Getting Ahead of the Curve

Action to strengthen the microbiology function in the prevention and control of infectious diseases

24 June 2002
A Discussion Paper on the Future Contribution of
Microbiology Services in the Public Health Regions
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Introduction

1. In Getting ahead of the curve - A strategy for infectious diseases (including other aspects of health protection) the Department of Health (DH) gave a commitment to high quality diagnostic microbiology services for the NHS that contribute to the protection of the public health in England. In addition, and as part of the strategy, DH has decided to transfer the Public Health Laboratory Service (PHLS) laboratories providing mostly general clinical microbiology services to the NHS. DH now seeks views on the transfer process. This discussion paper sets out a way forward, taking account of input from providers, users, and professional bodies involved in microbiology services. Any comments on the paper should be received by 5 August 2002 (see paragraph 23).
Roles of Microbiology Services

2. The roles of general clinical diagnostic microbiology services are to:
   • provide high quality diagnostic microbiology and management advice services to support clinicians in the care of individual patients; and
   • either directly provide, or support, infection control activities and management arrangements within the hospital setting;
   • ensure the full contribution of microbiology laboratories in supporting the development and implementation of policies for the prevention and control of infectious diseases in the population.

3. The above will be achieved by:
   • improving the contribution of general clinical diagnostic microbiology services to public health protection, especially surveillance and outbreak support as well as advice on policy. For the purposes of this document general clinical diagnostic microbiology is defined as “the first-line microbiological examination of specimens submitted by clinicians as part of diagnostic process of an individual patient”. Reference laboratories, as part of their function, undertake either detailed testing of common micro-organisms to characterise and fingerprint them or specialist testing for rare organisms; and specialist laboratories cover either events that require rare skills or rare clinical events. There is some overlap between specialist and reference work.
   • driving up standards of microbiology services;
   • changing the current management arrangements;
   • clarifying the roles of responsibilities of NHS laboratories in each NHS government office region.

4. Future services will need to take account of a changing context due to increasing burden of infection, the modernisation agenda, public expectations and staffing issues (Appendix 1).
5. Getting Ahead of the Curve set out the Chief Medical Officer's strategy for health protection. It made clear the intention to place responsibility for providing and commissioning general clinical microbiology with local NHS bodies, transferring this responsibility where necessary from the PHLS and ensuring that all laboratories carrying out general clinical diagnostic microbiology contribute appropriately to public health.

6. It also made clear the Government's wish to establish a Health Protection Agency, which will take over, amongst other things, the responsibilities currently held by PHLS for specialist and reference microbiology. The Government aims to establish the Agency by April 2003 by means of a Regulatory Reform Order. A consultation exercise is being conducted on the Government's proposals for the Agency. Copies of Health Protection: a consultation document on creating a health protection agency are available from Department of Health Publications, tel 08701 555 455, fax 01623 724524, email doh@prolog.uk.com, or on the Department of Health website at www.doh.gov.uk/consultations/live.htm.

7. The requirements placed on NHS general clinical diagnostic microbiology laboratories are that they:
   - provide a consistently high quality standard of service, use standard operating procedures and be accredited;
   - meet their public health obligations as well as their clinical responsibilities, including the submission of reports of infection for surveillance purposes, contributing to the investigation and management of outbreaks and complying with the required security procedures for microbiology laboratories.

This document sets out a way forward that is consistent with the strategic goals set by the strategy.
Way Forward

8. Regional Directors of Public Health (RDsPH), working with PHLS Headquarters (HQ) and Group Directors, Chief Executives of Primary Care Trusts (PCTs) and NHS Acute Trusts, should set a timetable for action to achieve the tasks set out below.

9. RDsPH may find it helpful to establish a regional advisory group of appropriate composition, including the PHLS Group Director, Representative of the Regional Group of Consultant Microbiologists, Representative of the Regional Group of Consultants in Communicable Disease, Regional Epidemiologists, Infectious Disease Physicians, Infection Control Nurses (community and hospital), Environmental Health Officers, and the Regional ‘lead’ for the Modernisation of Pathology Services to provide professional advice.

