



FACULTY OF
PUBLIC HEALTH MEDICINE
ROYAL COLLEGE OF PHYSICIANS OF IRELAND

HIGHER SPECIALIST TRAINING IN PUBLIC HEALTH MEDICINE



This curriculum of training in Public Health Medicine was developed in 2010 and undergoes an annual review by Dr. Peter Wright, National Specialty Director, Dr. Ann O'Shaughnessy, Head of Education and Professional Development and by the Public Health Medicine Specialty Training Committee. The curriculum was approved by the Faculty of Public Health Medicine.

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INTRODUCTION

Public health physicians who work in the public health framework

- Work within national and international policy frameworks at all levels
- Deliver comprehensive Public Health Programmes for populations, including vulnerable groups, to improve and protect health
- Rely on partnerships with communities and local government and voluntary sector
- Engage in activities which provide an assessment of the health of the population

A clinical background is essential for much of this work. The legal role of Medical Officer of Health is held by Public Health Physicians and delegated as appropriate to other Public Health physicians. Clinical experience is also invaluable in the health service development arena where understanding the nuances of clinical work is important.

Public Health departments have an advisory and contributory function in health service planning, health needs assessment, evidence based health policy, health service evaluation, clinical effectiveness, clinical governance, health technology assessment, clinical audit, intersectoral working and reduction of health inequalities in the region.

The activities of public health physicians must be considered at three levels:

1. Core activities that they lead on e.g. health protection issues, policy analysis, clinical service developments, epidemiological investigations of disease patterns, interfacing with clinicians in the health service and provision of evidence-based medical advice.
2. Activities that they lead or jointly lead e.g. health impact assessment, evaluation of health services and strategic planning in disease prevention.
3. Activities where they have a significant input e.g. health promotion, needs assessment, planning and social inclusion.

Besides these specialty specific elements, trainees in Public Health Medicine must also acquire certain core competencies which are essential for good medical practice. These comprise the generic components of the curriculum.

AIMS

Upon satisfactory completion of specialist training in Public Health Medicine, the doctor will be **competent** to undertake comprehensive medical practice in that specialty in a **professional** manner, unsupervised and independently and/or within a team, in keeping with the needs of the healthcare system.

Competencies, at a level consistent with practice in the specialty of Public Health Medicine, will include the following:

- Medical knowledge in the basic biomedical, behavioural and clinical sciences, medical ethics and medical jurisprudence and application of such knowledge in patient care.
- Knowledge of Public Health and health policy issues: awareness and responsiveness in the larger context of the Irish health care system, including the organisation of health care, partnership with health care providers and managers, the practice of cost-effective health care, health economics and resource allocations
- Ability to understand health care and identify and plan system-based improvement of care.
- Interpersonal and communication skills that ensure effective information exchange with individual patients and their families and teamwork with other health professionals, the scientific community and the public.
- Appraisal and utilisation of new scientific knowledge to update and continuously improve clinical practice.
- The ability to function as a supervisor, trainer and teacher in relation to colleagues, medical students and other health professionals.
- Professionalism.
- Risk assessment, risk communication and risk management.

- Capability to be a scholar, contributing to development and research in the field of Public Health Medicine.
- Act as an advocate for the promotion and protection of the health of the population.

Professionalism describes the knowledge, skills, attitudes and behaviours expected by patients and society from individuals during the practice of their profession (*as a doctor*). It includes such concepts as:

- The skills of lifelong learning and the maintenance of competence
- Information literacy
- Ethical behaviour
- Integrity, honesty
- Altruism
- Service to, justice and respect for others
- Adherence to professional codes
- Population perspective
- Effecting change

ENTRY REQUIREMENTS

Higher Specialist Training (HST) in the Faculty of Public Health Medicine of the Royal College of Physicians of Ireland is open to fully registered medical doctors.

- 1) Applicants must have obtained a certificate of completion of Basic Specialist Training
OR
completed an approved Irish College of General Practitioner (ICGP) training course (or equivalent) in General Practice.

Note 1: Doctors entering the programme who do not currently hold Part 1 of the Membership of the Faculty of Public Health Medicine of the Royal College of Physicians of Ireland (MFPHMI) or Part A MFPH (UK) or equivalent will be required to sit Part 1 of the MFPHMI in Year 1 of the training programme and must have passed the exam by the end of Year 2 of the training programme. Doctors who do not meet this requirement will not be certified to progress on the training programme

Note 2: For the doctors who will sit the Part 1 of the MFPHMI during training, the Faculty of Public Health Medicine of the Royal College of Physicians of Ireland will make a financial contribution towards the cost of a Masters in Public Health or equivalent in support of taking Part 1 MFPHMI.

Note 3: Doctors who have successfully completed Part 1 of the MFPHMI or Part A MFPH (UK) or equivalent before entering the training programme will be expected to complete Part II MFPHMI as outlined in the curriculum.

DURATION & ORGANISATION OF TRAINING

The duration of HST in Public Health Medicine is 4 years in supervised approved training posts, one year of which may be gained from a period of full-time research. Those who wish to obtain dual certification in Public Health Medicine and another specialty will require at least a fifth year in training.

In certain circumstances where, for example, people may wish to pursue further training in an area of special interest approved by the Faculty of Public Health Medicine, the possibility of a fifth year in training can be accredited.

The earlier years in training will usually be directed towards acquiring a broad general experience of Public Health Medicine under appropriate supervision. An increase in the content of hands-on experience follows naturally, and, as confidence grows and abilities are acquired, the Specialist Registrar will be encouraged to assume a greater degree of responsibility and independence.

A date of appointment to the approved post will be the starting point of the training programme and the Specialist Registrar will start in Year I of the training programme. Retrospective recognition may only be granted if the Specialist Registrar is transferring from a similar training programme elsewhere. The Specialist Registrars will be formally advised of the date of enrolment into the training programme by the Medical Training Department. The Specialist Registrar will also be advised of the expected date of completion of Higher Specialist Training. The Specialist Registrar will be entitled to a Certificate of Satisfactory Completion of Specialist Training (CSCST) on satisfactory completion of the training programme. To qualify for a CSCST, a Specialist Registrar must have satisfactorily completed HST based on annual reviews **and** have been admitted to MFPHMI by examination. On receipt of the Accreditation Committee's recommendation the applicant will be notified whether or not issue of a CSCST has been authorised through the Medical Training Department.

"Generic" knowledge, skills and attitudes support competencies which are common to good medical practice in all the Medical and related specialties. It is intended that all Specialist Registrars should re-affirm those competencies during Higher Specialist Training. No time-scale of acquisition is offered, but failure to make progress towards meeting these important objectives **at an early stage** would cause concern about a SpR's suitability and ability to become independently capable as a specialist.

Please see note in entry requirements section regarding the requirements for doctors entering the training scheme without holding Part 1 MFPHMI or Part A MFPH (UK) or equivalent.

FLEXIBLE TRAINING

Trainees who are unable to work full-time are entitled to opt for flexible training programmes. EC Directive 93/16/EEC requires that:

Part-time training shall meet the same requirements as full-time training, from which it will differ only in the possibility of limited participation in medical activities to a period of at least half of that provided for full-time trainees;

The competent authorities shall ensure that the total duration and quality of part-time training of specialists are not less than that of full-time trainees.

The above provision must be adhered to. A flexible trainee should undertake a *pro rata* share of the out-of-hours duties (*including on-call and other out of hours commitments*) required of their full-time colleagues in the same programme and at an equivalent stage.

for details of appointment and funding arrangements for flexible trainees, please contact your specialty administrator.

TRAINING PROGRAMME

The training programme offered will provide opportunities to fulfil all the requirements of the curriculum of training for Public Health. All Specialist Registrars are required to rotate through more than one location as approved by RCPI and the Faculty. These training posts are mostly based in Departments of Public Health. Other training locations include the Department of Health & Children (*DoHC*), and the Health Protection Surveillance Centre (*HPSC*). Additional locations may become available in the future. All Specialist Registrars are required, at present, to spend six months of their training in the DoHC.

Training programmes are generally flexible according to the qualifications, experience and career intentions of the individual Specialist Registrar.

Each post within the programme will have a named trainer and programmes will be under the direction of the National Specialty Director.

The experience gained through rotation around different departments is recognised as an essential part of HST. No trainee should remain in the same training location for longer than two years and should rotate trainers annually, where possible. Where an essential element of the curriculum is missing from a programme, it needs to be identified at an early stage to ensure access to it can be arranged, by day release, or if necessary by secondment.

All training locations are inspected by RCPI. All trainers must be accredited by the Faculty of Public Health Medicine and RCPI.

Other training experience related to the Specialist Registrar's personal specialist interests and overseas experiences, if applicable, are encouraged, provided educational approval is obtained in advance.

Part II MFPHMI must be completed by the end of training if not already completed prior to entry. It is expected that Specialist Registrars complete Part II by the end of the third year in training.

Where an essential element of the curriculum is missing from a programme, access to it should be arranged, by day release for example, or if necessary by secondment.

TEACHING, RESEARCH & AUDIT

All trainees are required to participate in teaching. They should also receive basic training in research methods, including statistics, so as to be capable of critically evaluating published work.

A period of supervised research relevant to Public Health Medicine is considered highly desirable and will contribute up to 12 months towards the completion of training. Some trainees may wish to spend two or three years in research leading to a MSc, MD, or PhD, by stepping aside from the programme for a time. Additional educational credit may be granted at the discretion of the NSD and STC for clinical work relevant to the Curriculum undertaken during the second and subsequent years of this research, up to a maximum of six months credit. For those intending to pursue an academic path, an extended period of research may be necessary in order to explore a topic fully or to take up an opportunity of developing the basis of a future career. Such extended research may continue after the CSCST is gained. However, those who wish to engage in clinical medical practice must be aware of the need to maintain their clinical skills during any prolonged period concentrated on a research topic, if the need to re-skill is to be avoided.

Trainees are required to engage in audit during training and to provide evidence of having completed the process.

LOGBOOK

Up-to-date training records and a portfolio of achievements will be maintained by the trainee throughout HST. The training records will be countersigned as appropriate by the trainers to confirm the satisfactory fulfilment of the required training experience and the acquisition of the competencies set out in the Public Health Curriculum. They will remain the property of the trainee and must be produced at the annual assessment review.

The trainer and Specialist Registrar must agree an individual training plan, which is reviewed and updated quarterly. A written record of training will be maintained in a logbook. It will be counter signed quarterly by the relevant trainer (*educational supervisor*) and may be used to confirm the satisfactory fulfilment of the required training experience and the acquisition of competence in areas enumerated in the Curriculum. The training record will remain the property of the Specialist Registrar and must be produced for the Annual Assessment Process.

Each trainee is responsible for maintaining an up-to-date record of progress through training and compiling a portfolio of achievements for presentation at annual assessment review. The trainee also has a duty to maximise opportunities to learn, supplementing the training offered with additional self-directed learning in order to fulfil all the educational goals of the curriculum. Trainees must co-operate with other stakeholders in the training process. It is in a SpR's own interest to maintain contact with the Medical Training Office and Dean of Higher Specialist Training, and to respond promptly to all correspondence relating to training. "Failure to co-operate" will be regarded as, in effect, withdrawal from the HST's supervision of training (*see the HST Training Handbook*).

At annual review, the training record will be examined. The results of any assessments and reports by educational supervisors, filed in the portfolio submitted, together with other material capable of confirming the trainee's achievements, will be reviewed.

The training record will be available for the final decision of an assessment panel on its recommendations for Certification of Satisfactory Completion of Specialist Training (CSCST) through the RCPI.

