an outbreak, non infectious disease incident and a look back	3	**See Blueprint**
6.18	Evaluate the management of an outbreak or incident	3	**See Blueprint**
6.19	Evaluate a health protection service improvement	3	**See Blueprint**
6.20	Apply heath protection principles to services relevant to health protection in particular settings and in high risk groups (e.g. prisons, with asylum seekers, in dental health, port health)	3	**See Blueprint**
6.21	Undertake a complex health protection health needs assessment	3	**See Blueprint**
6.22	Understand and apply the theoretical models of behaviour change, in the context of health protection for the general population and high risk/ hard to reach groups	3	**See Blueprint**
6.23	Develop and test/audit a multi agency incident control plan	3	**See Blueprint**
6.24	Establish or evaluate and quality assure a specific health protection surveillance system, including reporting and early warning, to meet a specified need for a defined population.	3	**See Blueprint**
6.25	Lead or make a substantial contribution to the implementation of a health protection policy or campaign	3	**See Blueprint**
6.26	Show appropriate judgement on the basis of potentially incomplete/conflicting clinical information	3	**See Blueprint**
6.27	Identify and intervene when a clinical risk to the health of the public is identified	3	**See Blueprint**
6.28	Generate hypotheses for health protection problems and test them in appropriate epidemiological studies	3	**See Blueprint**

* All learning outcomes for special interest options would be expected to be gained in phase 3

Key area 7

Health and social service quality

This area of practice covers commissioning, clinical governance, quality improvement, patient safety, equity of service provision and prioritisation of health and social care services.

7a Learning experiences
By the end of phase 1 trainees should know the basic principles of commissioning, clinical governance, quality improvement, patient safety, equity of service provision and prioritisation related to this area. By the end of phase 2 trainees should know how to collate and assess relevant evidence and make recommendations for service change and prioritisation. By the end of phase 3 trainees should have implemented and led change in some of the areas above. They will also have proactively sought out opportunities to use evidence to influence decisions. They will have worked on highly complex issues and influenced the decisions of senior decision-makers both within and across organisations and outside it. **Potential vehicles for the demonstration of this competence area:** • Evidence briefings providing recommendations for policy (for boards, committees, public health colleagues, the public) • Writing or appraising business cases and service specifications • Health needs assessment • Press releases • Clinical or public health audit and governance reports • Development of clinical guidelines and quality standards • Calculation of population costings for new technologies • Reports on commissioning and delivery of clinical services • Quality improvement strategy/policy/programmes • Peer reviewed publication **Potential settings for the demonstration of this competence area:** By the end of training trainees will be expected to have been involved in work in developing, evaluating, improving and commissioning health and social care services. Work must include at least two of the following: an acute service setting (including clinical networks), a primary care setting, a mental health care setting, a health protection context and a wider preventive / community setting. These may be at local and/or regional/national level.
7b Link to KSF
C1: Communication C5: Quality HWB1: Promotion of health and wellbeing and prevention of adverse effects on health and wellbeing IK2: Information Collection and Analysis G5: Services and Project Management

7c Knowledge base
Research methods appropriate to public health practice, including epidemiology, statistical methods, and other methods of enquiry including qualitative research methods. Disease causation and the diagnostic process in relation to public health; prevention and health promotion. Health information and audit methodology. Medical sociology, social policy, and health economics. Organisation and management of health care and health care programmes from a public health perspective. Ethical and legal frameworks. Clinical governance.