10. Roger Evans, an experienced NHS Chief Executive, is supporting DH, RDsPH and PHLS HQ and Group Directors in developing the Regional timetables and making the transfers. In particular, he will work with the DH, PHLS and individual NHS Trusts and networks to ensure the programme is achieved.

11. Actions for the NHS and PHLS are:

Improving the contribution of clinical diagnostic microbiology services to public health protection

12. PCTs and NHS Trusts need to maintain existing systems that ensure that all laboratories undertaking clinical diagnostic microbiology for the NHS, whether provided by the NHS or commissioned from other organisations provide:
   • surveillance data as specified by the communicable disease reporting arrangements issued by the PHLS Communicable Disease Surveillance Centre (CDSC);
   • timely and appropriate reports to the relevant Consultants in Communicable Disease Control (CCDCs);
   • help and support to those responsible for the management and control of incidents of infection whether they occur within NHS Trusts, PCTs or in the wider community.

Driving up standards of microbiology services

13. PCTs and NHS Trusts will ensure that, by 31 March 2003, all laboratories undertaking general clinical diagnostic microbiology for the NHS, whether provided by the NHS or commissioned from other organisations:
   • have timetables to adopt national standard operating procedures, along the lines of those produced by the PHLS (see paragraph 22) starting with those for diseases subject to national action plans;
   • operate according to specialist reference standards (see paragraph 21).
Changing management at the local level

14. At present, laboratories in PHLS Groups provide general clinical diagnostic microbiology services to their host NHS Trusts, other organisations and clinicians. The costs of these services are met, mostly in part, through service level agreements that are subject to periodic review.

15. Management of all laboratories (except those covered by paragraphs 18, 19 and relevant sections of paragraph 20 below) is to be transferred to the NHS by 31 March 2003.

Provision of general public health microbiology

16. Currently, PHLS laboratories provide diagnostic services for public health purposes, (surveillance, outbreak support, advice etc), at local and regional levels. Usually, these services are provided locally and regionally at the request of the CCDCs, Environmental Health Officers or Regional Epidemiologists. PHLS laboratories also contribute to national programmes co-ordinated by CDSC and supported by PHLS reference laboratories (e.g. enhanced meningococcal disease, measles, and HIV surveillance). In addition, PHLS laboratories undertake the examination of food, water and environmental samples in accordance with local agreements.

17. Public health services will continue to be provided by those laboratories transferred from the PHLS to the NHS. In future, we envisage that some of these services will be commissioned by the proposed HPA and other lead NHS bodies. The level and costs of these services will be the subject of service level agreements between commissioners and providers. It is expected that, normally, these service level agreements will sustain existing service commitments. These agreements will be implemented as part of the transfer of management to the NHS. The current PHLS staffing and financial resources are being identified, and will be transferred and/or distributed as appropriate. It is envisaged that the proposed agency will be responsible for providing or commissioning food, water and environmental microbiology for local authorities (PHLS currently provides this service).

Provision of reference and specialist public health microbiology

National/Regional

18. Until such time as new arrangements are put in place following the consultation on the Health Protection Agency the PHLS will continue to be responsible for the provision of its current reference services.

19. Until the new arrangements are in place, other specialist public health microbiology services provided on a regional or supra-regional basis will continue to be provided as at present.

Approach to provision of changed service delivery

20. RDSPH will be responsible for determining what public health microbiology services should be provided within the region to meet local needs. Arrangements will build on available expertise. There is an emerging consensus on the potential arrangements for microbiology. These are as follows:

Pathology Networks

• Guidance on modernising pathology services recommends that the NHS set up managed pathology networks serving populations equivalent to those served by Strategic Health Authorities (SHAs). Where such networks already exist, microbiology laboratories should be an integral part. Where such networks are not yet in place or are embryonic, planning for future
networks should include microbiology services. In some areas, it may be possible to establish microbiology services serving a number of Trusts, ahead of the overall pathology networks. However, this would be an interim measure as long-term accountability and management arrangements should be through pathology networks.