ASSESSMENT PROCESS

The methods used to assess progress through training must be valid and reliable. The Public Health Medicine Curriculum has been re-written, describing the levels of competence which can be recognised. The assessment grade will be awarded on the basis of direct observation in the workplace by consultant supervisors. Time should be set aside for appraisal following the assessment e.g. of clinical presentations, case management, observation of procedures. As progress is being made, the lower levels of competence will be replaced progressively by those that are higher. Where the grade for an item is judged to be deficient for the stage of training, the assessment should be supported by a detailed note which can later be referred to at annual review. The assessment of training may utilise validated assessment methods (e.g. Case Based Discussion) adapted for the purpose. These methods of assessment have been made available by HST for use at the discretion of the NSD and nominated trainer. They are offered as a means of providing the trainee with attested evidence of achievement in certain areas of the Curriculum e.g. *competence in procedural skills, or in generic components*. Assessment will also be supported by the trainee's portfolio of achievements and performance at relevant meetings, presentations, audit, in tests of knowledge, attendance at courses and educational events.

ANNUAL REVIEW – THE PeTRA PROCESS

An annual review of progress through training will be undertaken by RCPI. The training record will be examined at the review. Assessments and reports by educational supervisors, confirmation of achievements and the contents of the portfolio will be reviewed. The decision made regarding progress is detailed in the ICHMT's Training Handbook. At some or all of these annual reviews a non-specialty assessor will be present capable of addressing core competencies. An external assessor will participate in the penultimate year review (PYA) which is held to a standard format usually 12-18 months before the planned end of training. The award of a CSCST will be determined by a satisfactory outcome after completion of the entire series of PeTRA assessments plus attainment of Part II of MFPHMI.

Examination – Part II MFPHMI

Each candidate is strongly advised that they must sit the Part II examination within 4 years of passing Part I. Normally, an advisor is appointed by the Education and Examination Committee of the Faculty to advise on the thesis for Part II. Regular meetings should take place between the advisor and Specialist Registrar. Part II MFPHMI consists of the assessment of written material which will take the form of a thesis or two reports on an original project or projects, and of two oral examinations. One of these will be on the subject of the written material, including its relevance to the practice of Public Health Medicine. The second oral will be on all topics relevant to the practice of Public Health Medicine – the 'General Oral'.

It will be the responsibility of the assessment panel to indicate where specific deficiencies in the trainee's experience exist, and if required, remedial action will be recommended. In these circumstances, the recommendation to issue a Certificate of Satisfactory Completion of Specialist Training (CSCST) will be withheld until the assessors are satisfied that the remedial actions have been successfully undertaken.

The Faculty is responsible, through the medical training department, for supervision and attesting to the completion of Higher Specialist Training in Public Health Medicine.

Each year trainees undergo a formal review by a panel including the Dean, the National Specialty Director, and whenever possible, a representative member from another specialty. The panel will review in detail the training record, will explore with the trainee the range of experience and depth of understanding which has been achieved and consider individual trainer's reports. Attendance by the trainer is highly desirable and essential for the first year and PYA assessments. An opportunity is also given to the trainee to comment on the training being provided; identifying in confidence any deficiencies in relation to a particular post.

A decision on progress through training is reached at each of these annual assessments. The determination and the evidence considered is entered on one of a set of standard PeTRA Forms as follows:

- successful completion of a year of training – **PeTRA Form C**
- completion but with a need for additional targeted training – **PeTRA Form C₁**
- repeat training year – **PeTRA Form C₂**

The penultimate year assessment (*the PYA*) reviews the evidence provided in the logbook on the results of the assessment methods employed (*see above*); the evidence provided will be further questioned during the assessment. At the PYA, the panel identifies the residual training outstanding, advising adjustments to the training schedule as necessary, and finally confirming the estimated date for completion (**PeTRA Form T and CSCST issuance**).

FACILITIES

A consultant trainer/educational supervisor has been identified for each approved post. He/she will be responsible for ensuring that the educational potential of the post is translated into effective training which is being fully utilized. The training objectives to be secured should be agreed between trainee and trainer at the commencement of each posting in the form of a written training plan. The trainer will be available throughout, as necessary, to supervise the training process.

All training locations approved for HST are inspected regularly by RCPI. Each must provide an intellectual environment and a range of clinical and practical facilities sufficient to enable the knowledge, skills, clinical judgement and attitudes essential to the practice of Public Health Medicine to be acquired.

Physical facilities include the provision of sufficient space and opportunities for practical and theoretical study; access to professional literature and information technologies so that self-learning is encouraged and data and current information can be obtained to improve patient management.

Trainees in Public Health Medicine should have access to an educational programme of e.g. lectures, demonstrations, literature reviews, multidisciplinary case conferences, seminars, study days etc, capable of covering the theoretical and scientific background to the specialty. Appropriate educational activities should be ratified by the Faculty of Public Health Medicine. Details of attendance should be provided. Trainees should be notified in advance of dates so that they can arrange for their release. For each post, at inspection, the availability of an additional limited amount of study leave for any legitimate educational purpose has been confirmed in line with the NCHD employment contract. Applications, supported if necessary by a statement from the consultant trainer, will be processed by the relevant employer.

**TEACHING, LEARNING &
ASSESSMENT METHODS**

TEACHING, LEARNING & ASSESSMENT METHODS

This section relates to the clinical competencies that are required for your training. During your training you will be assessed by methods such as miniCEX, DOPS and Case Based Discussion. It is extremely important that you read this so that you are aware of the requirements of your training.

RECORD OF TRAINING

The evidence required to confirm progress through training includes:

- Details of the post(s) occupied, the training plan agreed with weekly timetables and duty rosters; case-mixes and volumes, numbers of practical procedures and outcomes.
- Confirmation of attendance at events in the educational programme, at departmental and inter-departmental meetings and other (optional) educational events.
- Confirmation (certificates) of attendance at subject-based/skills-training/instructional courses; (certificate or diploma from appropriate authority).
- Recorded attendance at conferences and meetings.
- A properly completed logbook with entries capable of testifying to the training objectives which have been attained and the standard of performance achieved.
- Evidence of regular contact with trainers, i.e. appraisals; confirmation of workplace/clinical encounters significant in relation to activities specified in the curriculum.
- Evidence of personal study, e.g. journals taken, membership of specialist society, web-based research, special interest developed.
- CPD/CME activity, returns, study leave records.
- Copies/examples of material prepared for presentation e.g. for audit, teaching, best-practice development, collection of cases, topic reviews, output from research.
- Educational supervisor's reports on **observed** performance (in the workplace): of duties, practical procedures, of presentations made and teaching activity: of advising and working with others, of standards of case notes, correspondence, communication with others e.g. at handover. Results of Mini-CEX, CBDs and DOPS encounters.
- Collective opinions– as used to ascertain a range of generic skills e.g. professionalism, maintaining trust.
- Result (diploma, certificate from recognised body) of completed knowledge-based test and/or practical examination.

ASSESSMENT OF COMPETENCIES

The competencies to be acquired during training are listed within the Generic and Specialty Sections of this Curriculum.

The competencies will be assessed on a regular basis during your training programme and must be documented in the Training Record (*Logbook*). Progress through training is confirmed by entries which must be authenticated/ countersigned by the educational supervisors.

Documents which provide evidence of satisfactory completion of other necessary components of the curriculum must be filed in the portfolio of achievements compiled by the trainee and reviewed annually.

A report from the educational supervisor will be included. This will be prepared following appraisal, based on his/her assessment of observed performances by the trainee of practical procedures and other duties. The standard of case notes, summaries, correspondence and other material, of presentational ability can also be the subjects of such report, as could the trainee's enthusiasm, judgement, team working or professionalism.

The trainer's report will also be based on a structured pro-forma, as used in the short form of clinical evaluation exercise (*Mini-CEX*); following observation and appraisal of the performance of a procedure

(DOPS); and after discussion of the (*clinical*) reasoning involved in the management of a problem faced by a trainee (*Case-Based Discussion, CBD*).

The results of any summative tests of knowledge taken, e.g. *MCQs and problem-solving tests, including self-administered tests*, should be filed and retained. Confirmation of the acquisition at a particular stage of a specified professional examination may be required in order to make progress towards the completion of training.

LEARNING METHODS

This section gives examples of the learning methods that can be used as guidance to acquire competencies as they appear in the curriculum.

Experiential:

- Working under supervision
- Documenting/reporting progress (*case notes*), preparing summaries (*discharge notes*) other professional correspondence; communicating information to patients/to other health professionals.
- Consults, referrals between departments, handover, providing cross-cover.
- (*In certain specialties*), procedure room and investigation/assessment sessions offer practical opportunities to learn and develop skills under supervision and to exercise judgement when to seek assistance.

Self-directed learning:

- Curriculum-based personal study e.g. *textbooks, journals, literature search, retrieval of web-based information*.
- Information gathering and evaluation
- Active participation in audit
- Tests of knowledge

Group learning:

- Workplace discussions
- Multidisciplinary meetings
- Programmed meetings within the workplace

Performance based:

- Observing, learning, assisting, performing, demonstrating a technique or practical procedure.
- Simulations, role-play

Learning through teaching and research:

- Teaching, giving tutorials, lecturing.
- Mentoring and supervising junior colleagues and other staff.
- Presenting at meetings - local and international.
- Research
- Publication

External Courses:

- Specialty study/training days
- Attending mandatory and non-mandatory courses
- Attendance at seminars, relevant conferences, regional, national and international meetings.

ASSESSMENT METHODS

A modified form of these assessments will be introduced for Public Health Medicine

MINI-CEX

Definition: Mini-CEX is designed to provide feedback on skills essential to the provision of good clinical care by observing an actual clinical encounter.

Description: The mini-CEX is a “snapshot” of a doctor/patient interaction and is based on a 15 minute observation of a single interaction. It is designed to assess the clinical skills and behaviors of trainees assessing such skills as history taking, physical examination skills, clinical judgement, professionalism, organisation/efficiency and overall clinical care. Not all elements will be assessed on each occasion. Immediate feedback should be provided after each encounter by the observer assessing the trainee.

Frequency of assessment: At least two miniCEX assessments should take place in each year of training. Where appropriated, one should be based in an outpatient setting and one in an acute setting. The assessments include assessment of skills in history taking, physical examination, appropriate use of investigations, cost-effectiveness, interpretation of investigations, making medical notes, making a diagnosis, treatment and management of disease, appropriate referral to other specialities, standards of care.

Competencies assessed:

- Consideration/Professionalism:
- Recognises/accepts patient’s rights (to consent, confidentiality, information). Establishes trust, shows professional approach.
- Communication:
 - Informs, explains, advises using appropriate language. Obtains consent, enlists patient’s co-operation.
- Interviewing Skills:
 - Active” listening facilitating relevance; effectively using questions, responding to non-verbal clues.
- Examination Skills:
 - Prepares patient, minimises discomfort/unease. Proceeds logically, efficiently, thoroughly, completely.
- Judgement
- Correctly identifies/lists problems, prioritises actions in realistic and timely schedule.

Opportunities for assessment: The assessment should take place in the usual place of work (*in-patient, clinic, office or department*) where the assessor must directly **observe** the trainee’s performance.

DOPS:

Definition: Directly Observed Procedural Skills (DOPS) is a method, similar to the mini-CEX that has been designed specifically for the assessment of practical skills. DOPS assess the capabilities of a trainee while they perform a procedure.

Description: The DOPS is a structured assessment of actual performance. Each DOPS should represent a different procedure. The trainee chooses the timing, procedure and observer.

Frequency of Assessments: The number and frequency of assessments of procedural skills will vary from speciality to speciality.

Competencies assessed:

- Understanding of Procedure:
 - Relevant anatomy; purpose, indications, contra-indications; outcomes, risks, complications; choice of methods available, technique of procedure.
- Consideration for the Patient:
 - Gives reassurance, minimises discomfort, explains procedure fully; confirms informed consent obtained.
- Preparation:
 - First re-checks all relevant details correct. Safety check; instrumentation, equipment (drugs); positioning; cleansing/aseptic technique; sedation, analgesia, anaesthesia confirmed.
- Professional/technical ability:
 - Dexterity, accuracy, efficiency; obtains, interprets diagnostic material/information; informs, directs staff courteously; recognises own limitations; seeks help where appropriate; manages risk.
- Post-Procedure:
 - Completes documentation; regulates recovery phase, observations; anticipates/deals with complications. Informs/counsels patient/relatives.
- Overall ability to perform Procedure:
 - Ability to complete/undertake procedure; technical abilities as demonstrated; appropriately confident, team/ leadership skills.

