The Health Protection Stocktake Working Group

Interim Report - July 2011

The Scottish Government

The Health Protection Stocktake Working Group

Interim Report - July 2011

The Scottish Government, Edinburgh 2011

ISBN: 978-1-78045-326-2 (web only)

The Scottish Government
St Andrew's House
Edinburgh
EH1 3DG

Produced for the Scottish Government by APS Group Scotland
DPPAS11902 (08/11)

Published by the Scottish Government, August 2011

THE HEALTH PROTECTION STOCKTAKE WORKING GROUP

INTERIM REPORT - JULY 2011

CONTENTS LIST

THE HEALTH PROTECTION STOCKTAKE WORKING GROUP

INTERIM REPORT - JULY 2011

INTRODUCTION AND REMIT

1. The Health Protection Stocktake Working Group was established in autumn 2010 to conduct a concise multi-disciplinary stocktake of health protection in Scotland. The Working Group was asked to deliver its role within the context of the principles set out in the NHS Quality Strategy, published in May 2010.

2. The background to the Group's work includes an overview of public health conducted by the then Director of Public Health of NHS Fife, Dr Gina Radford; lessons learned from the handling of the H1N1 pandemic flu outbreak in 2009 – 10; and, overall, a focus on a process of continuous improvement of the service in line with the Quality Strategy.

3. The report by Dr Radford raised a number of issues for health protection. These included concerns about capacity and resilience at NHS Board and Health Protection Scotland (HPS) level; a noted lack of national standards and protocols; issues around the interface between HPS and NHS Boards and a need to consider the skill mix in health protection; the role of networks; and whether all functions need to be carried out in each Board. Concerns about capacity and resilience were also highlighted as a result of experiences in handling pandemic flu.

4. We would also note that the Group's work and this report focus on the areas of public health work commonly referred to as "health protection". A much wider range of activities might be considered to fall under the banner of "protecting public health" but are not considered here. Whilst this report is restricted to health protection, it may be the case that some of our conclusions and recommendations will have wider application across the field of public health.

5. The formal remit of the Group is as follows:

The Working Group will consider, as a process of continuous improvement; as they relate to the NHS in Scotland; and bearing in mind the interface with other relevant agencies:

- Current structures for health protection in Scotland including the roles of the Scottish Government, Health Protection Scotland and NHS Boards;
- Capacity and Resilience, including any issues related to immunisation, surveillance, outbreak and incident response;
- The health protection workforce and how this might be developed, with particular reference to multi-disciplinary approaches;
- Standardised protocols, including the HPS' role in producing guidance and standards;

THE HEALTH PROTECTION STOCKTAKE WORKING GROUP

INTERIM REPORT - JULY 2011

INTRODUCTION AND REMIT

1. The Health Protection Stocktake Working Group was established in autumn 2010 to conduct a concise multi-disciplinary stocktake of health protection in Scotland. The Working Group was asked to deliver its role within the context of the principles set out in the NHS Quality Strategy, published in May 2010.

2. The background to the Group's work includes an overview of public health conducted by the then Director of Public Health of NHS Fife, Dr Gina Radford; lessons learned from the handing of the H1N1 pandemic flu outbreak in 2009 – 10; and, overall, a focus on a process of continuous improvement of the service in line with the Quality Strategy.

3. The report by Dr Radford raised a number of issues for health protection. These included concerns about capacity and resilience at NHS Board and Health Protection Scotland (HPS) level; a noted lack of national standards and protocols; issues around the interface between HPS and NHS Boards and a need to consider the skill mix in health protection; the role of networks; and whether all functions need to be carried out in each Board. Concerns about capacity and resilience were also highlighted as a result of experiences in handling pandemic flu.

4. We would also note that the Group's work and this report focus on the areas of public health work commonly referred to as "health protection". A much wider range of activities might be considered to fall under the banner of "protecting public health" but are not considered here. Whilst this report is restricted to health protection, it may be the case that some of our conclusions and recommendations will have wider application across the field of public health.

5. The formal remit of the Group is as follows:

The Working Group will consider, as a process of continuous improvement; as they relate to the NHS in Scotland; and bearing in mind the interface with other relevant agencies:

- Current structures for health protection in Scotland including the roles of the Scottish Government, Health Protection Scotland and NHS Boards;
- Capacity and Resilience, including any issues related to immunisation, surveillance, outbreak and incident response;
- The health protection workforce and how this might be developed, with particular reference to multi-disciplinary approaches;
- Standardised protocols, including the HPS' role in producing guidance and standards;

- Governance, including a review of the Health Protection Advisory Group (HPAG);
- Existing and required links at EU and UK level, including with the Health Protection Agency, at both an administrative and professional level;
- Relationships and behaviours.

Expected outputs from the Working Group will be:

- Recommendations on the roles and remits of the Scottish Government, NHS Boards and Health Protection Scotland, including relationship with local authorities;
- Recommendations on all of the other above issues;
- A review of the CMO letter setting out NHS Boards Health Protection remit and the MOU between the Scottish Government and HPS, and production of a new tripartite MOU between Scottish Government, HPS and NHS Boards;
- A review of the operation of the new Joint Health Protection Plans which are required under the Public Health (Scotland) Act 2008;
- A working definition of "health protection".

6. The Group has not looked specifically at issues around Healthcare Associated Infection (HAI). However, we have noted the interface between health protection and hospital infection prevention and control. Increasing integration between the two areas is expected with a particular emphasis on healthcare in the community (including care homes). As such, much of the discussion and recommendations within this report are pertinent to HAI as "standard" health protection whilst noting the somewhat separate nature, different structures and different staffing in place for hospital infection prevention and control.

7. The Stocktake is expected to be conducted over a 12 month period, reporting in late Autumn 2011. Membership appears at **Annex A. This interim report gives an indication of the Group's discussions so far and direction of travel. This will inform the work of the Improving Population Health Action Group which incorporates the Efficiency and Productivity Preventative and Early Intervention workstream and reports to the Scottish Government's Quality Strategy Effective Delivery Group. It will be published on the Scottish Government website and made available to all key partners and contributors to health protection in Scotland. Our final report will build on this interim version.**

8. Health protection has made an invaluable contribution to better health in Scotland over many years, driven by the skills, expertise and professionalism of committed staff in a range of capacities; and the Group acknowledges at the outset what has been achieved. Recent notable achievements include:

- Successful handling of the Pandemic Flu Outbreak in 2009-10;
- Effective responses to outbreaks including anthrax in injecting drug users in 2010;

- Delivery of the HPV cervical cancer vaccination programme from 2008;
- Implementation of the Hepatitis C Action Plan;
- Delivery of very high childhood immunisation rates;
- A UK and internationally recognised travel health service (TRAVAX);
- Securing significant reductions in C difficile and MRSA infections;
- Implementation and maintenance of the ban on smoking in public places.

9. Whilst recognising what has been secured in the past, it is necessary to be prepared for the future. Health protection is dynamic. It is never static. A culture of continuous improvement, which builds on previous successes and learns from past experiences, is therefore essential to ensure that health protection in Scotland is poised to meet new and emerging challenges. In particular, it is vital that partnerships are strong and roles are clear, that the use of resources is maximised, and that there is a firm focus on the standards required of a high quality, effective, safe and fully resilient service.

10. The Group has so far considered the following issues, which are reflected in this interim report of the Group's work:

- Current working structures including alternative models of working;
- Capacity and resilience;
- The role of the Quality Strategy in health protection;
- Relationships and Behaviours;
- Roles and Responsibilities;
- Priorities;
- Governance;
- Consistency;
- A definition of health protection (at **Annex B**).

11. The Group's final report will additionally address:

- The health protection workforce;
- The role of Scotland's laboratories;
- Existing and required links at EU and UK level;
- A review of Joint Health Protection Plans;
- An assessment of alternative models of working.

12. This interim report, as part of our remit, has examined working structures by setting out what we see as the potential models of working in Scotland and making some early recommendations around roles. We also set out later in this report a process by which we intend to assess these models, including criteria to be applied. The final report will provide that assessment with a new tripartite MOU established in due course.

13. The Group would like to record their thanks to the following contributors who presented issues to the Group and informed our discussions:

Dr Syed Ahmed, NHS Greater Glasgow and Clyde
Dr Eddie Coyle, NHS Fife
Dr Lorraine Doherty, Public Health Agency, Northern Ireland
Dr Helen Howie, NHS Grampian
Dr Sue Ibbotson, Health Protection Agency, West Midlands
Dr Pasi Penttinen, European Centre for Disease Prevention and Control
Mr Fraser Thomson, Fife Council
Dr Margaret Hannah, NHS Fife
The International Futures Forum
Ruth Robertson, HPS

HEALTH PROTECTION IN SCOTLAND

Current Roles and Responsibilities

14. This section sets out the current roles and responsibilities of the various contributors to health protection in Scotland. Each organisation has a distinct role and remit but clearly the aim is that an integrated effective system of health protection should result from collaboration and communication among all concerned.

The Scottish Government

15. The Scottish Government (SG) has the overarching responsibility for the NHS in Scotland. NHS Boards, including health protection services, are accountable to the Scottish Government through formal performance review procedures. HPS is a division of National Services Scotland (NSS) and is accountable through NSS to the Scottish Government. The Health Protection Advisory Group (HPAG) provides an independent advisory function for health protection in Scotland and reports direct to Scotland's Chief Medical Officer.

16. The Scottish Government provides overall strategic authority and control and links to the UK Government and the other devolved administrations. This includes Ministerial advice and briefings; policy decisions; strategic co-ordination of national health programmes; strategic co-ordination of the response to national level incidents and outbreaks and national communication. This is delivered at a number of levels led by the CMO's Public Health Directorate. The HAI Policy Unit within the Directorate of the Chief Nursing Officer, Patients, Public and Health Professions provides the same function for HAI.

Health Protection Scotland

17. HPS was set up in April 2005. It encompasses the former Scottish Centre for Infection and Environmental Health (SCIEH), and has the commissioning responsibility for National Reference Laboratories and surveillance functions previously carried out by the Information Services Division (ISD) of NSS. HPS has the following aim and functions –

Aim: To work in partnership with others to protect the Scottish public from exposure to hazards which damage their health and to limit any impact on health from such exposures.

Functions:

- Monitoring hazards and exposures and their impact on health
- Co-ordinating national health protection activity
- Facilitating an effective response to incidents and outbreaks
- Supporting the development of good professional practice
- Monitoring the quality and effectiveness of health protection services
- Research and development
- Providing expert impartial advice on health protection

- Promoting workforce development
- Commissioning national reference laboratories

18. The existing MOU between HPS and the SG makes it clear that HPS has a proactive role in co-ordinating health protection activity in Scotland and promoting and assuring quality. As set out in the incident management guidance "Managing Incidents with Actual or Potential Risk to the Public Health" (currently being revised), HPS is responsible for leading the health protection management in Scotland of outbreaks which are Scotland or UK wide where there is no major disruption of services. Where an outbreak or incident affects one Board, HPS will work with that Board and assess the need for their involvement; where an outbreak or incident affects more than one Board, HPS will agree the appropriate management arrangements with the affected NHS Boards.

Health Protection Agency

19. For certain functions, Scotland is unable to provide a self-sufficient service and currently accesses and pays for additional services from the UK Health Protection Agency (HPA). The necessary powers are conferred by the Health Protection Agency Act 2004 and two Statutory Instruments made under it in 2006 and 2007. Additional functions can be given to the HPA to provide services in Scotland under the Act by agreement with the relevant Ministers and subject to Parliamentary procedures. A Memorandum of Understanding, agreed in 2010, exists between the Scottish Government, HPS and the HPA and sets out further detail on the funding arrangement and relationships. Services covered are:

- Advisory services for chemicals (commissioned by HPS);
- Advisory services for poisons (commissioned by HPS);
- Planning for public health emergencies (commissioned by SG);
- Radiation advice (commissioned by SG);
- Specialist laboratory services (commissioned by HPS).

20. In addition, the HPA acts as the focal point for the UK for the International Health Regulations (IHR) and is the competent body for the UK.

HPA Centre for Radiation, Chemical and Environmental Hazards (CRCE)

21. CRCE provides a wide range of radiological protection services. Scotland has access to the provision of training courses, personal monitoring of occupational exposures, radiological protection advice, radiochemistry, radon assessments, instrument testing, dose assessments and specialised services covering medical and dental radiology. The HPA will also provide support to the Scottish Government on incidents involving radiation and chemical hazards and advice to NHS Boards.

22. The HPA also commissions the National Poisons Information Service, a national service which provides expert advice on all aspects of acute and chronic poisoning. The NPIS Scottish base at the Edinburgh Royal Infirmary manages the UK TOXBASE, a clinical toxicology database which is

specifically designed to provide healthcare professionals with information on clinical management of individuals who have been exposed to chemicals.

NHS Boards and Local Authorities

NHS Boards

23. Under the NHS (Scotland) Act 1978, NHS Boards are tasked with protecting the health of their local communities. There are 14 territorial Boards. NHS Boards' health protection teams are part of Departments of Public Health and are accountable to the Director of Public Health (DPH), who is in turn accountable to the Board Chief Executive. Public Health has three domains - protecting health, improving health (promoting good health, well being and equity) and supporting the provision of equitable and effective health services to the benefit of population health. The DPH has a strategic leadership role for health and the reduction of inequalities in health and also leads a multidisciplinary team of health professionals across the three domains of practice. This may include consultants in public health medicine (CPHMs), specialists on the UK Register for Public Health and nursing staff. CPHMs generally work in all the domains of practice, with each having a particular area of expertise and responsibility (which can change according to need).

24. A typical Department of Public Health has a wide span of responsibilities, ranging from the response to individual notifications of infectious disease, to working at community level to promote a healthy and equal community, implementing a population screening programme, and assessing the evidence for health service interventions.

25. A CMO letter issued in February 2007 sets out the role of NHS Boards in Health Protection. This formal remit, set out below, will be revised in due course to reflect the work of the stocktake:

Aim: through co-operation with its partners (especially local authorities) to protect the local population from hazards which endanger their health by preventing, controlling or reducing exposure to these and limiting damage when such exposures occur.

- To monitor, detect and respond to infectious and environmental hazards;
- To collaborate with local and national agencies;
- To ensure activities contribute to improving public health especially by working with partners to prevent and manage risks to local communities;
- To respond to public anxiety and meet expectations by informing them about risk and maintaining effective dialogue and communication;
- Together with local agencies, to play a full part in Scottish, UK and international health protection arrangements especially when managing incidents and outbreaks;

- To strive to continuously improve the efficiency and effectiveness of policy, service delivery and professional practice involved in health protection;
- To meet the statutory duties imposed by the Civil Contingencies legislation and to comply with the provisions for emergency planning and emergency response contained in "Responding to emergencies – guidance for the NHS in Scotland".

Local Authorities

25. Local Authority Environmental Health Services are mainly regulatory services, the core activities of which are required by statute. The services tend to be whole area rather than locality, age or gender specific. The services provide protection through reactive activities i.e. investigation and resolution of sporadic public health enquiries; and also through preventative activities such as planned interventions, monitoring of food, air, water and workplace safety.

Aim - Through the application of statute and the provision of advice and guidance, to protect and enhance the health, welfare, environment, and workplace safety of Scotland's communities and workforce.

Functions

Duty to:

- comply with the framework agreement on food law enforcement in Scotland and to ensure food safety through planned interventions such as sampling, monitoring and risk-based inspections; this includes imported food control as a port health authority;
- enforce the Environmental Protection Act in relation to the investigation and abatement of statutory nuisances such as noise, waste accumulations etc;
- enforce workplace safety through planned interventions and risk-based inspections and to investigate accidents with a view to preventing recurrence;
- monitor air quality within Scotland, and in particular ensure compliance with the Scottish Government's targets relating to specific pollutants with known negative health impacts;
- enforce specific legislation in respect of known health risks such as smoking, tattooing and sun bed use;
- enforce legislation relating to the compliance of the housing stock with Tolerable Standards and fitness for habitation;
- provide an effective response to incidents and outbreaks;
- monitor, and improve where needed, private water supplies;
- enforce pest control, dog behaviour and animal health related activities;
- support the development of good professional practice; and
- give advice on local issues likely to have a health impact on the community, such as noise and pollution impacts of major planned developments.

26. It is recognised that many other local authority services, such as Social Services, Housing, Planning etc, make a contribution to public health protection. However these services have not been included within the terms of this report.