Learning outcomes: Key area 7. Health and Social Service Quality

	Learning outcome	Target phase	Link to related KSF competency	Suitable assessment methods	Link to knowledge base[1]	Related curriculum areas
7.1	Evaluate and audit services to assure and improve quality.	2 or 3	C5:4	See Blueprint	*5.1, 5.3*	*KAs 2, 9*
7.2	*Design and implement data collection for a defined service question and integrates data outputs with other routinely available and relevant data*	*2 or 3*	*C5:3 IK2:4*	See Blueprint	*1.1.21 to 22, 1.2.11 to 15, 4.2, 4.4*	*KAs 2, 8*
7.3	Critically appraise a business case or cost/budget assessment for a new service development or configuration from either a provider or commissioner perspective	3	G5:4	See Blueprint	KA 2	KAs 2, 3
7.4	Conduct a health economic or cost/budget assessment in response to a clinical priority setting question to inform commissioning	3	G5:4	See Blueprint	4.4	KAs 2, 3
7.5	Contribute to a project using techniques of resource mapping and economic appraisal of resource redeployment, such as programme budgeting and marginal analysis	3	G5:4	See Blueprint	4.3.1 to 4.3.3	KA 4
7.6	Prepare and present a service specification document which will lead to service development to a relevant committee or management group within the organisation	3	C1:4	See Blueprint	KAs 3 & 4	KAs 3, 4
7.7	Assess an individual funding request using sound legal and ethical principles	3	G5:4	See Blueprint	KA 2	KA 3
7.8	Monitor and appraise the impact of screening or other similar disease prevention programme	3	G5:4	See Blueprint	1.1.21 - 22, 1.2.11 - 15, 2.2	KA 1, 6, 8
7.9	Develop policy on cost-effective commissioning of new procedures or treatment taking into account exceptional care and legal guidelines	3	HWB1:4	See Blueprint	4.3.8, 4.4, 5.3	KAs 2, 3
7.10	Apply the results of a healthcare needs assessment for a relevant local population or community leading to service development	3	HWB1:4	See Blueprint	1.1 to 1.3, 5.1 to 5.3	KA 1, 4
7.11	Establish links with existing professional networks or set up new professional groups to direct changes in service configurations across and within different organisations and health/social care settings	3	HWB1:4	See Blueprint	5.1 to 5.3	KA 4
7.12	Identify and deal with uncertainty in service change decision making processes	3	HWB1:4	See Blueprint	5.1 to 5.3	KA 4

[1] Numbers link either to Key Areas (KA), learning outcomes (LO) or to the Part A syllabus

Optional Special Interest Learning Outcomes

	Learning outcome	Target phase*	Suitable assessment methods
7.13	Model and project the impacts of the introduction of new services, technologies and treatments	3	See Blueprint
7.14	Lead an exercise in horizon scanning for new technologies and treatments which informs planning decisions	3	See Blueprint
7.15	Carry out an appraisal of the quality and outcome of an under-performing care or provider area and report back with recommendations for action to relevant multi-disciplinary management forum	3	See Blueprint
7.16	Design and co-ordinate a multi-trust or cross organisation audit or evaluation of a clinical or service area or topic including the development and assessment of guidelines	3	See Blueprint
7.17	Set up a service review and leads change management process if needed	3	See Blueprint
7.18	Lead the development of outcome measures and standard setting within the context of professional networks and/or commissioning	3	See Blueprint
7.19	Take a lead role in setting budgetary programmes and marginal cost analysis in the context of business planning, option appraisal and disinvestment	3	See Blueprint
7.20	Prepare a service commissioning policy and associated contractual documentation e.g. service level agreement, incorporating outcome measures demonstrating rationality in the local and national context	3	See Blueprint
7.21	Lead the assessment, project management and investigation of a clinical governance issue e.g. an adverse event or serious untoward incident or professional regulatory problem within or across provider organisations or within a clinical network demonstrating impact through change	3	See Blueprint

* All learning outcomes for special interest options would be expected to be gained in phase 3

Key area 8

Public health intelligence

This area of practice focuses on the systems and strategies that are essential for organisations to base practice and policy on sound intelligence. It uses the skills of key areas 1 and 2 to establish intelligence systems, integrating the skills and methods of routine and ad hoc data and research evidence into systems and strategies. This area involves a clear understanding of the systems and capacity needed to deliver surveillance and early warning functions and costs effective interventions. This includes the quantification of performance management systems for health care and public health systems. This area addresses systems that should deliver intelligence using formats and methods that are relevant to particular needs and specific to particular audiences.

