Current CV

Keep a current version of your CV in this section. Maximum three pages, highlighting academic and service achievement and publications.

Part B
Guidance for the development of a portfolio

These items should be kept in your own portfolio either electronically or in paper format but do not need to be routinely submitted to the RITA panel. However, the assessment panel may wish to look at certain aspects of your portfolio including written work:

- Task description (a detailed description of specific training tasks fixed in conjunction with your trainer)
- Work record (an ongoing summary of tasks/projects you have completed)
- Presentations and publications
- Teaching and research
- Key written reports
- Copy of any publications
- Reports of any specific attachments or secondments
- Reports on progress by trainer and other parties

You may find it helpful to retain the following in the same place:

- Job description
- Record of enrolment, RITA assessments and CCST dates
- Record of progress with examinations, MPH/MSc/other
- Regional training policy for public health

Part B: Task description/protocol

(Use one sheet per task and copy as required.)

TO BE COMPLETED AT OUTSET	COMMENTS SIX MONTHS LATER
Description of task:	
How and by whom was the task generated?	
Deadline and time to be devoted:	
***Intended benefits to trainee in terms of acquiring* competencies:**	
Intended benefits to the Department/District:	
Sources of help and guidance:	

Work record

This section is for recording a summary of the work that you do during training. This will simplify the regular updating of your Curriculum Vitae and the completion of your logbook. It should be completed at regular intervals.

When noting items in the work record you may also find it helpful to write the areas which you feel this work has helped you with against the competencies it will address.

Date	Description	Competency addressed	Outcome e.g. report etc.

Teaching

Keep a record of all teaching experience. Formal tuition in these areas should be recorded. Experience in curriculum development and examination setting and marking should be recorded.

Date	Task	Details*

* For example, mode of teaching, audience

Research

Keep a record of all research. Formal tuition in these areas should be recorded. Progress towards any higher degrees should be recorded here. For research this will include initiating research projects and writing grant applications, as well as original data collection and analysis.

Date	Task	Skills demonstrated*

* For example, protocol writing, grant application, conducting research

Presentations

Keep a list of all presentations made, the date and audience and any feedback received.

Presentations

Date	Title	Details*

* Include audience, methods, any feedback or issues raised.

Publications

Keep a list of all publications, including reports, peer reviews, articles, date and purpose of reports. Keep a copy of the reports in the file, if not too large, or maintain a separate file. Please include the date of completion for each piece of work and the date of publication and full citation for publications.

Peer review publications

Date	Title/Citation	Details*

Other publications

Date	Title	Details*

Unpublished reports

Date	Title	Details*

* Include journal, audience, methods, any feedback or issues raised.

評価は、学術指導者（academic supervisor）と教育指導者（educational supervisor）が担当する。どちらの指導者もFPHによって州ごとに認定されている。学術指導者は、研修生が登録する州で割り当てられ、教育課程全体の評価を担当する。

教育指導者はPublic Health Training Portfolioの個々の評価項目の評価を担当する。教育指導者は、通常、出向先の組織の責任者であり、出向先でのプロジェクトへの取り組みなどを評価し、達成された評価項目ごとに証明のサインをする（sign off）。なお、出向先の組織の業務やプロジェクトの内容によって達成される評価項目が異なるため、教育指導者は領域や評価項目ごとに異なる場合がほとんどである。例えば、LHPUに出向し、健康危機管理のプロジェクトに従事した場合、LHPUの責任者が教育指導者となって、健康危機管理に関連する項目を中心に評価する。このように、一人の研修生の評価を複数の教育指導者が担当するため、領域や評価項目によってsign offの名前が異なることになる。

また出向期間については、従事するプロジェクトによって2～3日、3ヶ月など様々であるが、これは、評価に必要な期間が領域や評価項目によって異なるためである。

研修生は、Public Health Training Portfolioの進捗状況を報告するために、毎年、研修アセスメント記録（Record of In-training Assessment ：RITA）を、FPHのRITA委員会に提出しなければならない。RITA委員会は教育課程の進捗状況を確認し、進捗状況が十分でない場合は、個別指導や重点的な教育プログラムなどを実施する。