Opportunities for assessment: While supervising, assisting, observing actual performance in appropriate setting (office, theatre, day procedure, ICU etc.). The assessment should be made under appropriate conditions e.g. with all equipment and personnel necessary to support the procedure.

CASE BASED DISCUSSION (CBD)

Definition: Case-based discussion (CBD) is used to enable the documenting of conversations about, and presentations of, cases by trainees. This activity happens throughout training, but is rarely conducted in a way that provides systematic assessment and structured feedback. CBD is used to evaluate core skills that can be demonstrated during an interactive discussion based on a single case in which the trainee has been actively involved.

Description: CBD is designed to assess clinical decision-making and the application or use of medical knowledge in relation to patient care for which the trainee has been directly responsible. It also enables the discussion of the ethical and legal framework of practice, and in all instances, it allows trainees to discuss why they acted as they did. Although the primary purpose is not to assess medical record keeping, as the actual record is the focus for the discussion, the assessor can also evaluate the record keeping in that instance. The case for discussion can either be selected by the trainee or chosen by the assessor. The assessment will be based on oral discussion and written information available. It includes a bi-lateral (trainee's and trainer's) critical appraisal of the reasoning and judgements made, and of the management of the case. Whenever possible the assessment should include issues such as disease notification, health promotion and screening.

Frequency of Assessment: This method of assessment has not been validated as yet, however it is a very useful method and can be easily incorporated into journal clubs, post-graduate teaching sessions or on-line etc

Competencies assessed:

- **Problem Definition:**
 - All relevant facts established, from current/previous history, investigations, interventions; reports, correspondence reviewed.
- **Record Keeping:**
 - Legible, tidy, legally defensible records seen.
- **Reasoning:**

- Appropriately selected, sequenced investigations/procedures planned. Evidence-based, logical judgements made; (differential) diagnosis established; action plan made with realistic goals.
- **Case Management:**
 - Effective, safe (responsible) prescribing; aware of protocols/guidelines, best practice; monitoring progress, handling complications/mistakes; timely, appropriate referrals, case closure.
- **Reflective Practice:**
 - Shows analytical, constructive approach to case, willingness to learn; acknowledges and prepared to consider other management options; aware of change, possible advances, when to seek help.

Opportunities for assessment: The presentation should take place in a suitable environment, with due consideration given to the patient's sensitivities, to confidentiality e.g. in any ward or clinical setting; an office, side- or seminar-room may be found convenient. Case presentations and discussions, e.g. at handover, ward-rounds (inter-) departmental meeting.

MANDATORY TRAINING COURSES:

(Note: this list only included the generic mandatory courses)

Mandatory Communication course:

To be completed in Year 1. The course is a short 1 -2 hour course at the start or the end of specialty study days to reduce time spent away from the hospitals.

Communication skills will be assessed as part of the miniCEX assessments

Audit:

Mandatory 1/2 day on audit to be completed in Year 1.

Audit reports are submitted on a yearly basis

Ethics:

Four mandatory study days are to be completed during the training programme. Three study days are for all specialities - Ethics & Law, Ethics in Research and Professionalism. The fourth day 'End of life' is for all specialties except Public Health Medicine, Occupational Medicine and Histopathology who have a speciality specific ethics day.

Leadership Skills:

Mandatory 3 day course to be taken in year 3 - 5.

ACLS

(Note: This is not mandatory for Public Health Medicine)

SPECIALTY STUDY DAYS:

The number and topics of the specialty study days are listed as part of the specialty curricula.

ANNUAL ASSESSMENTS

Consultant feedback:

End of year assessment completed by the Trainers include assessment in areas such as: Team working skills, Leadership skills, Handling of complaints, conflict management

Questions such as the following are included in the assessment form:

- Have there been any complaints from nursing staff, AHP, patients regarding this trainee or their team?
- If so:
 - How did the trainee respond to a complaint about a member of his/her team?
 - How did the trainee respond to a complaint against him/her?.
- Have you any serious issue with your SpR?
- Where there any instances of serious conflict?
- Do you think he/she behaved appropriately?

Audit:

It is difficult to complete the audit cycle in a one year period. Each year the trainee should take part in an audit - either to develop and start an audit or to review and change practice as a result of an audit - the complete audit cycle should be understood. In hospitals that have audit systems set up, the trainee should complete a full audit.

Trainees will be required to submit a full audit report and will be encouraged to present audit results at local, national or international meetings.

Attendance at conferences

**Time spent in Laboratory/Pathology or attendance at Laboratory/Pathology conferences
(Not necessary in Public Health Medicine)**

Committee membership :

Many specialty curricula have identified participation in committees.

Teaching skills

Number of undergraduate and postgraduate tutorials, number of membership tutorials.

Presentations/Publications

GENERIC COMPONENTS

Communication & Interpersonal Skills

Objective: To be able to communicate effectively and sensitively with patients, their relatives, carers and with professional colleagues in different situations.

Medical Council Domains of Good Professional Practice: No. 2: Relating to Patients; No 3. Communication and Interpersonal Skills.

KNOWLEDGE

Within a consultation

- How to structure an interview to obtain/convey information; how to identify concerns, expectations, priorities; how to promote understanding, reach conclusions; use/choose appropriate language. Knowledge of procedures/investigations available and alternative options; of strategies to promote compliance through understanding of objectives.
- Able to elicit facts, question using open, followed by closed questions; “active listening”. Gives information clearly, avoids jargon, confirms understanding, is able to encourage co-operation, compliance; obtain informed consent.
- Considerate, shows respect for other’s culture, opinions, patient’s right to be informed, make choices.

In difficult circumstances

- Understands potential areas for difficulty “awkward situations”, knows how and when to break bad news, how to circumvent cultural, language barriers, deal with sensory or mental impairments, how to deal with challenging or aggressive behaviour.
- Able to communicate essential information where difficulties exist, appropriately uses assistant, interpreter, chaperone, relatives. Able to deal with anger, frustration in self and others.
- Selects an appropriate environment; seeks assistance, makes and takes time. Avoids unrealistic optimism or pessimism.
- Respects another’s right to opinions and to accept or reject advice.

With professional colleagues and others

- How best and when to communicate with doctors and other members of the healthcare team; how to provide concise, problem-orientated statement of facts and opinions (*written, verbal or electronic*). Knows legal context status of records and reports, of data protection (*confidentiality*), Freedom of Information (FOI) issues.
- Understands relevance to continuity of care and the importance of legible, accessible, authenticated records. Knows when urgent contact becomes necessary and the appropriate place for verbal, telephone, electronic, written communication.
- Communicates effectively, promptly; recognises roles and skills of other health professionals.
- Able to judge own abilities/limitations and when to seek help or give assistance, advice to others; when to delegate responsibility, when to refer.
- Values perspectives of others contributing to management decisions.

In maintaining continuity of care

- Understands the relevance to outcome of continuity of care, within and between phases of healthcare management.
- The importance of completion of tasks and documentation *e.g. before handover (to another team, department, specialty)*, of identifying outstanding issues, uncertainties.
- Maintains (*legible*) records, is available, contactable, time-conscious, sets (*and attempts to reach*) realistic objectives, identifies/prioritises outstanding problems.
- Alert to avoid potential confusion or misunderstanding through communications failure.

Giving explanations

- The importance of possessing the full facts, and of recognising uncertainty and conflicting evidence on which decisions have to be based.

- How to secure, retain attention avoid distraction. Understand how adults receive information best, the relative value of the spoken, written, visual means of communication, use of reinforcement to assist retention. Risk of information overload.
- Need to interpret results, significance of findings, diagnosis, to explain objectives, limitations, risks of treatment, in terms and by means adjusted to recipients' ability to comprehend.
- Uses language, literature (*leaflets*) diagrams, educational aids and resources appropriately.
- Able to achieve level of understanding necessary to achieve co-operation (*compliance, informed choice, acceptance of opinion, advice, recommendation*).
- Prepared to discuss, repeat information, resolve uncertainty, confusion, respond to questioning, challenge.

Responding to complaints

- Value of hearing and dealing with complaints promptly; the appropriate level, the procedures (*departmental and institutional*); sources of advice, assistance available.
- The importance of obtaining and recording accurate and full information, seeking confirmation from multiple sources.
- Able to establish facts, identify issues and respond quickly and appropriately to a complaint received.
- Accepts responsibility, involves others, consults appropriately.
- Open, prepared to accept criticism, acknowledge shortcomings where they exist, offer an apology.

SKILLS

- Communication
- Conflict resolution
- Dealing with complaints
- Communicate decisions in a clear and thoughtful manner
- Presentation skills

ASSESSMENT & LEARNING METHODS

- Communication course (Year 1)
- Consultant feedback at annual assessment
 - Workplace based assessment e.g Mini-CEx, DOPS, CBD
 - Educational supervisor's reports on observed performance (in the workplace): communication with others e.g. at handover. ward rounds, multidisciplinary team members
- Presentations

PROFESSIONALISM & AUTONOMY

Objective: To have the knowledge, skills and attitudes to act in a professional manner at all times and in partnership with patients and colleagues. To develop the attributes of someone trusted to be able to manage complex human, legal and ethical problems.

Medical Council Domains of Good Professional Practice: No. 1 Patient Safety and Quality of Patient Care; No 2. Relating to Patients; No. 7 Professionalism

KNOWLEDGE

Patient Centred Care;

- The provision of Patient Centre Care should be at the core of the service a doctor provides
- To put the quality and safety of patient care as a prime objective

Behaviour in the workplace;

- **Relationships with patients**
 - Know patients' rights e.g. to be informed sufficiently to enable them to be involved in decisions about their treatment and care. Know boundaries limiting consultations including ethical, duty of care.
 - How to deal with inappropriate behaviour *e.g. aggression, threats, violence, harassment, racism.*
 - Potential obstacles *e.g. cultural, educational, ethical – also preconceptions and prejudices.*
 - Ensures confidentiality, respects privacy. Focuses investigation on patient's needs and expectations. Shows sensitivity, develops empathy but avoids personal involvement.
 - Non-judgemental in approaching patient's perceived problems. Prepared to accommodate idiosyncrasies, respecting patients as individuals. Altruistic.
- **Working with colleagues**
 - Know the potential roles and contributions of other specialists – medical, surgical, general practitioners and of other hospital or community-based agencies *e.g. social services, also patient support groups and other providers of care.*
 - How to arrange cover, safeguarding the handover process, know where responsibility begins and ends, when and where to seek advice.
 - Aware of the extent and limitations of own areas of practice/expertise; recognises and respects others' inputs, capabilities; is able to work co-operatively with other health professionals; refers, delegates appropriately.
 - Realistically schedules and completes tasks and provides full documentation for handover, referral; strives to maintain continuity and standard of care especially across shifts and when arranging rotas and covering absences.
 - Conscientious, reliable, responsible and professional at all times, considerate, shows respect for opinions of others, values good advice, accepts constructive criticism.

Creating an environment conducive to learning and improvement

- Endeavours to foster an environment conducive to learning
- Shares knowledge with trainees, students and other members of the multidisciplinary team
- Encourages and is open to reflective practice
- Seeks out role models and learns from the best practice behaviours of others.
- Participates in quality assurance and clinical improvement systems & training
- Uses evidence based practice in decision making
- Participates in journal clubs, case presentations, grand rounds

Time management & continuity of care

- Is punctual for duty, meetings, handovers and other duties
- Prioritises workload
- Delegates when appropriate to do so
- Knows when to call for help
- Ensures satisfactory handover to ensure continuity of care
- Ensures satisfactory transfer of patients to other medical teams or services when required
- Makes adequate arrangements to cover holidays, study and other leave

Honesty & Integrity

- Acts with honesty and integrity at all times in the delivery of patient care and in working with professional colleagues
- Acts fairly in all situations.