27. The services provided by Environmental Health are exceptionally wide ranging and contribute to all of the healthier, safer and more prosperous community aspirations of the Scottish Government and Community Planning Partners. Local Authority Environmental Health Services work closely with many partner agencies, whose functions are later described, such as FSA, SEPA, HSE, Police, Scottish Water, Animal Health, Emergency Planning, COPFS, HPS and NHS. In addition to the core activities listed above, many Local Authority Environmental Health Services are involved in regulating contaminated land, waste services, animal health and welfare, licensing, and antisocial behaviour.

The Public Health (Scotland) Act 2008

28. Statutory functions for Scottish Ministers, NHS Boards and Local Authorities are also set out in the Public Health (Scotland) Act 2008. Local authority environmental health officers work very closely with NHS Boards, particularly in relation to handling incidents and outbreaks or national emergencies. In addition, under section 7 of the Act, NHS Boards must prepare plans relating to the protection of public health (Joint Health Protection Plans) as the Board considers appropriate and must consult the relevant Local Authority in preparing that plan.

Duties on NHS Boards and Local Authorities under the Public Health (Scotland) Act 2008 are:

- each Health Board to protect public health in its area and to designate competent persons to carry out health protection functions under the Act;
- local authorities to make provision or secure that provision to protect public health in their area and to designate competent persons to carry out functions under the Act;
- completion of Joint Health Protection Plans;
- registered medical practitioners, Health Boards and diagnostic laboratories to report notifiable diseases and health risk states;
- powers and functions in relation to public health incidents:
    - NHS Boards – include detention, quarantine, exclusion and restriction powers;
    - Local authorities – include provision of facilities and powers relating to disinfection and decontamination of premises or things
- provision of mortuary facilities by NHS Boards and local authorities.

OTHER PARTNERS

29. Health protection relies on working in partnership with a range of agencies and other bodies. These include:

- NHS Health Scotland
- ISD
- NES
- Food Standards Agency
- Animal Health and Veterinary Laboratories Agency
- Scottish Water
- Drinking Water Quality Regulator
- Police
- Fire and Rescue Service
- Health and Safety Executive
- Scottish Environmental Protection Agency
- Procurator Fiscal Service
- Healthcare Improvement Scotland (HIS)
- Social Care and Social Work Improvement Scotland (SCSWIS)

30. The roles of each are set out briefly below.

Health Scotland

31. Health Scotland is Scotland's national health improvement agency. Their work covers every aspect of health improvement, from gathering evidence, to planning, delivery and evaluation. Health Scotland's primary focus is to work with local NHS Boards and their health improvement partners during the implementation phases of public health improvement and health inequalities programmes, and other initiatives designed to achieve health outcomes that meet public health HEAT targets, promote equality and diversity, and address local priorities, thereby supporting the national outcomes in Single Outcome Agreements. Specifically Health Scotland's work in relation to health protection includes production of information materials to support immunisation programmes. Health Scotland has also led on work to develop educational interventions for vulnerable young people at risk of being infected with blood borne viruses.

ISD

32. ISD provides health information, health intelligence, statistical services and advice that support the NHS in progressing quality improvement in health and care and facilitates robust planning and decision making. ISD collect and analyse statistics for all national vaccination programmes, on sexual health/STIs, on smoking cessation services, as well as in relation to other related fields such as substance misuse, primary care information, and performance management.

NHS Education for Scotland (NES)

33. NES is NHS Scotland's education and training body. NES is responsible for supporting the NHS frontline services delivered to the people

of Scotland by developing education, training and workforce development for those who work in NHS Scotland. NES works in partnership with HPS and stakeholders such as Local Authorities to promote the development of a competent and confident workforce in health protection by:

- assessing the skills and knowledge needs of key disciplines;
- identifying the most appropriate education and training methods for meeting these; and
- working to ensure this is provided on a local and national basis.

NES, HPS and their partners have produced a national framework for workforce education development in health protection in Scotland. It gives stakeholders a basis from which they can build action plans for facilitating, delivering and evaluating workforce education development for their own staff. Expert advice for this work is provided by the joint NES/HPS National Health Protection Education Advisory Group (HPEAG).

Food Standards Agency

34. The Food Standards Agency (FSA) is a non-Ministerial UK Government Department operating at arm's length from Ministers and governed by a board appointed to act in the public interest. Its UK headquarters are in London but the Agency has a Scottish office in Aberdeen. The Agency's food safety and standards remit is one which is wholly devolved to Scottish Ministers. The Director in Scotland is responsible under the Chief Executive for ensuring activities of the Agency in Scotland are carried out effectively and efficiently. The FSA is the Central Competent Authority for food and animal feed law and ensures enforcement and monitoring activities are delivered effectively and consistently across the UK.

Animal Health and Veterinary Laboratories Agency

35. The Animal Health and Veterinary Laboratories Agency, formerly known as the Animal Health Service, covers England, Wales and Scotland but not Northern Ireland. It is the lead agency responsible for animal health matters and implements the policies of the Chief Veterinary Officers in Defra and the Devolved Administrations. It exercises the Scottish Government's statutory responsibilities for responding to notifiable diseases in animals including those which can be transmitted between animals and humans (zoonoses), working closely with veterinary and policy colleagues in the Scottish Government Animal Health and Welfare Division of the Rural Directorate.

Drinking Water Quality Regulator

36. The role of DWQR was created in 2002 by the Water Industry (Scotland) Act 2002 to monitor and regulate the quality of public water supplies in Scotland, and to supervise the discharge of local authority duties with respect to private water supplies. The work of the DWQR is supported by a small team of technical staff within the Drinking Water Quality Division of the Scottish Government.

Scottish Water

37. Scottish Water was created in 2002 to provide water and sewerage services throughout Scotland. Its general responsibilities and powers are set out under the Water Industry (Scotland) Act 2002. Scottish Water has a duty under the Water (Scotland) Act 1980 to provide a supply of wholesome water. The Water Supply (Water Quality) (Scotland) Regulations 2001 define what is meant by wholesome by setting the quality standards for a number of different parameters and also define the monitoring frequency to establish the quality of all supplies.

The Police

38. Police Forces have a range of responsibilities which overlap with NHS Boards in managing public health incidents. The police will normally coordinate the activities of those responding at and around the scene of a land based sudden impact emergency. They liaise with NHS Boards in managing the coordinated provision of essential services to protect the public from exposure to hazards in chemical incidents and other public health emergencies.

Fire and Rescue Service

39. Fire and rescue services may be involved at declared major incidents and have received specialist training. They are trained to recover individuals from areas where they have been exposed to hazardous agents.

Special Operations Response Teams (SORT)

40. The Scottish Ambulance Service has developed three Special Operations Response Teams (SORT) in Edinburgh, Glasgow and Aberdeen, comprising 106 specially trained paramedics and ambulance technicians. The teams are now trained and equipped to work inside the inner cordon alongside police and fire and rescue services at large scale hazardous incidents. They have all completed an intensive training course that enables them to operate in chemical, biological, radiological, nuclear and explosives (CBRNE) incidents and other accidents that involve hazardous materials.

Health and Safety Executive

41. The Health and Safety Executive (HSE) is a non-departmental public body with Crown status. The Chair and members of HSE's Board are appointed to provide strategic direction for Great Britain's health and safety system. The Board reports to the Secretary of State for Work and Pensions, and to other Secretaries of State. HSE's primary function is to secure the health, safety and welfare of people at work and to protect others, including members of the public from risks to health and safety from work activity in accordance with the Health and Safety at Work etc Act 1974 (HSWA) and regulations made under it. HSE does this in partnership with Local Authorities by applying an appropriate and proportionate mix of intervention techniques such as inspection, communication campaigns, advice and support and, where necessary, enforcement action. If a public health incident arises as a result of work activity, HSE could have a role in investigating the matter under HSWA and reporting its findings to the Crown Office and Procurator Fiscal Service. Health and safety matters dealt with by HSE have not been devolved to the administrations in Scotland and Wales.

Effective working arrangements have been developed, however, between HSE and the devolved administrations to ensure that areas of 'common and close interest' are managed appropriately.

Scottish Environment Protection Agency

42. SEPA is a non-departmental public body, accountable through Scottish Ministers to the Scottish Parliament. Their main role is to protect and improve the environment, by being an environmental regulator, helping business and industry to understand their environmental responsibilities and helping customers to comply with legislation. SEPA protect communities by regulating activities that can cause harmful pollution and by monitoring the quality of Scotland's air, land and water. The regulations they implement also cover the keeping and use, and the accumulation and disposal, of radioactive substances. SEPA are responsible for delivering Scotland's flood warning system, helping to implement Scotland's National Waste Strategy and controlling, with the Health and Safety Executive, the risk of major accidents at industrial sites.

The Procurator Fiscal Service

43. The Crown Office and Procurator Fiscal Service (COPFS) is responsible for the prosecution of crime in Scotland, and the investigation of sudden, unexpected, accidental and suspicious deaths which occur in Scotland.

Healthcare Improvement Scotland

Healthcare Improvement Scotland is a health body formed on 1 April 2011. HIS has taken over the functions of NHS Quality Improvement Scotland and responsibility for regulating independent healthcare services, which was previously undertaken by the Care Commission. HIS supports the NHS and independent healthcare providers to deliver high quality, evidence-based, safe, effective and person-centred care; and to scrutinise services to provide public assurance about the quality and safety of that care.

Social Care and Social Work Improvement Scotland

44. Social Care and Social Work Improvement Scotland (SCSWIS) is the new unified independent scrutiny and improvement body for social services. SCSWIS regulates and inspects care services and social work services and also carries out child protection inspections. SCSWIS has a key role in improving services for adults, including the elderly and disabled, and children across Scotland.

Scale of Health Protection in Scotland

45. NHS Boards' health protection teams vary in size. Generally there is a team of consultants in public health medicine (health protection), health protection nurse specialists and practitioners and administrative staff with on call and surge support from the broader public health team and the NHS Board. The exact make up and number of staff varies from Board to Board depending on the population and geography of the area, individual circumstances and the health protection priorities of each Board.

46. During the H1N1 pandemic in 2009, capacity was assessed within public health (including health protection) as generally two consultants and one support member of staff in rural and island boards and from 6-16 WTE members of staff in larger urban or urban/rural Boards. However, several Boards eg including Borders, Forth Valley and Dumfries and Galloway only have one health protection consultant. In February 2010, there were 128 WTE consultants in public health (including dental public health) employed by the NHS in Scotland.

47. Information received from DsPH on what is happening now shows that almost all NHS Boards have designated specialists (usually medical) for health protection. Most have at least one whole time individual who is solely concerned with health protection duties. The maximum number in the largest board is 3.3 WTE but this is spread across 5 individuals, some with other responsibilities. As responsibilities vary (for some TB, screening and BBV duties are included, for others not), it is not possible to give exact numbers but an average of 2 or slightly more in the larger Boards is a fair estimate. In Island Boards, the DPH (sometimes with a consultant) covers all duties across the public health spectrum. Almost all Boards have at least 1 nurse specialist, with some having up to 3. However, other duties such as TB control, infection control, healthcare associated infection and blood borne virus work vary by Board. GPs are, of course, involved in the health protection response, particularly in the Island Boards.

48. Most larger Boards concentrate their daytime health protection work on the designated health protection staff but other medium sized and smaller Boards involve the wider team either routinely or in times of absence or pressure.

49. Out of hours (OOH) cover involves all the specialist staff and junior staff (if available). In a minority of Boards, nurse specialists are on the OOH rota. Some Boards have a double rota, some have a single tier, with the consultant being the first and only person on call. An average on call requirement of 1 in 5 is common, though in smaller Boards it is more frequent. There is a lack of consistency across Boards in the staffing grades and tiers of rota available to cover similar OOH functions.

50. HPS has around 130 WTE staff based in Glasgow (at 31 March 2011). These staff are multi disciplinary with a majority of staff who are not doctors. 37 posts cover HAI. There are 6 consultant posts, one associate specialist and 6 nurse consultants. There are also 25 epidemiologists.

51. The Scottish Government has a number of staff working on health protection. Within the CMO's Directorate, there is a Health Protection (Policy) Team of 16 staff with around 13 covering general health protection issues, screening and sexual health working to a health protection Team Leader and a Deputy Director. This Team works closely with two senior medical officers and a specialist scientific advisor, with additional support from a senior pharmacist and senior primary care medical advisor. The Nursing Directorate

has 8 staff working on HAI (6 policy staff, nurse advisor and medical advisor secondees). Some additional staff work on decontamination.

52. Within local authorities, there are 786 officers delivering food, health and safety, public health & pollution services. This figure is a mixture of EHOs and specific enforcement officers.

Costing the Service

53. Setting out a clear cost for the current health protection service in Scotland is not straightforward as it covers a number of different bodies and a wide variety of activities. We are considering further how to refine costings but the table below provides a rough global sum covering staffing costs of NHS Boards, Scottish Government, HPS and Local Authorities. ISD and Health Scotland are also included. These costs (as the footnotes explain) are not directly comparable. Costs were put together following an exercise conducted with NHS Board health protection teams and local authority environmental health services with central costs provided directly from the related organisations eg HPS, Scottish Government etc.

54. Reference Laboratory costs are not included and other programme (as opposed to staff) costs are not included (this covers Scottish programmed activities and funding provided to the Health Protection Agency).

	£	
NHS Boards	**5,380,000**	*
Local Authorities	**38,417,000**	**
ISD	**71,000**	
Health Scotland	**365,000**	
HPS	**6,068,000**	***
Scottish Government	**1,147,000**	****

*This is based on the costs attributable in territorial Health Boards' public health departments to their health protection activity, both in and out of hours. The staff may have other public health duties, but only that cost attributable to health protection has been included. Estimates of time on health protection duties for some staff may have been made. It does not include generic staff in the NHS (eg GPs and community nursing staff) who carry out health protection functions as part of their role. It includes medical, nursing and administrative costs. Because of the different models of delivery among Boards, and the usual inclusion of health protection as one of the strands of an integrated public health team, particular activities are included or excluded depending on local responsibilities. Examples of this are healthcare associated infection, TB control and blood borne virus work.

**Relates to wide range of activities delivered by environmental health services and includes work related to food enforcement, workplace health & safety, public health and pollution. The figure is indicative as some budgets are not yet fixed and include management costs but no overheads. Excluded are pest control, cleansing and contaminated land. It is recognised that other LA services may also contribute to public health but they are not included here.

***Includes staffing costs for HPS staff, including staff working on HAI but excluding central support functions provided by National Services Scotland.

****This includes all health protection costs including the health protection policy team; senior medical support; decontamination and HAI. The percentage attributable to HAI is around 37% and also includes some costs which are not directly related to health protection activities but cannot be disaggregated.

CAPACITY AND RESILIENCE

Capacity:
Sufficient resources and capability in an organisation with responsibility for Health Protection to enable them to discharge their remit, including timely response to increasing pressures on services.

Resilience:
The sustainability of a response over a period of time.

54. A primary purpose of NHS Boards' health protection services is to respond to cases of infection (either occurring sporadically or as clusters i.e. incidents) to prevent further exposure to them. Sexually transmitted infections are dealt with principally by GUM services. Healthcare associated infections are on the whole tackled by hospital infection control teams. It is estimated that in Scotland as a whole in 2010, there were around 2,400 cases of non-STI/HAI infection requiring local health protection action. The majority of these (around 74%) were gastro-intestinal infections (*E. coli O157, cryptosporidium and salmonellae*). Field work associated with these is mainly done by Local Authority Environmental Health Officers. The remainder (predominantly infections spread person to person e.g. TB, meningococcal infections), numbering between 600 and 650 a year, are usually dealt with directly by Board health protection personnel. Given that these are infectious diseases, the numbers fluctuate year by year. Larger Boards serving bigger populations will clearly handle more. In 2010, over 60% of all notifiable diseases came from two Boards, Greater Glasgow and Clyde and Lothian. The number of environmental and water incidents handled by NHS Boards is also increasing.

55. With regard to incidents, currently there is no overall surveillance system to accurately measure their occurrence. Work done for the development of "the Framework for Managing Public Health Incidents" estimated that on average annually during 2007-09, there were 125 incidents (both infectious - including HAI and STI - and environmental) notified to HPS as actually or potentially requiring support, 16 featuring in the HPS Weekly Report as being of sufficient importance for a wider audience to be informed and 10 being reported on formally, mainly by NHS boards, for accountability purposes. HPS has responsibility for co-ordinating the management of incidents affecting two or more Boards especially if there is a UK or European dimension. In the period 2007-09, on average, the management of 2 of the 16 incidents each year, which featured in the Weekly Report, was led by HPS.