②公衆衛生大学院のDiploma・Master課程

教育課程の1年目に受講するのが一般的である。イギリスには様々な公衆衛生大学院が設置されているが、基本的にはどの大学院で受講してもよい。問題点として、FPHには公衆衛生大学院のカリキュラム等に対する権限がないため、Diploma・Master課程の教育内容の質の格差が大きいことが挙げられる。しかしDiploma・Masterの取得は教育課程の一つのステップに過ぎず、次のステップであるDiploma & Part Ⅰ examは、質の低い大学院の教育内容では合格しないようなレベルに設定されているため、現在のところ大きな問題にはなっていない。

③FPHのDiploma & Part Ⅰ exam

教育課程の2年目に受験することが推奨されている。これは、公衆衛生の基本的な知識と技術を試験するためのもので、公衆衛生専門家の教育課程に参加していない者も受験できる。

以下にDiploma & Part Ⅰ examのシラバスを示す。これらはFPHのホームページ上で公開されている。試験問題は、知識に関するPaper Ⅰと技術に関するPaper Ⅱで構成される。試験時間はどちらも4時間である。

Diploma & Part I examのシラバス

A. Paper I (知識) の試験範囲

1. Research methods appropriate to public health practice, including epidemiology, statistical methods, and other methods of enquiry including qualitative research methods

a) Epidemiology

use of routine vital and health statistics to describe the distribution of disease in time and place and by person; numerators, denominators and populations at risk; time at risk; methods for summarising data including direct and indirect standardisation and years of life lost; sources of variation and error in epidemiological measurement and avoidance of error in numerator and denominator data; concepts and measures of risk; the odds ratio; association and causation; bias; confounding; the design, applications, strengths and weaknesses of descriptive (including small area) studies, methods for analysis of small area statistics; design, applications, strengths and weaknesses of analytic studies and intervention studies (including randomised controlled trials); intention to treat analysis; clustered data - effects on sample size and approaches to analysis; Numbers Needed to Treat (NNTs) - calculation, interpretation, advantages and disadvantages; time-trend analysis; new applications of epidemiological methods; methods of sampling from a population; methods of allocation in intervention studies; the design of documentation for recording survey data; construction of valid questionnaires; methods for validating observational techniques; studies of disease prognosis; appropriate use of statistical methods in the analysis and interpretation of epidemiological studies, including life-table analysis (see also 2.1.b); systematic reviews; electronic bibliographical databases and their limitations; grey literature; evidence based medicine and policy; the hierarchy of research evidence - from well conducted meta-analysis down to small case series; the Cochrane Collaboration; the ethics and etiquette of epidemiological research.

b) Statistical methods

elementary probability theory; independence of events; standard statistical distributions (e.g. Normal, Poisson and binomial) and their uses; the sampling distribution; principles of making inferences from a sample to a population; measures of location and dispersion of data and their appropriate uses; graphical methods in statistics; hypothesis testing; type I and II errors; problems of multiple comparisons; parametric and non-parametric tests for comparing two or more groups;

estimation and confidence intervals; sample size and statistical power; regression; correlation; multiple regression; multiple logistic regression; Cox regression; comparisons of survival rates; methods for combining data from several studies; publication bias; heterogeneity; funnel plots; Bayes' theorem.

c) Approaches to the assessment of health care needs, utilisation and outcomes, and evaluation of health care

the uses of epidemiology and other methods in defining health service needs and in policy development; participatory needs assessment; formulation and interpretation of measures of utilisation and performance; measures of supply and demand; study design for assessing effectiveness, efficiency and acceptability of services including measures of structure, process and outcome of health care; measures of health status, quality of life and health care; population health outcome indicators; deprivation measures; principles of evaluation, including quality assessment and quality assurance; equity in health care; clinical audit; confidential enquiry processes; qualitative methods of data collection, including focus groups, semi-structured and in-depth interview techniques; Delphi methods; economic evaluation (see also 2.4.d); appropriateness and adequacy of services and their acceptability to consumers and providers; epidemiological basis for preventive strategies; health and environmental impact assessment.