Moral Reasoning & Legal and ethical issues (see also Ethics section)

- Describes and demonstrates an understanding of the main principles of medical ethics including autonomy, justice and confidentiality
- Understands correct procedures for obtaining consent (for treatment, investigations, procedures, research project, post mortem). Legal responsibilities surrounding death/disease certification; regarding mental illness; referrals to coroner; also in criminal cases.
- Understands issues surrounding confidentiality, disclosure/release of information; discovery (FOI) of records. Legal and ethical issues in context of resuscitation, organ donation/transplantation.
- Able to complete certificates, documents, respects patient's wishes, rights, but accepts a doctor's (legal) obligations to society. Able to obtain/provide in full, information relevant to consent.
 - Alert to possible legal implications and ethical aspects of actions
 - Ensures privacy when discussing sensitive issues
 - Seeks timely advice where patient abuse is suspected

Team working and leadership

- How teams work, know how to assign individual and collective responsibilities which respect an individual's (*professional*) status within a team. How to set goals, initiate/ co-ordinate action, audit performance, give feedback, e.g. developing guidelines, protocols.
- Positively contributes to planning, motivating, organising activity, employs negotiating, human relations, interpersonal skills appropriately.
- Able to set and apportion individual and team objectives, energise and fortify others to sustain efforts to achieve goals, appraise performance.
- Co-operates as team player; respects the contributions, expertise of others; tolerant but determined as team leader.
- Adopts a holistic approach to patient care
- Knowledge of principles of audit and self assessment

Health-Physical health and Handling Stress & Fatigue

- Know how stress can affect performance, how to reduce stress and develop coping mechanisms to deal with pressure. When to enlist support.
- Understand the relevance of personal health to performance at work: the risks of self-medication, potential for drug and alcohol abuse: know that support is available from Occupational Health Services.
- Able to recognise, cope with stress; asks for help when necessary, is aware of responsibility (*to others*) of having health problems dealt with. Willing to take time off; and, if necessary, re-train/redevelop skills.

Commitment to Continuous Improvement in Health care Systems

- Understands the principles of quality and safety improvement
- Participates in quality improvement activities, including standard setting, follows established practice guidelines, research and audit
- Undergoes training in this area where appropriate

SKILLS

- Professionalism
- Multidisciplinary team working
- Ethical issues
- Leadership
- Time management
- Stress management

ASSESSMENT & LEARNING METHODS

- RCPI Ethics programme: Ethics I, Ethics II, Ethics III and Ethics IV (mandatory)
- Consultant feedback at annual assessment
 - Workplace based assessment e.g. Mini-Cex, DOPS, CBD
 - Educational supervisor's reports on observed performance (in the workplace): communication with others e.g. at handover. ward rounds, multidisciplinary team members
- Leadership Programme (Year 3 – 5)

Maintaining Good Practice

Objective: To adopt the habits of lifelong learning, and to appreciate and implement the practices of clinical governance.

Medical Council Domains of Good Professional Practice: No. 1 Patient Safety and Quality of Patient Care, No. 6 Scholarship, No 7 Professionalism, No 8 Clinical Skills

KNOWLEDGE

Lifelong learning

- Aware of CME/CPD obligations, systems/process for competence assurance/revalidation. Understand the role of appraisal, assessment methods available their application.
 - Sources, resources, opportunities for self-directed and group learning including IT. Know how adults learn.
 - Recognises and makes effective use of learning opportunities, maximises the potential for personal study, plans personal development.
 - Self motivated, inquisitive, eager to learn.

Application of clinical governance

- Understand the principles of evidence-based practice, clinical audit and effectiveness, the development/application of best-practice protocols.
- Able to appraise and apply data from research, and to use audit to establish best practice and clinical effectiveness. Utilizes and practices evidence-based medicine.
- Accepts the need for reflective practice and to critically evaluate own work and make changes.

Risk management

- Systems, procedures for identifying (*clinical*) risk; correct procedures and action when things go wrong; how to handle complaints.
- Employes procedures and policy for accidents, injuries; for confirming skill and staffing levels, arranging cross-cover, on-call, for supervision.
- Potential complications or side effects of treatments, procedures and investigations; importance of accurate, recent information and available records. The assessment of risk, relative risk.
- Able to assess, anticipate, risks; recognise failure. Openly discuss bad outcomes, locate system weakness, analyse critical incidents.
- Able to discuss potential risks *e.g. with patients, to analyse and balance risk with benefit*. Able to learn from previous experience, from complaints received, errors.
- Is honest in recognising misjudgements.

Evidence, audit, guidelines

- Basis for developing evidence-based medicine, kinds of evidence, evaluation; methodologies of clinical trials.
- Sources from which useful data for audit can be obtained, the methods of collection, handling data, the audit cycle.
- Means of determining best practice, preparing protocols, guidelines, evaluating their performance.
- Capable of accessing relevant data (library, internet use). Able to appraise available evidence critically.
- Able to complete an audit cycle relevant to practice; to develop, evaluate, review and update a set of guidelines.
- Uses evidence / guidelines appropriately having due regard for the individual.

SKILLS

- Personal development planning
- Evidence -based practice
- Risk Management
- Audit
- Research

ASSESSMENT & LEARNING METHODS

- Record of attendance at journal clubs, medical grand rounds, SpR teaching sessions, local and national academic meetings
- Record of attendance at CME accredited international meetings
- Attendance at local radiology conferences
- Time spent in laboratory or attendance at laboratory conferences
- Audit Study Day (Year 1)
- Annual Audit
- Leadership Skills Course (Year 3- 5)
- Research Publications
- Consultant feedback at annual assessment
- Workplace based assessment e.g Mini-Cex, DOPS, CBD

Standards Of Care

Objective: To be able to assess patients' problems investigate and treat them appropriately, efficiently, and consistently over time.

Medical Council Domains of Good Professional Practice: No. 1 Patient Safety and Quality of Patient Care; No. 2 Relating to Patients; No. 3 Communication and Interpersonal Skills; No. 4 Collaboration and Teamwork; No. 5 Management (including Self Management; No. 8 Clinical Skills,

KNOWLEDGE

History taking and examination

- Diagnostic significance of patterns of symptoms, pathophysiology and physical signs.
- Able to take and analyse a clinical history and perform a reliable and appropriate examination, arrive at a differential diagnosis.
- Exhibit empathy and show consideration for all patients, their impairments and attitudes irrespective of cultural and other differences.

Investigation, indications, risks, cost-effectiveness

- Understand the pathophysiological basis of the investigation undertaken.
- Know and be able to explain the procedure for the commonly used investigations, preparations, effects or risks, the reason for the investigation, the information sought and its relevance to management.
- Sensitivity and specificity of results, possible interferences, artefacts.
- Able to understand significance, interpret and explain results of investigations.
- Shows logical approach in choosing, sequencing and prioritising investigations.
- Able to liaise, discuss, negotiate effectively with those undertaking the investigation.
- Careful to select investigations appropriately, considering (*patients'*) needs, risks, value.

Treatment and management of disease

- Understand the pharmacology, therapeutics of treatments prescribed, choice of routes of administration, dosing schedules, compliance strategies; the objectives, risks and complications of treatment cost-effectiveness. Natural history of diseases; quality of life concepts.
- Able to assess accurately patient's needs, to prescribe administer, deliver, arrange treatment; recognise and deal with reactions / side effects. Sets realistic therapeutic goals, utilizes rehabilitation services, palliative care appropriately.
- Able to discuss rationale, objectives, risks and alternative options openly, taking into account patients' / their relatives' attitudes, beliefs or other philosophical concepts.
- Recognises that the degrading effects of illness, especially incapacity which is chronic, impacts on relationships and family, having financial as well as social effects.
- Discusses, plans, delivers care appropriate to patient's needs and wishes.

Disease prevention and health education

- Disease notification; methods of collection and sources of data. Screening for disease, (*methods, advantages and limitations*). Health promotion and support agencies; means of providing and sources of information for patients.
- Risk factors, preventive measures, strategies applicable to smoking, alcohol, drug abuse, lifestyle changes.
- Able to advise on and promote lifestyle change, stopping smoking, control of alcohol intake. Able to assess and explain risk, encourage positive e.g. *immunisation* and negative preventive measures.
- Enlists / requires patients' involvement in solving their health problems, provides information, education. Avails of support provided by voluntary agencies and patient support groups, as well as expert services e.g. detoxification / psychiatric services.
- Non-judgemental approach to patient's problem: values contributions of health education and disease prevention to health in a community.

Notes, records, correspondence

- Understand the functions of medical records, their value as an accurate up-to-date commentary and source of data.
- Understand the need and place for problem-orientated discharge notes, letters, more detailed case reports, concise out-patient reports, focused reviews.
- Compiles adequate case notes, with results of examinations, investigations, procedures performed, sufficient to provide an accurate, detailed account of the diagnostic and management process and outcome. Provides concise, informative progress reports orally.
- Maintains legible, authenticated records, uses dictation, telephone, e-mail appropriately.
- Appreciates importance of up-to-date, accurate information, its availability, transfer and the need for communicating promptly *e.g. with primary care*.

Time management and decision taking

- How to prioritise demands, respond to patients' needs, sequence urgent tasks. Understand how to establish (*clinical*) priorities *e.g. for investigations, intervention; how to set realistic goals; understand the need to allocate sufficient time, know when to seek help*.
- Understands the need to complete tasks, reach a conclusion, make a decision, take action with allocated time.
- Able to recognise when falling behind and can adjust accordingly; able to cope with changing circumstances, variable demand, prepared to re-prioritise and ask for help.
- Able to collate evidence, summarise, recognise when objective has been gained
- Knows how and when to conclude, disengage.
- Has realistic expectations of own and of others' performance. Time-conscious, punctual.

Relevance of professional bodies

- Understand the relevance to practice of standards of care set down by recognised professional bodies – the Medical Council, Medical Colleges and their Faculties, and the additional support available from professional organisations *e.g. IMO, Medical Defence Organisations and from the various specialist and learned societies*.
- Actively engages with professional/representative/specialist bodies.
- Values the breadth and depth of experience that can be accessed by associating with professional colleagues.

SKILLS

- History taking and examination
- Appropriate use of investigations
- Treatment and management of disease
- Disease notification
- Health promotion
- Screening
- Study Day - Disease prevention & health education
- Personal and professional organisation and planning; goal setting, time management

ASSESSMENT & LEARNING METHODS

- Consultant feedback at annual assessment
- Workplace based assessment *e.g. Mini-Cex, DOPS, CBD*
- Educational supervisor's reports on **observed** performance (in the workplace)
- Study Days
- Annual Audit

Patient Safety

Objective: To ensure patient safety is at the core of the health service provided by designing safe systems and processes of care and understanding the role of healthcare systems and human factors in adverse events and errors.

Medical Council Domains of Good Professional Practice: No. 1 Patient Safety and Quality of Patient Care.

KNOWLEDGE

Safe Systems, Competency and Safe practice

- Understands multiple factors involved in failures;
- Safe Healthcare Systems-a Safe working environment
- The relationship between 'Human factors' and patient safety
 - Safe working practice. Role of procedures and protocols in optimal practice
- Patient safety relevance in health care and its role in minimizing the incidence and impact of adverse events and maximize recovery from them.
- Knowledge and understanding of the Swiss cheese model.
- Health care errors and system failures; human and economic costs; blame culture

Communication

- Disclosure – know the principles of open disclosure
- Knowledge and understanding of valid consent
- Teamwork
- Continuity of care

Near Misses and adverse events

- Knowledge of preventing and managing near misses and adverse events. Incident reporting; root cause analysis. Understanding and learning from errors
- Understands and manages clinical risk
- Manages complaints
- Knows when and how to report a near miss or adverse event

Quality improvement

- Standardises common processes and procedures – checklists, vigilance
- Evidence based care
- Infection control; healthcare associated infections
- Patient safety and invasive procedures.
- Improvement medication safety; safe prescribing; common medication errors
- Ethical behaviour

SKILLS

- Effective Communication with patients, families and colleagues
- Co-operation and collaboration with colleagues to achieve safe and effective quality patient care
- Being an effective team player
- Understand how and why systems break down and why errors are made
- Be able to learn from errors and near misses to prevent future errors
- Know how to use relevant information from complaints, incident reports, litigation and quality improvement reports to control risks
- Minimise infection through improved infection control practice
- Minimise errors during invasive procedures by developing and adhering to best-practice guidelines for safe surgery.
- Minimise medication errors by practicing safe prescribing principles

ASSESSMENT & LEARNING METHODS

- Consultant feedback at annual assessment
- Workplace based assessment e.g Mini-Cex, DOPS, CBD
- Educational supervisor's reports on observed performance (in the workplace): prioritization of patient safety in practice
- RCPI Patient safety on-line course (recommended)
- Completion of infection control induction in the workplace

Therapeutics and Safe Prescribing

Objective: To progressively develop your ability to prescribe, review and monitor appropriate therapeutic interventions relevant to clinical practice in specific specialities including non-pharmacological therapies and preventative care

Medical Council Domains of Good Professional Practice: No. 1 Patient Safety and Quality of Patient Care.