8a Learning experiences
By the end of phase 1, trainees will know the different sorts of intelligence and how they are used by practitioners, decision makers and policy makers. By the end of phase 2, trainees will know a wide range of specific sources of intelligence including their quality and relevance in specific circumstances. They will be capable, and will have had experience, of assembling such intelligence to provide valued decision support to practitioners, senior decision makers and policy makers. By the end of phase 3, trainees will be skilled at working with senior management in understanding the intelligence systems required to develop interventions to address the needs* of sub populations served. Trainees will be able to effectively use public health intelligence in the development, implementation and evaluation of policies and strategies. The trainee will understand how to evaluate their actions and will be able to identify why/if a contribution appears to have been unvalued or unsuccessful and have subsequently developed alternative strategies. By the end of training trainees will be expected to have contributed to the surveillance of the public's health from within, or via, a local, regional or national intelligence unit. *needs as expressed through population preference and through objective measurements **Potential vehicles for the demonstration of this competence area include**: • Implementation of national surveillance policy. • Quality assurance activity. • Data flow analysis. • Development of systems to extract intelligence and decision support from data sets. • Production of a major data rich report (e.g. public health annual report). **Potential settings for the demonstration of this competence area**: Learning outcomes in health intelligence can be gained in service work through links with specialist health intelligence units such as public health observatories, cancer registries and QA reference centres. Work in academic departments and health protection will expose trainees to public health intelligence.
8b Link to KSF
C1: Communication IK2: Information Collection and Analysis IK3: Knowledge and Information Resources
8c Knowledge base
Advanced techniques in surveillance and dissemination. Methods of trending and modelling health status. Linkage of data sets; Design of knowledge management systems for both data and research literature (libraries); The role of ICT in intelligence based and evidence based decision support; Integration of clinical data systems and population based systems to reduce inequalities and improve health; Technical, legal and ethical issues relating to data security, disclosure and trust. Pseudonymisation. The role of information and intelligence in policy formulation and implementation, and in local clinical and public health practice.

Learning outcomes: Key area 8. Public health intelligence

	Learning Outcome	Target phase	Link to related KSF competency	Suitable assessment methods	Link to knowledge base[1]	Related curriculum areas
8.1	Formulate and articulate problems so they can be addressed by using public health intelligence	1	IK2:3	See Blueprint	n/a	KAs 1, 2
8.2	Organise data, meta-data, information and knowledge (knowledge management including libraries)	1	IK3:2	See Blueprint	3.1. to 3.3	KAs 1, 9
8.3	Appraise the validity and relevance of data and data systems in order to assess their quality and fitness for purpose	2	IK2:4	See Blueprint	3.1 to 3.3	KA 1
8.4	Use data with a full appreciation of the legal and ethical aspects of data collection, manipulation and release (confidentiality, security, privacy and disclosure) in order to balance societal benefit with individual privacy	2	IK2:4	See Blueprint	3.1 to 3.3	KAs 1, 9
8.5	Present and communicate population health intelligence in effective ways in order to monitor system performance and to improve decisions of colleagues, practitioners and senior decision makers	3	C1:4	See Blueprint	6.3	KAs 1, 7
8.6	Present and communicate population health intelligence in effective ways in order to develop local and national policy	3	C1:4	See Blueprint	6.3	KA 3, 6
8.7	Treat information about patients as confidential	1, 2 & 3	IK2:4	See Blueprint	n/a	GPHP
8.8	Provide information needed and requested and in a way that can be understood	1, 2 & 3	C1:4	See Blueprint	n/a	GPHP

[1] Numbers link either to Key Areas (KA), learning outcomes (LO) or to the Part A syllabus

Optional Special Interest Learning Outcomes

	Learning outcome	Target phase*	Suitable assessment methods
8.9	Make a major contribution to systematic collecting, collating and interpreting of intelligence to inform the commissioning of health care and public health activities.	3	See Blueprint
8.10	Establish and quality assure a specific surveillance system, including reporting and early warning, to meet a specified need for a defined population.	3	See Blueprint
8.11	Lead the delivery and quality assurance of an intelligence unit function	3	See Blueprint
8.12	Contribute to strategic leadership and management of a health intelligence function	3	See Blueprint
8.13	Make use of novel technologies to collect, generate, synthesise, appraise, analyse, interpret or communicate health intelligence	3	See Blueprint

* All learning outcomes for special interest options would be expected to be gained in phase 3

Key area 9

Academic public health

This area of practice focuses on the teaching of and research into public health.

9a Learning experiences

By the end of phase 1, trainees should understand the important areas of uncertainty in public health and have the ability to distinguish those areas which are amenable to research, and how, within available resources. The importance of these uncertainties should be related ultimately to potential population health gain. The main outlines of the methods for effective research in public health should be understood with reference to public health problems for which the optimum solution is unclear.