2. Disease causation and prevention and health promotion

a) Epidemiological paradigms - programming, life-course and adult risk factor approaches.

b) Epidemiology of specific diseases

knowledge of the defining clinical features, distribution, causes, behavioural features and determinants of diseases which currently make a significant impact on the health of local populations, with particular reference to those that are potentially preventable, or require the planned provision of health services, or are otherwise of particular public concern.

c) Screening

principles, methods and applications of screening for early detection, prevention, treatment and control of disease; statistical aspects of screening tests, including knowledge of and ability to calculate sensitivity, specificity, positive and negative predictive values for tests from raw data; differences between screening and

diagnostic tests; likelihood ratios; pre and post test probability; ethical and economic aspects of screening; planning, operation and evaluation of screening programmes; evidence for widely implemented screening programmes, such as breast and cervical cancer, antenatal and neonatal screening tests.

d) Genetics

elementary human genetics; inherited causes of disease in populations; atiology, distribution and control of disease in relatives; interaction of genetic factors with the environment in the occurrence of disease; elementary molecular biology as related to genetic epidemiology.

e) Health and social behaviour

principles of nutrition and the influence of malnutrition in disease aetiology; nutrition and food; determinants of the choice of diet; current dietary goals and recommendations; the effects on health of different diets (e.g. "Western" diet), physical activity, alcohol, drugs, smoking, sexual behaviour, and sun exposure.

f) Environment

environmental determinants of disease; risk and hazard; the effects of global warming and climate change; principles of sustainability; the health problems associated with poor housing and home conditions, inadequate water supplies and sanitation; methods for monitoring and control of environmental hazards (including food and water safety, atmospheric pollution and other toxic hazards, noise and ionising and electromagnetic radiation); the use of legislation in environmental control; appreciation of factors affecting health and safety at work (including the control of substances hazardous to health); occupation and health; transport issues.

g) Communicable disease

surveillance and methods of control; the design and management of immunisation programmes; application of epidemiological methods in the investigation of outbreaks; knowledge of natural history, clinical presentation, methods of diagnosis and control of local common and important infectious diseases; organisation of infection control; elementary molecular biology as related to microbiology, international aspects of communicable disease control.

h) Principles and practice of health promotion

collective and individual responsibilities for health; interaction between social,

political, economic, physical and personal resources as determinants of health; ideological dilemmas and policy assumptions underlying different approaches to health promotion; the prevention paradox; health education and other methods of influencing personal life-styles which affect health; the value of models in explaining and predicting health-related behaviour; risk behaviour in health and the effect of interventions in influencing health related behaviour in professionals, patients and the public; theory and practice of communication with regard to heath education; the role of legislative, fiscal and other social policy measures in the promotion of health; methods of development and implementation of health promotion programmes; community development methods; partnerships; evaluation of health promotion, public health or public policy interventions; international collaboration and initiatives in health promotion.

3. Health information

a) Population

conduct of censuses and how data are collected and published; demography; important regional and international differences in populations, in respect of age, sex, occupation, social class, ethnicity and other characteristics; methods of population estimation and projection; principles of life-tables and their demographic applications; population projections; the effect on population structure of fertility, mortality and migration; historical changes in population size and structure and factors underlying them; the significance of demographic changes for the health of the population and its need for health and related services; policies to address population growth; national and international population policies.

b) Sickness and health

sources of routine mortality and morbidity data and how they are collected and published at national, regional and district levels; the International Classification of Diseases and other methods of classification of disease and medical care; rates and ratios used to measure health status including regional, occupational and social class variations; routine notification and registration systems for births, deaths and specific diseases, including cancer and other morbidity registers; record linkage.

c) Applications

Use of information for health service planning and evaluation; specification and uses of information systems; common measures of health service provision and usage; the

uses of mathematical modelling techniques in health service planning; indices of needs for and outcome of services; the strengths, uses, interpretation and limitations of routine health information; use of computers in management of health services information and in support of provision of health care.

