



Crowe Horwath[®]



Final Report to:



An Roinn Sláinte

DEPARTMENT OF HEALTH

on the Role, Training, and Career Structures of Public Health Physicians in Ireland

April 2018

Contents

1	Introduction and Background	1
1.1	Introduction.....	1
1.2	Background and Terms of Reference	1
1.3	Approach and Methodology	3
1.4	Stakeholder Consultation	5
1.5	Report Structure	6
2	Current Role of the Public Health Physician in Ireland	7
2.1	Overview	7
2.2	Medical Officer of Health: Legislative Role and Responsibility	7
2.3	Structure of Public Health Services	8
2.4	Role and Functions	9
2.5	Conclusion.....	11
3	Current Training Arrangements	12
3.1	Higher Specialist Training Scheme for Public Health Medicine	12
3.2	Conclusion.....	14
4	International Comparisons	15
4.1	The National and International Context	15
4.2	The Role of Public Health	15
4.3	Ensuring Competency in Public health	16
4.4	Training Programmes in Public Health	20
4.5	Direction of the Specialty	26
4.6	Summary.....	27
5	Survey Findings	29
5.1	Overview	29
5.2	Profile of Respondents.....	29
5.3	Current Role and Responsibilities.....	30
5.4	Education and Training	32
5.5	Careers in Public Health Medicine	33
5.6	Future of Public Health Medicine Practice in Ireland	35
6	Key Issues Arising from Our Analysis	37
6.1	External Stakeholder Submissions and Consultations	37
6.2	SWOT Analysis	41
7	Future Role of the Public Health Physician in Ireland	45
7.1	Overview	45
7.2	Sláintecare Report	45
7.3	Need for a National Development Plan for the Public Health Workforce	46

7.4	Structures and Governance	47
7.5	Future Scenario – A Day in the Life of a Director of Public Health	49
8	Future Higher Specialist Training Arrangements	51
8.1	Overview	51
8.2	Current HST Scheme Considerations.....	51
8.3	Skills and Expertise for Delivery of Public Health Medicine in the Future	52
8.4	Forecast Requirements for PHPs	52
9	Developing the Public Health Medical Workforce.....	54
9.1	Overview	54
9.2	Future Workforce Requirements.....	54
9.3	Addressing the Workforce Requirements	57
9.4	Public Health Medicine: A Destination of Choice?.....	58
10	Conclusions and Recommendations.....	61
10.1	Conclusions.....	61
10.2	Recommendations	62
10.3	Implementation and Ownership of Change.....	64

Appendix 1: Survey Outputs

Appendix 2: Stakeholders Consulted

Appendix 3: Submission from Department of Health

Appendix 4: Submission from Health Service Executive

Appendix 5: Submission from Faculty of Public Health Medicine of the Royal College of Physicians in Ireland

Appendix 6: Directors of Public Health Submission

Appendix 7: Irish Medical Organisation Submission

Appendix 8: Specialist Registrars in Public Health Medicine Submission (via the NCHD Committee of the IMO)

Appendix 9: Joint submission from Public Health Representatives

Appendix 10: Public Health Medicine Early Career Network Submission to the MacCraith Review

Glossary

CHOs	Community Health Organisations
CSCST	Certificate of Satisfactory Completion of Specialist Training
CSTAR	Centre for Support and Training in Analysis and Research
DoH	Department of Health
DPH	Director of Public Health
FPHM	Faculty of Public Health Medicine
HIU	Health Intelligence Unit
HPSC	Health Protection Surveillance Centre
HSE	Health Service Executive
HST	Higher Specialist Training
MFPHMI	Membership of the Faculty of Public Health Medicine of the RCPI
NCCP	National Cancer Control Programme
NIO	National Immunisation Office
NSD	National Specialty Director
NSS	National Screening Service
PHM	Public Health Medicine
PHP	Public Health Physician
QI	Quality Improvement
RCPI	Royal College of Physicians of Ireland
SPHM	Specialist in Public Health Medicine
SpR	Specialist Registrar in Public Health Medicine
STC	Specialty Training Committee
UCD	University College Dublin
WHO	World Health Organization

1 Introduction and Background

1.1 Introduction

Crowe Horwath were commissioned by the Department of Health to undertake a review of the current and future role, training, and career structures of public health physicians in Ireland. This report sets out details of the review, the process followed, and the principal findings and recommendations arising from this.

1.2 Background and Terms of Reference

1.2.1 Context: MacCraith Report

The Department of Health (Office of the Chief Medical Officer, in conjunction with the National HR Unit) issued a request for tender (RFT) document setting out its intention to appoint consultants to prepare a comprehensive report, with prioritised recommendations, which addressed the current and future role, training, and career structures of the public health physician in Ireland.

This requirement arose from a recommendation within the report of the Strategic Review of Medical Training and Career Structures (“the MacCraith Report”). In July 2013 a Working Group, chaired by Professor Brian MacCraith, President, Dublin City University, was established to carry out a strategic review of medical training and career structures. The Working Group was tasked with examining and making high-level recommendations relating to training and career pathways for doctors with a view to:

- improving graduate retention in the public health system;
- planning for future service needs;
- realising maximum benefit from investment in medical education and training.

Public health medicine was considered as a key area of focus within this report. In the context of Action 46 of *Future Health* (DoH, 2012), *Healthy Ireland* (DoH, 2013) and emerging service developments, as well as national and regional demand for public health expertise, the Working Group recommended the examination of matters including the following:

- *the current and future role of the public health specialist in Ireland, including the appropriate skill mix in relation to public health functions;*
- *the attractiveness of public health medicine as a career option;*
- *the curriculum and content of the specialist training scheme, and associated administrative arrangements relating to the rotation of trainees around the system;*
- *any requirement for post-CSCST sub-specialisation;*
- *the replacement rates required to fill existing public health specialist posts in order to ensure the viability of the specialist training scheme and any expansion that may be required to plan for future service developments;*
- *measures to enhance the awareness of public health medicine as a career option at undergraduate level and during the Intern year.*

1.2.2 Assignment Terms of Reference

In order to implement the above recommendation, the Department opted to engage an external consultancy firm “to prepare a report, in the light of the strategic direction of health reforms, and mindful of the need for a fully functioning public health medical service in Ireland, for the attention of the Minister for Health within 6 months with prioritised recommendations, which addresses:

- *The current role of the Public Health Physician (PHP) in Ireland, with respect to the established roles of Public Health Medicine in Health Improvement, Health Service Improvement, Health Intelligence and Health Protection and the legislative functions required to be performed by the Public Health Physician by virtue of the Medical Officer of Health role*
- *The future role of the public health physician in Ireland, in the context of the projected requirement for public health medical services, with consideration of any requirement for post-CSCST sub-specialisation, having regard to the planned review of these services, being led by the Director of Health and Wellbeing in the HSE*
- *The current and future curriculum and content of the specialist training scheme and associated arrangements to facilitate and develop training of PHPs with a recognised qualification that facilitates reciprocity internationally, who can avail of overseas post-CSCST fellowships and sub-specialty training, to bring additional expertise to the Public Health Medicine community in Ireland*
- *The future recruitment (including replacement) rates required to fill public health medical posts in order to ensure the viability and future development of the specialty and the specialist training scheme, in the context of the projected need for public health medical services*
- *The status and attractiveness, including in respect of remuneration, of public health medicine as a career option*
- *Measures to enhance the awareness of Public Health Medicine as a career option at undergraduate level and during the intern year Measures to give PHPs the opportunity to follow a variety of career paths, work in diverse roles, including combining academic posts and expert HSE posts with their Specialist in Public Health Medicine post, similar to consultants in other specialties. PHPs should be facilitated to utilise their expertise, and enjoy a rewarding, challenging career with recognised career progression, and flexibility in work patterns.*

A series of sub-items to the terms of reference indicated that the assignment was to be conducted by:

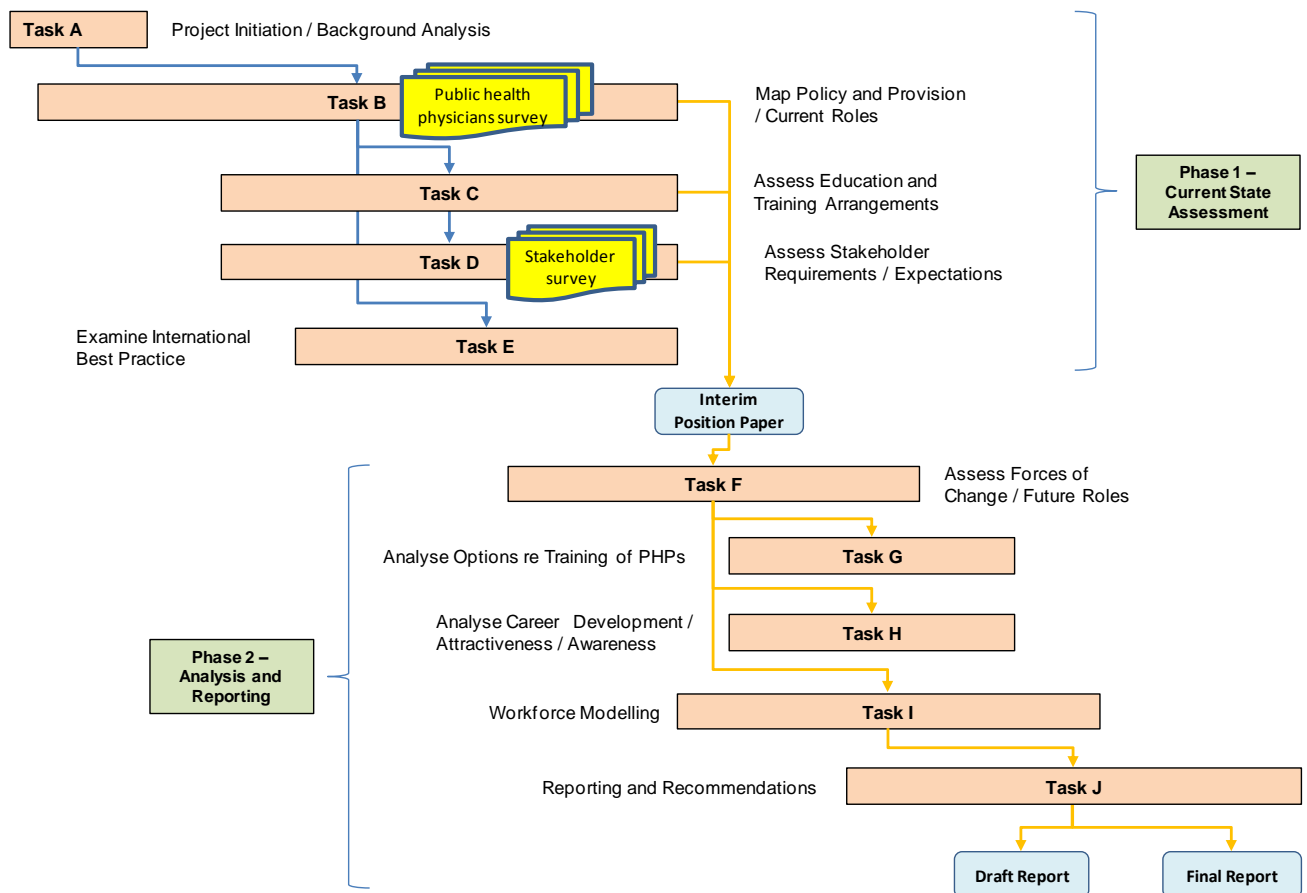
- *Analysing governance, organisational, resourcing, and relevant workforce issues including workforce requirement numbers, taking into account the projected need for Public Health Medical services, including international comparisons with Public Health services and functions in similar sized nations*
- *Evaluating the responsibilities of PHPs with respect to national and international legislative frameworks*
- *Evaluating the responsibilities of PHPs with respect to national healthcare reform and the role of Public Health Medical services in relation to healthcare reform requirements*
- *Consulting with all appropriate stakeholders including trainees, a variety of current PHPs (to reflect the diversity of roles), customers of Public Health Medical services*

within the HSE, HSE–NDTP, the Faculty of Public Health Medicine, other relevant specialist centres at national level, and staff associations

- Examining the national and international context and published evidence to ensure recommendations reflect best practice and current and future health service requirements.

1.3 Approach and Methodology

Crowe Horwath put forward an approach and methodology, illustrated below, to address the terms of reference set out by the Department.



A brief outline of the key tasks and activities undertaken as part of the review is set out in the table below.

Task	Key Activities
A	Project Initiation / Background Analysis
B	Map Policy and Provision / Current Roles
	Project initiation meeting, along with some high-level background analysis.
	Development of a comprehensive understanding of the current position regarding public health physicians in Ireland by means of a detailed review and analysis of the literature pertaining to public health medicine in Ireland over the last 20 years; a series of discussions with the

Task		Key Activities
		Department of Health and the HSE; and a baseline survey of public health physicians.
C	Assess Education and Higher Specialist Training Arrangements	Assessment of the current education and higher specialist training arrangements for public health physicians in Ireland, by means of a review of relevant literature and other material, together with key stakeholder discussions.
D	Assess Stakeholder Requirements / Expectations	Engagement with stakeholders working with public health physicians.
E	Examine International Best Practice	Review of international best practice with regard to the role of public health physicians, led by Prof Gabriel Scally, comprising a rapid evidence review; direct engagement with international contacts; identification and analysis of good and best practice within public health medicine; assessment of lessons learned from international experience which may be relevant to public health medicine in Ireland; and discussion of these issues with the expert reference panel established by the Department.
F	Assess Forces of Change / Future Roles	Detailed analysis of all the key issues contained within the terms of reference, bringing together the findings emerging from the investigative and information gathering activities within the first phase of the assignment.
G	Analyse Options re Higher Specialist Training of Public Health Physicians	Analysing options for the future higher specialist training of public health physicians, using the baseline position established within Task B and material arising from other Tasks. These options considered the positive and negative aspects of the current working arrangements and HST programme, and options for improving and strengthening these along with the attractiveness of the profession overall.
H	Analyse Career Development / Attractiveness / Awareness	Assessment to determine how best public health medicine can be structured and promoted so that it enhances opportunities to recruit and retain competent and able physicians, who have the capacity to enjoy a challenging career and have a reasonable expectation of career progression. The analysis also considers the barriers to this and how they can be overcome.
I	Workforce Modelling	Assessment of the optimum future shape and size of the public health physician workforce in Ireland, taking into account any planned service reforms and configurations within the HSE and elsewhere.
J	Reporting and Recommendations	Development of draft and final reports to the Department.

1.4 Stakeholder Consultation

This sub-section is designed to meet the following requirements set out within our terms of reference:

- *Consulting with all appropriate stakeholders, including trainees, a variety of current PHPs (to reflect the diversity of roles), customers of Public Health Medical services within the HSE, HSE– NDTP, the Faculty of Public Health Medicine, other relevant specialist centres at national level, and staff associations.*

1.4.1 Engagement with Key Stakeholder Groups

A key element within this review was a comprehensive consultation with the principal stakeholders. This process comprised meetings with and submissions from a range of organisations and individuals, including among others:

- Department of Health
- Health Service Executive
- Faculty of Public Health Medicine of the Royal College of Physicians in Ireland
- Directors of Departments of Public Health
- Irish Medical Organisation
- Representatives of Specialist Registrars in Public Health Medicine
- Public Health Medicine Early Career Network.

A full list of those with whom we consulted over the course of this review can be found in Appendix 2.

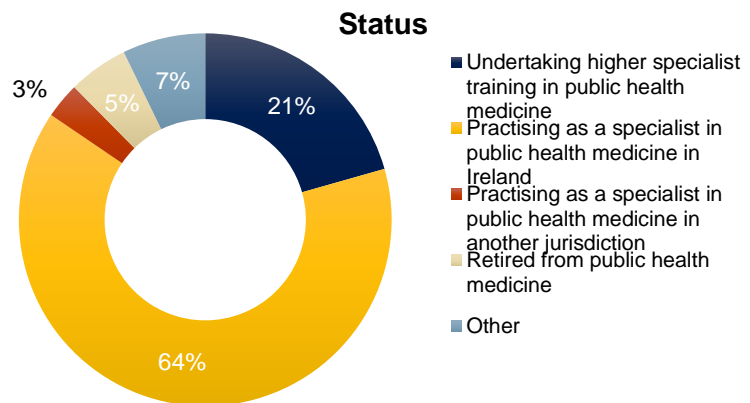
1.4.2 Survey of Public Health Physicians

It was critical to ensure that public health physicians had an opportunity to contribute to the review process individually as well as through the stakeholder consultation. Consequently, an online survey was developed to facilitate this, and to elicit information on the day-to-day activities and functions of public health physicians in Ireland currently. The content for the survey was drafted in consultation with the Department and other stakeholders, and the survey went online on the 14th of March 2017.

In order to reach as many of the target participants as possible, emails were sent to those working within the HSE (whose work emails could be used for such a purpose), and the Faculty of Public Health Medicine within the RCPI disseminated an invitation to its members and Specialist Registrars in Public Health Medicine (SpRs) to contact Crowe Horwath for access to the survey. Faculty contact details could not be directly passed to Crowe Horwath under data protection legislation.

The survey ran for approximately four weeks. A total of 90 fully-completed responses were submitted, with a further 17 incomplete responses available. On review, a number of the latter were substantially complete so their responses were included in analysis, giving a total of 97 for the purposes of the analysis.

Of these, 64% (n=62) were currently practising as SPHMs, with a further 21% (n=20) on the Higher Specialist Training Scheme as SpRs. 8% (n=8) were either retired from public health medicine or practising in other jurisdictions. 7% (n=7) indicated they had “other” roles, such as management or national roles.



The survey informed our analysis of the current role and training for public health physicians, and elicited substantial and useful opinion from physicians in relation to their vision for the profession, the issues and challenges they identify, and the changes they suggest for improvement. A further examination of the survey outputs is contained in Section 5, and where relevant, survey findings are used to illustrate and support other material within this report.

1.5 Report Structure

The report is structured as follows:

- 1 **Introduction**
 - 2 **Current position: role and functions of public health physicians in Ireland**
 - 3 **Current training arrangements**
 - 4 **International comparisons: best practice in public health medicine as seen in other jurisdictions**
 - 5 **Survey findings: high level summary of key findings from our survey**
 - 6 **Key issues arising from our analysis**
 - 7 **Future role of the Public Health Physician: our assessment of the key issues to be addressed by the DoH, HSE, and other stakeholders**
 - 8 **Future training arrangements: our recommendations for the future arrangements for training of public health physicians**
 - 9 **Developing the public health medical workforce**
 - 10 **Conclusions and recommendations**
- Appendices**

2 Current Role of the Public Health Physician in Ireland

2.1 Overview

This section is designed to meet the following requirements set out within our terms of reference:

- *The current role of the Public Health Physician (PHP) in Ireland, with respect to the established roles of Public Health Medicine in Health Improvement, Health Service Improvement, Health Intelligence and Health Protection and the legislative functions required to be performed by the Public Health Physician by virtue of the Medical Officer of Health role.*

Public health physicians practise in a variety of roles within the Irish health services. This section outlines the key areas within which the public health medicine professionals work.

2.2 Medical Officer of Health: Legislative Role and Responsibility

A statutory public health function is established under legislation concerning the role and activities of the “Medical Officer of Health”. The Medical Officers of Health (MOH) have a mandated responsibility and authority to investigate and control notifiable infectious diseases and outbreaks, under the Health Acts 1947 and 1953 and the Infectious Disease Regulations 1981 (and subsequent amendments to these). Responsibilities for the Medical Officers of Health are also described in the Health (Duties of Officers) Order, 1949.