By the end of phase 2, trainees will be able to distinguish evidence-based strategies from others and prioritise accordingly and will have participated in some teaching. They will have presented in an academic setting of critical peers.

By the end of phase 3, trainees will have demonstrated their ability to teach reflectively and with enthusiasm, in class and individually, will have had experience of or observed prioritising, writing and presenting research findings. They will demonstrate an ability to write proposals, to critique research substantively and have used one or more research methodologies to support current service or academic work, disseminating findings appropriately. By the end of training trainees will be expected to have undertaken some original research in association with an academic unit and taught public health to a range of audiences.

Potential vehicles for the demonstration of this competence area include:

- Written research reports including literature reviews.
- Course documentation, demonstrating participation in design and/or delivery.
- Conference proceedings.
- Diplomas and higher degrees.
- Published peer reviewed papers.
- Articles in the media.
- Referees reports on other people's articles submitted for publications.
- Research proposals submitted (possibly in collaboration).
- Peer observation of teaching and student feedback.
- Teaching or research prizes.
- Book Chapters etc.

Potential settings for the demonstration of this competence area:

Research methodologies can be demonstrated in service and academic settings both in original research and in support of other work. Academic public health competence could also be gained in health protection settings. Public health could be taught to a range of audiences including medical students, other health care professionals and local authority staff

9b Link to KSF

IK2: Information Collection and Analysis
IK3: Knowledge and Information Resources
G5: Services and Project Management
G7: Capacity and Capability

9c Knowledge base
Epidemiology, statistics, economic evaluation and qualitative research methods. Social and health psychological sciences. Biological, social, environmental and therapeutic determinants of health and disease. Mechanism of therapeutic interventions, including complex interventions. Educational theory, principles of setting learning objectives, curriculum development, GMC documents, course evaluation and student assessment. Research governance, research ethics, confidentiality and privacy of personal data.

Learning outcomes: Key area 9. Academic public health

	Learning outcome	Target phase	Link to related KSF competency	Suitable assessment methods	Link to knowledge base[1]	Related curriculum areas
	Using research methods					
9.1	Apply and interpret appropriate statistical methods	1	IK2:3	See Blueprint	1.2	KA 1, 2
9.2	Formulate a specific public health research question	3	IK2:4	See Blueprint	n/a	KA 2, 2
9.3	Interpret a meta-analysis	3	IK2:4	See Blueprint	1.1.35 to 37, 1.2.19 to 21	KA 2
9.4	Define appropriate outcome measures and data requirements for specific research proposals, both quantitative and qualitative	3	IK2:4	See Blueprint	1.2, 1.4	KA 1, 2
9.5	Identify the resource implications of varied research strategies	3	G5:4	See Blueprint	5.4	KA 3
9.6	Use one or more research methods to support work undertaken in a service or research setting, disseminating findings appropriately	3	IK2:3	See Blueprint	1.1 to 1.4	KAs 3, 4
9.7	Identify the potential for misleading findings from different research methods and identify ways to avoid them	1	IK2:3	See Blueprint	1.1	KA 2
9.8	Draw appropriate conclusions and make recommendations from others' research	1	IK3:1	See Blueprint	1.1, 1.2, KA 2	KA 3
9.9	Identify research needs based on patient/population needs and in collaboration with relevant partners	1, 2 & 3	G5:4	See Blueprint	n/a	GPHP
9.10	Work within the principles of good research governance where appropriate	1, 2 & 3	G5:4	See Blueprint	n/a	GPHP
	Facilitate learning					
9.11	Help the public to be aware of and understand health issues	3	G7:2	See Blueprint	n/a	GPHP
9.12	Contribute to the education and training of other staff, medical students and colleagues.	3	G7.2	See Blueprint	n/a	GPHP
9.13	Develop skills and attitudes for teaching including appropriate supervision and assessment	3	G7:2	See Blueprint	n/a	GPHP
9.14	Supervise a junior colleague in a one-to-one project mentorship	3	G7:2	See Blueprint	n/a	KA 4
9.15	Conduct a group tutorial	3	G7:2	See Blueprint	n/a	KA 4
9.16	Develop and give a large class lecture	3	G7:2	See Blueprint	n/a	KA4
9.17	Advise on the relative strengths and limitations of different research methods to address a specific public health research question	3	IK2:4	See Blueprint	1.1, 1.2, KA 2	KAs 1, 4