- Organisational arrangements for such networks should depend on local circumstances. While for most networks there should be a lead Trust, other solutions such as collaborations between universities and the NHS or partnerships with the private sector may be of advantage in some areas.

- Within the managed pathology networks, the precise configuration of microbiology services should be determined by each region with major input from local pathologists, microbiologists and public health protection teams. In deciding on configurations, due consideration should be given to current arrangements, as in some areas there may already be well-established networks with identified benefits. In other areas, networks are embryonic. A flexible approach is vital so that it should be possible to build on established or developing systems from within current NHS, and/or PHLS arrangements where benefits should be preserved.

- Within pathology networks, there should be clear lines of accountability to the management of the pathology networks for the main pathology disciplines. In the case of microbiology a clinical director for microbiology with identified sessional commitment and clear lines of accountability should be identified who should have general management and finance support. This post holder will be responsible for arrangements to support the public health functions outlined below.

**Delivering Local Public Health Functions of Pathology Networks**

- The public health functions (draft in Appendix 2) should form the basis of a Service Level Agreement. The distribution of these functions within the network will depend on local circumstances.

- Each network should have a consultant microbiologist with a significant specified sessional commitment to public health. This would ensure delivery of the four basic functions of reporting of infections, submitting specimens to reference laboratories, outbreak support, and policy development and implementation as well as serve local, regional and national requirements for infectious disease and environmental work. Each network will have a full time manager with responsibility for all public health resources in the network.

- An implementation board should assist the lead local microbiologist for public health. Performance management to be via the StHA with input from relevant stakeholders.

**Delivering the Regional Public Health Functions of Pathology Networks**

- At a regional level there will be a need to ensure co-ordination of microbiology services to support public health activities, e.g. enhanced surveillance, cross-boundary outbreak investigations, development and implementation of standard operating procedures, input to local/regional policy, as well as continuing professional development and manpower planning. There will also be a need for specialist services (see paragraph 21)

- To carry out the above, each region should have significant dedicated microbiology sessions from a ‘Regional Public Health Microbiology Co-ordinator’.

- An implementation board should assist the Regional Public Health Microbiology Co-ordinator. Performance management of the regional contribution of networks and the laboratories of the proposed Health Protection Agency (HPA) to be via the RD PH with input from relevant stakeholders.
Management of the PHLS Public Health Microbiology Functions in the Transition Period

To ensure the current stability of PHLS run public health microbiology services and support the development of the NHS services, there is a need to have a function which will transfer with the creation of the proposed HPA, that:

- ensures the provision of the Public Health Microbiology Co-ordinator sessions for the regional role;
- in those regions with an emerging pathology network or with a microbiology service across a number of Trusts, provides a ‘regional’ microbiology laboratory function. This could be envisaged as running a whole, or part of a larger laboratory providing clinical services. It could also co-ordinate the public health work of the networks including food and environmental work. Where this arrangement is agreed, the necessity to maintain some/all of the ‘regional’ microbiology laboratory function should be subject to a review, to be completed no later than 31 March 2004.
- in those regions where there is little or no pathology network infrastructure, nor a microbiology service across a number of Trusts, provides a ‘regional’ microbiology laboratory function and manages the work of the public health microbiologists in the PHLS laboratories transferring to the NHS and manages the public health food and environmental work. Where this arrangement is agreed, the necessity to maintain the ‘regional’ microbiology laboratory function should be subject to a review, to be completed no later than 31 March 2004.
- where aspects of the public health work may be provided by a commissioning arrangement, these should be within a standardised specification and accountability format.