56. Incident scale varies – the majority might be considered smaller scale and routine; there are larger single Board incidents that may affect a large number of people eg *E-coli* incidents, *legionella* or *cryptosporidium*; there can be multi-Board incidents eg linked to concerns with a food product or an issue

affecting drug users and there can be national level incidents eg measles outbreaks in certain populations; and infectious disease outbreaks. Incidents can vary not only in size and severity (in terms of mortality and morbidity) but also in duration. Small localised incidents may be over in a week or two although can last longer depending on circumstances (eg anthrax in the Scottish Borders took several months to manage). An infectious disease outbreak may last for a number of weeks or even months. Pandemic flu has recently represented the longest incident dealt with nationwide – activity associated directly with the outbreak took place over a period of around 12 months. However, pandemic flu may only affect Scotland (and the rest of the world) once every 20-30 years. NHS Boards and Health Protection Scotland will be involved in other incidents on a regular and ongoing basis.

57. As the description above highlights, multiple or longer term outbreaks, or a number of simultaneous incidents can place an extreme amount of pressure on NHS Board staff and other resources in a system which carries little spare capacity.

58. Dealing with incidents is however only a part of the issue of capacity and resilience. Just as important is resilience to deal with the proactive weekly programme of health protection work in a climate of constrained resources and where reactive work may require the diversion of resources for days or weeks from other programmes. NHS Boards also spend a considerable amount of time responding to enquiries and providing general advice and support.

59. The Group has therefore considered whether the existing service in Scotland has, **overall,** the required degree of capacity and resilience to meet these challenges. To assist in this task, the Group took part in a session organised by the International Futures Forum which helped us to work through some of the key challenges.

60. A resilient system is able to flex under challenge and 'bounce back'. The opposite is a 'brittle' system. Brittleness becomes exposed when:

- Disruption occurs in highly interconnected infrastructure;
- Emergency services become the biggest emergency;
- People expect "the authorities" to fix the impossible;
- Society rapidly runs out of options.

61. Growth and efficiency alone can often lead to fragile rigidities and the ways in which we tend to run our systems, for economic efficiency, tend to make the system overall less resilient. The **'resilience premium'**, the slack in the system needed to cope with uncertainty and challenge, is too often taken as "profit". On the other hand, a resilient system has the following characteristics:

- the ability to absorb disturbances;
- to be changed, to re-organise and maintain the same clear identity;
- the ability to learn;

- resilience shifts attention from purely growth and efficiency to recovery and flexibility.

62. The Group went on to consider - ***what brittleness might these challenges reveal in the Health Protection system?***

63. In considering these issues, the Group also recognised the following additional pressures on the service now and looking to the future:

Pressures

- Increasing demands:
  - burden of disease
  - ageing population
  - new, emerging and re-emerging infections (in healthcare settings and the community)
  - new environmental hazards
  - antibiotic resistance
  - complexity of immunisation
  - pressure of new immunisation programmes eg HPV
- Geographical pressures;
- Data management and new technologies;
- Requirement to maintain consistent standards;
- Increasing resource pressures;
- Impact of climate change (medium to longer term);
- Migration and increased mobility;
- Workforce capacity changes and succession planning (in both the NHS and LA env health);
- Scottish Government and political requirements;
- Demands of the media;
- Expectations of the public including attitudes to risk;
- De-regulation or new statutory regulation
- Vulnerable population issues.

Potential Strengths

64. Scotland is a small country with a relatively small population compared to its geographic size. In comparison to England with a population of over 50 million and surface area of 130,395 km^2, Scotland covers some 5 million people and a surface area of 78,782 km^2 with a much lower population density and different challenges with its sparsely populated remote and rural areas, together with dense urban conurbations.

65. Scotland has a number of important strengths in protecting public health. As a small country, there are opportunities for strong and supportive partnerships and excellent communication. Scotland has a culture of partnership working and strong networks that can be strengthened and built upon, in addition to a pool of existing professional expertise in most areas of health protection. Although health protection functions are split across not just the NHS but other agencies such as Food Standards Agency for Scotland

(FSAS) and Local Authorities, those agencies have built strong and effective local working partnerships. The additional requirement for Joint Health Protection Plans under the Public Health (Scotland) Act 2008 is seen as a positive step, reinforcing those existing partnerships. The Health Protection Network is a good example of a respected professional network which, by producing a range of advice and guidance for health protection professionals, helps to support and standardise the service across Scotland.

66. Scotland has strong practised working arrangements for dealing with health protection incidents. This includes formal guidance but also relies on local relationships and goodwill. The NHS and partner agencies have been able to mobilise resources fairly quickly in responding to a range of issues from pandemic flu in 2009 to *E-coli* in Paisley in 2007. We also benefit from having a comprehensive schedule of routine vaccinations that are well managed and successfully delivered, protecting the population from vaccine-preventable disease. Uptake rates for routine childhood programmes are in most cases in excess of 95% and for the new HPV vaccine it is around 90%. The annual seasonal flu vaccination programme also works very well with uptake in the over 65s in excess of target in recent years, and with year on year increases in the under 65 group over the last four years. The Hepatitis C programme has seen significant successful outcomes including an increase in treatment rates. This puts Scotland ahead of the UK for some programmes.

67. Scotland's surveillance systems are of high quality providing excellent support in identifying measures needed to protect public health and in monitoring the success of our programmes. Detailed procedures for notifying HPS about notifiable organisms, diseases and health risk states are set out in the 2008 Act.

68. Basic laboratory services in Scotland are on the whole, Board based provided by the NHS. Some laboratories perform a reference laboratory function for the NHS across Scotland. Reference laboratories are commissioned by HPS on behalf of NHS Scotland. The role of the Public Analyst and other private laboratories in testing environmental, food and water samples also contribute important diagnostic and monitoring.

69. The Scottish Government launched a new project in 2008 - 'Good Places Better Health', which represents a significant shift in the response to the impact of environment on public health. This strategy considers the capacity of the environment not only to damage health (through hazards, toxins and infections for example) but to nurture good physical health and mental wellbeing. Good Places Better Health puts Scotland at the forefront of attempts to improve public health through environmental improvement and the project has been acknowledged internationally.

Potential Brittleness

70. Health protection faces unpredictability. Demands can be predicted up to a point yet there will always be a reactive nature to the service, thus exposing the need for capacity and resilience to be built into our systems.

The list of pressures above highlights some of the areas from where unexpected demands may come. We have noted that certain areas of Scotland are already experiencing some increasing problems that are not reflected in existing NHS structures (or funding patterns). For example, NHS Greater Glasgow & Clyde is incurring a high increase in costs associated with treating HIV. The inherent fragility of some of our infrastructure might also suggest an increase in urban public health issues in the future. Likewise, the way in which we source our food (with increased food miles) risks a wider spread of foodborne disease. The recent issues concerning *E-coli* in salad vegetables in Germany is a very good example of this.

71. Although small countries like Scotland can benefit from strong partnerships and good lines of communication, they also have limited resources. It is clear, particularly in the current financial climate both in the UK and worldwide, that scarce resources must be maximised, using both an efficiency and quality approach to help achieve this. Scotland, as a small country, will also have more difficulty in responding to sustained pressures of any kind, particularly (within existing structures) in small territorial NHS Board areas. As noted above there are a number of increasing demands and pressures that will put yet more strain on our limited capacity in the future.

72. Responses locally or nationally to public health incidents may be dependent upon the involvement of one or two key individuals and this cannot be sustained for lengthy incidents. There is currently limited use of mutual aid procedures between Boards. Small Boards already have difficulty in responding even to routine health protection issues due to a lack of capacity and resource. The balance between prevention and reactive work is therefore also very important.

73. Although Scotland benefits from national expertise in many areas of health protection, it also relies on agencies outside Scotland for some services. In particular, we rely on certain services provided by the HPA and will continue to require these services once Public Health England is established. We also rely on laboratory services outside Scotland for specialist testing eg the HPA's laboratory at Colindale in England. So during the anthrax outbreak, samples had to be sent to Porton Down for testing, introducing delays to the process. We may also depend on outside agencies where specialist decontamination is required e.g. during the anthrax incident in the Scottish Borders in 2006, decontamination services were provided by a specialist private US contractor. This may be acceptable but may highlight conflicts of interest for some organisations in deciding how to prioritise the needs of eg the Scottish Government against the Department of Health. In addition, there are certain functions provided by the UK Government over which the Scottish Government has limited influence. GP contracts are an example of this.

74. Under current health protection arrangements within the 14 territorial Boards, dedicated health protection (consultant level) expertise available 24/7 is not possible. NHS Boards are therefore dependent on out of hours (on call)

cover from Consultants in Public Health whose daytime role may not include health protection.

75. A feature of a system where there are 14 local health protection arrangements that differ from Board to Board is that there can be non-standardised approaches across the country. The lack of accepted national protocols on some issues can be seen as a weakness though the Group acknowledges the need for an appropriate degree of local flexibility that can respond to local circumstances. This may lead to inequity in the provision of services across the whole population. Currently, a further weakness is the lack of a national health protection information management system for Scotland i.e. an IT system that all NHS Boards (and partners) can use to record and share information, manage incidents and that could also be used to underpin the use of standard protocols and the appropriate degree of common approach. Auditing is also currently under-used in health protection in Scotland.

76. Although, in theory, roles and responsibilities appear to be well defined in Scotland, this may not always be the case in practice. Accountability channels may be clear but governance arrangements are not always so. This is explored further below.

77. A further overarching issue that affects health protection is in relationships with the public and with the media. Effective risk communication is vital. However, we may in fact have created a culture of dependency around health protection where there is an expectation that all the answers are provided and little appetite for understanding that all assessments of risk have a number of variables or for taking partial responsibility for reducing those risks. This inevitably affects our communication strategies and the weight of resource that may need to be dedicated to fulfilling expectations.

Building Resilience in Health Protection Systems

78. As part of the session run by the International Futures Forum (noted above), the group considered further the potential "brittleness" of the system and identified the following as areas in which to build the resilience of the health protection system.

79. Some of these themes are developed in more detail later in the report but it should be noted that some emerged as a result of a much wider discussion on global influences on health protection:

- A greater emphasis on multi-agency collaboration;
- Build greater cohesion between health protection and health improvement and a more integrated approach to resources;
- Broaden the range of issues for planning to include those outwith the direct control of Health Protection and include a broader view of the future;
- Balance the cost of resilience against the pressures of routine activity;

- Consider a different collectively agreed resource split to support identified priorities;
- Build more effective community resilience and protection;
- Make more use of the voluntary sector as partners in health protection in local communities;
- Consider whether a more specialist public health workforce is needed;
- Ensure succession planning through training and appropriate recruitment of NHS and LA personnel;
- Finally, it was clear that:
    - Flexibility of response is the key;
    - It is not possible to plan for every eventuality;
    - In planning ahead, it is important to look at the broader horizon and focus on building in sufficient future resilience to our systems.

In considering how to develop these issues, the Group also took into account the conclusions of the International Futures Forum session, which are reflected throughout the report.

HEALTH PROTECTION AND THE NHS SCOTLAND QUALITY STRATEGY

3 Quality Ambitions:

- ***Person centred:*** *Mutually beneficial partnerships between patients, their families and those delivering healthcare services which respect individual needs and values and which demonstrate compassion, continuity, clear communication and shared decision-making,*
- ***Safe:*** *There will be no avoidable harm to people from healthcare advice or support they receive and an appropriate, clean and safe environment will be provided for the delivery of healthcare services at all times,*
- ***Effective:*** *The most appropriate treatments, interventions, support and services will be provided at the right time to everyone who will benefit, and wasteful or harmful variation will be eradicated.*

80. The Quality Strategy builds upon existing foundations and ensures that all ongoing work is integrated and aligned to deliver the highest quality healthcare services to people in Scotland and in doing so provide recognised world leading quality healthcare services. It sets out 3 **Quality Ambitions** which provide a consistent description of quality for NHS Scotland, and work is underway to streamline and align all work programmes with these Ambitions. The Quality Strategy is designed to ensure that challenges facing NHS Scotland such as increased public expectations, demographic change, economic constraints and technological developments can be addressed using the dual aims of Quality and Efficiency as the benchmark. Key to the continuous quality improvement approach is the concept of *consistency* of quality across all areas and challenging unwarranted *variation*. The Group therefore agreed that it is vital that health protection is firmly grounded in the context and principles of the Quality Strategy in future in the same way as other health and healthcare services.

81. The Quality Ambitions were used to map the key strategic issues for health protection and to further identify the issues to be aired and resolved. The underpinning dimensions of quality - person-centred, equitable, safe, effective, efficient, and timely - were recognised as key to our aims for the service and were used to describe more of the detail of health protection. The mapping of health protection against the 6 quality dimensions is set out at **Annex C.**

82. **We have examined relationships and behaviours within the service and, from that, have extracted a more detailed view on key improvement issues. Key issues have been identified around priorities and outcomes; roles and responsibilities; governance; and consistency. This is set out below and is followed by a section on conclusions that sets out our proposals for the way forward.**

Relationships and Behaviours

Scottish Government

83. Relationships between HPS, NHS Boards and the Scottish Government are reasonably good with effective communication channels established. However, we have noted some issues. During pandemic flu, some NHS Boards and HPS observed that decision making was too slow at times (eg resolving issues around GP contracts). In addition, there was a perception that information was not always shared as early as Boards would have liked and a sense of conflicting priorities. Part of this is clearly due to the process of Ministerial decision-making and policy requirements, as well as the need to secure, as far as possible, compatible approaches across the UK.

84. NHS Boards, in terms of their management structures, do not necessarily see health protection as a priority. This is partly because health protection (outside of the HAI programme of activity) has not had any recent HEAT targets and performance management of Boards on health protection is therefore limited. This contrasts with some key health improvement targets and a focus on inequalities. Health protection may only be seen as a priority when an incident occurs. This is examined further below under priorities and outcomes.

Health Protection Scotland

85. HPS was established in Scotland in 2005 following a consultation on health protection arrangements in Scotland undertaken in 2003.

86. HPS' role has changed and developed over the last few years. Generally, the Group found that there has been a lack of buy-in from some NHS Boards to the role and remit of HPS. HPS is sometimes seen as distant, with Boards viewing themselves as "frontline services" and HPS somehow seen as divorced from this. This seems to be for a number of reasons. Some Boards consider that they are self-sufficient but in reality could struggle to cope with even a moderate level incident without HPS providing substantial support. HPS staff are multi disciplinary; some have previously worked for NHS Boards but not all. Instead there is a mix of staff, many of whom are scientists or epidemiologists rather than staff who have experience working in Board Health Protection Teams. This specialist expertise may therefore be undervalued or viewed as supernumerary.

87. A further factor influencing perceptions in relation to HPS is that HPS is seen as both bureaucratic (in terms of its programme management approach) and attempting to impose a nationalised and standardised service which Boards view as unnecessary. Some Boards can feel micro-managed by HPS, with reporting requirements sometimes resulting in a heavy burden on limited local resources. In addition, HPS may be perceived as having too much resource (in terms of staffing) when Boards are struggling to find resource.

88. There is also an issue about HPS' role, particularly in terms of its programme management, which might be viewed as inflexible at times and a tension between the need for some national consistency and the need for Boards to establish their own local priorities and delivery mechanisms. Conversely, HPS would confirm the need for programme management as a means to manage large programmes and introduce an element of consistency. These issues are examined further below.

89. It is clearly the case that attitudes to the respective roles of HPS and Boards influence relationships between them and this must be addressed.

NHS Boards

90. Relationships between NHS Boards are generally good with sharing of knowledge and expertise becoming common and support established for Island Boards. There are recognised experts for some aspects of health protection located within NHS Boards, and Boards are making more connections to those local experts for advice.

91. HPS' view of NHS boards is consistently that having 14 different models makes it difficult to coordinate and ensure consistency across the country. HPS have also flagged up differing existing levels of expertise amongst boards with some having a specialist consultant led service and others having a service led by consultants whose time is split or a generic public health consultant who leads the service for a short period of time before being rotated to another area. There are also a range of approaches amongst Boards at a corporate level in terms of the priority given to health protection.

92. We have noted that, although there is a formal concept of mutual aid between NHS Boards (3 formal agreements made in 2004), this does not always appear to operate in practice, except in the North. A copy of the North of Scotland agreement appears at **Annex H**. HPS also provides informal mutual aid to some Boards. Directors of Public Health have been supportive of this concept but in practice such arrangements have not been widely supported other than in the NOSPHN. In the Group's view, it is important that criteria are agreed and comprehensively adopted for mutual aid, and this will be addressed in our final report in the light of our conclusions on models of working.