[1] Numbers link either to Key Areas (KA), learning outcomes (LO) or to the Part A syllabus

Optional Special Interest Learning Outcomes

	Learning outcome	Target phase *	Suitable assessment methods
	Understanding research methodology		
9.18	Design, undertake and analyse an original research project(s)	3	See Blueprint
9.19	Conduct a systematic review on a defined research question	3	See Blueprint
9.20	Present an accepted research paper at a national public health scientific meeting	3	See Blueprint
9.21	Prepare and submit a research paper to a reputable peer reviewed journal	3	See Blueprint
9.22	Scope research priorities in own area	3	See Blueprint
9.23	Critique research proposals for their validity and feasibility	3	See Blueprint
	Facilitate learning		
9.24	Relate proposed or existing curricula and courses to learning objectives	3	See Blueprint
9.25	Participate in developing and teaching courses and related material	3	See Blueprint
9.26	Organise the design and delivery of an academic course or lecture series	3	See Blueprint
9.27	Supervise others(e.g. MPH or other aspiring academics) and demonstrate ability to assess and to respond reflectively to being assessed	3	See Blueprint
	Leadership and advocacy		
9.28	Engage in leadership roles in curriculum development	3	See Blueprint
9.29	Play a role in a teaching committee	3	See Blueprint
9.30	Advocate beneficial changes in research funding and administrative arrangements for improving public health	3	See Blueprint
9.31	Practice inter-professional and interdisciplinary academic public health	3	See Blueprint
9.32	Be a reflective educator, evaluating practice across research, teaching and administration	3	See Blueprint
9.33	Communicate complex research issues that can affect health to a variety of audiences	3	See Blueprint

* All learning outcomes for special interest options would be expected to be gained in phase 3

Map to *Good Public Health Practice*

Good Public Health Practice	Map to Key Areas and EMS*
Good public health practice	Knowledge syllabus, KAs 1 - 9, EMS 1, 3, 12, 14, 18
Maintaining good public health practice	KAs 1 – 9, EMS 13
Working with colleagues	KAs 3 – 9, EMS 2, 4 - 6, 8 - 11
Good relationships with individuals and communities	KAs 4 – 9, EMS 5 - 8, 11
Teaching, training, assessing and appraising	KA 9, EMS 13
Probity in professional practice	KA 4, EMS 14, 15, 16
Personal health	EMS 16, 17

* Ethical management of self and professionalism

Key Areas

1. Surveillance and assessment of the population's health and well-being.
2. Assessing the evidence of effectiveness of health and healthcare interventions, programmes and services.
3. Policy and strategy development and implementation.
4. Strategic leadership and collaborative working for health.
5. Health Improvement.
6. Health Protection.
7. Health and Social Service Quality.
8. Public Health Intelligence.
9. Academic Public Health.

Knowledge and Skills Framework (KSF)
(as applied to specialist trainees in public health)

The following sections of the Knowledge and Skills Framework apply to trainees in public health. The core dimensions apply to all staff groups, while the specific dimensions vary between staff groups. The identifying number/alphanumeric identifies the specific dimension of the KSF which, together with the level, relates directly to a linked curriculum learning outcome as indicated on the learning outcomes framework.

Each dimension at the appropriate level must be reached by the end of training in order for the trainee to be able to pass through a KSF gateway on the pay scale.

Core/ Specific	Number	Dimension	Level
Core	1	Communication	4
Core	2	Personal and People Development	2
Core	3	Health, Safety and Security	2
Core	4	Service Improvement	4
Core	5	Quality	4
Core	6	Equality and Diversity	3
Specific	HWB1	Promotion of health and wellbeing and prevention of adverse effects on health and wellbeing	4
Specific	HWB3	Protection of health and wellbeing	3
Specific	IK2	Information collection and analysis	4
Specific	IK3	Knowledge and information resources	2
Specific	G5	Services and project management	4
Specific	G7	Capacity and Capability	2

http://www.dh.gov.uk/PolicyAndGuidance/HumanResourcesAndTraining/ModernisingPay/AgendaForChange/fs/en

Activity/Work area title	

Name			
NTN Training number		**PMETB Slot number**	
Date		**Year of training (WTE)**	
Training location		**Trainer/project supervisor**	