Key responsibilities under the legislation include:

- The investigation, prevention, and control of notifiable infections and outbreaks, including authority to detain individuals who might be at risk of infecting others;
- A mandate for national and regional human epidemiology;
- Advisory role to the local authority and other organisations – as many of the functions previously undertaken by county councils are now under the auspices of the HSE and other bodies such as Irish Water, the advisory role of the MOH includes providing advice to these organisations;

MOHs also maintain a key relationship with the Health Protection Surveillance Centre (HPSC) in relation to notification and management of infectious disease.

The MOH function has been assigned to the HSE’s Assistant National Director for Public Health, Child Health, and Health Protection who is the National Medical Officer of Health. The Assistant National Director in turn has assigned the MOH function to Directors of Public Health. Directors of Public Health have assigned the MOH function to Specialists in Public Health Medicine based in Departments of Public Health. Assignments must be in place before these doctors carry out the MOH function, including out of hours, when they require the authority to carry out their role.

2.3 Structure of Public Health Services

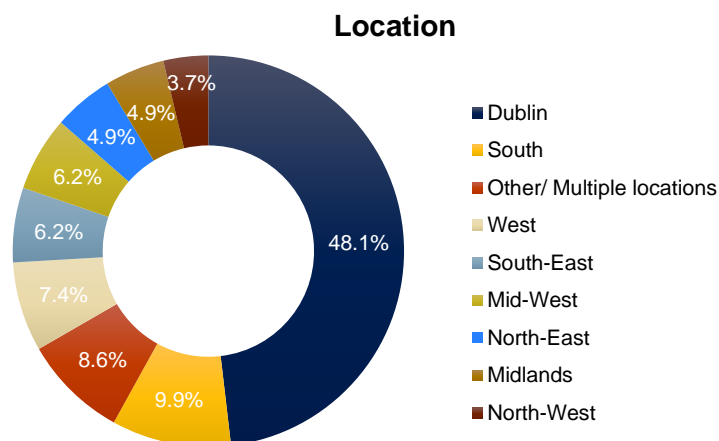
Responsibility for public health sits within the Health and Wellbeing division of the HSE. The Assistant National Director for Public Health, Child Health, and Health Protection is the head of the public health function, and reports to the HSE National Director for Health and Wellbeing.

The majority of Specialists in Public Health Medicine (and Specialist Registrars in Public Health Medicine on the Higher Specialist Training Scheme) are based within the regional Departments of Public Health. There are eight Departments across the country, corresponding to former Health Board areas rather than to current HSE geographic divisions (such as the nine Community Health Organisations (CHOs) or the hospital group areas).

Each Regional Department of Public Health is led by a Director of Public Health and has a number of SPHMs. Additionally, Departments of Public Health employ staff such as Senior Medical Officers, infection control nurses, surveillance scientists, researchers, and administrative staff. The staffing profile and numbers vary across the Departments. In total, there are 254.3 whole-time equivalent (WTE) staff employed within the Health and Wellbeing Division for the Public Health function, with 67 WTE being public health medical staff.

Within the HSE, public health physicians also work in roles outside the Departments. SPHMs are employed in the Health Protection Surveillance Centre (HPSC); the National Immunisation Office (NIO); the National Health Intelligence Unit; the National Cancer Control Programme; the Quality Improvement Division; and in Social Inclusion – Primary Care Division. There are SPHMs supporting the National Clinical Advisor and Programme Group Lead, working within hospital groups, working on secondment to the Department of Health, working in joint academic posts, and working outside the HSE.

Our survey of public health physicians reflected this variety of locations and organisations. Of those currently working in Ireland, the largest group of respondents (48%; n=39) were based in Dublin, as can be seen in the chart to the left. Almost 10% (n=8) were based in the South region; 7.4% (n=6) in the West; just over 6% (n=5) each in the South-East and Mid-West; just under 5% (n=4) each in the North-East and Midlands; 3.7% (n=3) from the North-West; and 8.6% (n=7) based in other or multiple locations.



The majority (62%; n=50) of respondents are based within HSE public health departments, with the remainder based in a variety of organisations as set out in the table below:¹

¹ We have intentionally not broken these figures down in more detail (e.g. by grade or location), as the relatively small numbers of public health physicians in many of these organisations means that in certain cases we would be identifying specific individuals, which would be inappropriate from a data protection perspective.

Organisation	%
HSE Public Health Department	62%
Health Protection Surveillance Centre	9%
Department of Health	6%
National Cancer Control Programme	5%
Other	5%
National Immunisation Office	4%
Health Intelligence Unit	3%
Academic Institution	3%
More than one organisation	3%
HSE Health & Wellbeing	1%
Safefood	1%
Total	100%

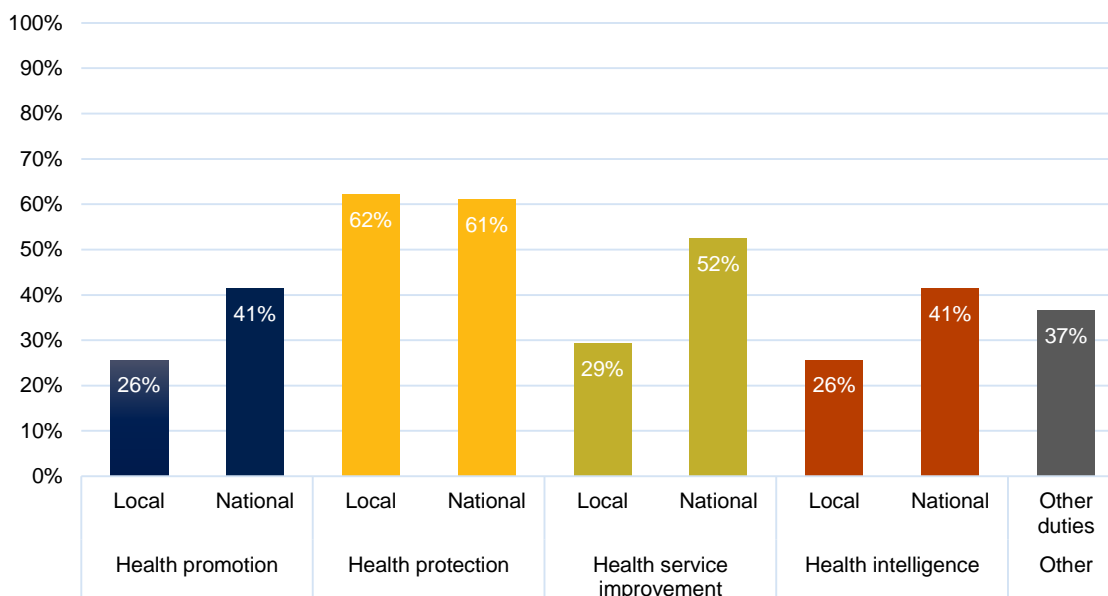
2.4 Role and Functions

The range of activities undertaken by Specialists in Public Health Medicine is extensive and varied. The “pillars” of Public Health Medicine are defined as health protection, health improvement, and health services improvement, and health intelligence.

- Health Improvement: developing an integrated approach to promoting health and preventing disease, with a particular emphasis on health inequalities.
- Health Service Improvement: working towards delivering effective, efficient, and accessible health services.
- Health Protection: the prevention and control of infectious disease and environmental and radiation risks, and emergency response to major incidents and health threats.
- Health Intelligence: using population health surveillance and monitoring of trends, and using an evidence-based assessment of policies, programmes, and services to inform health planning.

Stakeholder consultations and submissions indicate a particular emphasis in Ireland on health protection, with stakeholders suggesting it represents a considerable, indeed very dominant, aspect of the practice of public health medicine here. The survey supports this, with health protection at local and national level being undertaken for at least some of the time by over 60% of respondents (local level 62%; n=51; national level 61%; n=50), higher than other activities, as illustrated below. The figures on the chart represent the percentage of respondents who indicated that at least a portion of their working time was taken up by the activity in question. A more detailed table in relation to this is set out in Appendix 1.

Duties undertaken



There is substantial variation in the balance of duties for different public health physicians: we asked survey respondents to estimate the percentage of time across the different sets of activities above, and these varied from 0% to 100% for many of the areas of activity, as set out in the following table. Again, it can be seen that on average, health protection at both local and national level consistently represent a considerable proportion of public health physicians' time by comparison with other activities.

Activity		Number who ticked activity	Average % of working time*	Minimum	Maximum
Health promotion	Local	51	4%	0%	50%
	National	60	9%	0%	100%
Health protection	Local	67	27%	0%	100%
	National	67	25%	0%	100%
Health service improvement	Local	52	6%	0%	50%
	National	59	23%	0%	100%
Health intelligence	Local	49	4%	0%	20%
	National	56	12%	0%	100%
Other duties		39	25%	0%	100%

**It should be noted that the average is the mean of the various responses in terms of percentage time-spend, and is inclusive of those who indicated that the function took up 0% of their time. It is also calculated individually for each category: as can be seen, differing numbers of respondents provided answers to each of the categories, i.e. for example, 67 respondents indicated their time spent on health protection but only 39 did so for other duties.*

2.5 Conclusion

Public health physicians work in a variety of roles, but most are based in the HSE public health departments across Ireland. Health protection is the dominant activity for most public health doctors.

3 Current Training Arrangements

3.1 Higher Specialist Training Scheme for Public Health Medicine

3.1.1 Overview

This section outlines the current arrangements for the training of Specialists in Public Health Medicine. The Higher Specialist Training Scheme operates within the Faculty of Public Health Medicine of the Royal College of Physicians in Ireland, and it is with the Faculty's assistance in providing detailed information that we set out the key elements of the training programme here.