4. Medical Sociology, Social Policy and Health Economics

a) Concepts of health and illness and aetiology of illness

the theoretical perspectives and methods of enquiry of the sciences concerned with human behaviour; illness as a social role; concepts of primary and secondary deviance; stigma, disability and handicap; social and structural iatrogenesis; role of medicine in society; explanations for various social patterns and experiences of illness (including differences of gender, ethnicity, employment status, age and social stratification); the role of social, cultural and psychological factors in the aetiology of illness and disease.

b) Health care

different approaches to health care (including self-care, family care, community care, self-help groups); hospitals as social institutions; professions, professionalisation and professional conflicts; the role of clinical autonomy in the provision of health care; behaviour in response to illness and treatments; psychology of decision-making in health behaviour.

c) Equality, equity and policy

concepts of need and social justice; priorities and rationing; balancing equity and efficiency; consumerism and community participation; public access to information; problems of policy implementation; principal approaches to policy formation; appreciation of concepts of power, interests and ideology; inequalities in the distribution of health and health care, including those relating to social class, gender, culture and ethnicity, and their causes.

d) Health economics

principles of health economics (including the notion of scarcity, distinctions between need and demand, opportunity cost, margins, efficiency and equity); financial resource allocation; techniques of economic appraisal (including cost-effectiveness analysis, cost-utility analysis, option appraisal and cost-benefit analysis); marginal analysis; decision analysis; "rationing"; the role of clinicians in decision-making.

5. Organisation and management of health care

a) Understanding organizations

theories of organisation; methods of organisation analysis (including role analysis and the behaviour of individuals and groups within organisations); structural and contextual dimensions of organisations; functional, product and matrix structures and the strengths and weaknesses of each; group theory (e.g. Belbin roles, stages of group life); relevance to health care systems and public health practice; principles of organisational design and diagnosis; role of international organisations in health and health care.

b) Management and change

basic management models and theories (e.g. Taylor, Weber, Fayol, Mayo. Mintzberg, Peters and Waterman); Basic motivation theory (e.g. McGregor, Maslow, Mayo, Herzberg); external and internal influences on strategy development; frameworks for strategy development (e.g. Porter, BCG matrix, McKinsey 7S framework, SWOT analysis) approaches to change; factors that resist change and promote change; Force Field analysis; creativity and innovation; barriers to creativity and innovation; frameworks to stimulating creativity (e.g. brainstorming); personal management skills (e.g. managing: time, stress, conflict); principles of delegation; principles of negotiation; principles, theories and methods of effective communication (written and oral); relevance to health care systems and public health practice; evolution and change in management of health services; interactions between managers, doctors and others; intersectoral work and partnerships; basis of power and authority; leadership and leadership styles; professional behaviour change; theory and practice of communication with regard to management; principles of motivating people and managing conflict; effective decision-making (by individuals and groups); performance assessment against goals and objectives.

c) Health service development and planning

planning theory (including rational, disjointed incremental and mixed scanning approaches); methods of organising and funding health services and their relative merits; risk management; guideline development; integrated care pathways; public consultation and involvement in health service planning; historical development of personal health services and of public health, focusing particularly on international comparisons.

B. Paper II（技術）の試験範囲

a) Design and interpretation of studies

skills in the design of research studies; ability critically to evaluate published papers including the validity of the use of statistical techniques and the inferences drawn from them; ability to draw appropriate conclusions from quantitative and qualitative research .

b) Data manipulation and interpretation

ability to sort and manipulate data, and to draw appropriate conclusions from quantitative and qualitative data.