Evidence included	
Number and letter eg 1a	

Learning outcomes claimed	**Explanation**	**Evidence**
Number and description of learning outcome		

Activity details

Background

Aims and objectives

Personal contribution/ roles and responsibilities

Methods	**Evidence**

Involvement of others

Results

Outcome

Academic reflection		
Backing literature		
Possible publication		
How will you disseminate this work/finding/learning		
Academic trainer's signature if relevant		Date

Reflection

Trainer reflection

Trainer confirmation		
I confirm that this work supports the learning outcomes claimed	Supervisor's name	Date
Signature		

On Call Logbook

1. Purpose of the Log Book

This log book has been developed as part of the process for assessment of learning outcomes in specialist public health training. The log book aims to fulfil the requirements of the Faculty of Public Health in its guidance on Educational Requirements for On Call, and to form part of the Training Portfolio which trainees will maintain throughout their training.[7]

The log book is designed to record experience of reactive Health Protection work during daytime and out of hours duties. It allows a cumulative record of reactive experience. It should be used in conjunction with the portfolio summary sheets which will record the detail of work undertaken and link this to competence gained, evidence presented and reflection on learning.

2. The Use of the Log Book

Trainees should complete the log of reactive work during each component of their Health Protection experience. The log table should be extended as far as is needed for the record of work. In the action columns trainees should record, with a simple code, whether they have just observed (O), acted under supervision (S) or acted independently (I). Trainees should also indicate whether there was new learning (N) or whether the work consolidated learning (C).

The date and time of the call is important to note and the trainer/supervisor should countersign the record to verify that the work was undertaken as a piece of reactive response to a call either in or out of hours.

This activity log sheet can be used to record out of hours call, in hours queries and in or out of hours major incidents. The log sheet must be submitted with documentation for each ARCP.

[7] Faculty of Public Health. Health protection training for generalists in public health, including educational requirements for on call.

Log of Health Protection Reactive Work

(Please continue table onto as many sheets as you need)

Date	Daytime or OOH	Health Protection query	**Your initial action (brief details)** Include whether observed (O), acted under supervision (S) or acted independently (I)	**Your further action** Include whether observed (O), acted under supervision (S) or acted independently (I) Did this experience include new (N) or consolidated (C) learning	Trainer signature

Reflective Logbook Guide

Specialty Registrars in Public Health are required to develop a professional learning portfolio which will be presented at each ARCP for assessment. The portfolio will include:

- Reflective logbook.
- Activity summary sheets (described below).
- Evidence to back leaning outcome claims described in the summaries.
- On call log sheet.
- Learning outcome sign off sheet.

These documents are described below.

1. Reflective logbook

This document lists competencies by key area and is drawn directly from the leaning outcome framework in the public health curriculum. Against each learning outcome the trainee should list the reference number and title of the piece of work they are using to evidence their claim of competence.

Learning outcome	Evidence
1.7 Undertake a health needs assessment for a defined population for a specific purpose and demonstrate that this work has been considered at a high level in a relevant organisation	1c Mental health promotion report 2a Personality disorder pilot evaluation 11c Epidemiology and stats exam 11i Part I pass 13b CHD needs assessment

The evidence presented is coded for easy retrieval: the number relates to the summary of the whole area of work (see activity summary sheet guidance below) and the letter relates to the specific piece of evidence in the suite of evidence backing the whole area of work. Any one leaning outcome will therefore have several pieces of work with associated backing evidence to support a claim. This presentation of cumulative evidence against the claim of each leaning outcome will allow confidence in sign off for that leaning outcome and also allow easy audit of the claim.

2. Activity summary sheets

Activity summary sheet should be completed for each significant area of work or training. The logbook should be developed over the whole period of training and can include both academic and service work, on call experience and training events, major projects and small one off events. The wide varieties and possibility of training experiences that can be logged are listed:

- Long term linear project based work.
- Long term non-linear PCT work.
- General day to day work.
- Short term isolated activities.
- Induction activities.
- Training courses attended.
- Meetings attended.
- Activities with other trainees.
- Retrospective competencies.
- Academic work.
- Teaching.
- Presentations.

These summary sheets will systematically compile evidence which is descriptive, allow each learning outcome to be evidenced in several ways, give the assessor confidence of a claim by enabling easy retrieval and inspection of actual work and will evidence and encourage reflective practice. The trainee will be more easily able to retrieve work either to remind themselves of a method against a specific learning outcome to help with a future area of work or to prepare for interviews where a job description states a requirement for certain competence. The methodology also prepares the trainee for professional revalidation.