3.1.2 Outline of Higher Specialist Training Scheme

Training to qualify as a Specialist in Public Health Medicine in Ireland comprises four years of higher specialist training (HST). Applicants must have completed basic specialist training, save in very limited circumstances where individual applicants with exceptional experience in the field of public health medicine may be considered for entry to HST.

The aim of the HST scheme is to ensure that those who successfully complete it will be competent to undertake comprehensive medical practice in the specialty in a professional manner, unsupervised and independently and/or within a team, in keeping with the needs of the healthcare system and the domains of public health practice

3.1.3 Phases of Training

The four-year HST scheme for Public Health Medicine is divided into two phases:

Phase 1 comprises placements for a minimum of two years (whole-time equivalent) within a regional Department of Public Health capable of providing training in all curriculum competency areas, with the purpose of:

- providing the opportunity to work as an integral part of a public health team;
- providing broad generic experience in all the domains of public health practice.

Those entering without a Master's in Public Health attend academic training and complete the MPH or similar during year 1 of training. Part 1 of the Membership examination must be passed during Phase 1.

Phase 2 comprises at least two specialised training attachments of at least six months' duration each in approved locations, such as:

- Department of Health
- HPSC
- NIO
- NCCP
- HIU, Dr Steevens' Hospital, Dublin
- University College Dublin (UCD), Centre for Support and Training in Analysis and Research (CSTAR)

- Safefood, Cork
- WHO, Geneva.

All training locations are inspected jointly by the Faculty and the RCPI and accredited by the RCPI.

The remainder of training is in another regional Department of Public Health. The Part 2 Membership Examination must be completed to exit HST and obtain a Certificate of Satisfactory Completion of Specialist Training and be eligible for specialist registration with the Medical Council.

3.1.4 Content of Training

The Public Health Medicine Curriculum has been approved by the Medical Council. Training consists both of generic broad cross-specialty training within the RCPI, and defined specialty specific training. The curriculum sets out acquisition of knowledge and skills in the four domains of PHM. Specialty training is undertaken in the following competency areas:

- Applied epidemiology
- Research
- Knowledge management including health intelligence
- Health improvement
- Communicable disease prevention, surveillance and control
- Environmental health
- Emergency planning and response
- Quality and safety in healthcare
- Health economics
- Public health communication and advocacy
- Public health leadership and management
- Health policy

3.1.5 Trainers

A trainer is identified by the Faculty for each approved post, who is responsible for ensuring that the educational potential of the post is translated into effective training which is being fully utilised. The training objectives to be secured are agreed between SpR and trainer at the start of each placement in the form of a written training plan. The trainer is intended to be available throughout, as necessary, to supervise the training process.

All trainers are accredited by the Faculty and by the RCPI.

3.1.6 Faculty Membership Examinations

Examinations for Membership of the Faculty of Public Health Medicine of the RCPI (MFPHMI), Parts I and II, are run by the College of Physicians on behalf of the Faculty.

Part I Membership of the Faculty of Public Health Medicine in Ireland (MFPHMI)

Candidates may apply to sit the Part I 12 months after completing their primary medical degree. The Examination aims to test knowledge of public health medicine, including basic skills in research methods, data analysis, problem solving and communications.

The Part I consists of four written papers. Papers 1 and 2 are designed to mainly test knowledge. Papers 3 and 4 are designed to also test skills and ability to apply knowledge.

Part II MFPHMI

The format of the Part II written exam was changed in recent years, following a review of international practice, from a thesis or two reports to three Public Health Reports (PHRs) in order to increase the relevance of the submissions to the workplace. The new format was an option from Autumn 2013 and was obligatory from Spring 2015.

The Part II General Oral was retained to ensure that the knowledge examined in Part I has been retained and that the candidate has the capacity to apply that knowledge to public health scenarios.

Part II – Public Health Reports	Part II – General Oral Examination
Public Health Reports are required to show that candidates have developed and applied a range of competencies from those outlined in the curriculum for Higher Specialist Training in PHM. They must demonstrate that they can critically study an epidemiological or public health question, carry out in-depth investigations of the issues and propose appropriate solutions.	The General Oral examination is conducted separately on the same day as the oral examination of the Public Health Reports and it takes about 30 minutes. Candidates are asked to discuss challenges and problems that present in the practice of Public Health Medicine to show they have retained and built on the knowledge, skills and understanding demonstrated in Part I.

3.2 Conclusion

There is a higher specialist training scheme in place to train graduate and experienced doctors for public health medicine. The HST scheme includes a competency-based approach and placements in both public health departments and other locations/organisations to develop a range of skills for those on the HST scheme. The HST scheme is accepted by the Medical Council for the purpose of entry to the specialist register for public health medicine.

4 International Comparisons

4.1 The National and International Context

This section is designed to meet the following requirements set out within a sub-item of our terms of reference:

- *Examining the national and international context and published evidence to ensure recommendations reflect best practice and current and future health service requirements*

Global comparators benchmark and provide context for understanding of the Irish public health system's present challenges, as well as consideration of available improvements and solutions. Comparators have been drawn from countries with systems and populations that have similarities to the Irish demographic composition and organisation of health services. For comparator nations, the following common features are of note:

- Economic pressures have led to reduced rates of growth in public health care spending; cost cutting efforts and this trend is expected to continue. The EMEA region is projected to see the world's slowest growth in healthcare spending in 2015-19 at 1.4% annually²;
- Rates of physicians per capita are relatively static or showing signs of modest growth in most comparator countries³. The global labour market for physicians continues to be challenging in terms of supply-demand;
- Increased community based care and upskilling of nurses and community health practitioners to undertake discreet public health activity.

In all countries advanced medical speciality training is an expensive investment. Best utilisation of healthcare resource is being sought, and strategically utilising, distributing, developing and retaining public health physicians is therefore vital to getting the best return on investment.

4.2 The Role of Public Health

At the international level, there is a great deal of consensus about what constitutes a fully and effectively functioning public health system within a country. This consensus applies almost irrespective of the level of social and economic development the country has managed to achieve. Several national or international public health bodies have attempted to produce a clear statement as to the functions that contribute to such an effective public health system. These various statements are in general accord with each other and thus provide a useful international benchmark against which it would be reasonable to assess the construction of any one country's system.

² Global Health Care Outlook (2016) Deloitte
<https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Life-Sciences-Health-Care/gx-lshc-2016-health-care-outlook-regional.pdf> Accessed 24.08.17

³ World Health Organisation Healthcare workforce summary (2015) World Health Organisation
http://www.who.int/gho/health_workforce/physicians_density/en/ Accessed 24.08.17

One of the first international statements on essential public health functions was produced by the Pan-American Health Organization (PAHO) and has become recognized as a key starting point in the development of national approaches to public health systems. PAHO defined eleven essential public health functions (Box 1).

Box 1: The Eleven Essential Public Health Functions

EPHF 1	Monitoring, evaluation, and analysis of health status
EPHF 2	Surveillance, research, and control of the risks and threats to public health
EPHF 3	Health promotion
EPHF 4	Social participation in health
EPHF 5	Development of policies and institutional capacity for public health planning and management
EPHF 6	Strengthening of public health regulation and enforcement capacity
EPHF 7	Evaluation and promotion of equitable access to necessary health services
EPHF 8	Human resources development and training in public health
EPHF 9	Quality assurance in personal and population-based health services
EPHF 10	Research in public health
EPHF 11	Reduction of the impact of emergencies and disasters on health

Whilst it is very clear that there is a role, arguably to a greater or lesser extent, for public health professionals in contributing to these essential public functions, it is notable that EPHF8 is explicitly about human resource development and training in public health.

“Many achievements in reducing mortality and morbidity during the past century can be traced directly to public health initiatives. The extent to which we are able to make additional improvements in the health of the public depends, in large part, upon the quality and preparedness of the public health workforce, which is, in turn, dependent upon the relevance and quality of its education and training.”⁴

4.3 Ensuring Competency in Public health

Whilst there is general consensus on the components of a modern public health system, there is little consensus on how that public health system might be structured and staffed. This reflects the differing nature of the civil society arrangements in place in different countries and the inevitable flexibility that is required in the public health function, due to the requirement for effective public health work to be carried out in close relation to that range of different sectors of civil society.

In order to facilitate the development of appropriately trained staff to engage in undertaking public health tasks, many countries have, in recent decades, determined the core competencies needed for effective public health practice. This competency-based approach,

⁴ Hernandez, Lyla M., Linda Rosenstock, and Kristine Gebbie, eds. *Who will keep the public healthy?: educating public health professionals for the 21st century*. National Academies Press, 2003.

which is utilised commonly across a wide spectrum of health care professionals, relies upon the establishment of broad professional consensus and usually reflects the role of professionals with a specific national context.

The competency statements generally describe the essential knowledge, skills and attitudes necessary for the practice of public health and are regarded as essential building blocks for education and training of public health professionals. Their use is intended to provide assurance of a properly trained public health workforce and can have an important role in ensuring the continuing competence and appropriateness of a workforce.

The competencies are usually developed on a consensus basis with deep involvement of existing public health professionals and cover a wide span of public health practise. In Canada, for example⁵, a total of 36 core competencies have been identified within seven separate categories (Box 2).

Box 2. The seven categories of public health competencies in Canada.

- | |
|---|
| 1) Public health sciences |
| 2) Assessment and analysis |
| 3) Policy and program planning, implementation and evaluation |
| 4) Partnerships, collaboration and advocacy |
| 5) Diversity and inclusiveness |
| 6) Communication |
| 7) Leadership. |

The Royal College of Physicians and Surgeons of Canada has further developed the competency approach and translated the competencies into objectives for higher specialist training in public health and preventive medicine.⁶

The USA has taken a different approach to reflect both the very diverse public health workforce that is engaged in public health work at the County, State and National level and the functioning of their complex health services arrangements. The USA approach is similar to the Canadian in that are eight overarching domains of competency identified (Box 3) and then these are each expanded further to identify the skills required in order to be competent in each of the domains. However, due to the desire to cover the full range of staff working in public health roles, for each domain the competencies are split into three tiers. Tier three represents competencies applicable to public health professionals at a senior management level and to leaders of public health organisations. They thus seem to be the equivalent of highly trained public health doctors in other countries. The USA list of individual competencies for this senior group stretches to 92 in total.