KNOWLEDGE

- Indications, contraindications, side effects, drug interaction, dosage and route of administration of commonly used drugs
- Knowledge of prescribing for common medical conditions
- Knows range of adverse drug reactions to commonly used drugs, including complementary medicines
- Identifies common prescribing hazards
- Identifies high risk medications
- Knows drugs requiring therapeutic drug monitoring and interprets results
- Knows the effects of age, body size, organ dysfunction and concurrent illness or physiological state e.g. pregnancy on drug distribution and metabolism relevant to the trainees practice
- Recognise the roles of regulatory agencies involved in drug use, monitoring and licensing (e.g. IMB , and hospital formulary committees
- Knows procedure for monitoring, managing and reporting adverse drug reaction

SKILLS

- Knows how to write a prescription
- Prescribes appropriately in the elderly, childhood, pregnancy and breast feeding
- Make appropriate dose adjustments following therapeutic drug monitoring, or physiological change (e.g. deteriorating renal function)
- Review the continuing need for long term medications relevant to the trainees clinical practice
- Anticipate and avoid defined drug interactions, including complementary medicines
- Advise patients (and carers) about important interactions and adverse drug effects
- Provide comprehensible explanations to the patient, and carers when relevant, for the use of medicines
- Open to advice and input from other health professionals on prescribing
- Participates in adverse drug event reporting

ASSESSMENT & LEARNING METHODS

- Consultant feedback at annual assessment
- Workplace based assessment e.g Mini-Cex, DOPS, CBD
- Educational supervisor's reports on **observed** performance (in the workplace): prioritization of patient safety in prescribing practice

Infection Control

Objective: To be able to manage and control infection in patients, including controlling the risk of cross-infection, appropriately managing infection in individual patients, and within the wider community to manage the risk posed by communicable diseases.

Medical Council Domains of Good Professional Practice: No. 1 Patient Safety and Quality of Patient Care; No. 5 Management (including Self Management).

KNOWLEDGE

Within a consultation

- Understand the principles of infection control as defined by the HIQA
- How to minimize the risk of cross-infection during a patient encounter by adhering to best practice guidelines available
- Treat and manage infection in the individual patient
- Understand the principles of preventing infection in high risk groups e.g managing antibiotic use to prevent Clostridium difficile) Knowledge and understanding the local antibiotic prescribing policy
- Aware of infections of concern, eg MRSA, C Difficile,
- Understands best practice in isolation precautions
- Knows when and how to notify relevant authorities in the case of infectious disease requiring disclosure

In surgery or during an invasive procedure

- Understands the increased risk of infection in these patients and adheres to guidelines for minimizing infection in such cases
- Knows the guidelines for needle stick injury prevention and management

During an outbreak

- Adheres to guidelines for minimizing infection in the wider community in cases of communicable diseases and seeks expert opinion or guidance from infection control specialists where necessary

SKILLS

- Practices aseptic techniques, hand hygiene
- Follows guidelines for infection control and management
- Prescribes antibiotics according to antibiotic guidelines Encourages all staff, patients and relatives to observe infection control principles
- Communicates effectively with patients regarding treatment and measures recommended to prevent re-infection or spread
- Collaborates with infection control colleagues to manage more complex or uncommon types of infection including those requiring isolation eg transplant cases, immunocompromised host
- In the case of infectious diseases requiring disclosure:
 - Has knowledge of the diseases requiring disclosure and undertakes notification promptly
 - Collaborates with external agencies regarding reporting, investigating and management of notifiable diseases .
 - Able to advise patients on lifestyle change to minimize the risk of re-infection or spread of infection,
 - Enlists / requires patients' involvement in solving their health problems, provides information, education.
 - Avails of support provided by voluntary agencies and patient support groups, as well as expert services where appropriate
 - Non-judgemental approach to patient's problem:
 - Utilises and values contributions of health education and disease prevention and infection control to health in a community.

ASSESSMENT & LEARNING METHODS

- Consultant feedback at annual assessment
- Workplace based assessment e.g Mini-Cex, DOPS, CBD
- Educational supervisor's reports on **observed** performance (in the workplace): practicing aseptic techniques as appropriate to the case and setting, investigating and managing infection , prescribing antibiotics according to guidelines
- Completion of infection control induction in the workplace

Leadership

Objective: To have the knowledge, skills and attitudes to act in a leadership role and work with colleagues to plan, deliver and develop services for improved patient care and service delivery

Medical Council Domains of Good Professional Practice: No.1 Patient Safety and Quality of Patient Care; No. 3 Communication and Interpersonal Skill; No. 4 Collaboration and Teamwork; No. 5 Management (including Self Management); No 6 Scholarship.

KNOWLEDGE

Demonstrating Personal Qualities

- Develops self-awareness and understanding of personal style and its impact on others
- Efficiently and effectively manages one- self and one's time especially when faced with challenging situations
- Continues personal and professional development through scholarship and further training and education where appropriate
- Acts with integrity and honesty with all people at all times

Working with others

- Develops networks to expand knowledge and sphere of influence
- Builds and maintains key relationships. Adapts style to work with different people and different situations
- Encourages contributions from others including patients, carers, members of the multidisciplinary team and the wider community
- Aware of own personal style and other styles and their impact on team performance. Understands the importance of good communication in teams and the role of human factors on effectiveness and patient safety

Managing Services

- Knows and understands the structure and function of Irish Health Care System
- Aware of the challenges of managing in healthcare
 - Role of Governance
 - Clinical Directors
- Can contribute to the planning and design of services
- Knows and understands the financing of the health service
 - Preparing a budget
 - Defining value
 - Managing resources
- Knows and Understands the importance of human factors in service delivery.
 - Manages staff training, development and education
- Managing performance
 - Performs staff appraisal and deals effectively with poor staff performance
 - Rewards and incentivises staff for quality and efficiency

Improving Services

- Ensures patient safety by adopting and incorporating a patient safety culture
- Critically evaluates where services can be improved by measuring performance, and acting to raise standards where possible Encourages a culture of improvement and innovation
- Facilitating transformation by creating and living a vision

Setting Direction

- Identifies the external and internal drivers setting the context for change
- Applies knowledge and evidence of systems and resource management to guide service development
- Makes decisions using evidence based medicine and performance measures
- Evaluates the impact of change on health outcomes through ongoing service evaluation

SKILLS

- Effective Communication with patients, families and colleagues
- Co-operation and collaboration with others; patients, service users, carers colleagues within and across systems
- Being an effective team player Being able to managing resources and people
- Managing performance, performance indicators
- How to write and develop a service plan
- How to prepare and manage a budget

ASSESSMENT & LEARNING METHODS

- Communication course (Year 1)
- Leadership course (Year 3 – 5)
- Consultant feedback at annual assessment
- Workplace based assessment e.g Mini-Cex, DOPS, CBD
- Educational supervisor's reports on observed performance (in the workplace): on management and leadership skills
- Involvement in hospital committees where possible e.g.division of Medicine, Drugs and Therapeutics, Infection Control etc.

Management Information Systems & Management Skills

Objective: To understand the organisation, regulation and structures of the health services, nationally and locally, and to be competent in the use and management of information on health and health services. To develop personal effectiveness and the skills applicable to the management of staff and activities within a healthcare team.

Medical Council Domains of Good Professional Practice: No. 5 Management.

KNOWLEDGE

Health service structure, management and organisation

- The administrative structure of the Health Service, services provided in Ireland and their funding. Department of Health, HSE and Hospital Management structures and systems. The National Regulatory Bodies, health agencies and patient representative groups.
- Can explore, direct, pursue a project, negotiating through the relevant department at an appropriate level. Able to “*operate the system*”. Understand the need for business plans, annual hospital budgets, the relationship between the hospital and PCCC.
- Recognises the advantage of understanding the administrative machinery of the Health Services.

The provision and use of information in order to regulate and improve service provision

- Methods of collecting, analysing and presenting information relevant to the health of a population and the apportionment of healthcare resources. The common ways in which data is presented. Know of the sources which can provide information relevant to national or to local services, publications available.
- Able to seek / locate information in order to define an issue needing attention e.g. to provide data relevant to a proposal for change, establishing a priority, obtaining resources.

Obtaining information of value in maintaining medical knowledge with a view to delivering effective clinical care

- Understands the contribution that current, accurate knowledge can make to establishing clinical effectiveness, best practice, treatment protocols. Know sources providing updates, literature reviews and digests.
- Able to make use of information, use IT, undertake searches and obtain aggregated data, to critically evaluate proposals for change e.g. *innovative treatments, new technologies*.
- Embraces principles of clinical governance.

Delegation skills, empowerment and conflict management

- How to assess, develop personal effectiveness, improve negotiating, influencing and leadership skills. How to manage time more efficiently, deal with pressure and stress. How to motivate and operate within a multidisciplinary team.
- Able to adjust to change, apply management/leadership, negotiating skills to manage change. Self-awareness, able to recognise strengths and weaknesses.
- Appropriately values and uses management techniques and seeks to improve these skills and personal effectiveness.

Leadership

- How to maintain, improve working relationships within a team; appropriately recognise roles, skills, status. Know when and what to delegate, provide support, appraise.
- Motivates and empowers others, knows when help is needed. Able to foresee, forestall, manage conflict.
- Sensitive to and aware of the needs of others.

SKILLS

- Risk Management
- Leadership skills
- Time management
- Delegation skills
- Conflict management
- Clinical governance
- Audit

ASSESSMENT & LEARNING METHODS

- Communication course (Year 1)
- Audit course (Year 1)
- Leadership course (Year 3 – 5)
- Annual audit
- Consultant feedback at annual assessment on management and leadership skills
- Involvement in hospital committees

Teaching & Research

Objective: To recognise the opportunities for personal/professional development that exist for medical teachers, educational supervisors and from involvement with research.

Medical Council Domains of Good Professional Practice: No. 6 Scholarship.

KNOWLEDGE

Teaching, educational supervision and assessment

- Know principles of adult learning, teaching and learning methods available and strategies; educational principles directing assessment, methods, formative vs. summative. Value of regular appraisal / assessment in informing training process.
- Able to identify educational objective. Able to design and deliver an effective teaching event, both small and large group. Uses technology / materials effectively. Adequate preparation, timekeeping.
- Appreciates benefit to learner is key objective of teaching sessions, key resource is adequate knowledge of subject.

Research, methodology and critical evaluation

- How to design and resource a research project, how to obtain ethical approval. Research methodology, valid statistical analysis, writing and publishing papers. Ethical considerations, declaring an interest.
- Reviewing the literature, framing the question, designing a project capable of providing an answer. Able to derive results and conclusions, able to write or present a paper.
- Intellectually honest.
- Present data in a clear, honest and critical fashion.