Reference laboratories and specialist public health work

With the migration of many PHLS laboratories to the NHS, there is a need to ensure close links with the reference laboratory services, currently provided by the PHLS, the Centre for Applied Microbiology and Research (CAMR) and other bodies and that are largely envisaged as being provided by the proposed Health Protection Agency. A framework document is being developed that will inform the need for specialist public health microbiology and reference laboratory services. This will assist in ensuring the delivery of appropriate services within regions. Each RD PH should commission a report that considers the relationship between general microbiology and specialist services in their region, as well as the relationship with national reference laboratory services. In addition, RD sPH should consider the relationship and management arrangements for those national reference laboratories currently located in their region, to be published by 31 December 2002. The framework document will be prepared by DH with input from PHLS, CAMR, the Royal College of Pathologists, academic units as well as clinical and public health stakeholders. Prior to the new arrangements, PHLS specialist and reference laboratories will continue to be managed by the PHLS. The providers of other reference services will continue to be responsible for the provision of current services. As part of this activity, RD sPH should determine the specialist contribution made by individual members of PHLS staff and ensure that these are documented in the transfer e.g. the need to ensure the availability of individuals with expertise in exotic and dangerous pathogens that could be used in the deliberate release of biological agents.
22. Standard operating procedures can be obtained from the Head of Technical Services, PHLS HQ, 61 Colindale Avenue, London NW9 5DF.

23. Comments on the discussion paper to be forwarded, by 5 August 2002, by Email: labs@doh.gsi.gov.uk
    Surface mail: Roger Evans, Health Protection Agency Implementation Team, 5th Floor, Hannibal House, London SE1 6TE
    Fax: 020 7972 2312
Appendix 1
Future Context of Microbiological Service Provision

Key Points

Increased workload due to:

Clinical requirements
  • burdens of infectious diseases associated with new technologies and increased numbers of, immunosuppressed patients;
  • demand for advice, especially in complex areas such as healthcare associated infections;
  • more molecular testing at local level.

Public health
  • demand for more input on public health activities such as antimicrobial resistance;
  • new areas of work e.g. decontamination issues in primary and secondary care settings.

Modernisation Agenda
  • demand for near patient testing;
  • securing national specialist services for virology, mycology, parasitology.

Staffing Issues
  • potential crises because of reduced medical input, difficulty in recruiting scientific/MLSO staff;
  • need to support increase in training numbers, more flexible use of staff e.g. nurse specialists in infection control.

Public Expectations
  • informed public and a more responsive service;
  • knowledge about imported infections due to travel;
  • demand for prevention programmes to combat infections.
Appendix 2
Public Health Functions of all NHS Microbiology Laboratories and Networks

Getting Ahead of the Curve, the Chief Medical Officer’s strategy for combating infectious diseases, states that all clinical microbiology laboratories will be required to recognise their public health as well as their clinical responsibilities. These responsibilities specifically (but not exclusively) include mandatory reporting of infection for surveillance purposes and contributing to outbreak investigations. The strategy further states that there is a need to bring consistency to the delivery of the public health functions of all clinical laboratories and to standardise on current good practice.

This document is a template, based on best practice, to ensure that core local, regional and national public health needs are addressed in local service level agreements with laboratories undertaking work for the NHS. Local agreements will need to be agreed by the Hospital Trust managing the laboratory, the proposed Health Protection Agency, the relevant PCTs and the Regional Director of Public Health.

1. Support to local infectious disease prevention and control function

1.1 Provision of data and information in a timely manner to appropriate local Teams (based on district of residence of patient), including:

- The local team will be informed of all isolates/results of ‘reportable diseases’ and other results of public health importance.
- All results for routine reporting to local teams and Environmental Health Departments will be reported on the same day that a report is issued to the requesting clinician.
- Infections with serious public health implications (e.g. botulism, diphtheria) will be reported immediately by telephone as soon as a provisional diagnosis is suspected.
- For results on specimens likely to be of public health importance which are referred elsewhere, a provisional result will be issued to the local team by the laboratory. The local team will be informed that the specimen is being sent to a reference laboratory.
- Other laboratory data relevant to the responsibilities of local teams, will be provided as agreed with the Consultant Head of Laboratory (or equivalent local appointment).