93. In addition, the Group found that there is no mutual support agreement in place between Boards for on call arrangements. Individual Boards have arrangements in place, but these arrangements are generally not shared, resulting in a lack of availability of specialist health protection support 24/7. This may not be the best approach in some areas where resources are scarce and may represent some unnecessary duplication in others. Again this would be influenced by any conclusions around models of working.

94. There is a strong culture within the health service in Scotland of individual NHS Boards establishing local arrangements to deliver services in

the way that best suits their requirements. With the advent of the quality approach to NHS services and the focus on outcomes, it is quite rightly the case that the SG should not dictate the way in which a service is to be provided. However, as noted above, this may also at times create a tension in health protection in relation to attitudes to establishing national standards or protocols. There may be a need to balance local autonomy against the need for the whole Scottish population to have access to consistent professional standards.

95. Health protection staff within Boards may draw at times upon the support of colleagues working in general Public Health and both are part of a public health service run by a Director of Public Health. Across NHS Boards, the extent of inter-dependence between health protection and health improvement may vary i.e. from sharing information to working together on one or more issues. Some Boards may also seek additional support across the whole public health spectrum e.g. if a resource-intensive incident arises. It may be that there could, in some areas, be a sense of greater cohesion between health protection and health improvement. This is also an issue that the Group will bear in mind in discussions around alternative models of working.

Local Authorities

94. NHS Boards generally have close working relationships with Local Authority counterparts. The benefits of working in partnership with environmental health officers on public health issues are clearly recognised. All LAs have agreed procedures and processes with NHS boards for the local investigation and control of food or waterborne communicable disease. There are close working relations with HPS, directly and through CPHMs, and local authorities make use of the advisory services of HPS in relation to local issues such as air pollution and contaminated land advice. All thirty-two local authority environmental health services liaise through long established network groups and chief officer societies relating to pollution, food safety, workplace safety and general public health & housing. However, it is worth noting that, within local authority management structures, the contribution of local authority environmental health services to public health protection, as opposed to purely fulfilling a statutory role, may not be fully appreciated.

Other Agencies

95. The blue light agencies and emergency planning partners also work closely with NHS boards and HPS in handling major incidents and in collaborative working on the Resilience agenda through the 8 Strategic Coordinating Groups across Scotland.

Summary – Relationships and Behaviours

96. **There may be issues associated with the early sharing of information and speed of decision-making at the national level including handling conflicting priorities in sharing information with the media.**

There are a number of issues around attitudes to the role and remit of HPS. Between Boards relationships are generally very good although this has not always translated to supporting each other in terms of mutual aid or on call arrangements. We have also noted some tensions between local priorities and a need for greater national consistency. Local authorities provide important support to public health however senior management may not always identify the link between the local Environmental Health activities and the contribution to the greater public NHS health protection agenda.

97. **Mutuality and the principles of co-operation and co-ordination are themes that are easily recognisable in relation to health protection and which we need to continue to re-invigorate for the future. There is a cost involved in establishing relationships, improving mutual aid, strengthening on call arrangements and so on. None of this will be easy in a climate of big cuts, but it is essential if health protection is to be fit for purpose.**

Roles and Responsibilities

"Are there clearly defined roles and responsibilities to support health protection activity that are commonly agreed and understood?"

98. Earlier in this report we set out the formal and recognised roles of Scottish Government, Health Protection Scotland, NHS Boards and Local Authorities. Whilst those roles may be understood in the broadest sense, there does appear to be some lack of clarity about existing roles and remits and a resistance to some aspects of them. This includes –

- Some duplication of roles between the Scottish Government and HPS (and sometimes Scottish Government and NHS Boards);
- Lack of buy-in to the role of HPS;
- Role of experts based in NHS Boards;
- A need to re-examine what is "national" and what is "local".

Scottish Government

99. The Scottish Government role is to a large extent clear and understood. It could be the case that there is some potential duplication at times with the role of HPS. This can arise around programme management issues in some cases. Equally, there are strong and effective partnerships between Scottish Government and HPS on a wide range of issues. NHS Boards may also at times feel that the Scottish Government is taking too much of an operational role, as was expressed, for example, in response to the handling of the H1N1 pandemic flu outbreak. We recognise that high profile events of this kind can be driven by Ministers but there is a need to ensure that operational activity is taking place at the right level and subject to appropriate governance. It is the case, however, that the Scottish Government's performance management role does not at present effectively encompass health protection, with a lack of relevant targets.

Health Protection Scotland

100. The HPS role has evolved since 2005, with greater emphasis on the co-ordination of national programmes and liaison with NHS Boards to achieve this. More formal project management approaches have been employed by HPS over the last three years in particular. HPS has been required to co-ordinate the implementation of some major (and very successful) new programmes such as the HPV Programme and the Hepatitis C Action Plan. In addition, HPS has a clear role in incident management and has successfully co-ordinated a number of incidents where a multi-Board or national response was required. This includes Avian Flu and Q fever in 2006, Pandemic Flu in 2009 and the Anthrax outbreak in drug users in 2010. HPS' role in producing surveillance and an evidence base for policy has also been highly successful. It should also be acknowledged that NHS Boards are only one stakeholder for HPS who also deal with a wider range of work including European work and perform a large amount of work on HAI.

101. There is a perception amongst Boards that HPS provides less of a source of expert advice now (an advisory function) with more emphasis on the programme management approach (which is seen as bureaucratic) and data gathering. This ties in with the use amongst Boards of their own network of expertise and the resistance to programme management described above. HPS would argue very strongly in favour of the programme management role as it is seen as helping to secure a degree of national consistency and monitoring. It was suggested that there could be a difference in the management of routine and new programmes with a lighter touch required around routine programmes (something that HPS has recognised). Communications around programme management were an issue and could be improved. In relation to advice, health protection needs to be seen as multi-disciplinary with the role (and numbers) of epidemiologists and scientists recognised as valuable in the same way that medical advice is valued. This does not currently appear to be always the case. Board staff are seen as "frontline" but others may not be and this is perceived to affect the value of their advice and usefulness of their role. There has been very little "interchange" between HPS and NHS Board staff. We also note that the main recipient of HPS advice is actually the Scottish Government, who rely upon that advice, and HPS is responsible for conducting a considerable amount of preventative work at a national level often working closely with Government. These issues will be addressed more fully by the Group when we look at workforce issues.

102. HPS runs successful diagnostic work including surveillance and a programme of epidemic intelligence that is utilised by the Scottish Government and shared within the UK. This current programme of work is of a high standard. The range of activity covered includes looking at risk factors for disease; evolution of disease; work on effectiveness and research as well as feeding into UK level modelling work. HPS stores and analyses data in accordance with UK and EU requirements and has access to a wider range of data including food and environmental data accessed from SEPA and the FSAS. HPS is also represented on the National Expert Panel on New and

Emerging Infections (UK) that considers the implications of new and emerging infections.

103. However, some Boards appear to feel that there may not be a need for the full extent of the surveillance and diagnostic work currently conducted by HPS. This may reflect a lack of thinking beyond Board boundaries i.e. to include the contribution Scotland makes to national and international early warning systems and a lack of knowledge (and discussion) about how this activity connects with policy and can support operational activity. HPS conducted a review of its surveillance systems 5 years ago and a further review (of all epidemic intelligence work) is under way.

104. HPS' work on quality improvement and standard setting has been explored. There was again perceived to be a lack of buy-in to this as a role for HPS. The piece of work done around pandemic flu standards which successfully identified weaknesses was not taken forward and adopted by Boards. HPS has tried in the past to consider standards for health protection but this has had to be put on hold due to other priorities (pandemic flu) and has not so far been revisited. Quality improvement work has taken place around HAI with this work firmly embedded in the quality strategy. On the other hand, as described below, there would appear to be a better sense of ownership around the Health Protection Network.

The Health Protection Network (HPN)

105. The HPN provides guidance on public health management for NHS Boards. It is a multi professional network which supports continuous professional development. The HPN looks at professional practice but does not, at present, address issues around systems/processes/national standards or improving a local service. The network produces concise practical evidence, learning and best practice to support HP work across a range of topics. It seeks to bring a greater consistency of service and approach across Scotland. It supports evidence based practice by collating and disseminating evidence of best practice; setting standards related to this evidence and supporting peer audit of those standards. Recent examples are a report on communicating with the public about health risks and guidance on rabies and legionella.

106. The role of the HPN has been widely welcomed and supported. The provision of evidence based guidance is also recognised as increasing safety, effectiveness and equity. However, the Network has limited resources, confined to a full-time co-ordinator, administrative support, and a part-time chairman. These constraints clearly impact on its output. The limited number of publications and the long gestation time to produce these is a reflection of this. The Group considers that the HPN has potential to develop its contribution to the health protection service in Scotland.

NHS Boards

107. NHS Boards have clear statutory and formal roles. The 2008 Public Health Act has been helpful in clarifying Board and Local Authority roles but the existing CMO letter setting out Boards' Health Protection remit is certainly out of date and needs to be revised. Boards currently have a range of views on the extent to which activities should be considered to be "national" or "local". It is clear that larger Boards will have the capacity to conduct a wider range of activities locally and will rely less on support from HPS. Smaller Boards may have a greater reliance on HPS and have to focus resources on a more limited range of activities.

Role of the DPH

108. The DPH has a clear role and overall accountability for health protection. He/she will have lead accountability to the NHS Board for improving and protecting health in the Health Board area and for the response of NHS staff, including health protection staff in dealing with health protection challenges including outbreaks. In addition, the DPH directly line manages the health protection team of doctors, nurses and other staff and, as well as professional leadership for all public health activity, has the managerial accountability within the NHS Board.

109. The DPH has delegated responsibility within the NHS Board which can then in turn be delegated to public health staff within the department.

Local Authorities

110. The local authority role and the support provided to NHS Boards on health protection appears to be well understood and widely valued, although on occasion may be overlooked due to the scale of NHS contributions. Local partnerships are generally strong.

111. The priorities within local authority environmental health services tend to align as much with the Scottish Government single outcome agreement as with NHS HEAT targets. Environmental health is the local enforcement agency for many devolved and non-devolved pieces of health protection legislation relating to the environment and lifestyle. The relationship between NHS Boards and LAs has been strengthened by the 2008 Act which now requires NHS Boards and Local Authorities to work together on a Joint Health Protection Plan for their area.

112. Local authority environmental health officers have the facility to add greatly to public health work and there is considerable concern that the service is being consistently cut back and focusing purely on statutory requirements. Whilst those requirements are, of course, vital, this approach fails to recognise the wider contribution that this partnership between LAs and Boards could make to protecting (and improving) public health. In times of scarce resources a strong partnership will continue to be of critical importance.

Communities and Voluntary Organisations

113. The Group has considered the role of both voluntary organisations and local communities. It was felt that the relationship of health protection to local communities is often based around management of an incident i.e. communicating a public health risk whilst that risk is being handled. Communicating risk is an issue that has been helpfully looked at by the HPN who have produced some valuable guidance on this topic. However, there may be a need to engage local communities at other times in order to build a relationship of trust. This might include, for example, working with local community leaders and decision makers and local interest groups. The benefit of this could be seen as a more productive relationship in which communities become partners in dealing with a public health risk and are more willing to build their own resilience. In turn, this may have a valuable impact not only on public health but on the level of Board resources that may need to be deployed locally during an incident.

114. In addition, the Group has considered the existing links with voluntary organisations. We recognise that many health boards may have very active and effective links with local or national voluntary bodies. More should be made of those links in the future and certainly in terms of viewing the voluntary sector as potentially effective partners in building resilience and communicating risk. This may require some thought in terms of communications and available mechanisms at local level for working with voluntary bodies.

Summary - Roles and responsibilities

115. **There are issues both with 'horizontal' integration in health protection i.e. between NHS Boards and 'vertical' integration between the different levels of the service – Scottish Government, HPS and NHS Boards. The local authority role in public health is recognised as essential and valuable but risks being eroded by resource pressures and a continuing emphasis on statutory functions. The HPN is widely supported. The role of communities and voluntary sector organisations should be considered further in a spirit of partnership that, with the investment of some time, may contribute to a wider distribution of resource pressure and greater local resilience. Overall, there is a need to further clarify and adapt existing roles and remits.**

<u>Priorities and Outcomes</u>

"Are we clearly identifying and agreeing on strategic priorities and required interventions and working towards them on a national basis from SG to Board level?"

"Are all of our activities focussed on outcomes that will ultimately benefit the public's health? "

116. Currently, health protection priorities for Scotland are set in a number of ways:

- Scottish Government priorities;
- The Health Protection Advisory Group (HPAG);
- Scientific eg recommendations from expert bodies such as the Committee on the Medical Aspects of Radiation in the Environment (COMARE) and the Joint Committee on Vaccination and Immunisation (JCVI);
- Local (NHS Board) priorities and priorities identified by Health Protection Scotland;
- Priorities dictated by new and emerging infections.

Scottish Government

117. Scottish Government has a National Performance Framework and outcomes approach to performance management with public accountability through publication of statistics on the "Scotland Performs" website. NHS Scotland's direct contribution to delivering these outcomes has to date focused on delivering a series of trajectories and targets which are reviewed annually, embedded in Local Delivery Plans and on which NHS Boards are accountable to Ministers. Allied with quarterly reports to the Health & Social Care Management Board and the Cabinet Secretary, and a face to face (public) performance review annually with the Cabinet Secretary for Health, this visible system of accountability has clear advantages. For health protection, responsibility is normally delegated through the Chief Executive to the Director of Public Health who is manager and budget holder of this function.

118. The **Quality Measurement Framework** provides a new structure for aligning the wide range of measurement that goes on across the NHS in Scotland for different purposes. It describes how measurement helps to drive progress towards our Quality Ambitions and provides the ability to demonstrate improvement both locally and nationally. The three levels described by the framework provide a simplified structure for thinking about the intended use of sets of indicators. In summary:

Level 1 (Quality Outcome Indicators) is for national reporting on longer term progress towards the Quality Ambitions and the Quality Outcomes. These are intended as indicators of quality, and will not have associated targets. It is expected that most Quality Outcome Indicators (QOIs) will be disaggregated geographically, and by equality groups, where possible, and appropriate.

Level 2 contains the HEAT targets (Health Improvement, Efficiency, Access, Treatment), which describe the specific and short term priority areas for targeted action in support of the Quality Outcomes. These will be further aligned with the Quality Ambitions over time.

Level 3 describes all other indicators/measures required for quality improvement and performance management and reporting, either by national programmes or locally.

119. HAI is the key issue for health protection on which high level targets exist, reflecting Ministerial priorities. Outside of HAI, however, health protection has had no visible HEAT targets for a number of years (childhood immunisation rates used to be included as a background target) and has no visible targets within the Quality Strategy. In fulfilment of a Manifesto commitment, the Scottish Government successfully introduced the HPV cervical cancer vaccination programme from 2008. Interest and accountability at Government level on health protection has therefore, in recent years, been either programme driven i.e. a new immunisation programme always attracts attention or is focussed on the response to public health incidents. Outside of this, there are no high level agreed outcomes and therefore very little active performance management on issues other than HAI.

120. Performance is also addressed in other ways i.e. through reports on outbreaks and health protection incidents provided to the NHS Board Clinical Governance Committee, and also by the DPH, as an executive member, to the NHS Board. Aspects of Quality and Performance of all health protection teams are visible through Scotland-wide measurements of immunisation rates, sharing of reports of significant incidents with HPS and regular meetings of Scottish Consultants in Public Health Medicine/Health Protection. In addition, The Director of Public Health annual reports normally cover health protection issues including immunisation and significant outbreaks.

121. The Scottish Government, as well as holding NHS Boards to account, also holds HPS to account (as a division of National Services Scotland) via the annual performance review of NSS. This formal review process is supplemented by the informal in year arrangements that exist between HPS and the CMO's Directorate to monitor progress and performance. This arrangement seems to work well with open communication about issues and "no surprises" at the annual review meeting. However, clearly HPS cannot hold Boards to account for their performance in contributing to the measures on which HPS is regularly assessed. This creates a tension underlined by the lack of comprehensive performance management of Boards on non-HAI health protection issues. HPS attempts to gather a range of information from Boards through their programme management approach in order to assess the success of programmes of work. This responsibility has been delegated to HPS by the Scottish Government. However, not all Boards will engage proactively or willingly with this process since they feel themselves to be accountable formally only to Scottish Government; there may therefore be a lack of impetus in responding to requests from HPS and (as noted elsewhere) the HPS programme management approach can be seen as overly bureaucratic and labour-intensive to support.