SKILLS

- Bed-side undergraduate and post graduate teaching
- Lectures
- Ethics of research
- Presentation and writing skills

ASSESSMENT & LEARNING METHODS

- Number of undergraduate and postgraduate tutorials provided
- Teaching skills course
- Number of presentations at local, national and international meetings
- Number of publications in peer reviewed medical journals
- RCPI Ethics programme: Ethics I, Ethics II, Ethics III and Ethics IV (Mandatory)
- Statistical course (optional)
- Consultant feedback at annual assessment
- Workplace based assessment e.g CBD
- Educational supervisor's reports on observed performance (in the workplace)

Ethics

Objectives: *Medicine is predominantly concerned with the diagnosis and treatment of illness. Besides the pathological processes involved and the physical impact of each condition, the requirements for practising medicine in a fair, competent and ethical manner must be understood before a doctor is ready for independent practice.*

*Upon satisfactory completion of specialist training, the doctor will be **competent** to undertake comprehensive medical practice in that specialty in a **professional** manner, unsupervised and independently and/or within a team, in keeping with the needs of the Irish healthcare system.*

Medical Council Domains of Good Professional Practice: No. 1 Patient Safety and Quality of Patient Care; No. 3 Communication and Interpersonal Skill; No. 6 Scholarship; No. 7 Professionalism.

KNOWLEDGE

- Knowledge of basic biomedical, behavioural and clinical sciences, medical ethics and medical jurisprudence and application of such knowledge in patient care.
- Interpersonal and communication skills that ensure effective informational exchange with individual patients and their families and teamwork with other health professionals, the scientific community and the public.
- Professionalism.

Ethics I: Professionalism

Objectives: *To explore the relationship between ethics of healthcare delivery and professionalism including the challenges and the impact of current developments*

KNOWLEDGE

- Knowledge, skills, attitudes and behaviours expected by patients and society from individuals during the practice of their profession (as a doctor).
 - The skills of lifelong learning and the maintenance of competence
 - Information literacy
 - Ethical behaviour
 - Integrity, honesty
 - Altruism
 - Service to, justice and respect for others
 - Adherence to professional code
- Leadership and Accountability
- Role of the Clinical Director
- Dignity & Respect
- Conflicts of interest
- Personal scope of practice & boundaries
- Adverse Events- open communication when adverse events occur
- Discussing errors

Ethics II: Ethics & Law

Objectives: To explore the relationship between ethics of healthcare and law including the challenges and the impact of current developments

KNOWLEDGE

- Ethical patient care and Irish Law including:
- Informed consent
- Consent and capacity
- Disclosure
- Medical Practitioner's Act
- Malpractice
- Misconduct
- Confidentiality
- Data protection
- Coroner's System
- Medical Council Ethical Guide

Ethics III: Research

Objectives: To explore the ethics of healthcare research including the challenges and the impact of current developments

KNOWLEDGE

- Principles of research
- Un-ethical conduct
- Genetics
- The Importance of Research in Health Care
- Dept of Health and Children Research Action Plan-implications for researchers
- Reasons for Research being Ethically Regulated
- Genetics
- Researching vulnerable groups
- Data Research/Protection and confidentiality
- Patient information bill
- Human Tissue Act
- Role of Research Ethics Committee
- Conflict of interest

Ethics IV: Public Health and Occupational Medicine

***Objectives:** To explore the ethics of public health and occupational medicine including the challenges and the impact of current developments*

KNOWLEDGE

- Screening
- Confidentiality
- Immunisation
- Infectious disease

SKILLS

- To incorporate the above ethical concepts in everyday practice

Dealing with and Management of Acutely ill Patients in Appropriate Specialties

Objective: To have the knowledge and skills to be able to assess and initiate management of patients presenting as emergencies with the problems outlined below. For each scenario, trainees should in particular gain knowledge and skills to recognise the critically ill and:

Immediately assess and resuscitate if necessary.

Formulate a differential diagnosis, treat and/or refer as appropriate.

Select relevant investigations and accurately interpret reports.

Communicate the diagnosis and prognosis – see Generic Skills.

Medical Council Domains of Good Professional Practice: No. 1 Patient Safety and Quality of Patient Care, No. 8 Clinical Skills

KNOWLEDGE

Management of acutely ill patients with medical problems

- Know how potentially life-threatening problems present; know the indications for urgent intervention, additional information necessary to support action (e.g. *results of investigations*) and treatment protocols (see *Addendum*).
- Know when to seek help, refer/transfer to another specialty. Know ACLS protocols. Know the ethical and legal principles relevant to resuscitation and DNR orders.
- Able to manage acute medical intake, to receive and refer patients appropriately, to interact efficiently and effectively with other members of the medical team, accept/undertake responsibility appropriately.
- Able to anticipate / recognise, assess and manage life-threatening emergencies, recognise significantly abnormal physiology e.g. *dysrhythmia* and provide the means to correct e.g. *defibrillation*.
- Able to convey essential information quickly to relevant personnel: maintains legible up-to-date records documenting results of investigations. Lists of problems dealt with or remaining, identifies areas of uncertainty; ensures safe handover.
- Remains calm, delegates appropriately, ensures good communication. Tries to meet patient's/ relatives' needs and concerns, respecting their views and right to be informed.

Discharge planning

- Distinguish between illness and disease, disability and dependency. Understand the potential impact of illness and impairment on activities of daily living, family relationships, status, independence. Be aware of quality of life issues.
- Know role and skills of other members of the healthcare team, how to devise and deliver a care package. Know the support available from other agencies e.g. *specialist nurses, social workers, community care*. Understand the principles of shared care with the general practitioner service.
- Show awareness of the pressures/dynamics within a family, the economic factors delaying discharge but recognise the limit to benefit derived from in-patient care. Establish liaison with family and community care, primary care, communicate / report to agencies involved.
- Demonstrates an awareness of the wide ranging effects of illness and the need to bridge the gap between hospital and home.

SKILLS

- ACLS
- Deal with common medical emergencies
- Interpretation of blood results, ECG/Rhythm strips, Chest X-Ray, CT Brain
- Give clear instructions to both medical and hospital staff
- Order relevant follow up investigations
- Discharge planning

- Knowledge of patient pathways
- Knowledge of HIPE
- Multidisciplinary team working
- Communication
- Early regular and on-going consultation with family members and primary care physicians

ASSESSMENT & LEARNING METHODS

- Certified ACLS
- Record of on call
- miniCEX (acute setting) - each year
- Case based discussions
- Consultant feedback at annual assessment

**Specialty Section for
Public Health Medicine**

HEALTH INTELLIGENCE & EPIDEMIOLOGY

Objective: *To acquire and develop the skills, knowledge and attitudes needed for exploiting a range of fundamental epidemiological principles and tools used to promote health intelligence in the Irish and international context. It is important to note that epidemiology underpins the practice of public health medicine; while many of the theoretical aspects will have been covered in Masters in Public Health or equivalent training, it is essential that competency in its everyday application in health intelligence is honed to the highest degree. Available training courses should be exploited.*

KNOWLEDGE

- Principles of epidemiology e.g. cause, effect, confounding, analysis by person, place and time, standardisation, determinants of health and ill health.
- Health measurement e.g. health status, life expectancy, morbidity, mortality, quality of life, deprivation.
- Service activity/performance/outcome/evaluation/accessibility measures in primary care and hospital settings.
- Sources of health related data e.g. census, population dynamics, mortality, morbidity, registries, road collision, physical and social environment.
- Sources of health information e.g. local, national and international, including published and grey literature.
- Irish and international public health priorities e.g. chronic disease, infectious disease, trauma, inequality.

SKILLS

- Apply epidemiological principles in everyday public health practice.
- Exploit available health-related data/information/intelligence.
- Summarise and assimilate complex data into useful and effective evidence-based health intelligence in text, slide or other formats for different audiences, e.g. scientific, clinical, management and the public.
- Taking projects/studies from conception, design, implementation, analysis to completion of final report/publication/presentation within the expected time frame using available resources.
- Exploit the potential of large national health related datasets e.g. Health Atlas Ireland

ASSESSMENT & LEARNING METHODS

- Self-directed learning.
- Active participation/assistance/leading in initiatives/projects/studies.
- Responding to service pressures & training opportunities in a timely, focused and balanced manner.
- Attendance at scientific meetings and conferences (local/regional/national/international).
- Attendance & participation at journal clubs, courses, study days, modules, seminars etc.
- Attachment to units/departments/centres providing appropriate training opportunities.
- Completion of timely, high quality reports/commentary.
- Presentation at local/regional/national/international level.
- Publications in peer reviewed journals.
- Trainer observation/feedback: performance at meetings, workshops, presentations etc; interaction with colleagues; feedback from colleagues.
- Teaching/mentoring/supporting colleagues at undergraduate/postgraduate levels.
- MFPHMI Part 1 by end of year 1 (expected)
- MFPHMI Part 1 by end of year 2 (required)
- MFPHMI Part II by end of year 3 expected)
- MFPHMI Part II by end of year 4 (required)

RESEARCH IN PUBLIC HEALTH PRACTICE

Objective: *To acquire and develop the skills, knowledge and attitudes for conducting high-quality research in public health medicine. Available training courses should be exploited.*

KNOWLEDGE

- Quantitative and qualitative research methods e.g. uses, strengths, weaknesses.
- Information governance e.g. data protection, freedom of information legislation.
- Study designs e.g. cross-sectional, prospective, randomised control trials.
- Ethical considerations e.g. ethics committees, consent, conflicts of interest, authorship.
- Study protocol development e.g. literature review, aims, objectives, methods, analysis, logistics.
- Literature review techniques e.g. assimilating and interpreting current states of knowledge.
- Study population selection e.g. inclusion, exclusion criteria, sampling, sample size (significance, power).
- Questionnaire design and development e.g. format, clarity of presentation, computerisation.
- Safe and secure data collection and processing e.g. recording, inputting, quality control, back-up, personal identifiers, sensitive data, encryption/hashing.
- Analytical techniques e.g. descriptive, comparative, trend, spatial.
- Interpretative considerations e.g. non-response, statistical v clinical significance, assimilation with other knowledge.
- Report writing/presentation - abstract, introduction, literature review, methods, results, discussion, conclusion, referencing, acknowledgements, authorship.

SKILLS

- Use relevant software e.g. word processing, spreadsheet, statistical analysis, database, geographic analysis, reference management tools.
- Collaborate with colleagues in undertaking research studies/projects.
- Produce high quality reports/presentations.
- Taking projects/studies from conception, design, implementation, analysis to completion of final report/publication/presentation within the expected time frame using available resources.

ASSESSMENT & LEARNING METHODS

- Self-directed learning.
- Active participation in initiatives/projects/studies.
- Attendance at scientific meetings and conferences (local/regional/national/international).
- Attendance & participation at journal clubs, courses, study days, modules, seminars – research methods, statistics etc.
- Attachment to units/departments/centres providing appropriate training opportunities.
- Completion of timely, high quality reports/commentary.
- Presentation at local/regional/national/international level.
- Publication in peer reviewed journals.
- Trainer observation/feedback: performance at meetings, workshops, presentations etc; interaction with colleagues; feedback from colleagues.
- Teaching/mentoring/supporting colleagues at undergraduate/postgraduate levels.
- MFPHMI Part 1 by end of year 1 (expected)
- MFPHMI Part 1 by end of year 2 (required)
- MFPHMI Part II by end of year 3 (expected)
- MFPHMI Part II by end of year 4 (required).

COMMUNICABLE DISEASE PREVENTION, SURVEILLANCE AND CONTROL

Objective: *To acquire and develop the skills and knowledge to detect, assess and respond appropriately to infectious diseases and to potential public health threats. This includes the acquisition of skills in surveillance, communicable disease control, risk assessment, risk management and risk communication, outbreak management, and multiagency and multidisciplinary working.*

KNOWLEDGE

- Organisation of communicable disease surveillance and control at local, national and international level e.g. European Centre for Disease Control (ECDC), World Health Organisation (WHO).
- Complementary roles of other colleagues in communicable disease control: environmental health officers, infection-prevention nursing (hospital and community), clinical microbiologists, infectious disease consultants, and surveillance scientists. Experience in working with these disciplines, routinely and during incidents.
- Legal basis for infectious disease (ID) surveillance and control in national, international and global contexts, including national, EU, and international health regulations.
- Recognition of the value of surveillance and response systems, information networks and effective communications in order to prevent, detect and control communicable diseases; competency in surveillance data management, descriptive analysis, interpretation of trends, assessment of the need for and development of surveillance systems; understanding how to formally evaluate a surveillance system (and ideally undertake an evaluation).
- Sources of information about possible public health threats, including the use of event-based surveillance (e.g. epidemic intelligence) to detect health threats.
- Principles of infection control and how infection control is organised in Ireland; ability to apply effective and appropriate procedures and policies to reduce risk; familiarity with local implementation, e.g. on Regional Infection Committees.
- Transmission dynamics of infectious diseases.
- Current immunisation programmes.