⁵ Core Competencies for Public Health in Canada: Release 1.0. Public Health Agency of Canada, 2007.

⁶ Royal College of Physicians and Surgeons of Canada. Objectives of Training in the Specialty of Public Health and Preventive Medicine. 2014.
<http://www.royalcollege.ca/cs/groups/public/documents/document/y2vk/mdaw/~edisp/tztest3rcpsced000887.pdf> (accessed 3 Sept 2017)

Box 3. Domains of Public Health Competencies in the USA

- 1) Analytical/Assessment Skills
- 2) Policy Development/Program Planning Skills
- 3) Communication Skills
- 4) Cultural Competency Skills
- 5) Community Dimensions of Practice Skills
- 6) Public Health Sciences Skills
- 7) Financial Planning and Management Skills
- 8) Leadership and Systems Thinking Skills

The Faculty of Public Health of the Colleges of Physicians in the UK (FPHUK) identifies nine key areas in which competency must be demonstrated in order to complete the training programme for the public health specialty (Box 4). It also adds a further key area which deals with the ability of the practitioner to properly integrate and apply the competencies at a senior level of public health practise. The available documentation from the FPHUK spells out these competencies in detail and includes both the expected learning outcomes in relation to the components of each key areas and provides guidance on how the competency should be assessed.⁷

Box 4. Key areas of public health competencies in the UK

- 1) Use of public health intelligence to survey and assess a population's health and wellbeing.
- 2) Assessing the evidence of effectiveness of interventions, programmes and services intended to improve health or wellbeing of individuals or populations.
- 3) Policy and strategy development and implementation.
- 4) Strategic leadership and collaborative working for health.
- 5) Health promotion, determinants of health and health communication.
- 6) Health protection.
- 7) Health and care public health.
- 8) Academic public health.
- 9) Professional personal and ethical development.
- 10) Integration and application of competences for consultant practice.

A similar approach is taken in New Zealand where the guide for public health medicine specialists and trainees lists 116 competencies in the New Zealand College of Public Health Medicine (NZCPHM) competency document.⁸ This long list of competencies is organised into 15 separate areas, grouped under five broad themes. Again, in Australia there has been extensive work on the competency based approach within six domains and the Australasian Faculty of Public Health Medicine of the Royal Australasian College of Physicians has developed learning objectives that aim to cover the required competency.⁹

⁷ Public Health Specialty Training Curriculum 2015. Faculty of Public Health UK.
http://www.fph.org.uk/uploads/PH%20Curriculum%202015_approved.pdf

⁸ Public Health Medicine Competencies: A list and guide for Public Health Medicine Specialists. New Zealand College of Public Health Medicine.
http://www.nzcphm.org.nz/media/60282/2013_03_reformatted_nzcphm_competencies_for_fellows_cpd_review.pdf

⁹ Public Health Medicine Advanced Training Curriculum. Australasian Faculty of Public Health Medicine.
<https://www.racp.edu.au/docs/default-source/default-document-library/at-afphm-public-health-medicine-advanced-training-curriculum.pdf?sfvrsn=2>

In Ireland, the guidance on Higher Professional Training in public health medicine states that, during training SpRs must acquire certain core competencies that are essential for good medical practice and are applicable to all doctors undertaking higher specialist training in medical specialties. In respect of public health medicine the guidance states that on completion of training public health physicians will possess public health orientated competencies that span at least twelve identified areas (Box 5).¹⁰ The training programme requires completion of a competency log and the key areas of competency are broken down into sections on 'knowledge' 'skills' and, 'assessment and learning method'.

Box 5. The twelve identified areas of public health competency in Ireland

- 1) Medical knowledge in the basic biomedical, behavioural and clinical sciences, medical ethics and medical jurisprudence and application of such knowledge in patient and population care.
- 2) Knowledge of Public Health and health policy issues: awareness and responsiveness in the larger context of the Irish health care system, including the organisation of health care, partnership with health care providers and managers, the practice of cost-effective health care, health economics and resource allocations.
- 3) Ability to support analysis of and improve health intelligence.
- 4) Ability to understand the health reforms such as 'Healthy Ireland' and 'Towards 2026' and efforts to prioritise health and prevention of disease rather than a focus on illness.
- 5) Ability to understand health care, and identify and plan system-based improvement of care.
- 6) Interpersonal and communication skills that ensure effective information exchange with individual patients, their families, communities and non-governmental agencies and teamwork with other health professionals, the scientific community and the public.
- 7) Ability to appraise and utilise new scientific knowledge to update and continuously improve clinical practice and support policy development.
- 8) The ability to function as a supervisor, trainer and teacher in relation to colleagues, medical students and other health professionals.
- 9) Professionalism.
- 10) Ability in risk assessment, risk communication and risk management.
- 11) Capability to be a scholar, contributing to development and research in the field of Public Health Medicine.
- 12) Advocacy for the promotion and protection of the health of the population.

The competency approach to public health is seen as important within the development of public health training across Europe.¹¹ But the public health systems and staffing vary enormously across Europe and training and education is frequently seen purely in the context of academic based postgraduate education. The countries mentioned specifically above do however have structured public health systems that are comparable with the Irish system.

It is clear that internationally public health professional organisations take the issue of competency seriously and that the approach of developing competency frameworks is well

¹⁰ Higher Specialist Training in Public Health Medicine Version 6.0 (2016), Faculty of Public Health Medicine, Royal College of Physicians of Ireland.

¹¹ Bjegovic-Mikanovic, Vesna, et al. "Addressing needs in the public health workforce in Europe." *European Observatory on Health Systems and Policies. Copenhagen: WHO-EURO* (2014)

established. The list of competencies identified as important in public health training in Ireland is in keeping with other major countries with similar approaches to provision of public health functions. It is clear from the publicly available documentation that the Irish approach to competency-based training is entirely comparable to other major countries.

4.4 Training Programmes in Public Health

4.4.1 Public Health Higher Specialist Training Summary

The shaping, implementation and effectiveness of the full range of public health functions are achieved through its workforce; the integrity of its proactive and reactive strength depends on their correct skilling, placement and context within health and non-health systems. Countries undertake public health training in a variety of forms.

Australia and New Zealand, Ireland, Scotland, England, Wales and Northern Ireland run postgraduate medical training programmes^{12 13 14}, varying in their length of training (see Table 1) but heavily influenced and overseen by professional bodies in the form of medical Colleges or their Faculties. By comparison, the American system operates with a postgraduate degree system for entry to the profession in general, with a limited duration specialty training approach available to medically qualified applicants.¹⁵ Individuals are then dominantly working within the structures and professions of the Public Health Corps¹⁶, Centres for Disease Control or at state and local level within public health departments. Similarly, in Canada academic institutions provide training programmes in public health mainly at Masters level but including doctorate programmes. Physicians undertaking public health training complete a five-year programme overseen by the Royal College of Physicians and Surgeons of Canada.¹⁷

4.4.2 Composition of Specialist Training

Taking the subset of countries who undertake postgraduate advanced training led or overseen by Colleges/Faculties, analysis of curriculum^{18 19 20} content indicates that Ireland is

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- ¹² Physician Readiness for Expert Practice, Advanced Training in Public Health Medicine, 2017-18 Program Requirements Handbook (2017) Australasian Faculty of Public Health Medicine.
- ¹³ Public Health Speciality Training– ST1 Applicant Guidance 2017 (2016) Faculty of Public Health UK.
- ¹⁴ Higher Specialist Training in Public Health Medicine, Version 6.0 (2016) Faculty of Public Health Medicine, Royal College of Physicians of Ireland.
- ¹⁵ Loh, L.C. and Peik, S.M., 2012. Public health physician specialty training in Canada and the United States. *Academic Medicine*, 87(7), pp.904-911.
- ¹⁶ Civil Service vs Commissioned Career Path, CDC Website, <https://jobs.cdc.gov/medical-officers> accessed 13.01.17
- ¹⁷ <https://www.canada.ca/en/public-health/services/public-health-practice/plan-your-career-public-health.html> Accessed 31.08.17
- ¹⁸ Public Health Speciality Training Curriculum 2015 (2006) Faculty of Public Health UK. http://www.fph.org.uk/uploads/PH%20Curriculum%202015_approved.pdf Accessed 13.01.17
- ¹⁹ Physician Readiness for Expert Practice (PREP) Training Programme, Public Health Medicine Advanced Training Curriculum (2013) Royal Australasian College of Physicians <https://www.racp.edu.au/docs/default-source/default-document-library/at-afphm-public-health-medicine-advanced-training-curriculum.pdf?sfvrsn=0&destination=%2flaunchpads%2fhandbook-launchpad> Accessed 13.01.17
- ²⁰ Higher Specialist Training in Public Health Medicine Version 6.0 (2016), Faculty of Public Health Medicine, Royal College of Physicians of Ireland

comparable in the proportions of curriculum content attributed to epidemiology, public health research, health protection and health promotion. The proportion of curriculum taken up by advanced training in health services and clinical areas is much higher than in the United Kingdom, Australia and New Zealand, likely attributable to the proportion of time spent in training fulfilling the three report criteria.

The proportion of training spent in an academic setting is not mandated in Australia and New Zealand. In the United Kingdom, a period of academic training is defined by deanery on a one to one basis, the period being from 1-24 months. In Ireland training in an academic setting is desirable but not required and can contribute up to 12 months of training.

4.4.3 *Employment Terms*

In comparator countries, public health physicians were within contracts generally commensurate with other medical specialties. The variety of employing organisations was however wide: a healthcare organisation, national body, or state /county for America; by healthcare organisation or public health body at local, regional, provincial, or federal level for Canada; by State or healthcare organisation in Australia and New Zealand; by local government or single healthcare organisation in the United Kingdom.