122. Despite the (very welcome) advent of Joint Health Protection Plans between NHS Boards and Local Authorities, there is little evidence that those plans have been reflected in Local Authority outcome agreements. Again,

there may be issues with the visibility of health protection and the level of priority it is accorded. Within local authorities it can be the case that the public health function is mainly seen as a statutory (regulatory) role.

123. **Overall, therefore, the Group concludes that there is currently a lack of a quality improvement and performance culture around non HAI health protection issues; a lack of an agreed outcomes approach and a consequent distance from mainstream NHS management and accountability structures.**

The Health Protection Advisory Group (HPAG)

124. HPAG (discussed in more detail below under "governance") has a key role in setting priorities for health protection in Scotland annually. The Chairman and members of HPAG represent a wide number of different agencies with a role in health protection. They reach a collective view on priorities and communicate this to the CMO (to whom they report). The CMO in turn communicates those priorities to Boards, generally by letter. Those priorities tend to be represented as a list of very high level issues on which health protection (as a whole) in Scotland needs to focus its attention in order to protect public health. There is currently no evidence of any direct use of the priorities set by HPAG – eg Scottish Government utilises their own targets; HPS agrees a work plan with Scottish Government containing their high level objectives (as part of NSS) and Boards do not see the communication of HPAG priorities as relevant.

125. In addition, there is no follow up or use of HPAG priorities to guide actions or assess performance of any part of the health protection system.

NHS Boards and Local Authorities

126. NHS Boards will be working to some Scottish Government outcomes around HAI and may from time to time be addressing specific issue driven targets on other health protection subjects. They will see management from HPS of nationwide programmes such as seasonal flu but with the issues associated with that as noted above. Local Authorities do not generally have health protection activities reflected in single outcome agreements.

127. Many Boards and Local Authorities may now be making use of the Joint Health Protection Plans process to set local outcomes and priorities. For example, the Fife plan reproduces the environmental services plan for Fife which includes various outcomes eg "Better control and mitigation of infectious disease" with associated actions for environmental health largely around statutory responsibilities and value for money, and NHS Board workplan priorities eg "scope food security in Fife" and "complete local implementation of revised national UK BCG immunisation policy". There is also a joint activity grid (rather than outcomes) which sets out roles eg "Potential hazard to humans and the environment from contaminants" with a Fife Council role of identification of contaminated land and an NHS Board role of advising on risks.

128. The Grampian plan sets out separately the priorities and activities of the NHS Board and local authority. For example, for the NHS Board under bloodborne viruses NHS Grampian will "continue to provide surveillance…this will then inform prevention strategies. …continue to implement the national Hepatitis C plan for Scotland…". For the local authority, as with Fife, there are many statutory responsibilities included and a wide range of activities from houses in multiple occupation to occupational health exposures.

129. It would appear that Board and Local Authority priorities may be set separately. Board priorities seem to include a mix of national and local level activities but not necessarily presented in an outcomes focussed way. There appears to be a lack of general cohesiveness across the different agencies.

130. The Group will be conducting a full review of Joint Health Protection Plans as part of our work.

Scientific Priorities

131. Health protection in Scotland, in common with the rest of the UK, is influenced by the recommendations of various Scientific Expert Groups, including JCVI and COMARE. A full list appears in **Annex D.** Generally, these expert bodies, which are largely of independent status, provide recommendations to the UK Government and devolved administrations. Ministers are required to decide whether and how to implement those recommendations. It is rare for Ministers to act against the advice of an expert committee, though there may be differences in approach throughout the UK in terms of implementation. Examples in recent years that have resulted in Scottish Government priorities include:

- JCVI recommendation to implement the HPV cervical cancer vaccination programme for young girls;
- COMARE recommendations on sunbed usage.

132. Research and evidence generated by HPS contributes to the overall picture on scientific priorities. HPS is often asked by the Scottish Government to further interpret the implications of advice from expert bodies for the Scottish context.

133. In addition, some priorities or targets may be WHO or EU driven. WHO targets around seasonal flu vaccination are a good example.

Summary – Priorities and Outcomes

134. **It is recognised that currently priorities for health protection in Scotland can be drawn from a range of sources. There is a distinct lack of a single integrated and coherent system in Scotland where a common approach is agreed leading to a set of clear national outcomes. A proportion of those working in health protection view it from the functional viewpoint of their own organisation rather than as a whole**

integrated service. There appears to be no existing mechanism or forum that will successfully allow agreement on a common approach that is of direct relevance to everyone and is followed through. There is therefore a lack of unity behind a set of agreed strategic objectives. Performance management on health protection from Scottish Government is limited to HAI and one or two programme based activities. There are issues around compliance with the HPS approach (delegated from Scottish Government). In addition, health protection (outside of HAI) has no quality targets or indicators associated with the Quality Strategy and there is therefore not the same focus on the performance of health protection services as for most other clinical services.

135. **Boards are clearly comfortable with the translation of national priorities into local implementation aims (though these may not be outcomes focussed) but currently operate very independently in relation to identifying priorities for the year with a mix of priorities drawn from different sources.**

136. **There should be a new national annual work programme for health protection in Scotland to tackle this that would replace the existing diverse range of priorities and would be outcomes focussed.**

Governance

137. Currently, Health Protection in Scotland has an overarching advisory (rather than governance) function which is carried out by the independent Health Protection Advisory Group (HPAG), which was established in 2005. Other levels of governance (rather than accountability) exist, including a range of Programme Boards and Steering Groups. The latter are set up generally on a single issue approach and are sometimes established by the Scottish Government and sometimes by HPS eg HPS Environment and Health Steering Group and the HPV steering group (reporting to Scottish Government and the NSS Board). NHS Boards also have local governance arrangements.

138. Unlike many clinical services, health protection services may require multi-agency preparedness and response. This requires a further level of joint governance and awareness with the local authority and other agencies. Mechanisms include biennial Joint Health Protection Plans and liaison within the multi-agency Strategic Co-ordinating Group (SCG) chaired by the Chief Constable.

139. A clear structure exists for HAI governance. The HAI task force, chaired by Scotland's Chief Nursing Officer (CNO), was first established in 2003. Since April 2011, the Task Force National Policy Group (chaired by CNO) is advised by a National Advisory Group (whose chair is independent of government). The Task Force is now working to its fourth rolling delivery plan and implementation is overseen by the Delivery Plan Implementation Group.

National Arrangements - The Health Protection Advisory Group (HPAG)

140. HPAG reports direct to the CMO and to the Board of NSS. HPAG has an independent chair and a very wide membership drawn from Scottish Government, HPS, NHS Boards, HPA, Local Authorities and all other Scottish Agencies with an interest in Health Protection eg SEPA, Scottish Water, Food Standards Agency Scotland. A full list appears in **Annex G.**

141. HPAG's remit is as follows:

> *To advise the Chief Medical Officer and NSS on matters relating to health protection and on the effectiveness and efficiency of the health protection function in Scotland and to support the establishment and ongoing corporate development of Health Protection Scotland by:*
>
> - *Advising on a strategic framework and priorities for health protection*
> - *Assessing and advising on major risks to public health and associated risk perception and communication issues;*
> - *Advising on the effectiveness of health protection related emergency plans and major epidemic and pandemic plans;*
> - *Advising on the capacity to prevent and respond to infectious disease and environmental hazards, which present a risk to public health;*
> - *Advising on research in support of the health protection function; and*
> - *Producing an annual report.*

142. We recognise that HPAG has sought to raise the profile of health protection in Scotland. It has conducted useful work and made a helpful contribution to the direction of health protection in Scotland. In particular, the work on standards for pandemic flu preparedness was undertaken under the auspices of HPAG; as was the launch of the Health Protection Network and standards for workforce for health protection. HPAG has recognised the need for a standards-led approach and a standard against which to measure the quality of our services. It has also kept Scotland's capacity and resilience under review and highlighted issues of concern. The Group has engaged, too, in the identification of priorities for health protection.

143. However, HPAG has found it difficult to make an impact within the current established structures, despite the committed efforts of the Chairman and members. HPAG's remit suggests a conflation of different roles which are difficult for one (albeit multi agency) group to provide. There is a mixture of roles connected to the capacity and effectiveness of health protection (advising on a strategic framework; advising on emergency plans and capacity to respond to disease and hazards) and those which are more about the provision of an expert view on science (advising on major public health risks and research). HPAG is supported very ably by HPS but is not set up to provide scientific advice. In any case, the Scottish Government seeks its views on science from the UK expert bodies (eg the JCVI) and direct from HPS and we are not aware of any intention to change this approach.

144. HPAG's role is largely welcomed by those wider agencies that may not otherwise have an adequate voice or connection to health protection in Scotland. However, given the changing environment in which it operates, including the introduction of the quality strategy, its continuing relevance to both Scottish Government and to NHS Boards could be questioned in terms of the extent of its current influence at either a strategic or operational level. Much of this is about the way in which HPAG was established and how it fits within the other health protection structures in Scotland. Its essentially advisory status, and thus lack of enforcement or directive powers, limits its capacity to stamp its authority on the health protection scene. This is particularly the case in relation to its role in priority setting where it has no locus of intervention to ensure its advice is being fully followed. The sheer weight of the HPAG membership, whilst it has many advantages in terms of a multi-agency approach, also presents challenges in terms of effective decision making.

Summary – Governance

145. **Whilst acknowledging the valuable contribution that HPAG has made over time, the Group also recognises that the current overarching advisory arrangements in Scotland require revisiting to reflect our earlier conclusions. The need for effective governance in Scotland remains, and indeed is arguably more compelling given ever increasing demands on services and resource pressures and alternative mechanisms to achieve this are required.**

146. **In relation to our other conclusions around relationships and behaviours and priority setting, it is also clear that there needs to be a new impetus around creating a more integrated system for health protection that is based around a set of common values and common goals. A new national governance model can help us to achieve this. Details of our proposed new national governance model appear under key conclusions and in Annex E.**

Consistency

147. Consistency and cohesion are important issues for health protection since the diseases, infections and hazards we deal with do not respect boundaries and spread across geographic areas and populations. We also have requirements to fulfil at a UK and European level that rely on some degree of consistency. Consistency also has benefits in terms of equity – ensuring that the Scottish population has access to a similar level of protection across the country.

148. There is a recognised lack of consistency of approach across the country. NHS Board's have tended to develop many local arrangements and local standards for health protection. Those arrangements may of course be very effective locally. Local flexibility is clearly always important but it may be that this has been developed at the expense of agreed national approaches

and standards. This is probably also a reflection to some extent of some of the issues outlined in this report around relationships, roles and priority setting.

149. Our understanding of consistency encompasses a culture of shared values and common goals rather than unnecessarily rigid protocols or standards. We return to an original theme that flexibility within any structure is the key. Governance and priority setting should be enabling and a means of supporting a system of shared values. This should lead to less rigidity between different parts of the existing structures and more blurring of organisational boundaries. Mutual aid is part of this. There is also a need to recognise that expertise may come from a number of different sources.

150. We support the role of HPS in seeking to quality assure the systems involved in delivering health protection, strengthening evidence based practice through the health protection network and facilitating the sharing of experience and lessons learned. This also provides a framework for workforce development. Within the approach to consistency described above there is still room to develop a stronger agreed approach to health protection nationally not just around priority setting but also by developing and implementing formal continuous improvement measures. Some degree of national co-ordination across the country is also part of ensuring the right level of consistency in approach.

151. In addition, we have noted the slow progress towards a national Scottish health protection information management system (SHPIMS). This type of national system would have clear benefits in ensuring a common approach to incidents and outbreaks and the lack of it is hampering the effective health protection response across Scotland. This should be given greater priority by the Scottish Government.

KEY CONCLUSIONS AND RECOMMENDATIONS

152. We have emphasised in this report the many successes of health protection in Scotland. We have also recognised the professionalism and dedication of its staff at all different levels. It is clear that there is a solid platform on which we can build for the future. Our initial conclusions, set out below, are designed to achieve this and set in train a culture of improvement, which we are confident will strengthen Scotland's resilience to meet future challenges.

- **Capacity and Resilience**

1. **Scotland, as a small country, has some impressive strengths to build on but there are also weaknesses in current capacity and resilience arrangements. Smaller Boards realistically will face a lack of capacity and resilience in dealing with multiple or large incidents or even in coping with larger volumes of routine work. Overall future challenges, as set out in this report, suggest that demands on capacity will increase and that we must find ways to accommodate them.**

2. **Mutual aid exists in principle but is only adhered to in practice in the North of Scotland. Arrangements should be strengthened in other areas of the country.**

3. **On call arrangements currently exist separately in each NHS Board. We recommend further examination of the scope for combined on call arrangements between NHS Boards to maximise capacity and use resources efficiently (though clearly this could be part of any new approach to alternative models of working).**

4. **Scotland relies on the Health Protection Agency for advice on radiation, chemicals and emergency planning. It is vital that this provision continues with the advent of Public Health England. Scotland should have access to the same level of service and expertise as is available to the Department of Health and the NHS in England on those issues.**

- **Roles and Responsibilities:**

5. **Roles and responsibilities should be clearer. In due course we will be reviewing both the current MOU between the Scottish Government and HPS and the NHS Boards health protection remit. These will be replaced with a new tripartite MOU.**

6. **There is a need to improve communication between HPS and NHS Boards. Interchange should be arranged between staff (in both directions) and other activities considered to strengthen relationships and engender mutual respect and to help soften existing boundaries. This should include a wide range of**

activities including joint learning sessions; joint training and web based initiatives.

7. The programme of epidemiological intelligence (including surveillance activity) is currently being reviewed by HPS – we support this move and the results should be proactively shared and discussed with NHS Boards.

8. A surveillance forum should be established providing a means for HPS to share and discuss surveillance with NHS Boards and establish a firmer link between surveillance and operational activity. However, the role of any existing fora should be clear first (as should the interaction with those fora).

9. Not all Boards have a dedicated role for health protection data management – this should be encouraged and Boards should review their existing arrangement and how this contributes to surveillance networks.

10. The guidance on the content of single outcome agreements should in future include reference to joint working between health boards and Environmental Health Services to deliver health protection.

11. The Health Protection Network should be accorded more support and formal recognition by Scottish Government and its role clearly articulated.

12. The role of communities and voluntary sector organisations should be considered further as a means of improving the communication of risk and using effective partnerships to build community resilience.

- Priorities and Outcomes:

13. There should be a stronger link between Scottish Government and NHS Boards in terms of the performance management function and Board annual performance reviews (in relation to health protection);

14. There is too weak a link between strategic priority setting and operational activity. Local activity also needs to be more visible at national level. Health protection priorities need to have better links to mainstream NHS corporate structures. A new national annual work programme for health protection in Scotland is proposed to tackle this. This should replace the existing diverse range of priorities; it should be outcomes focussed and informed/fed by Scottish Government priorities and local indicators. This should be a rolling work programme with a focus

on continuous improvement across a single integrated system of health protection with a clear channel of communication;

15. The work programme should serve as the basis for a set of tier 3 indicators for health protection for NHS Scotland as our contribution to the quality strategy and the priorities should be integrated into local authority workplans at local level. They should also be reflected in Joint Health Protection Plans.

16. We should also focus on celebrating our successes.

- Governance:

17. A new overarching national governance structure should be established (subject to any eventual conclusions around models of working). This could be chaired jointly by an NHS Board Chief Executive (or Chief Officer) and Local Authority Chief Executive (or Chief Officer). As part of its role, this body should draw up and seek agreement on the national work programme. It should therefore be outcomes focussed, clearly linked to operational activity and should report to the Scottish Government (potentially as a recognised action group reporting to one of the delivery groups established under the quality framework). Membership of this body should cover Scottish Government, HPS, NHS Boards (including Directors of Public Health) and Local Authority environmental health services;

18. Wider agencies with an interest in health protection would no longer be directly represented on the governance body. Instead we recommend a more streamlined structure than at present including:
    - Partnership working with agencies recognised in the work programme and by the governance group;
    - Invitations to attend meetings on an issues basis and consultation as appropriate;
    - An annual health protection multi agency seminar.