SKILLS

- Respond in an outbreak situation, to liaise and communicate with other professionals and agencies, and to supporting and undertake timely control measures, experience on outbreak control teams (OCTs) throughout training.
- Correctly interpret the diagnostic and epidemiological significance of reports from laboratory tests, and familiarity with different methods for diagnosing and typing, including molecular tests;
- Respond to immunisation queries and issues based on understanding of the design, management and implementation of immunisation programmes.
- Conduct risk assessments, verifying, using critical thinking, whether a public health ID problem exists, and describing its magnitude and communicating risk to different groups;
- Ability to participate regularly in on-call rota for ID, acting for the Medical Officer of Health (MOH).

ASSESSMENT & LEARNING METHODS

- Self-directed learning
- On-call activity record.
- Course - Introduction to Computerised Infectious Disease Reporting (CIDR) for public health users (HPSC)
- Course - HPSC/EPICONCEPT epidemiology, outbreak, computer tools, logistic regression (optional)
- Course - ECDC training (optional)

- Committee member/medical secretary e.g. SPHM Communicable Disease (CD) group; national guidance committees.
- Attachment to microbiology department (optional).
- Involvement in rapid assessment and response e.g. needs assessment, infectious diseases, new immunisation programmes.
- Descriptive and analytical epidemiological reports for outbreak control teams.
- Multidisciplinary and interagency working.
- MOH case or incident-based discussion reports.
- Trainer observation/feedback: performance at meetings, workshops, presentations etc; interaction with colleagues; feedback from colleagues.
- Teaching/mentoring/supporting colleagues at undergraduate/postgraduate levels.

ENVIRONMENTAL HEALTH

Objective: *To acquire and develop the skills and knowledge to detect, assess and respond appropriately to potential non-infectious environmental hazards. This includes the acquisition of skills in surveillance and control of environmental incidents and hazards, identification of the population exposed, risk assessment, risk management and risk communication, and multiagency and multidisciplinary working in planning preparedness, and in response.*

KNOWLEDGE

- Evidence-based cluster response to assertions of human health risks or effects from environmental exposures including risk communication.
- Surveillance of public health status in the light of exposure to non-infectious environmental hazards, including sentinel events, indicators of exposure, biological and environmental sampling, bio-monitoring, and their indications, scope and limitations.
- Strategy and planning (EU Developments, European Environment and Health Committee (EEHC), Environmental Health Information System, sustainable development and health impact assessment, National Environment and Health Action Plans (NEHAP), and current EU research with focus on child health and environmental influences (SCALE), environmental indicators, environmental justice.
- Role of expert medical environmental advice on planning, licensing (Integrated Pollution Prevention Control (IPPC)) and environmental enforcement, and a working knowledge of the relevant environmental legislation.
- Sources of information about non-infectious environmental hazards including Health Protection Agency (HPA), Chemical Hazards and Poisons Division (CHaPD), Agency for Toxic Substances and Disease Registry (ATSDR), Centers for Disease Control and Prevention (CDC), WHO, and International Commission on Non-Ionising Radiation Protection (ICNARP), as well as published guidelines, reference texts, and relevant on-line web sites.
- Professional networks and relationships with EPA, HSA and the National Poisons Information Centre.
- Drinking water legislation, understanding of the respective roles and responsibilities of the relevant agencies and professional groups involved; understanding of the communication and information exchange mechanisms within the HSE and between the HSE and other agencies.

SKILLS

- Undertake timely scientific investigation of environment and health incidents.
- Establish chemical incident surveillance and response systems, information networks and effective communications in order to prevent, detect and control non-infectious environmental hazards.
- Respond to an incident involving exposure of members of the public to a non-infectious environmental hazard, (chemical, radiological or nuclear).
- Identify the population exposed to a non-infectious environmental hazard (those injured; those potentially harmed who may need health surveillance, and those who are unharmed or who may experience transient effects and who need full information.
- Assess public health risk from exposure to a noxious substance - acute and chronic toxicant effects.
- Undertake risk assessments for exceedences, incidents and departures; ability to formulate advice on mechanisms for protecting human health.
- Communicate the risk posed by a non-infectious environmental hazard and provide guidance to key health and other professionals and to the public to address concerns.

ASSESSMENT & LEARNING METHODS

- Self-directed learning.
- Involvement in cluster investigations with multidisciplinary/multiagency involvement.
- Medical secretary to a regional or national group.

- Completion of timely, high quality reports/commentary.
- Attendance & participation at journal clubs, courses, study days, modules, seminars.
- Attachment to units/departments/centres providing appropriate training opportunities.
- Trainer observation/feedback: performance at meetings, workshops, presentations etc; interaction with colleagues; feedback from colleagues.
- Teaching/mentoring/supporting colleagues at undergraduate/postgraduate levels.

PUBLIC HEALTH EMERGENCY PLANNING AND RESPONSE

Objective: *To acquire and develop the skills and knowledge to prepare for, detect, assess and respond appropriately to potential public health emergencies and other major emergencies. This includes the acquisition of skills in surveillance, risk assessment, risk management and risk communication, exercise planning and participation, incident management, and multiagency and multidisciplinary working.*

KNOWLEDGE

- Stakeholders & policies: National taskforce, Office for Emergency Planning, national framework for major emergency planning, and public health emergency planning, National Public Health Emergency planning policies, including risk assessment and mitigation of risk, planning and preparedness, response and recovery.
- Role of the public health physician in major emergency management and ability to participate in major emergency planning and preparedness for chemical incidents and to assist the CPHM on the interagency group of local competent authorities responsible for External Emergency Plans for SEVESO II sites.
- Role of public health and other agencies in major emergencies, and public health emergencies; knowledge of emergency planning structures and organisation nationally, locally and internationally.
- International Health Regulations and procedures for dealing with potential public health emergencies of international concern (PHEIC), communications protocols, and national focal point communications.
- Structures and processes pertaining to port health.
- Local response to a port health event including PHEIC.
- Risk assessment, risk communication and risk management of potential public health emergencies of international concern threats.
- Familiarity with CBRN: knowledge of hazards, roles of agencies and protocols for management.

SKILLS

- Respond appropriately in a public health emergency situation.

ASSESSMENT & LEARNING METHODS

- Self-directed learning.
- Medical secretary to a regional or national group.
- Involvement in local, regional or national simulation exercises.
- Participating in RCMT (Regional Crisis Management Team).
- Participating in Port Health Network/port health incident.
- Completion of timely, high quality reports/commentary.
- Attendance & participation at journal clubs, courses, study days, modules, seminars.
- Attachment to units/departments/centres providing appropriate training opportunities.
- Trainer observation/feedback: performance at meetings, workshops, presentations etc; interaction with colleagues; feedback from colleagues.
- Teaching/mentoring/supporting colleagues at undergraduate/postgraduate levels.

EVIDENCE-BASED HEALTH CARE (EBHC)

Objective: *To acquire and develop the skills, knowledge and attitudes for the conscientious, explicit and judicious use of current best evidence in making decisions*

KNOWLEDGE

- Role of evidence-based health care and best practice guidelines in health care practice.
- Process of accessing, interpreting and applying information on best practice i.e. the steps of EBHC.
- Hierarchy of evidence.
- Effective strategies that encourage evidence-based practice.

SKILLS

- Critically appraise primary and secondary research.
- Grade research and understand the strengths and limitations of different approaches.
- Identify areas where EBHC approach could improve population outcomes.
- Undertake EBHC project/initiative.

ASSESSMENT & LEARNING METHODS

- Self-directed learning.
- Active participation in EBHC initiatives/projects/studies/initiatives.
- Completion of timely, high quality reports/commentary.
- Attendance & participation at journal clubs, courses, study days, modules, seminars.
- Attachment to units/departments/centres providing appropriate training opportunities.
- Trainer observation/feedback: performance at meetings, workshops, presentations etc; interaction with colleagues; feedback from colleagues.
- Teaching/mentoring/supporting colleagues at undergraduate/postgraduate levels.

HEALTH TECHNOLOGY ASSESSMENT (HTA)

Objective: *To acquire and develop the skills, knowledge and attitude to undertake, support and advise on health technology assessment.*

KNOWLEDGE

- Principles of costing, effectiveness and outcomes and how these are brought together for economic evaluation.
- Factors that contribute to HTA including economic evaluation; understanding the methods used to make explicit values and resources (including health economics) in the decision-making process of HTA, their strengths and weaknesses and the ability to apply these appropriately.
- Use of both primary and secondary research and modelling methods in HTA.
- National and international information sources relevant to HTA.
- Use of modeling approach for evidence of effectiveness.

SKILLS

- Undertake health technology assessment.

ASSESSMENT & LEARNING METHODS

- Self-directed learning.
- Active participation in HTA initiatives/projects/studies/initiatives.
- Completion of timely, high quality reports/commentary.
- Attendance & participation at journal clubs, courses, study days, modules, seminars.
- Attachment to units/departments/centres providing appropriate training opportunities.
- Trainer observation/feedback: performance at meetings, workshops, presentations etc; interaction with colleagues; feedback from colleagues.
- Teaching/mentoring/supporting colleagues at undergraduate/postgraduate levels.

QUALITY CARE AND RISK MANAGEMENT/EFFECTIVE GOVERNANCE IN HEALTH CARE

OBJECTIVE: *To acquire and develop the knowledge, skills and attitude required for a quality care and risk management approach to all aspects of practice.*

KNOWLEDGE

- Elements of effective governance in healthcare and the role of public health in their support.
- How quality, risk and governance apply to public health practice and health care services.
- Factors that contribute to patient safety in health care settings and to leading causes of threats to this safety.
- Internal health service monitoring and interventions together with external regulatory interventions and agencies in assuring quality and driving improvement including HIQA, IMC, FSAI, IMB, together with relevant legislation.
- Methods used to measure quality and their strengths and weaknesses.
- Steps involved in hazard identification, risk assessment and risk management including role of risk registers.
- Managing clinical and non-clinical health information including issues relating to information sharing and performance reporting.
- Concepts of quality assurance and quality improvement.
- StarsWeb risk management database.

SKILLS

- Supporting quality care and risk management/effective in governance in health care as it applies to public health practice including health care delivery.

ASSESSMENT & LEARNING METHODS

- Self-directed learning.
- Active participation in incident investigations/meetings/initiatives.
- Completion of timely, high quality reports/commentary.
- Attendance & participation at journal clubs, courses, study days, modules, seminars etc.
- Attachment to units/departments/centres providing appropriate training opportunities.
- Trainer observation/feedback: performance at meetings, workshops, presentations etc; interaction with colleagues; feedback from colleagues.
- Teaching/mentoring/supporting colleagues at undergraduate/postgraduate levels.

HEALTH NEEDS ASSESSMENT

Objective: *To acquire and develop the knowledge, skills and attitude required to undertake health needs assessments and understand their role in the promotion and protection of the population.*

KNOWLEDGE

- Models of health needs assessment including their strengths and weaknesses.
- Health determinants.
- Factors contributing to health inequalities.
- Population diversity and its influences on health and health service utilization.

SKILLS

- Undertake health needs assessment.
- Public health approach to prioritisation within the strategic planning cycle.