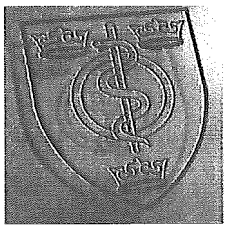
c) Communication

written presentation skills; preparation of papers for publication; preparation of material for different audiences, including expert and non-expert audiences and the media. Information handling. Use of media in advising the public about health services, disease prevention (including communicable disease outbreaks and environmental hazards) and health promotion.

Paper Ⅰでは、調査研究方法（疫学、統計学、ヘルスケアのニーズ・利用状況・結果のアセスメント及びヘルスケアの評価)、疾患の因果関係と予防及びヘルスプロモーション（リスクファクターの基本的な考え方、特定疾患の疫学、スクリーニング、遺伝学、保健・社会行動、環境、感染症、ヘルスプロモーションの理念と実践)、保健情報（人口学、保健統計（出生、死亡、罹患など)、保健情報の応用)、医療社会学・社会政策・保健経済学（健康と病気の概念及び疾患の原因学、ヘルスケア（ヘルスケアの種類、病院、保健医療専門職、病気対処行動、健康心理学など)、平等・公平と政策、保健経済学)、ヘルスケアの組織と管理（組織原理の理解、組織のマネージメントと変革、保健サービスの開発と計画）の5領域の知識が要求される。各領域2設問、計10設問で構成され、選択肢や簡潔な記述式で解答する。なお各設問につき、複数の小問題が設定されている。

Paper Ⅱでは、調査研究のデザインと解釈、データの処理と解釈、コミュニケーションの3領域の技術が要求される。学術雑誌に掲載された論文を読んでその批判と解釈を行う設問と、提示された統計資料に関して計算と結果の解釈を行う設問（計算機持ち込み不可）で構成され、各設問につき複数の小問題が設定されている。

以下に、Diploma & Part Ⅰ examの過去の試験問題とその解説を示した。これはFPHのホームページ上で公開されている。



Faculty of Public Health

of the Royal Colleges of Physicians of the United Kingdom
Education Department

Working to improve the public's health

DIPLOMA & PART I EXAMINATION FOR MEMBERSHIP OF THE FACULTY OF PUBLIC HEALTH

Of the Royal Colleges of Physicians of the United Kingdom

JANUARY 2004

EXAMINATION QUESTIONS WITH EXAMINERS' KEY POINTS AND COMMENTS

N.B. Please note that these are key points, not model answers

PAPER IA

QUESTION 1

A new test for a disease was evaluated on 50 affected individuals and 50 who were known to be unaffected. The test correctly identified 40 of the affected subjects, but incorrectly classified 5 of the unaffected ones.

i. Calculate the sensitivity and specificity of the test. Explain what these measures tell us. *(2 marks)*

ii. The test has been suggested for screening a population in which the disease prevalence is 2%. What additional measures should be calculated from the above figures to express the expected performance of the test? *(1 mark)*

iii. Calculate these additional measures, explain what they tell us, and explain how they would change if the prevalence altered. *(3 marks)*

iv. Outline the arguments for and against the suitability of the test as a screening instrument based on the above evidence. *(4 marks)*

KEY POINTS

1. Sens 80%, spec 90%. Careful definitions indicating both how calculated and what they tell us.

2. PPV and NPV.

3. Set up 2 by 2 table with total say 10000.
Projected PPV=160/1140=14%, NPV=8820/8860=99.5%.
Careful explanation so that no risk of confusing with sens and spec.
Decreasing prevalence decreases PPV (crucial) but increases NPV (probably doesn't matter greatly).