- Consistency:

19. There is a recognised lack of consistency in approach across the country. This can be partly addressed by a new approach to developing a unified system based on shared values and goals. Flexibility around local arrangements for service delivery is clearly important but there is also a need for formal continuous improvement measures to be developed by HPS and NHS Boards. This could cover networking to share learning; peer audit; system standards and reviewing lessons learned. We recommend this approach.

20. **A consistent national approach can be effectively supported by a National Scottish Health Protection Information Management System (SHPIMS). This has been proposed previously by various bodies but has so far been unsuccessful in securing Scottish Government funding. We see this as a key development for Scotland to secure the most effective use of future resources at local level and to support an effective and responsive approach to public health incidents, whether on a local or national scale. We recommend that the Scottish Government works with NHS Boards to find a means to develop and implement this system.**

MODELS OF WORKING

153. **Our remit requires us to consider current health protection structures. Thus in the light of our initial recommendations, the Group has also spent some time assessing the implications for our current models of working, whilst recognising that any change to existing structures in the NHS in Scotland is initially for the Scottish Government to consider.**

154. **A guiding principle has been that structures should reflect the multi-faceted dimensions of health protection and be sufficiently robust and flexible to facilitate a swift, cohesive and effective response to day to day activity and any sudden demand. The models described below are considered against that background and taking into account the aims of the Quality Strategy.**

155. **A key factor in future success will be that all those working within health protection in Scotland view themselves as part of a cohesive system with common goals and common priorities. In addition to the benefits of consistency, it is important that health protection embraces flexibility – a governance system that is enabling; a blurring of rigid institutional boundaries; and a sense of working to common goals with mutual respect. It is the Group's view that, under any model of working, there will be a need for a national health protection function or body to carry out the kind of functions currently conducted by HPS.**

156. **This section sets out some of the evidence the group has received and describes four models of working. Annex I of the report sets out a methodology and criteria (based on the quality strategy) which will be used to assess each model. That assessment will be done as part of the next phase of work and the results will be provided in our final report.**

157. **The group has not taken any specific advice as yet on whether any legislative change would be required for the models proposed.**

Impact of Structural Change in England and Wales

158. In light of its White Paper- *Healthy Lives, Healthy People: Our Strategy for Public Health in England*– the UK Government has confirmed its intention to establish a new integrated national public health service - Public Health England. Most of the existing role and functions of the Health Protection Agency will be incorporated into Public Health England, which will now be established as an executive agency. A feature of the new arrangements is that Directors of Public Health will be located in local authorities. The Scottish Government made representations to the Department of Health seeking assurance that the range of activities currently carried out by, or on behalf of, the HPA for Scotland will continue. This includes the poisons service, additional advice on chemicals, radiation advice and emergency planning.

The Secretary of State for Health has provided assurances that Scotland will be able to access those services on the same (paid) basis from in future, thus ensuring optimum use of a valuable and scarce resource and expertise, which it would be impracticable to replicate in Scotland. Executive Agency status for Public Health England will also help meet another concern of the Scottish Government, HPAG and HPS, namely the importance of ensuring that expert advice from Public Health England is seen to be independent, as was the case with the HPA.

Health Protection Agency (HPA)

159. The Group received a presentation from Dr Sue Ibbotson, Regional Director of the HPA (West Midlands) and considered current arrangements for local health protection service delivery by the HPA in England. Under existing arrangements, the statutory responsibilities for protecting the health of the population sit with NHS Primary Care Trusts (PCTs) with the HPA acting in an advisory capacity. There are currently 9 regions, each with a Regional Director, which are coterminous with the Government Offices for the English Regions – covering population sizes from 2.5m to 7.6m with 26 Health Protection Units (HPUs) which follow NHS boundaries, each covering a number of PCT and Local Authority areas. Delivery of local services is supported as necessary by the HPA's national Centres for Infection (CFI based in Colindale, London); Chemicals, Radiation and the Environment (CRCE based in Chilton, Oxfordshire) and for Emergency Preparedness and Response (CEPR based in Porton, Wiltshire).

160. As well as HPUs, each region has a Regional Epidemiology Unit, a Regional Health Emergency Planning Team and business and governance support. Support is also received from CRCE "field teams" (Birmingham, Chilton, London, and Nottingham), a regional Communications Manager/press officer, a regional Microbiologist and HPA regional laboratory. HPUs are multi-disciplinary – CCDCs, health protection nurses, health protection practitioners, information support and administrative. An average HPU covers a population of 2 million, has <1 CCDC per 500,000 population and around 18.5 WTE staff. Roles of the local and regional services include –

- Surveillance of infectious diseases, and tracking of health protection incidents, exposures and health impacts;
- Acute response to enquiries, notifications of cases and incidents;
- Alerting of partners to emerging infectious and environmental threats to health
- 24/7 specialist provision to investigate and manage incidents, outbreaks, emergencies and clusters of disease;
- Provision of evidence-based risk assessment and health protection advice for action by partners across the full range of hazards;
- Provision of plans, tools, training and exercising for partners to prepare for incidents and emergencies;
- Designing and providing training for partners to ensure high quality health protection delivery and train the next generation of specialists;

- Strengthening the science base for health protection;
- Leadership and specialist support to local and regional strategic partnerships on health protection prevention and control programmes.

161. The model of HPU provision supported by services arrayed as appropriate at other levels is considered by the HPA to work well. Good working relationships are maintained with DsPH and the Regional DPH, NHS microbiologists, NHS Infection Control Teams and LA environmental health officers, as well as with a range of other partner organisations, for example Animal Health, the Environment Agency and Water Companies and police, fire and ambulance services as part of the HPA's Civil Contingencies Act Category I responder status. HPUs are essentially the "front door" to the Agency and manage all routine local business plus "level 1" incidents and outbreaks with regional oversight of incidents with support and escalation as required; HPU staff have geographical and specialist portfolio responsibilities. Mutual aid is also in place within and between regions.

Arrangements in the other Devolved Administrations

162. Dr Lorraine Doherty, Assistant Director of Public Health (Health Protection) of the Public Health Agency of Northern Ireland also presented to the Group on the arrangements in Northern Ireland. Dr Roland Salmon from Public Health Wales (and a member of the stocktake working group) provided information about Wales.

Northern Ireland

163. A re-organisation of health services has taken place in Northern Ireland. In 2007, there was an amalgamation of hospital and community trusts to form 5 Health and Social Care Trusts. This was followed in 2009 by the creation of regional structures – a Health and Social Care Board; a Public Health Agency; and a business services organisation.

164. Before 1st April 2009 health protection policy was carried out by the Government; there were 4 health and social services Boards with a DPH in each board with responsibility for health protection activities and supported by a Consultant in Communicable Disease Control (CCDC). In addition there were 2 surveillance centres.

165. The Public Health Agency was established in 2009. It reports to the Department of Health, Social Services and Public Safety (DHSSPS). It is a regional agency with 1 DPH and an assistant DPH leading the regional health protection service. It includes staff from previous Health and Social Services Boards and the surveillance centres – CCDCs, Specialist Registrars, Health Protection Nurses, Infection Control Nurses, Regional Epidemiologists, Surveillance Staff and Emergency Planning Officers. The health protection service has a frontline role in protecting the NI population from infectious diseases and environmental hazards by: surveillance and monitoring of diseases; operational support and advice to a range of health

professionals/other stakeholders; response to adverse health protection incidents; and, education, training and research.

166. A centralised rapid response arrangement has been set up for incidents with a duty room and standard operating procedures, which has made it far easier to respond to larger outbreaks. Non-health protection consultants are part of the duty rota but, in practice, their contribution is limited to providing additional surge capacity for acute response. Although incidents are led centrally, a fairly integrated approach is taken i.e. Incident Control Teams are chaired by the health protection service but include representation from the local health trust/primary care and local environmental health. There were some concerns when the health protection service was first established about the impact on the previous close relationships between CCDCs and Trusts. Health protection consultants continue to have Trust liaison responsibilities, the new acute response arrangements are working well and Trusts are now supportive. The establishment of an integrated Health Protection Service has led to a closer relationship being established between surveillance and operational response. Dr Doherty felt that the national service was not just working at the centre but was also reaching out and working with local agencies.

Wales

167. Dr Roland Salmon, Director of the Communicable Disease Surveillance Centre (CDSC) Public Health Wales and a member of the stocktake working group, provided a paper outlining the health protection function in Wales. Public Health Wales was established as an NHS trust on 1 October 2009. It provides and manages a range of public health services covering not only health protection but also health improvement, health promotion and health service quality. Its health protection services cover diagnostic laboratory services (essentially the former Public Health Laboratory Service area and regional laboratories plus one or two subsequent additions), surveillance, prevention and control of communicable disease and environmental public health as well as policy advice, training and research arising from these activities. Health protection services are divided into 3 units, administratively – Health Protection Teams/Communicable Disease Surveillance Centre/Microbiology Services. There are 3 Health Protection Teams working from 5 offices with 7 Consultants in Communicable Disease Control (CCDCs) and 9 health protection nurses. There are 2 Consultants in Environmental Public Health. The teams support 5 local health board areas in all communicable disease control and environmental health functions. The team increasingly work to standardised procedures and protocols, a process facilitated by centralised management.

168. Dr Salmon noted, in discussion, differences from the Northern Irish model, as presented to the working group, including a greater reliance on English guidance in Wales, and a reliance on a number of reference laboratory services provided by the HPA, particularly at Colindale. Wales, like Northern Ireland, has a centralised operations room (in Cardiff) but this is only used in the management of more extensive incidents. Otherwise, on call

arrangements in Wales are based, during the working day, around the previous CCCDC offices. Out of hours there is an all-Wales rota with first on call staffed by ("generalist") specialists and trainees in public health; second on call staffed by a CCDC and third on call by regional epidemiologists. Each NHS Board in Wales has its own Director of Public Health but they have no department to draw upon, relying instead upon the resources of Public Health Wales. There was a need to be responsive to local needs, that was recognized but as they tended not to vary significantly across the country, this type of system could be made to work, provided it was seen as accessible and responsive. The current arrangements are seen as efficient and have allowed a necessary degree of harmonisation and standard setting. An all Wales on-call rota, however, presents some challenges geographically and as specialist staff numbers are relatively small, a disproportionate burden can fall on two or three individuals.

Models of Working – Four Models

169. Under each of the models set out below, the working arrangements between health boards and local authorities should be examined to identify opportunities for improved communication, common objectives and the removal of duplication. Opportunities for physical co-location of health protection with environmental health services should be considered which may assist overall capacity and allow better links between health protection activities and local activities relating to food, pollution and workplace safety to be made.

170. It is also appropriate to note that whilst we have specifically considered health protection services, we are very much aware that in some NHS Boards there may be close working and potentially additional support provided from the wider public health function. Clearly this would need further consideration as part of any move to an alternative model of working.

Model 1 - A National Health Protection Service

171. Scotland has previously considered moving to an approach similar to the arrangements involving the HPA in England. This option was rejected under the review of health protection, which led to the establishment of HPS.

172. This approach would involve a single national health protection service supported by local regional offices/outposts similar to HPA's HPUs. All health protection services would therefore be run nationally. This body would have regional delivery arms eg potentially 3 that would run local implementation and that might also perform some national functions delegated to them. Such an arrangement would replace the existing roles of HPS and the NHS Board health protection units. There would also be a need for corporate management functions and corporate governance.

173. This body would have responsibility for discharging functions **on behalf of** NHS Boards. Routes of accountability and the relationship to the existing accountability of NHS Boards would have to be clear and transparent. Staff currently delivering services locally for a Board would become employees of the national body under this model. The majority of resource would be likely to be transferred. This wouldn't necessarily require relocation. Some resources could be retained locally and some co-located centrally.

174. The approach has attractions in terms of the benefits of providing some health protection services on a regional basis, bearing in mind that an average HPU in England may serve up to 2 million people. There would potentially be economies of scale; greater capacity and resilience to deal with larger scale or simultaneous incidents; capacity to introduce a regional on call structure; greater integration of surveillance and operational activity; a specialist workforce and consistent standardised protocols and procedures. One of the advantages of a national model, and a continuing disadvantage of other models, is that there is no divide between national and local delivery of health protection, which could get in the way of an effective and coordinated

health protection service. The allocation of resource across the whole of health protection delivery would also be achieved through one combined budget.

175. Against this, a single body risks becoming too distant from specific local needs; it may experience practical difficulties due to Scotland's wide ranging geography; it would lose the capacity to draw on wider NHS Board public health and management/corporate resources; as a significant change to current practice it might take several years to bed in; local relationships with acute and primary care providers may be lost and long established partnerships with eg local authorities might suffer.

176. Although Northern Ireland and Wales have both been able to put successful arrangements in place based on a single national agency, they combined a smaller number of local health protection functions in order to do this. In Wales, arrangements developed historically over time. Northern Ireland may have a model that is closer to what Scotland could achieve. However, significant outreach to other public health services remaining within Boards would have to be achieved and the links with local authority environmental health services considered and adapted.

Model 2 – A national centre with regional units

177. A second model could see the retention of some national functions – most likely those primarily already carried out by Health Protection Scotland – with 3 or more population-based larger regional Health Protection Units. Those units could potentially be based on the existing regional planning boundaries – north, west and south east & Tayside – or on an alternative.

178. The 3 or more regional units would be run by local NHS Boards (and not by the national function) but would clearly require existing services to be combined and run over a wider geographic area. This could potentially be achieved in a number of different ways including by hosting/service level agreements etc.

179. Under this model, a lead Board would employ the staff at regional level. This means that some staff would change employer (to another NHS Board) and some would not.

180. The advantages of this model would in some ways be similar to those noted above around improved capacity and resilience; potential for a much more consistent service to the Scottish population; regional on call arrangements and mutual aid between the regions established on a formal basis. There would be additional advantages depending on the size of each region i.e. the structure could take into account any geographical factors with regions of different population size according to both geography and the health protection issues faced. It would be useful for some flexibility to be built into the system between the regions to accommodate new and emerging infections and threats. A critical mass of staff would allow for sufficient expertise and advice to be available locally. There would still be

disadvantages – possible loss of detailed local knowledge, loss of links with the rest of the public health function and the loss of strong local partnerships. There would remain a divide between the national and local services. Strong governance arrangements would need to be put in place to replace existing arrangements. Clarity of arrangements around out of hours on call procedures would also be required.

Model 3 - A mixed regional approach based on current structures

181. Some of the advantages noted above could also be provided with some adaptation of our existing models of working. Existing accountability lines of NHS Boards would be maintained (rather than accountability with a lead board as per option 2). NHS Boards would not be required to put regional services into place – there would be flexibility for Boards to determine their own arrangements and they would decide whether and how to establish any regional working. This is likely to result in a mixed picture across Scotland.

182. It is clear from the work of the stocktake so far that some Boards do experience capacity problems; that there is a lack of a standardised approach across Scotland; a lack of consistent mutual aid and issues with the existing arrangements for on call services which rely on the contributions of non-specialists. It is also clear that there are relationship issues between HPS and Boards which are exacerbated by the existence of 14 differently delivered health protection services. An optimum service in Scotland has to recognise these issues and the impact on resources. In addition, Scotland's health protection function must be adaptable, flexible and resilient enough to deal with future challenges.

183. Some benefits might be achieved from some reshaping of our existing model. This could include –

- The amalgamation of some NHS Board health protection units (there are we think some Boards who would wish to go down this route) eg potentially where smaller Boards have capacity and resilience issues and currently rely on HPS for significant support around incidents. This could result in the creation of potentially 3 or more regional health protection teams **alongside** other existing NHS Board health protection teams. This would clearly require more thought and governance and corporate management arrangements would need to be clear;
- Regional on call arrangements could be established;
- A stronger focus on quality could be put in place as recommended in this report;
- All local health protection teams working to an appropriate and agreed level of national protocols.

Model 4 – Existing Arrangements

184. This model relates to our existing arrangements which are described elsewhere in this report in detail. We would expect that this model would still include commitment to take into account the other changes recommended in this report around priorities and governance etc.

185. Whilst existing arrangements will be evaluated as part of the options appraisal exercise alongside the other models noted above, the contents of this report would suggest that some change is required. In addition we have noted that some NHS Boards are already considering a range of alternatives to existing arrangements.