Table 1: International public health physician training

	Australia and New Zealand	Ireland	Scotland, England, Wales, Northern Ireland	United States of America	Canada
Recognised Supervisory Body or Bodies for Training	Australasian Faculty of Public Health Medicine; New Zealand College of Public Health Medicine	Royal College of Physicians of Ireland Faculty of Public Health Medicine	UK Faculty of Public Health	American Board of Preventive Medicine; Accreditation Council for Graduate Medical Education	Royal College of Physicians and Surgeons of Canada
Medical qualification required	Yes	Yes	No	Yes	Yes
Prerequisites	Current General Medical Registration	Fully registered medical doctors with two years' approved BST including CCBST where appropriate, and exceptional cases considered on a case by case basis	Two years postgraduate medical experience, 12 months' experience after achieving full GMC registration or equivalent; or 60 months experience at AfC NHS Band 6	Holding an appropriate medical degree and passing the United States Medical Licensing Examination	Medical Degree
Length of training	Australia 36-month minimum requirement (following two years' basic medical experience). New Zealand 43 months	4 years	4 years minimum, average 5 years	1-year clinical internship 2 years of graduate study and practicum experiences	5 year Royal College residency programme in Community Medicine (first 2 years are commonly in family practice clinical training)

	Australia and New Zealand	Ireland	Scotland, England, Wales, Northern Ireland	United States of America	Canada
Joint accreditation	Distinct training programme, no indication of joint accreditation		Dual accreditation not yet in place but may be negotiated on an individual basis	Including another specialty within a Preventive Medicine residency is becoming more common in the in USA. Often occupational medicine (which overlaps with public health) or primary care	May be accredited in family practice after first 2 years.
On-call for Health Protection	All trainees and trained individuals part of formal surge capacity for communicable disease outbreaks.	SpRs must participate in the on-call rota during Phase 1 and Phase 2 of training	Those in work placements with a response involved at employer's discretion.	The federal uniformed corps is deployable at all times.	Rotations, including communicable disease agreed within training programmes.

On call provisions are also varied, from inclusion within contractual standard hours, derogating from employment provisions at the national and supra national level where necessary, or as additional work with specific provisions and remuneration. Pay was at similar mean levels in comparable countries^{21 22 23 24} (Table 2). These pay rate comparisons are of course affected by exchange rate fluctuation.

Table 2: Pay comparators

	Australia and New Zealand	Ireland	Scotland, England, Wales, Northern Ireland
Salary range during training	Intern L1-L9 Indicative €51,514 -€85,856 [§] § Scales differing by State.	Intern Scale to top point - Specialist Registrar in Public Health Medicine €31,938 - €69,491	Specialty Registrar €36,461 to €51,645
Typical salary range when taking up career post-training	Medical Officer Pay Scale Indicative €104,068 [§] § Scales differing by State.	Specialist in Public Health Medicine €102,887 Director of Public Health salary €119,067 in January 2016 pay scales	Consultant starting point: €85,793. Reaching €115,667 after 19 years. Directors of Public Health receive a supplement of up to €15k. Medical staff are also eligible for Clinical Excellence Awards which may increase salary significantly.
Standardised pay and settlement	Within medical pay scales, settlements, T&C of medics within each State.	Outside standard consultant contract, bespoke contract, bespoke pay scales and bespoke pay reviews.	Standard revisions to Consultant Contract, pay scales and pay reviews.

Ireland would appear to differ significantly from some comparator countries in not having a standardised pay settlement or harmonisation of consultant contracts with other specialists. Australia and New Zealand place public health physicians within medical pay scales, with terms and conditions of physicians set by state. The United Kingdom places public health physicians within medical pay scales, consultant contracts having pay scales and pay reviews applicable to them.

Non-harmonisation of contracts between physicians as part of routine practice has meant that divergence of the specialisms' modernisation or employment considerations can occur within the Irish employment terms for public health physicians.

Comparator countries differ in the title used for public health physicians. America's Federal public health service operates public health within a military corps and therefore titles are

²¹ Health Medical Stream Wage Rates (2017), https://www.health.qld.gov.au/hrpolicies/wage_rates/medical, accessed 24.01.17

²² Pay circular for medical and dental staff – Pay and conditions circular (M&D) 1/2016 (2016) NHS Employers

²³ Health Sector Consolidated Salary Scales in Accordance with Clause 5.1 of the Lansdowne Road Agreement (2016) Health Service Executive.

²⁴ HSE HR Circular 024/2014 Salary Scales to Apply to NCHDs on streamlined specialist Training Schemes (2014) Health Service Executive.

related to commissioned officer ranks. In other agencies, state or local settings there is a wide range of employment practices and requirements in order to hold posts. Australia and New Zealand use the title Specialist in Public Health post-qualification, applicable to all Medical Officers with the specialism. Public health physicians in Ireland to date have had the title Specialist in Public Health Medicine. In the United Kingdom, senior doctors working in public health were titled, since 1973, 'Specialist in Community Medicine'. The nomenclature subsequently changed with senior physicians being renamed Consultant in Public Health Medicine following the implementation of the Acheson Report in the late 1980's.²⁵ With the advent of non-medical Consultants being appointed, the standard title is now usually Consultant in Public Health.

Senior public health physicians in leadership roles have a variety of titles depending on the history and structure of the system. For example, the Medical Officer of Health title is still in use in New Zealand whilst Director of Public Health is usual in Ireland and the UK. In the UK Directors of Public Health receive a salary supplement.

4.4.4 Continuing Professional Development

System strength in public health is in part attributable to the maintenance of skills, medical mentoring and learning and development conducted post-qualification in continuing professional development. A secondary impact is on the status and value of public health physicians to other specialties and professionals, where esteem is increased by ongoing skills and knowledge training.

The Canadian and American systems provide for ongoing workplace-based training after their standard advanced training requirements through workplace-based programmes for continuing professional development. Solely basic medical revalidation and licencing exist in a common form, beyond this it is the respective public health bodies that lead and require ongoing skills and knowledge training for the specialist workforce. In Canada specialists in Public Health and Preventive Medicine participate in the CPD programmes of the Royal College of Physicians and Surgeons of Canada.

The English, Scottish, Northern Irish, Australian and New Zealand approaches place public health physicians within medical continuing professional development systems. This is a consolidated approach with an ease of inter-specialism information sharing on best practice and standards for workforce development. There is parity between different medical specialisms' continuing professional development. In the UK in particular, there is now a requirement for all public health physicians to undergo regular revalidation in public health by the General Medical Council in order to remain in active practice.

The composition of a specialist faculty within the Irish system medical college system is standard internationally, as is the breadth and reach of the Faculty's activities. The setting of curricula and training standards for accreditation within the specialty is undertaken as part of the Royal College of Physicians of Ireland (RCPI) system. However, the further development of knowledge and skills for public health physicians once advanced training is completed is fundamentally a matter for the individual and employer. The Faculty of Public Health Medicine

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Grande-Bretagne. Committee of Inquiry into the Future Development of the Public Health Function. *Public health in England: the report of the Committee of Inquiry into the Future Development of the Public Health Function*. HM Stationery Office, 1988.

does however organise one of the six Professional Competence Schemes provided by the RCPI for doctors on the Specialist Division of the Medical Council Register.

4.5 Direction of the Specialty

4.5.1 Preamble

A variety of important factors have stressed the importance, and increased the level of consideration of the role of public health specialist workforces internationally.

4.5.2 Financial and Cost Effectiveness

Medical specialties, alongside many civil functions, are being placed under differing and greater financial pressures and investment pressures. Within this context, the development of the public health practitioner level of non-medical staff trained in a single function (such as infectious disease control or outbreak investigation) and advanced training for other non-medically qualified staff groups in health promotion functions have increased dramatically. This not only addresses the shortage of medical graduates in many countries but can also reduce total staffing costs for the public health function. The development of a multidisciplinary public health workforce, with staff focused on key functions whilst also working together collaboratively, also opens up a greater level of opportunity for more effective impact analysis, evidence-based practice, formal needs assessment and other approaches.²⁶

4.5.3 The Role of the Specialist

Most jurisdictions have sought to utilise the specialist workforce in the area of leadership across single or multiple areas of the public health system including planning, change management and advocacy, but supported by individuals working for them in multidisciplinary groups of more junior staff. This has been a direction of travel driven by maximising the value returned for the advanced speciality knowledge and training. It has sometimes been accompanied by consolidation of teams across wider geographical areas.

This move is to preserve those with advanced specialist medical training skills in public health for strategic and wider-ranging roles. The norm is increasingly to have mixed-skill teams operate fulfilling single geographical area public health remits, led by public health physicians. The move of location of elements of the public health function to local government in England²⁷ has replicated this context with low numbers of physicians and teams of individuals with various skills tasked with responsibility for a population.

Accompanying this change has been a recognition that addressing the social determinants of health and ill-health requires a public health function that is capable of operating across civil society in key areas of planning, housing, employment, transport etc. at local regional and national levels. This requires those in public health leadership roles to take on new responsibilities and become active in interacting at senior levels in a wide range of bodies.

²⁶ We note that these aspects of international practice are in line with the proposals set out for Ireland in the 2017 Sláintecare report.

²⁷ Health and Social Care Act 2012 (2012), TSO, United Kingdom.

4.5.4 Workforce Development

As with other specialities in medicine, there has been a global shift in workforce behaviours and potential related to online information, learning, and the broader impact of technology. Many areas globally have utilised the accessibility of information and knowledge resources to increase public health physician access to evidence and public health databases as a means of workforce development of skills and practice.