1.2 Assistance in the management of incidents and outbreaks, including:

- Contributing to the formulation of robust local contingency plans, including participation in exercises.
- Detection of local outbreaks in community and healthcare settings through monitoring laboratory findings and immediately informing the local team.
- Detection and prompt reporting to the local team of unusual occurrences of public health significance, including adverse incidents.
- Providing laboratory support to the local team for the investigation of local outbreaks or incidents.
• Attendance whenever possible of Consultant Microbiologist/Virologist (and/or other appropriate staff) at incident/outbreak control team meetings as requested.

• Advice on appropriate investigation strategy.

• Forwarding of appropriate specimens within network or to reference laboratories without delay.

• With the agreement of the Consultant Head of Laboratory (or appropriate deputy), the local team may submit specimens for investigation that may have implications for public health action (e.g. contacts of cases).

1.3 Provision of specialist advice to local staff, EHOs and other professional groups (to be defined locally) on the prevention and control of infections, including:

• Advice on the microbiological diagnosis of infection, interpretation of results, appropriate investigations and clinical and other appropriate advice on infection.

• Acting as an initial point of contact for access to other experts within microbiology networks as required. Local staff may also access such experts directly.

• Specialist advice on infection control in primary care and community settings (there may be a separate SLA to cover specialist support for PCT premises).

• Specialist advice on appropriate antimicrobial prescribing.

• The Consultant Head of Laboratory or agreed deputy will be a member of the District Control of Infection Committee (or equivalent successor committee), which will meet on a regular basis.

• Laboratory staff will contribute as appropriate to local policies and publications.

1.4 Contribute to relevant local training and updating.

2. Support to regional and national infectious disease prevention and control function

2.1 Contribute to regional and national surveillance, including:

• Contributing in a timely manner to local, regional and national surveillance of infectious diseases reporting through national software (currently CoSurv-Lablink reporting to CDSC regional units).

• Contributing to enhanced surveillance studies, unlinked anonymous serosurveillance and other investigations that may be part of local, regional or national surveillance (e.g., surveillance of meningococcal disease, enhanced TB surveillance, vaccine failures, etc).

• Participation in mandatory surveillance of healthcare associated infections, in line with Department of Health requirements.

• Participation in audits of reporting.

2.2 Provision of appropriate specimens to reference laboratories in a timely manner:

• To national reference laboratories to assist in the control of communicable disease in line with national guidance, including provision of relevant clinical and epidemiological data.

• To assist local, regional or national investigations.

• Within managed microbiology networks, as agreed locally/regionally.
2.3 All laboratories should work towards being part of a microbiology network, in order to:

- Contribute promptly to the provision of surge capacity when microbiology services come under public health pressure, e.g., during large outbreaks where extra testing capacity is needed, when other local laboratories are unable to provide services, etc.
- Obtain prompt support from other laboratories when needed, e.g. large local outbreak.
- Ensure microbiological support provided when required for unusual circumstances, e.g. rare infections, deliberate release, etc.
- Contribute appropriately to planned national action plans to reassert control over serious infectious disease problems (Some recommendations might require additional resourcing).
- Contribute to ensuring best practice in microbiological contribution to control of important public health problems (e.g. diagnosis of tuberculosis).
- Contribute to development of national and, where appropriate, local SOPs.
- Allow local laboratory staff to contribute specialist expertise to networks.
- Contribute to compilation of register of relevant assets within network.

2.4 Maintain vigilance for new phenomena suggestive of local or national events with public health implications (e.g. failure of a test kit) and report these to public health authorities e.g. M DA, N PSA, H PA (CD SC, local team or Central Reference Laboratory), etc.