4. Usual arguments in favour: for many diseases e.g. ca breast, lead time → genuinely more effective Rx as assessed by cause-specific mortality in populations offered the test (not just better outcome in those identified early). Against, false positives swamp true positives, leading to both unnecessary anxiety and increased demands for investigation resources for many who don't in fact have the disease. The PPV here is quite low, but commensurate for that of the breast screening programme which is established as beneficial. Need to weigh seriousness and treatability of this disease.

For the above data, both sensitivity and specificity are based on small numbers, hence have wide confidence intervals. [67% to 87% and 79% to 96% using a good method, but we don't expect candidates to calculate these.] Great degree of uncertainty on PPV due to this (mainly due to imprecision of the specificity). Recommend to use larger series, using present data to help plan appropriate numbers, to get much more precise estimates of sensitivity and specificity first. This is certainly feasible with a fairly common disease such as this, and much more cost-effective than launching straight into population screening based on such limited data. Notwithstanding the fact that a very strong, highly significant

association between test and true status is already clearly established, with OR=36, X^2=49.5, p<<0.001 [don't expect them to calculate these] - which is only a minimum requirement for an effective screening test - greater precision is needed.

It is possible that a test already exists with a high sensitivity and specificity, such that it is implausible that the new test would have any advantage - bearing in mind issues of cost and invasiveness/acceptability as well as performance. The conclusion after this small study might therefore quite legitimately be to end further investigation. Better candidates would include this in their answer.

Little credit will be given for merely quoting the Wilson and Jungner criteria re known natural history, acceptability of test, availability of beneficial treatment etc.

COMMENTS

This question was poorly answered, despite its basic nature and the fact that quite similar questions had been asked in the past. Many candidates correctly identified the positive and negative predictive values as appropriate measures to express the expected performance of the test, though many gave less directly relevant answers such as likelihood ratios in addition or instead. Many simply calculated the PPV and NPV for the series given, failing to realise that the relevant figures to calculate are those relating to a series with 2% prevalence.

Candidates often quoted the Wilson & Jungner criteria, and got substantial credit only when these were applied to the context. No candidate brought out the limitations of the data resulting from the small sample size, disappointingly - small denominators such as these should be a cue directing attention to this issue. Nor was the possibility mentioned that other equally good or superior tests might already be available.

QUESTION 2

Describe what is meant by the following in the context of case control studies:

a) the matching ratio (of cases to controls)
b) demonstration of a dose-response relationship
c) confounding
d) recall bias
e) 'overmatching' (of controls with cases).

KEY POINTS

The marks will be equally distributed between the five sections. In the marking schedule, asterisks indicate the basic points necessary for a pass, the other points gain additional credit for a good or excellent answer.

a) the matching ratio
- refers to the number of controls (R) per case *
- 1:1 match (one control per case) is normally the most statistically efficient design*
- when the number of cases is limited the power of the study to detect an association if one truly exists (or equivalently, the precision in estimating the odds ratio) can be increased by selecting more than one control per case (R:1)
- occasionally the converse applies - e.g. if looking for totally disease-free individuals in a very elderly age range, or if study involves invasive methods that few controls would be willing for, it can be optimal to use more than one case per control (1:R)
- if ratio of controls to cases increases beyond four the gain is often considered small compared to cost (time and money)
- the above points are usually applied to individually matched studies, but similar issues apply to designs without individual-level matching

b) demonstration of a dose response relationship
- in a case control study this is also referred to as exposure – response relationship
- it means that the degree (intensity and/or duration) of exposure is related to the strength of association, as measured by odds ratio etc*
- demonstration of a dose – response relationship favours a causal relationship*
- measuring exposure exactly in case control studies is difficult as one is often dependent on long term recall, interviews with relatives, work records, analysis of stored tissue

c) confounding
- occurs when the observed association (or lack of association) is caused by a mixing of effects between the exposure, the disease and one or more other factors (the confounding variable(s))*
- the confounding factor is associated with the exposure and also independently affects the risk of developing the disease*
- answer illustrated with plausible example (descriptive or adequately explained numerical example related to a case-control study context)