July 2011

ANNEXES

ANNEX A

HEALTH PROTECTION STOCKTAKE - MEMBERSHIP

Jim Brown (Chairman)

- Dr Martin Donaghy, Health Protection Scotland
- Dr Ken Oates, Chair of the Consultants in Public Health Medicine (CPHMs)
- Dr Jackie Hyland, NHS Fife, Environmental Public Health Practice Network
- Dr Lesley Wilkie, Chair of the Directors of Public Health
- Dona Milne, Public Health Specialist
- Jayne Leith, Health Protection Nurse Group Representative
- Professor Sir Lewis Ritchie, Primary Care Representative
- Dr Roland Salmon, Public Health Wales
- Andrew Blake, West Lothian Council, Representative- Society of Chief Officers of Environmental Health in Scotland
- Mike Palmer, Scottish Government (until end March 2011)
- Donald Henderson, Scottish Government (from July 2011)
- Dr Malcolm McWhirter/Dr Andrew Riley, Scottish Government

- Observer: Dr Lorna Willocks, Scottish Government HAI team
- Observer: Anne Hendry, Scottish Government
- Observer: Garrick Smyth, COSLA

- Secretariat
  Jacqueline Campbell, Scottish Government

Working Group members will consider, as part of their role, how best to involve and consult a wider range of stakeholders.

The existing Health Protection Advisory Group (HPAG) will be available as a reference group for the stocktake.

ANNEX B

DEFINITION OF HEALTH PROTECTION

1. Public health has the characteristics of dealing with preventative rather than curative aspects of health and dealing with population level health interventions. The Faculty of Public Health defines public health as the "science and art of promoting and protecting health and wellbeing, preventing ill health and prolonging life through the organised efforts of society". Their approach is – population based; emphasises collective responsibility for protecting health; recognises the key role of the state; and emphasises partnership with all of those who contribute to protecting public health.

2. The group has received a number of papers and discussed the definition that should be used for "health protection". Those discussions focussed on a hazards based approach whilst recognising grey areas around environmental health, HAI and the crossover with health improvement. A list of health protection functions below supports the agreed generic definition:

"To protect the Scottish public from being exposed to hazards which damage their health and to limit any impact on health when such exposures cannot be avoided"

3. Hazards can be biological, chemical, physical or from radiation and result in exposures – through food, water, air, from animals, the environment and person to person. Hazards may be described as involuntary although the line can be blurred. Hazards are often capable of affecting large groups of the population in a short period of time. Often the route of an exposure may be unclear and health protection therefore requires a capacity to handle risk and uncertainty as well as a capacity to respond urgently when required.

Gastro-intestinal and Zoonosis	Healthcare Associated Infection and Infection Control	Travel Medicine	Immunisation & Respiratory	Environmental Health	Blood Borne Viruses and STI
Enteric Diseases	Antimicrobial Resistance	Prevention and Illness in Travellers	Biological Aspects of Deliberate Diseases (CBRN response)	Air quality and Prevention of Pollution	Hepatitis B
Food-borne and water-borne illnesses	Cleaning and Environmental Issues related to Health Care	Monitoring Health risks related to Travel & Migration	Respiratory Infections	Chemical aspects of CBRN	Hepatitis C
Zoonotic Diseases	Decontamination	Imported Infections / Port Health	Vaccination of Adults	Chemical Incidents and Environmental	STIs
Food Safety	Infection Control Measures	Needs of immigrants	Vaccination for Preventable Diseases of Childhood	Climate / Global change and Adaptation strategies	HIV and AIDS CD4 and virological surveillance
Animal Health	TSE's (CJD)	Protection of travellers health by electronic info dissemination	Vaccine Related Issues	Environmental Protection	Infections associated with IVDUs (e.g. SSTI, Hep A)
	MRSA	Electronic dissemination of info on outbreaks - internation importance		Food Safety	BBV/STI issues in decontamination failures
	ICU Surveillance	Travel and Migration Vaccines		Health Effects and Risk of Transport Systems (HEARTS)	
	SSI Surveillance	Travel and Migration Infectious diseases		Health Improvement and the Environment	
	Catheter Asociated UTI Surveillance (CAUTI S)			Housing and Health	
	HAI Outbreaks			Noise and Health	
	National Prevalence Surveillance			Waste management and disposal	
	Neurosurgery Surveillance			Water and Sanitation	

The Quality Dimensions

Person centred

- Health Protection is often population based but is still person centred and includes direct contact with patients during many routine interventions as well as during outbreaks and incidents.
- Health Protection has to be available to everyone.
- Health Protection has to ensure that the patients' needs are met through direct contact and communication materials, particularly around risk and safety. Communication has to be clear and straightforward when covering often complex issues. The impact should be audited from the perspective of those affected.
- There is interaction with and support to families and communities, those affected by a problem and those who are not directly affected but may be concerned.
- Concept of herd immunity and population health benefits against individual health benefit is a concept unique to health protection.

Challenges identified:

- **Does all activity benefit the public?**
- **Increasing demands**
- **Handling expectations around risk**

Safe

- Do no harm.
- Balance population health benefit against individual health benefit.
- Health Protection has to be resilient and capable of responding to incidents and outbreaks including over prolonged periods.
- Health Protection has to be responsive.
- Expertise has to be available – currently sourced from HPS, the HPA, JCVI but could also be locally based
- Responses need to have an appropriate degree of standardisation.
- Interventions eg vaccination needs to be safe.
- The impact of activities on the environment and the links between environment and health need to be clearly part of health protection.
- Workforce training and development need to be effective, including arrangements for OOH.

Challenges identified:

- **Dealing with multiple or longer term incidents and outbreaks (though rare)**
- **Workforce capacity**
- **Issues with OOH and availability of advice 24/7**

Effective

- Health protection takes preventive approaches which are generally known to work with a high level of success around routine programmes e.g. childhood and adult immunisation. This is supported by specific indicators such as vaccine uptake rates.
- HPS and HPA provide an evidence base and cost benefits to establish the effectiveness of interventions.
- Surveillance helps to establish the effectiveness of a variety of interventions.

Challenges identified:

- **Increasing complexity**
- **Pressure of new programmes**
- **Lack of consistent standards across the country**
- **Lack of clarity around roles and responsibilities**

Efficient

- Health Protection has to achieve the right balance between national and local approaches; between local variation and consistency of approach; and between prevention and reactive services.
- Use of scarce resources has to be maximised.
- Identifying the right route for an intervention
- Use of the Health Protection workforce has to be maximised in terms of the right staff mix, the right activities carried out by nursing staff and the right emphasis on specialists versus generalists.
- May sometimes be marginal benefit in attempting to identify e.g. the last 4% of children who have not had a vaccination

Challenges identified:

- **Increasing resource pressures**
- **Identifying right national/local balance**
- **Lack of a national information system**

Equitable

- Health protection has to recognise issues of equity, particularly around access to services both nationally and locally - HPS work on equality eg for HPV and local boards efforts to reach specific population groups.
- Preventive delivery is mainly primary care based and therefore access is equitable across the country (the service provided may not be eg HPV for older girls who have left school).
- We need to achieve the right balance between consistency of service across Scotland and sensible local flexibility.

Challenges identified:

- **Scotland's geographical challenges**
- **Migrating population**
- **Vulnerable populations**
- **Public health benefit v individual gain**

Timely

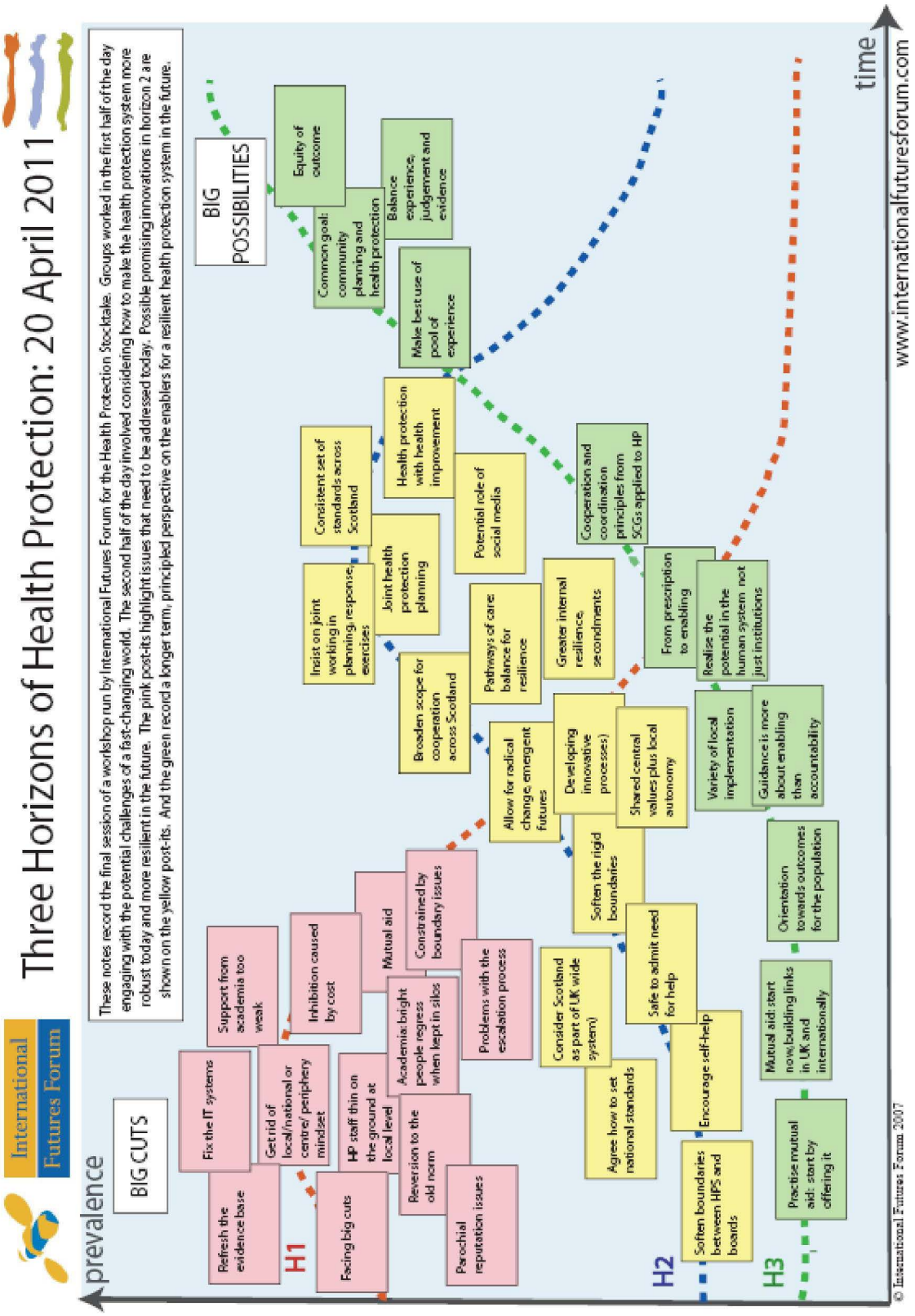
- Collection of data and feedback of information from surveillance programmes enable timely action.
- Response to major incidents/ Civil Contingencies Act – category 1 responders - needs immediate response and action.
- All Boards need to be able to offer the same timely service.
- Availability of expert advice 24/7

Challenges identified:

- **Media pressures**
- **Government requirements**
- **Data management**

ANNEX D

INTERNATIONAL FUTURES FORUM – 3 HORIZONS OF HEALTH PROTECTION
(by kind permission of the International Futures Forum)



ANNEX E

NATIONAL GOVERNANCE

Proposed new arrangements

1. A new overarching governance structure should be established (subject to our conclusions around models of working). This should be chaired jointly by an NHS Board Chief Executive (or Chief Officer) and Local Authority Chief Executive (or Chief Officer). This body should have the role of drawing up and seeking agreement on the national work programme. It should therefore be outcomes focussed, clearly linked to operational activity and should report to the Scottish Government (potentially as a recognised action group reporting to one of the delivery groups established under the quality framework). The HPV steering group (although with a much narrower remit) is considered to provide a good example of the working practices that might be followed by this group.

2. Membership of this body should cover Scottish Government, HPS, NHS Boards (including CPHMs, Nurses and Directors of Public Health) and Local Authority environmental health services. Wider agencies and bodies with an interest in health protection should be involved as necessary but would not form part of the core membership. An annual seminar should be held to allow the involvement of a wider range of stakeholders and would provide a forum for discussion of key health protection issues and specific input to the following year's annual work programme and priorities.

3. The work programme to be agreed through this group should result in a series of level 3 quality indicators developed and agreed with NHS Boards and Local Authorities. We anticipate a joint annual letter from the Scottish Government and the Chairs of the group. Those priorities would require local discussions between Boards and Local Authorities about reflecting them in joint work programmes (and Joint Health Protection Plans).

4. The role of this group would broadly be as follows:

    - To monitor the agreed work programme priorities / level 3 quality indicators at a strategic level with appropriate input from HPS programme management/NHS Boards/local authorities and Scottish Government;
    - To provide strategic direction and oversight of health protection in Scotland;
    - To provide views on Scottish Government health protection policy on request;
    - To report its findings to the Scottish Government;
    - To consider the UK and European dimensions to health protection and make appropriate links with UK bodies;

- To provide through the group or a time limited sub group a potential governance function for any new Scottish government programmes.
- To provide a forum for harmonising relevant aspects of clinical governance which affect the national delivery of health protection services.

5. The new governance group might also take a role in the steering and monitoring of any changes that are agreed to be taken forward as a result of the work of the stocktake. A full remit should be drawn up in due course.

6. The new group would report to the Scottish Government CMO Directorate. It is proposed that a secretariat function would be provided by Scottish Government.

7. The new group would not at present include HAI in its remit since there are robust existing arrangements in place for HAI governance.

Accountability and Governance

8. The proposal of these new governance arrangements is not intended to change existing formal accountability structures within the NHS and Scottish Government. NHS Board and HPS lines of accountability (as described earlier in this report) would not change.

ANNEX F

LIST OF SCIENTIFIC AND EXPERT BODIES PROVIDING HEALTH PROTECTION ADVICE IN SCOTLAND

HPS	Health Protection Scotland
HPA	Health Protection Agency
HPN	Health Protection Network
SGHD	Scottish Government Health Department
HAI Task force	Healthcare Associated Infection
SIGN	Scottish Intercollegiate Guidelines Network
FSA(S)	Food Standards Agency (Scotland)
MHRA	Medicines & Healthcare Products Regulatory Agency
SMF (A)	Scottish Microbiologists Forum (Association)
HSE	Health and Safety Executive
SEPA	Scottish Environment Protection Agency
NICE	National Institute for Health and Clinical Excellence
ECDC	European Centre for Disease Prevention and Control
CDC	Centre for Disease Control and Prevention
WHO	World Health Organisation

TRAVAX
TOXBASE

Expert groups:

JCVI	Joint Committee on Vaccination and Immunisation
ACDP	Advisory Committee on Dangerous Pathogens
ACDP TSE	ACDP-Transmissible Spongiform Encephalopathy
CJD-IP	CJD Incidents Panel
UKZADI	UK Zoonoses, Animal Diseases and Infections
PHWAB	Public Health Workforce Advisory Board
EAGA	Expert Advisory Group on AIDS
AGH	Advisory group on Hepatitis
UKAP	UK Advisory Panel
BHIVA	British HIV Association
COMARE	Committee on Medical Aspects of Radiation in the Environment
ACMSF	Advisory Committee Microbiological Safety of Food
SPI	Scientific advisory group on Pandemic Influenza
PICO-CSG	Pandemic Influenza Clinical/Operational group

Reference works:

DoH	Department of Health - Green Book
Hawker et al	Communicable Disease Control Handbook
Chin – APHA	Control of Communicable Diseases Manual

ANNEX G

MEMBERSHIP OF THE HEALTH PROTECTION ADVISORY GROUP (HPAG)

Name of Organisation	**Person nominated**	
Directors of Public Health	Dr Eric Baijal	
Faculty of Public Health	Dr. Andrew Carnon	
Consumer Focus Scotland	Kelly Leishman	
Royal College of Physicians of Edinburgh	***Dr. Andrew Seaton***	
Royal College of Physicians of Surgeons of Glasgow		
Food Standards Agency	***Peter Midgley***	
Health Protection Nurse Specialist	Jayne Leith	
NHS Chief Executives	George Brechin	
COSLA	Councillor Donal d Mcintosh Argyl & Bute (SNP) Member of the COSLA Health & Well-Being Executive Group	
Scottish Microbiological Forum	Dr. Mary Hanson	
Society of Chief Officers	***Jim Stirling***	
National Services Scotland	***Dr. Marion Bain***	
Scottish Partnership Forum	Dr. Charles Saunders	
Scottish Environment Protection Agency	Campbell Gemmell	
Heath Protection Agency	Dr. Anna Cichowska	
Scotland Representative of HPA	Jim Brown	
REHIS	***Bernard Forteath***	
Chair	Prof. Jim McEwen	

Scottish Government Health Directorate	Jacqueline Campbell	
Scottish Government Health Directorate	Dr. Malcolm McWhirter	
Consultant Public Health Medicine	Dr. Ken Oates	
Health Protection Scotland	Dr. Martin Donaghy	
Health Protection Scotland	Mary Morgan	
Health Protection Network	Dr. Bill Carman	
Health and Safety Executive	Dr. Robbert Hermanns	
Royal College of General Practitioners	Prof. Lewis Ritchie	
Department of General Practise and Primary Care	Prof. Lewis Ritchie	

NORTH OF SCOTLAND - MEMORANDUM OF UNDERSTANDING

Providing Public Health Surge Capacity

Memorandum of Understanding
North of Scotland Group
NHS Grampian, NHS Highland, NHS Orkney, NHS Shetland,
NHS Western Isles and Health Protection Scotland
(March 2011)

Scope
Arrangements to provide mutual Public Health support in the event of an incident, with actual or potential risk to the public health, outstripping the capacity of a single NHS Board Public Health Department.