3. Quality of microbiological services

The quality of the microbiological contribution to infectious disease prevention and control is dependent upon the quality of the underlying microbiological service. Getting Ahead of the Curve states that all clinical microbiology will be required to operate to common reference standards and standard operating procedures. Quality issues to be addressed by the laboratory include:

3.1 Participation in managed microbiological networks.

3.2 Seeking, obtaining and maintaining accreditation by CPA or other recognised UKAS scheme. The laboratory should inform the local team of any accreditation inspection and its outcome.

3.3 Participation in internal and external quality assurance programmes.

3.4 Use of Standard Operating Procedures that take account of national standards (and collaboration in further development and testing of SOPs).

3.5 Participation in peer audit, critical event and anomalies reporting and an active staff education and training programme.

3.6 Sufficient staffing levels, including sufficient to fully contribute to hospital infection control.

3.7 The Laboratory will inform the local team of any change in sampling or testing protocols or policy of relevance to infectious disease surveillance or control, or any other threat to possible quality or quantity of microbiological service.

3.8 The laboratory will follow Caldicott guidelines and will conform to national standards of confidentiality.
4. **Local Public Health Teams responsibilities to the local NHS Microbiology laboratory**

4.1 The local teams will inform the laboratory as soon as it becomes aware of any incident/outbreak with potential implications for the laboratory.

4.2 If the number of samples from an outbreak/incident is likely to require substantially increased resources from the laboratory, the investigation should be discussed and agreed beforehand by the Consultant Head of Laboratory (or appropriate deputy) and the local team.

4.3 The local team and the laboratory will liaise closely about specimens submitted by EHOs and others when an outbreak is suspected.

4.4 The local team will provide the laboratory with summary surveillance and other data on communicable diseases within the area as agreed.

4.5 Appropriate local team staff will be members of relevant Trust groups, e.g. Hospital Control of Infection Committee.

4.6 The local team will contribute as requested to the management of incidents and outbreaks of hospital acquired infection.

4.7 The local team will advise and assist in the management of lookback exercises involving patients potentially exposed to an infection within the hospital (e.g. blood-borne virus, TB or chickenpox), although the Hospital Trust will be responsible for identifying and informing relevant patients and staff.

4.8 The local team will provide advice to the Laboratory on public health aspects of communicable disease and epidemiology.

4.9 The local team will lead on the development of local community policy on specific community infections and on communicable disease control, including infection control in community settings (other than those managed by the PCT).

4.10 All local policies/guidelines/leaflets (including those produced on behalf of PCTs) which are likely to have a significant impact on the laboratory will be discussed with the Consultant Head of Laboratory.

4.11 The Consultant Head of Laboratory or deputy will be invited to all Incident Control Teams that are likely to involve investigations by the laboratory.

4.12 Samples sent by the laboratory to specialist and reference laboratories will be processed and reported in a timely manner.

4.13 The local team will ensure that the laboratory is involved in any relevant incident/outbreak exercise.

4.14 The local team will ensure that the security of patient information according to agreed legislation, national guidance and the oversight of its Caldicott guardian.
5. Appraisal of the service

5.1 The ‘Clinical Director’ of the local team will meet regularly with the Consultant Head of Laboratory to discuss current issues.

5.2 Joint audit will be carried out on a regular basis both for the process and for the public health management of specific infections.

5.3 This service provision will be subject to biennial review.

5.4 If the service is deemed unsatisfactory by either party, this should be discussed in the first instance between the Consultant Head of Laboratory and the Clinical Director of the local team. If this does not lead to resolution, either party may refer the dispute to the Regional Director of Public Health and the Trust Chief Executive for resolution.

Notes on exclusions from this Agreement:

Food, Water and Environmental Microbiology is not included in this document because it will be provided from a smaller number of laboratories and will be part of a separate agreement.

Support to screening programmes should be covered in separate agreements between laboratories and PCTs.