Public health physicians' abilities and adoption of technology are investments that can be made to increase involvement, mutuality and understanding of academic public health. These skills additionally enable remote collaborations and can permit senior staff to take on limited national level functions and tasks from non-central locations. Similarly, inter-country information, training, networks and joint work are widely appreciated to enhance individual capacity and system strength and response to public health events. Workforce development through international exchange, placements, country representation on public health topics and boards, is synergistic with building best practice and strong and positive use of regional and global leadership.

International jurisdictions are also utilising cross-disciplinary, organisational and corporate best practice learning to tackle the common workforce issues related to specialist workforces, applying learning about careers and modern workforce facilitation methods to drive recruitment, retention, development, and productivity.

4.5.5 Non-Medical Specialists in Public Health

Traditionally the senior public health posts in many countries have been open only to medical graduates who have completed higher specialist training in public health. Some countries, however, have taken different approaches. In the USA the public health workforce and its leadership is drawn from a wide range of backgrounds, although there is a medical speciality of public health and general preventive medicine. In the UK training programmes in public health have been open to suitably qualified individuals without a medical qualification and a significant number of consultant in public health posts and Director of Public Health posts are occupied by individuals without a medical qualification.

4.6 Summary

It is clear that the structure and organisation of higher specialty training in public health medicine in Ireland is on a par with higher specialty training programs in other medical specialties.

There are very few systematic analyses of the composition, training and functioning of the public health workforce across countries. However, despite the disparity of availability of timely and comprehensive information available across countries, it is possible to draw some conclusions from comparing the position of public health training and practice in Ireland with that operating in countries which have some comparable features.

The training programme operated in Ireland is at the upper end of the spectrum in terms of its organisation and management, competencies, duration, and content. There are, however, elements from other programmes which might further strengthen public health in Ireland. The development of joint training programmes with other relevant medical specialties, such as

general practice, paediatrics and occupational medicine would be one such innovation. Expanding the range of attachments available for those training in the specialty might further enhance its attractiveness and aid the development of SpRs. Examples such as the opportunity for attachments to international organisations such as WHO, World Bank and international development agencies could usefully be explored.

5 Survey Findings

5.1 Overview

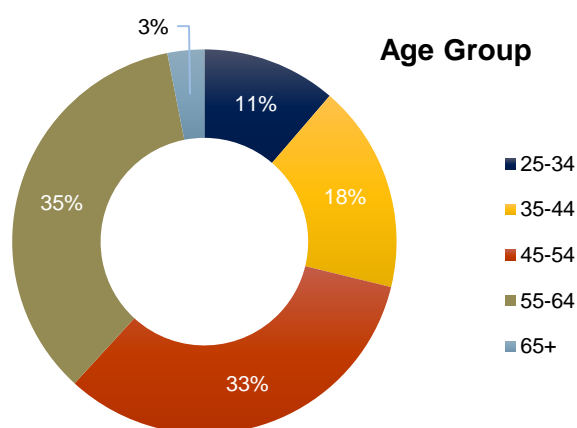
As mentioned in Section 1, a survey of public health physicians was a fundamental element in the consultation process for this review. The survey was designed with input from the Department and the Expert Reference Group and was built in LimeSurvey, an online survey tool. In order to reach as many of the target participants as possible, emails were sent to those working within the HSE (whose work emails could be used for such a purpose), and the Faculty of Public Health Medicine within the RCPI disseminated an invitation to its members to contact Crowe Horwath for access to the survey. Faculty contact details could not be directly passed to Crowe Horwath under data protection legislation.

The survey ran for approximately four weeks. 90 fully-completed responses were submitted, with a further 17 incomplete responses available. On review, a number of the latter were substantially complete so their responses have been included, giving a total of 97 for the purposes of the analysis.

More details on the survey responses, including the numbers of respondents for each question, is contained in Appendix 1. Percentages below relate to the percentage of participants who responded to the relevant question.

5.2 Profile of Respondents

The age of respondents is illustrated in the chart below. A small number (3%; n=3) are in the over-65 age group, with 35% (n=34) aged between 55-64; 33% (n=32) between 45-54; 18% (n=17) 35-44; and 11% (n=11) 25-34.



The majority (76%; n=71) of the 94 respondents who indicated their gender were female.

As noted in Section 1, we asked respondents to indicate their current status in respect of public health medicine: the majority of responses (64%; n=62) indicated that they were currently practising as Specialists in Public Health Medicine. A further 21% (n=20) were on the Higher Specialist Training Scheme as SpRs. 8% (n=8) were either retired from public

health medicine or practising in other jurisdictions, and 7% (n=7) indicated they had “other” roles, such as management or national roles.

73% (n=60 of 82 respondents) of respondents worked full-time, with the remainder working part-time.

Section 2 of this report outlines some of the survey responses in terms of location and organisations: 48% (n=39) were based in Dublin with others distributed across the different regions. The majority (62%; n=50) of respondents worked within HSE public health departments, with the remainder based in a variety of organisations as set out in the table in Section 2.3.

Respondents had been working in public health medicine for an average of 17 years, ranging from 1 year to 35 years’ experience in the specialty. On average, respondents had been in their current role for 7 years, with a wide range from 0 years to 21 years for this.

5.3 Current Role and Responsibilities

5.3.1 Duties and Responsibilities

As discussed in Section 2.4, the survey findings indicate that respondents are undertaking duties and responsibilities across all of the domains of public health, but with wide variations in relation to the balance between domains, with a strong emphasis on health protection as the area taking up the most time for public health physicians.

Most respondents (79%; n=61) feel that their duties and responsibilities are clear; however, 54% state that their contract or job description adequately captures the duties and responsibilities of the role they are performing. Approximately one-third (34%; n=27) stated that they did not have an annual work plan, and a similar number (32%; n=25) that they did not have explicit goals and objectives.

5.3.2 Empowerment to Carry Out Remit

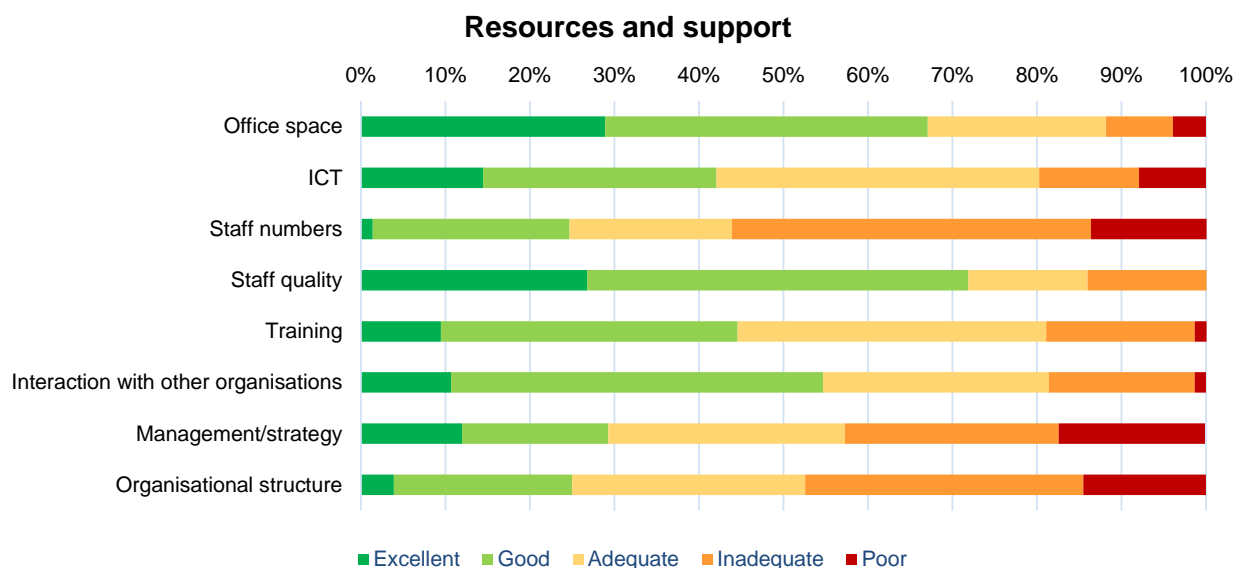
We asked respondents if they felt empowered to carry out their remit as public health physicians. Whilst nearly half (45%; n=44) felt empowered in relation to their remit within health protection, only much smaller numbers of respondents (17-22%; n=16-21) felt empowered in relation to health promotion, health service provision, or leadership of population health. Reasons given in relation to why this is the case include:

- a lack of clarity both within and outside the profession about the roles of public health physicians, in particular in areas outside health protection;
- a lack of integration into the management and power structures of the health system;
- lack of parity with other medical colleagues; absence of legislation underpinning the wider role of public health medicine;
- the “hiving off” of responsibility for health promotion, environmental health, etc., from the public health function, leading to further blurring of the distinctiveness of public health medicine;
- lack of resources, in particular for non-health protection activity;
- lack of capacity and/or ability to maintain skills when health protection dominates.

5.3.3 Resources and Support

Participants did not rate their overall levels of resources and support highly, with just 16% (n=12) indicating that they felt these were good or excellent, whilst 66% (n=50) felt these were inadequate or poor.

As can be seen in the chart below, some aspects of their resources and support, such as staff quality and office space, were rated broadly positively by respondents, whereas management and strategy, staff numbers, ICT, and organisational structure were less well rated.



Suggested improvements to public health physicians' workplaces include changes to ICT (such as clinical information systems); training; the filling of vacant posts; and recruitment of additional staff (in particular support roles and research staff). With reference specifically to organisation structures, many called for a clear national public health function with clear responsibilities, resources, and structures; other suggested improvements included better cohesion and integration of services.