This agreement focuses on Public Health but is part of the wider response required to manage major incidents. Surge capacity in other areas is being addressed through other forums.

Includes:
- Public Health specialist staff advice and/or support (including IT and Health Intelligence)
- Support staff.

Does not include:
- Emergency planning support
- Media
- Laboratory facilities
- Isolation facilities
- Availability of specialist Health Protection advice out of hours.

Activation of mutual aid
The exact threshold for seeking support will vary depending on the nature of the incident and the resources available to the 'incident' NHS Board Public Health Department. Each NHS Board must have appropriate internal surge arrangements, both in and out of hours, to manage reasonably foreseeable events and it would be expected that these had already been activated prior to seeking aid. It will also be expected that expert advice will have been sought from Health Protection Scotland prior to seeking aid from another department.

Supplying support to another NHS Board Public Health Department will inevitably be disruptive. Therefore the request should be from the Director of Public Health, after discussion with the Chair of the NHS Board Outbreak Control Team/Incident Management Team (OCT/IMT), to ensure that local capacity is already activated. The request should be directed to the Director of Public Health during working hours or the on call Public Health Consultant out of hours.

The staff provided to assist will be responsible to the Chair of the OCT during the incident. Legal indemnity will be provided by the employer of the seconded staff. The Board which originally employs the staff to be seconded will indemnify the other Board or Boards against each and every claim, cost and expense (including legal expenses on an agent and client (client paying) basis) by any seconded staff member where such claim properly arises from the acts or omissions of the seconded staff member or from their negligence and shall manage or handle any such claim which is intimated. The Chief Executives of both Boards

Maintaining mutual aid
Each NHS Board will have arrangements to rotate 'seconded' staff back to base to ensure appropriate rest. In a prolonged incident it may be necessary to seek support from outwith the North of Scotland Boards or from Health Protection Scotland.

Ceasing aid
It is equally important that stand down is clear. This should occur when local staffing is deemed adequate by the NHS Board OCT/IMT.

Amount of aid available
Whilst every effort will be made to fulfil reasonable requests, the amount of help available will inevitably vary and will ultimately be at the discretion of the DPH of the 'assisting' Public Health Department. Factors to be considered include:

- Maintenance of essential Public Health services by the 'assisting' NHS Board
- Ability of staff to travel at short notice
- Time of request since resource available to any NHS Board will vary due to leave, sickness etc.

Role of Health Protection Scotland[1]

Health Protection Scotland will provide:
- Expert advice on the hazard implicated in an incident (if this is known), its likely exposure and impact on health; the processes involved in incident management i.e. investigation, risk assessment, management and communication;
- Support for those involved in leading the management of the above processes when taking decisions on them;
- Liaison with UK and international health protection agencies which are or could be involved directly or indirectly in the incident.

Health Protection Scotland may provide:
- Additional personnel such as consultants in Public Health, epidemiologists, infection control specialists and information scientists to facilitate the management of the outbreak. On an agreed basis, these will be deployed to the site of local incident management or elsewhere if required. Health Protection Scotland itself may be called on to mount a national response to the same incident and thus the level of provision will depend on the availability of key personnel.

Formal review
This version (March 2011) of the MOU replaces the version agreed and signed off in October 2004.

The working of this Memorandum of Understanding will be subject to formal review in the light of any organisational changes and following activation of support in the event of an incident. Reports will be submitted to NHS Boards.

This MOU should be reviewed in 3 years (March 2014).

March 2011

Annex I

A REVIEW OF MODELS OF PROVISION FOR NHS SPECIALIST PUBLIC HEALTH, HEALTH PROTECTION SERVICES IN SCOTLAND

Objectives

To guide the Stocktake Group's discussions on a identifying preferred model by utilising the internationally recognised six dimensions of healthcare quality set out in the Healthcare Quality Strategy:

- Person centred;
- Safe;
- Effective;
- Equity;
- Efficient; and
- Timely.

Method

Each member of the Stocktake Group will be asked to participate in a survey to select which one of the three models proposed in the interim report for delivering health protection services best meets each of the six quality dimensions. They will do so by scoring each model for the degree of fit it has with each quality parameter, on a scale 0 to 4 (not at all to totally).

To ensure some consistency in scoring, each quality parameter has 4 criteria which are thought to be the main aspects of how that quality parameter relates to health protection service provision. Where available, background evidence related to each criteria will be circulated to the members.

In addition to scoring each quality parameter, each Group member will also be asked to clarify the reasons for their score by ranking the 4 indicators in terms of their importance in helping meet the quality parameter. Members will also list any additional factors that influence their score for the given quality parameter.

Standard risk assessment methods will be used to determine the impact of adapting the preferred option on wider public health services.

Options Review

1. Person Centred

Quality Parameter

How well does the proposed model provide a health protection service that is responsive to individual and community preferences, needs and values and assures that these help guide decisions on risk assessment and management?

Please review the indicators set out below and any other relevant factors and score each model for how well it meets the above parameter: not at all (0), only to a small degree (e.g. up to 25%), partly (up to 50%), to a large degree (e.g. up to 75%), totally (e.g. up to 100%).

Model 1	
Model 2	
Model 3	
Model 4	

In framing the above scores, please refer to the cited available evidence and specify the extent to which the indicators set out below are most important, ranking each indicator on a scale of 1 (low importance) to 5 (high importance):

Criteria	Scale
1. Acceptability of interviews of cases and contacts (feedback on cases and contacts' satisfaction with service encounter).	1 2 3 4 5
2. Effective risk communication to those actually or potentially affected by increased risks to their health. *(Evidence base: HPN Risk Communication Guidelines).*	1 2 3 4 5
3. Prompt and effective dealing with calls from public and staff about risks and their management (Logging response times, minimising delays in responding, and ensuring prompt action in response to calls).	1 2 3 4 5
4. Optimum community and stakeholder participation in decision-making and governance processes (Lay representation on groups, stakeholder representation on key governance groups, workforce development of PFPI). *(Evidence base: Scot Gov PFPI guidelines).*	1 2 3 4 5

Please describe any other factors which are relevant to your selection of a preferred model:

2. Safe

Quality Parameter

How well does the proposed model ensure that any harm to individuals or communities from health protection investigations, interventions, advice or support received is avoided and that the service is delivered as safely as possible?

Please review the indicators set out below and any other relevant factors and score each model for how well it meets the above parameter: not at all (0), only to a small degree (1), mainly (2), to a large degree (3), totally (4).

Model 1	
Model 2	
Model 3	
Model 4	

In framing the above scores, please refer to the cited available evidence and specify the extent to which the indicators set out below are most important, ranking each indicator on a scale of 1 (low importance) to 5 (high importance):

Criteria	Scale
1. Adequate service throughput to develop and maintain specialist skills and competencies *(Background evidence: FPH/NES/HPS Guideline on Unsupervised public health on-call duties).*	1 2 3 4 5
2. Adequate capacity and resilience to meet surge in demand for services (Sufficient staff resources to deliver health protection services during periods of escalating activity) while maintaining business continuity. *(Background Evidence: Draft HPAG capacity and resilience QA tool).*	1 2 3 4 5
3. Prompt detection of actual or potential risk to health (prompt assessment of risks). *(Background Evidence: sufficient data on main public health threats to promptly conclude if the observed significantly exceeds the expected numbers or cases).*	1 2 3 4 5
4. Formalised working arrangements with agencies responsible for community safety (healthcare, food, environment, work, animal, water, children, vulnerable elderly and others). *(Background Evidence: arrangements identified in Joint Health Protection Plans).*	1 2 3 4 5

Please indicate any other factors which are relevant to your selection of a preferred model:

4. Efficient

Quality Parameter

How well does the proposed model avoid waste (including in staffing, technology, ideas and energy) while ensuring that high impact productivity approaches are implemented reliably?

Please review the indicators set out below and any other relevant factors and score each model for how well it meets the above parameter: not at all (0), only to a small degree (1), mainly (2), to a large degree (3), totally (4).

Model 1	
Model 2	
Model 3	
Model 4	

In framing the above scores, please refer to the cited available evidence and specify the extent to which the indicators set out below are most important, ranking each indicator on a scale of 1 (low importance) to 5 (high importance):

Criteria	Scale
1. Productivity of case management activities to prevent secondary spread of infection *(Background evidence: Ratio of indicative numbers of cases requiring case management (total of TB, VTEC, and Meningococcal) to the level of resource identified by Health Boards as having been allocated to health protection).*	1 2 3 4 5
2. Reliability of outbreak management activities to ensure "get it right first time, every time" approach implemented (*Background evidence: Number of 'significant' incidents (as defined in the Framework for the Management of Public Health Incidents) managed and reported on by each Health Board per year).*	1 2 3 4 5
3. Appropriate skill mix of health protection team to ensure efficient deployment of specialist services. (*Background evidence: ratio of health protection nurses to dedicated time of consultant specialising in health protection).*	1 2 3 4 5
4. Management of main health protection programmes (e.g. Immunisation, TB and Hep C action plans) includes steps to minimise wastage and ensure time, cost and quality limits are met. *(Background Evidence: as defined in joint health protection plans).*	1 2 3 4 5

Please indicate any other factors which are relevant to your selection of a preferred model:

3. Effective

Quality Parameter

How well does the proposed model ensure that appropriate health protection investigations, interventions, support and advice will be provided at the right time to everyone who will benefit, will be based on scientific knowledge and will eradicate harmful variation?

Please review the indicators set out below and any other relevant factors and score each model for how well it meets the above parameter: not at all (0), only to a small degree (1), mainly (2), to a large degree (3), totally (4).

Model 1	
Model 2	
Model 3	
Model 4	

In framing the above scores, please refer to the cited available evidence and specify the extent to which the indicators set out below are most important, ranking each indicator on a scale of 1 (low importance) to 5 (high importance):

Criteria	Scale
1. Achieving health outcomes especially reducing the incidence of priority health problems (e.g. reduced levels of reduced levels of influenza mortality in at risk groups, of Hep C incident cases, and of secondary cases of VTEC). *(Background Evidence: variation in case numbers and trends by Board).*	1 2 3 4 5
2. Defined key health protection service outputs which contribute to achieving health outcomes *(Background Evidence: as defined in joint health protection plans).*	1 2 3 4 5
3. Development and implementation of protocols based on evidence based practice guidelines to support the delivery of priority health protection interventions.	1 2 3 4 5
4 Reducing variation in key impacts whose achievement should lead to achieving health outcomes. *(Background Evidence: Uptake of influenza immunisation in at risk groups and HCWs, uptake of needle exchanges).*	1 2 3 4 5

Please indicate any other factors which are relevant to your selection of a preferred model:

5. Equity

Quality parameter

How well does the proposed model provide a health protection service that does not vary in quality because of personal and community characteristics, geographical location or socio-economic status?

Please review the indicators set out below and any other relevant factors and score each model for how well it meets the above parameter: not at all (0), only to a small degree (1), mainly (2), to a large degree (3), totally (4).

Model 1	
Model 2	
Model 3	
Model 4	

In framing the above score, please refer to the cited available evidence and specify the extent to which the indicators set out below are most important, ranking each indicator on a scale of 1 (low importance) to 5 (high importance):

Criteria	Scale
1. Reducing variations in population use of health protection interventions *(Evidence base: uptake of national universal immunisation programmes)*	1 2 3 4 5
2. Maximising access to health protection interventions for vulnerable groups (including ethnic minorities, MWSM, IVDUs and low SIMD areas) *(Evidence base numbers on treatment per thousand Hep C diagnoses).*	1 2 3 4 5
3. Ensuring equality of access to specialist health protection staff at all times including during situations of increased risk *(Evidence base; health protection nurse and consultant in health protection available 24/7).*	1 2 3 4 5
4. Reducing variability in implementing standard health protection programmes *(Evidence base: degree of variation in practice uptake of vaccination, especially influenza).*	1 2 3 4 5

Please indicate any other factors which are relevant to your selection of a preferred model:

6. Timely

Quality Parameter

How well does the proposed model reduce delays in the response to situations of increased risk and avoids harm to individuals and communities from delaying the implementation of priority health protection interventions?

Please review the indicators set out below and any other relevant factors and score each model for how well it meets the above parameter: not at all (0), only to a small degree (1), mainly (2), to a large degree (3), totally (4).

Model 1	
Model 2	
Model 3	
Model 4	

In framing the above score, please refer to the cited available evidence and specify the extent to which the indicators set out below are most important, ranking each indicator on a scale of 1 (low importance) to 5 (high importance):

Criteria	Scale
1. Prompt response to detection of actual or potential risks to health *(Evidence base: existence of organised alert systems for national or local stakeholders*)	1 2 3 4 5
5. Plans, procedures, equipment and facilities in place to enable rapid and sustained response to significant incidents. *(Evidence base: Draft HPAG capacity and resilience QA tool).*	1 2 3 4 5
2. Speed in implementing good professional practice (adoption and implementation of protocols informed by evidence based guidelines)	1 2 3 4 5
3. Speed in decision making on the investment in and the deployment of resources necessary for the effective delivery of health protection interventions.	1 2 3 4 5

Please indicate any other factors which are relevant to your selection of a preferred model:

Risk Assessment

RISK ANALYSIS					
Risk	**Risk Description (including issues & dependency)**	**Likelihood Score:** (5 = High 1= Low)	**Impact Score:** (5 = High 1 =Low)	**Score:** (Likelihood * Severity)	**Corrective Action:**
Enter Title of Risk	Provide a concise description of the risk, issue or dependency as currently perceived and likely consequences if the risk happens, issue is not addressed or dependency not delivered.	2	4	8	Detail the action needed to be taken to mitigate the risk, address the issue or ensure the dependency is met along with those responsible for ensuring that action is taken.

Likelihood			
Score	**Description**	**%Occurrence**	**Chance of Occurrence**
1	Rare	0 – 15%	Hard to imagine this event happening – will only happen in exceptional circumstances.
2	Unlikely	15 – 35 %	Not expected to occur but might – unlikely to happen.
3	Possible	35 – 60%	May occur – reasonable chance of occurrir
4	Likely	60 – 80%	More likely to occur than not.
5	Almost Certain	80 – 100%	Hard to imagine this event not happening.

Score	Description	Impact on health protection, public health and NHS Objective
1	Negligible	Minimal impact. No disruption.
2	Minor	Minor impact on achieving objectives.
3	Moderate	Objectives only partially complete.
4	Major	Significant impact on achieving objectives
5	Catastrophic	Unable to function. Inability to fulfil obligations.

Risk Categories – definitions			
Business	**Staff**	**Clinical**	**Reputational**
Risks which impact on financial and operational performance. e.g. IT, external/political risk, business continuity, business processes.	**Risks which impact on the implementation of staff governance**. e.g. implementation of staff governance action plan and staff survey: ensuring staff are well informed, appropriately trained, involved in decisions, fairly and consistent treated, have a safe working environment.	**Risks which impact on the quality of services to patients and the public.** e.g. impact on the services, patients, general public and donors.	**Risks which have an impact on the reputation of the organisation.** e.g. when an event causes adverse publicity, negative impact on reputation with stakeholders (NHS Boards, The Scottish Government (SG), the public).

ISBN: 978-1-78045-326-2 (web only)

APS Group Scotland
DPPAS11902 (08/11)

w w w . s c o t l a n d . g o v . u k