Activities relating to Hospital Infection Control are outside the scope of this document: however, such activities are a core clinical governance function of all hospital trusts, for which they are accountable under Controls Assurance arrangements.

It is recognised that some laboratories may require some additional resource to undertake some functions (e.g. advice on infection control or training): the source of any such resource consequences locally is not discussed in this document. In addition, it is assumed that specimens which are submitted as part of the investigation of an incident or outbreak (subject to the agreement of the Consultant Head of Laboratory) will be processed without charge: this is best addressed in the overall service specification that a PCT should expect from a laboratory which serves its local population, although some network arrangement will be necessary for particularly large incidents.
Appendix 3
List of those to Whom the Discussion Paper is Being Forwarded

The Public Health Laboratory Service Board

NHS Trusts (chief executives, medical directors, directors of nursing, chief pharmacists)

Primary Care Trusts (chief executives, directors of public health, lead nurses, pharmacy advisers)

Consultants in public health medicine

Consultants in Communicable Disease Control and other staff affected

Directors/Chief Executives of Workforce Planning Confederations

Genito-urinary medicine clinics (directors)

Health authorities (chief executives, directors of public health, directors of nursing, chief pharmacists)

Health emergency planning advisers

Hospital and ambulance trust emergency planning leads.

Acute NHS Trust Emergency Planning leads

Ambulance Service Emergency Planning Advisors

Food Standards Agency

Centre for Applied Microbiology and Research

The Academy of Medical Royal Colleges

The Academy of Medical Sciences

Amicus

The Association of Clinical Microbiologists

The Association of Directors of Public Health

The Association for Genito-Urinary Medicine

The Association of Medical Microbiologists

The British Association of Medical Managers

The British Dental Association

The British Infection Society

The British Medical Association

The British Society of Antimicrobial Chemotherapy

The British Thoracic Society

The British Veterinary Association

The Chartered Institute of Environmental Health

The Community Practitioners and Health Visitors Association

The Faculty of General Dental Practitioners

The Faculty of Dental Surgery, Royal College of Surgeons

The Faculty of Public Health Medicine

The Hospital Infection Society

Infection Control Nurses Association (Community Network)

The Institute for Animal Health

The Institute of Biomedical Science

The Medical Defence Union

The Medical Protection Society

The Medical Society for the Study of Venereal Diseases
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<td>Director Public Health Prison Service</td>
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<td>Prospect</td>
<td>Prison Healthcare managers</td>
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<td>Public and Commercial Services Union</td>
<td>The Surgeon-General, Ministry of Defence</td>
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<td>The Public Health Medicine Environmental Group</td>
<td>The Association of Port Health Authorities</td>
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The Nursing and Midwifery Council
The Trading Standards Institute
The United Kingdom Accreditation Service
The Consumers Association
Medicines Control Agency
House of Commons Health Select Committee
House of Commons Science and Technology Committee
House of Lords Science and Technology Committee
Advisory Committee on Dangerous Pathogens
Advisory Committee on the Microbiological Safety of Food
Advisory Group on Hepatitis
Committee for the Microbiological Safety of Blood and Tissues
Expert Advisory Group on AIDS
Health Care Associated Infection Surveillance Steering Group
Joint Committee on Vaccination and Immunisation
Patient Information Advisory Group
Specialist Advisory Committee on Antimicrobial Resistance
Spongiform Encephalopathy Advisory Committee
UK Advisory Panel for Healthcare Workers infected with Blood-borne viruses
UK Xenotransplantation Interim Regulatory Authority
UK Zoonoses Group
The Department of Health, Social Services and Public Safety, Northern Ireland
The National Assembly for Wales
The Scottish Executive
The Commission for Health Improvement
The Health Development Agency
The National Blood Authority
The National Health Service Information Authority
The National Health Service Litigation Authority
The National Health Service Logistics Authority
The National Institute for Clinical Excellence
The National Patient Safety Agency
The UK Transplant Support Service Authority