Detailed guidance for actual completion of the activity summary sheet is below.

3. Backing evidence

This section of the portfolio can be presented in hard copy or electronically. It should include copies of reports, e-mails, examination certificates, meeting minutes, PowerPoint presentations, press releases, and publications etc which provide the backing evidence for the leaning outcome claimed. The backing evidence should be archived in a manner that allows easy retrieval and cross reference.

4. On call log sheet

This separate log allows easy reference to the specific area of competence relating to out of hours and emergency reactive work in health protection. The log sheet should be completed after every call both within and out of hours and should include a description of the presenting problem, immediate action, follow up and reflective learning. An emergency call may then lead to a more sustainable piece of work which can be summarized in the portfolio activity summary with backing evidence. For example an out of hours call notifying a possible meningitis case should be logged as a call on the on call log sheet but then may become a major piece of work dealing with contacts and prophylaxis, media involvement etc.

5. Leaning outcome sign off sheet

The trainee will hold one master sheet for leaning outcome sign off. This single sheet of paper lists all the required competencies and allows the trainer to sign off individual competencies. Each signature should be dated. If the trainer uses initials to sign, a key at the bottom of the sheet should allow identification of the signature/initials against a printed name for easy identification and authentication. This single sheet allows the trainer, trainee and ARCP panel an immediate view of numbers and types of competencies yet to be gained and will help to focus training experiences.

It is possible to maintain the complete portfolio electronically. There is no prescribed requirement for electronic or hard copy. An external assessor may require a trainee to present specific evidence backing a leaning outcome claim at a ARCP and should give advance notice of this. Sound archiving will allow this evidence to be retrieved with minimal notice.

Activity summary sheet guidance

Summary sheet item	Descriptor
Activity/Work area title	Activity/Work number and clear title e.g. Activity 2 - The Haven personality disorder pilot evaluation
Personal details	
NTN Training number Date Training location PMETB Slot number Year of training Trainer	Your NTN or other national number. The time period of the work. The training location for this work. The slot number you held during the work. Your year of training during the work. The name of the supervisor of the work (Work might be supervised by someone other than your trainer e.g. another consultant/practitioner).
Evidence included	
number and letter description of evidence	Number matches work number, letter identifies individual pieces of evidence. Description of evidence e.g. Letter to GPs inviting them to participate in locally enhanced service; e-mail from trainer; report etc. Code evidence by activity number and file to enable easy retrieval.
Competencies claimed	
Leaning outcome Explanation Evidence	Leaning outcome number from Reflective logbook; write leaning outcome descriptor in full. Describe how the evidence listed above meets each leaning outcome. List the evidence that backs the claim e.g. 1a, 5d etc. These will link to the list of evidence submitted above.
Activity details	
Background Aims and objectives Role and responsibility Involvement of others Methods Results Outcome	Describe the background to the activity. Include context and public health relevance of the activity. Clear summary of expected gains from this activity. What role did you play in the work? What other support did you need to complete the activity? Which other individuals/agencies were involved in the work? What did you learn from linking with them? Brief summary of methods used to carry out the work. Link these in the next column to the pieces of evidence where they can be seen. For some activities the work will have both results and outcomes. Here describe results – e.g. a needs assessment might show a particular population group having iniquitous access to services. Here describe the activity outcomes including feedback to others. Were the aims and objectives met? What changes/action resulted from the activity?
Reflection	
  Personal reflection Academic reflection Trainer reflection	**This is a very important section of the summary and will allow the trainee to take maximum learning from the work**. Describe what went well and what could be improved upon. What did you learn from this? How will this activity affect what you do in future practice? Here briefly summarise any literature reviewed in support of your work and describe any similar work that has been published. Discuss whether you may consider publication and describe your plans for dissemination of the work. Your trainer should reflect on your work.
Trainer confirmation	Your trainer should sign to confirm that the work described *supports* the claim of competencies. **Note** this signature does not confirm achievement of competence which is indicated on the leaning outcome sign off sheet. If any of the competencies claimed for this area of your work involve some academic knowledge/skills you should discuss this summary with your academic trainer and get their countersignature to the claim.