ASSESSMENT & LEARNING METHOD

- Self-directed learning.
- Active participation in health needs assessment/meetings/initiatives.
- Completion of timely, high quality reports/commentary.
- Attendance & participation at journal clubs, courses, study days, modules, seminars.
- Attachment to units/departments/centres providing appropriate training opportunities.
- Trainer observation/feedback: performance at meetings, workshops, presentations etc; interaction with colleagues; feedback from colleagues.
- Teaching/mentoring/supporting colleagues at undergraduate/postgraduate levels.

AUDIT

Objective: *To acquire and develop the knowledge, skills and attitude required to undertake audits to improve quality of health care.*

KNOWLEDGE

- Audit principles and processes, application, strengths, and weakness.
- Public health and clinical audit.
- Role of audit in improving the quality of health care.

SKILLS

- Identify and prioritise areas for public health audit.
- Undertake public health audit
- Achieve consensus with relevant stakeholders on the implementation of changes identified through the audit cycle.

ASSESSMENT & LEARNING METHODS

- Self-directed learning.
- Active participation in audit processes/meetings/initiatives.
- Completion of timely, high quality reports/commentary.
- Attendance & participation at journal clubs, courses, study days, modules, seminars.
- Attachment to units/departments/centres providing appropriate training opportunities.
- Trainer observation/feedback: performance at meetings, workshops, presentations etc; interaction with colleagues; feedback from colleagues.
- Teaching/mentoring/supporting colleagues at undergraduate/postgraduate levels.

EFFECTIVENESS AND OUTCOME ASSESSMENT

Objective: *To acquire and develop the knowledge, skills and attitude required to use sources of effectiveness and outcome measures in the promotion and protection of the health of the population.*

KNOWLEDGE

- Outcome theory, types of evaluation and their methodological limitations.
- National and international sources of information on effectiveness and outcome.
- Principles and application of health economics.
- Health as a commodity and associated opportunity costs.
- Methods and sources of health funding and international comparisons.
- Routinely available mortality and morbidity data sources.
- Outcome measures e.g. clinical, population health, national performance indicators, financial.
- Patient satisfaction and quality of life measures - with their inclusion in relevant evaluation projects.
- Sources of data available at base level (e.g. at local health office/hospital level) required for cost effectiveness and efficiency analysis.
- Elements of evaluation (e.g. structure, process, outcomes, accessibility, equity), including the limitations of outcomes measurement.

SKILLS

- Critically appraise the literature on effectiveness and outcome assessment and to provide recommendations based on this appraisal.
- Apply outcome and evaluation theory in practice.

ASSESSMENT & LEARNING METHODS:

- Self-directed learning.
- Active participation in effectiveness & outcome processes/meetings/initiatives.
- Completion of timely, high quality reports/commentary.
- Attendance & participation at journal clubs, courses, study days, modules, seminars.
- Attachment to units/departments/centres providing appropriate training opportunities.
- Trainer observation/feedback: performance at meetings, workshops, presentations etc; interaction with colleagues; feedback from colleagues.
- Teaching/mentoring/supporting colleagues at undergraduate/postgraduate levels.

ADVOCACY

Objective: To acquire and develop the knowledge, skills and attitude required to advocate on public health.

KNOWLEDGE

- Theory and practice of public health advocacy.
- Functions and processes of the communications infrastructure within the HSE/training location.

SKILLS

- Advocate the proactive role which public health practitioners can play in influencing other professionals, politicians and the public to ensure maximum population health gain;
- Use of local or national media to promote public health-related messages.
- Collaborate with the wider healthcare community and sectors in advocacy-related work.
- Lead and advocate positive action on public health initiatives.
- Identify and work with social networks and community groups to achieve public health goals.

ASSESSMENT & LEARNING METHODS

- Self-directed learning.
- Active participation in advocacy processes/meetings/initiatives.
- Completion of timely, high quality reports/commentary.
- Attendance & participation at journal clubs, courses, study days, modules, seminars.
- Attachment to units/departments/centres providing appropriate training opportunities.
- Trainer observation/feedback: performance at meetings, workshops, presentations etc; interaction with colleagues; feedback from colleagues.
- Teaching/mentoring/supporting colleagues at undergraduate/postgraduate levels.

COMMUNICATION

Objective: *To acquire and develop the knowledge, skills and attitude required to communicate public health messages to different audiences using a variety of methods.*

KNOWLEDGE

- Effective communication in the practice of public health medicine.
- Functions and processes of the communications infrastructure within the HSE/training location.

SKILLS

- Produce reports to a satisfactory standard and within given timeframes on matters of public health importance.
- Present information (including reports and recommendations) both written and oral to a variety of audiences in a manner appropriate to the audience, e.g. colleagues, peers, supervisors, Regional Health Fora, voluntary groups and community groups.
- Liaise with and provide feedback to colleagues, supervisors, subordinates, other professionals, and the public.
- Prepare press statements on matters of public health importance.
- Media interview to communicate an issue of public health importance.

ASSESSMENT & LEARNING METHOD

- Self-directed learning.
- Active participation in communication processes/meetings/initiatives.
- Active participation in the preparation of press statements (written/oral).
- Media interviews (written/oral).
- Completion of timely, high quality reports/commentary.
- Presentation at local/regional/national/international level.
- Publication in peer reviewed journals.
- Attendance & participation at journal clubs, courses, study days, modules, seminars etc.
- Attachment to units/departments/centres providing appropriate training opportunities.
- Trainer observation/feedback: performance at meetings, workshops, presentations etc; interaction with colleagues; feedback from colleagues.
- Teaching/mentoring/supporting colleagues at undergraduate/postgraduate levels.

HEALTH PROMOTION AND HEALTH EDUCATION

Objective: *To acquire and develop the knowledge, skills and attitude required to provide the public health medicine input and support necessary to promote health through a range of effective means including healthy public policy, health education and specific health promoting initiatives. This work should have a particular focus on reducing health inequalities and the prevention of chronic disease.*

KNOWLEDGE

- Theoretical models of health promotion.
- Structures for health promotion, nationally and internationally.
- Centres of excellence and recognised expertise.
- Sources of evidence of effectiveness of health promotion activities.
- Models of health education communication e.g. mass media, electronic, person-to-person.
- Methods and advantages and limitations of evaluation of health promotion.
- Major national and international priorities for health promotion based on disease epidemiology.
- Sources of published and grey literature on health promotion, especially nationally and locally.
- Major stakeholders and their key and differing roles in promoting health e.g. government, industry, professionals.
- Criteria for evaluating health promotion programmes e.g. community development projects, mass media campaigns, smoking cessation, dietary, and drug and alcohol services, population screening for cancers, neonatal disability and immunisation.
- Relative importance of public policy and the environment as well as individual behavior as determinants of health.
- Evidence base of the epidemiology and management of disease.

SKILLS

- Communicate health promoting messages in line with best practice standards.
- Work effectively in multidisciplinary settings.
- Realistic approach based on available resources, political climate etc.

ASSESSMENT & LEARNING METHODS

- Self-directed learning.
- Active participation in health education/promotion processes/meetings/initiatives.
- Completion of timely, high quality reports/commentary.
- Attendance & participation at journal clubs, courses, study days, modules, seminars.
- Attachment to units/departments/centres providing appropriate training opportunities.
- Trainer observation/feedback: performance at meetings, workshops, presentations etc; interaction with colleagues; feedback from colleagues.
- Teaching/mentoring/supporting colleagues at undergraduate/postgraduate levels.

STRATEGIC PLANNING AND MANAGEMENT (HEALTH SERVICE ORGANISATION, HEALTH ECONOMICS, STRATEGIC POLICY)

Objective: *To acquire and develop the knowledge, skills and attitude required to understand the organisation, regulation and structures of health services internationally, nationally and locally, and to demonstrate management competencies*

KNOWLEDGE

- Project management - theory & practice.
- Organisational structure of the health service and its component parts.
- Role of the Health Service Executive (HSE), Department of Health & Children and other agencies arising from the Health Acts.
- Health sector corporate and clinical governance mechanisms - nationally, regionally, locally.
- Health sector funding mechanisms.
- Health sector resource allocation and prioritisation mechanisms.
- Health sector service management processes.
- Health sector evaluation/monitoring processes.
- Financial legislation relevant to the health sector.
- Financial accountability, budget statements, projection.
- Management team functions & processes.
- Healthcare systems internationally.

SKILLS

- Manage projects to completion in an efficient, effective manner.
- Secretary/chair group meetings.
- Work with other disciplines and agencies, recognising competing priorities and differences in cultures and values.
- Respond to unpredictable service demands and to search, find, appraise and analyse data and produce reports of an acceptable quality within an appropriate timeframe.

ASSESSMENT & LEARNING METHOD

- Self-directed learning.
- Active participation in management processes/meetings/initiatives.
- Medical secretary/chair to local, regional, national groups e.g. NIAC, HPSC, Safefood, DOHC
- Completion of timely, high quality reports/commentary.
- Attendance & participation at journal clubs, courses, study days, modules, seminars – leadership, health economics, project management.
- Attachment to units/departments/centres providing appropriate training opportunities.
- Trainer observation/feedback: performance at meetings, workshops, presentations etc; interaction with colleagues; feedback from colleagues.
- Teaching/mentoring/supporting colleagues at undergraduate/postgraduate levels.

PUBLIC HEALTH MEDICINE IN EVERYDAY PRACTICE

Objective: *To demonstrate the willingness and capacity to integrate the broad range of knowledge, skills and attitude within the larger context of the values of public health and the importance of effective collaboration with peers and other groups/disciplines.*

KNOWLEDGE

- Pursuit of excellence in the practice & governance in public health medicine e.g. service & training commitments.
- Ethics in public health medicine e.g. ethical dilemmas, confidentiality, best practice.
- Awareness of Medical Council ethical guidelines and how they impacts on public health practice.
- Active participation in ongoing learning e.g. CPD, journal club, peer group, workshop.

SKILLS

- Reflective practice e.g. feedback, reflection, active learning, 360 review.
- Professional courtesy, consideration, ethical, respectful and sensitive approach in everyday practice with colleagues, patients/families and the public.
- Professional honesty, integrity & responsibility (especially when “things go wrong”), responding to complaints, knowing when to ask for help etc.
- Reasoning, deducting, concluding & summarising.
- Communication with colleagues, patients, the public.
- Problem solving e.g. self starting, taking the initiative to identify & resolve issues/challenges.
- Teamwork, collaboration, networking.
- Leadership & delegation.
- Time management & meeting deadlines e.g. completion of large/lengthy & short/urgent projects on time and of high quality, prioritisation.
- Performing under pressure - multi-tasking with capacity to “keep many balls in the air”, remaining calm and effective under emergency conditions.
- Flexibility e.g. responding to unpredictable service pressures & training opportunities in a timely, focused and balanced manner.
- Balancing service & training commitments e.g. identifying & exploiting learning opportunities.
- Conflict management e.g. negotiation, facilitation, conflict prevention/resolution.
- Committee involvement - organising/supporting, member, medical secretary, chairing.
- Teaching/tutoring/mentoring/supporting colleagues.
- Progression to professional independence e.g. need for less supervision over time.

ASSESSMENT & LEARNING METHODS

- Trainer observation/feedback: working under pressure, teamwork/leadership at meetings, presentations etc; interaction with colleagues; feedback from colleagues.
- Continual advancement in broadening the range of knowledge, skills and attitude necessary for the practice and governance in public health medicine.
- Committee involvement - organising/supporting, member, medical secretary, chairing,
- Active participation/assistance/leading in initiatives/projects/studies.
- Attendance at scientific meetings and conferences (local/regional/national/international).
- Attendance & participation at appropriate training courses, study days, modules and seminars.
- Completion of timely, high quality reports/commentary.
- Presentations at local/regional/national/international level.
- Publications in peer reviewed journals.
- Teaching/mentoring/supporting colleagues.
- MFPHMI Part 1 by end of year 1 (expected)
- MFPHMI Part 1 by end of year 1 (required)

- MFPHMI Part II by end of year 3 (expected)
- MFPHMI Part II by end of year 4 (required)