5.3.4 Skills

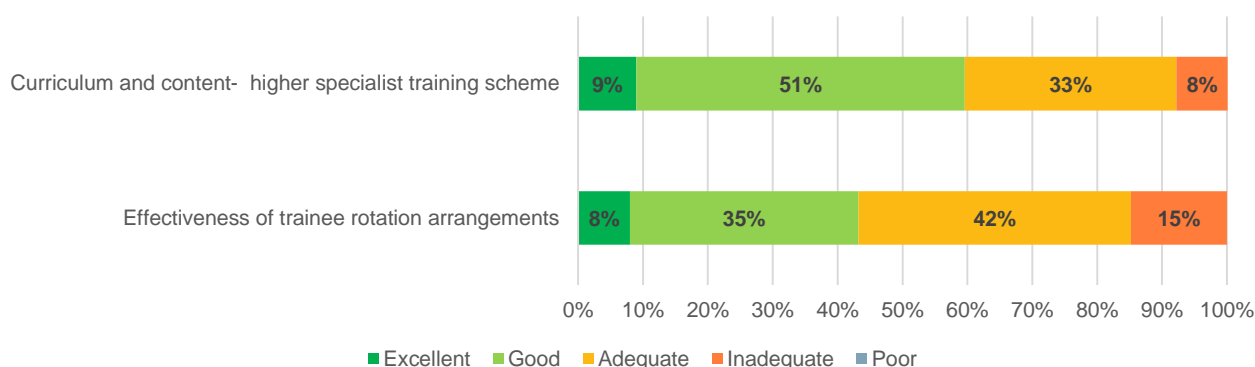
Respondents were asked to suggest the key skills required for public health physicians. A range of responses was received; most commonly-suggested skills included communications, epidemiology; leadership; and analytics.

Nearly three-quarters (74%; n=62) of respondents indicated that the public health medicine profession was deficient in some of these skills; most commonly suggested skills needing to be increased include leadership, communications, health economics, and management. Most respondents (90%; n=78) had confidence in their own professional practice, however.

5.4 Education and Training

5.4.1 Curriculum and Content of HST Scheme

We asked respondents to rate the curriculum and content of the Higher Specialist Training Scheme for public health medicine, as well as the effectiveness of the SpR training rotation arrangements. The responses were broadly positive, albeit that the majority rated these adequate or good rather than excellent. Very few rated them inadequate or poor, however, as can be seen from the chart below:



When asked if anything could or should be added to the curriculum, responses reflected the concerns relating to skills above, suggesting management, communication, and leadership should receive more attention.

5.4.2 Subspecialisation

A large majority (78%; n=69) of those responding indicated that there was merit in subspecialisation following on from the completion of specialist training. Respondents indicated that they felt that specialisation would allow for more development of key skills in specific areas, which is seen as difficult to achieve when “everyone is a generalist”. The speciality is seen as very broad currently, with a wide range of duties and associated skills and competencies required, with consequent opportunities for subspecialisation. It was also seen as a mechanism for career development in an otherwise “flat” career structure. However, some expressed concern that in a relatively small country and with the numbers working in public health medicine, significant subspecialisation may be impractical.

5.4.3 Linking to Other Specialties or Countries for Cross-Learning

We asked participants if they felt facilitated to link to other specialties for cross-learning, to which 59% (n=44) said yes; those who said no suggested that such opportunities were limited. A somewhat lower number of respondents (49%; n=37) indicated that they felt facilitated to link to other countries’ public health systems for cross-learning. Most respondents who commented stated that the reason for not feeling facilitated in this regard was a lack of funding or access to opportunities.

5.5 Careers in Public Health Medicine

5.5.1 Planning to Stay in Profession

Most respondents (88%; n=79) stated that they intend to remain within public health medicine in future. Of those few who indicated otherwise, a variety of reasons were given, including the desire to work in public health medicine but not in Ireland; the lack of a consultant contract; lack of opportunity to do work other than health protection; and a desire to work face-to-face with patients.

5.5.2 Career Advancement/Progression

When asked about career advancement prospects, respondents were negative: 45% (n=39) consider their prospects poor or very poor, with a further 25% (n=22) considering them average. 30% (n=26) rate them good or very good. The comments in respect of career progression suggest public health physicians see a lack of opportunity in relation to advancement given the relatively flat structures, with only eight Director positions nationally, these being lifetime appointments and therefore offering limited turnover. Several respondents also had a negative perception of the role of Director of Public Health, noting the managerial and administrative responsibilities involved.

There is also uncertainty about the availability of permanent roles for those who are on or have recently completed the Higher Specialist Training Scheme. Some respondents indicated that they were approaching retirement and that therefore their career was not going to develop further. The Dublin-centric nature of other opportunities at national level was a concern for some.

The lack of consultant status and associated pay scales was a barrier for many in terms of career progression. Many suggested that the perceived lack of recognition or valuing of the profession was an additional hurdle.

5.5.3 Status and Remuneration

Public health physicians indicated their strong dissatisfaction with the current contract (92% (n=77) were dissatisfied with current contracts) and remuneration (93% (n=84) were dissatisfied with current remuneration arrangements), and expressed the near-unanimous desire to see consultant status available to Specialists in Public Health Medicine, with 96% (n=86) of respondents indicating that this should be the case.

Comments indicated that the contracts should be similar to those offered to other physicians who have completed higher specialist training schemes, i.e. consultant contracts. Several respondents wished to see incremental points and grades within the contract. Some other comments include the desire to see the contract include changes to the out-of-hours services.

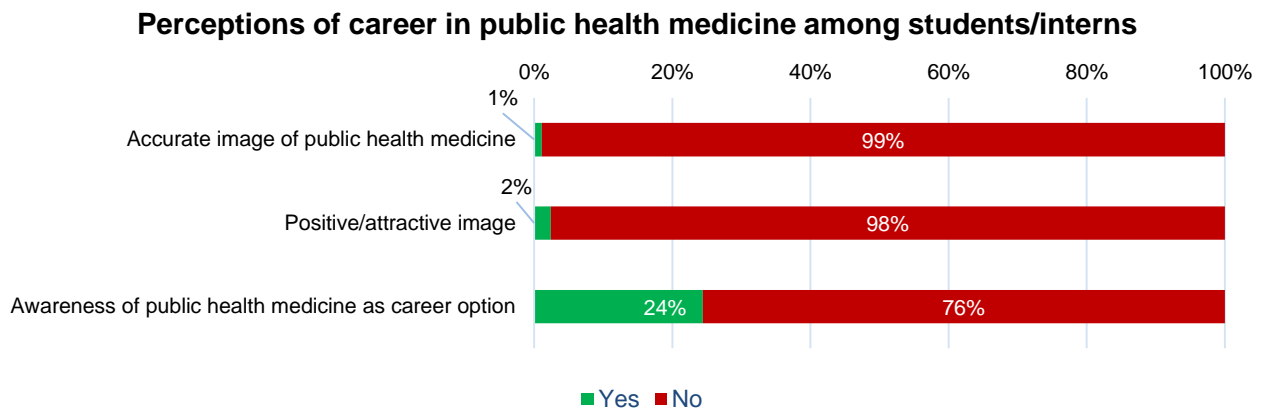
The bulk of the comments in relation to remuneration wished to see it brought into line with other medical specialties; however, it is important to note that many mentioned specifically that the status that would be forthcoming from an upgrade in title, from peers and the public, was as important as the remuneration.

5.5.4 Out of Hours On-Call Payments

Nearly all (96%; n=65) of the respondents were unhappy with the arrangements for out-of-hours on-call payments. Many noted that on-call duties were introduced as an interim measure and were not part of a contract but have remained in place. Most of those who commented indicated that the remuneration for out-of-hours on-call duties was a key reason for their dissatisfaction: it is perceived by respondents to be very low for the time commitment involved, and/or when compared to arrangements in other medical specialities or services.

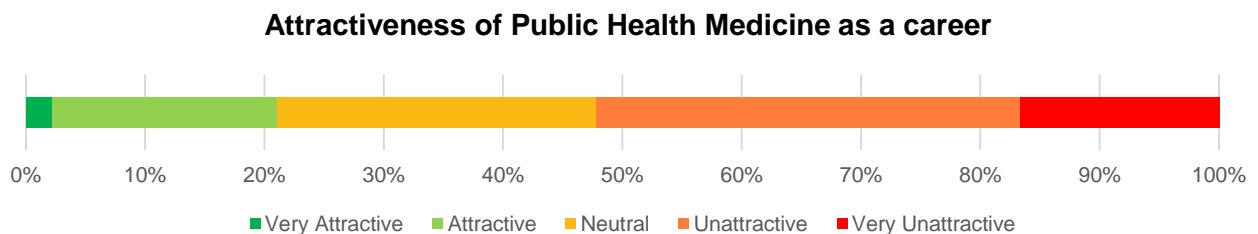
5.5.5 Perceptions of Careers in Public Medicine

We asked respondents to consider what perception of careers in public health medicine is held by those studying medicine or at intern stage. Participants consider this perception to be overwhelmingly negative, as can be seen from the chart below.



As illustrated above, 99% (n=88) of respondents believe that there is not an accurate image of public health medicine among medical students or interns, and 98% (n=82) believe that the image is not a positive or attractive one. A slightly smaller majority, 76% (n=62), believe that there is no awareness of public health medicine as a career option at all.

When asked about their own rating of how attractive a career in public health medicine is, more than half of respondents rated it unattractive or very unattractive, with only 21% (n=19) suggesting it is attractive or very attractive as a career.



Respondents were asked about the factors that attracted them to public health medicine. An interest in public health, the opportunity to undertake important work, and a desire to influence national health policy were key, whilst prestige was not considered a factor for many

respondents. Some commented that they sought a specialty that facilitated a work/life balance.

When asked how to improve the attractiveness of the profession, many respondents point to the contract, status, and remuneration as key factors, suggesting that these need to be on a par with other medical specialties in order to attract physicians to public health. Other suggestions include the creation of more joint academic appointments to enable public health physicians to undertake teaching, an overall increase in the “visibility” of the profession publicly, more exposure to public health medicine in undergraduate training, and improving the perception within the overall medical profession of the value of public health medicine.

5.6 Future of Public Health Medicine Practice in Ireland

5.6.1 Key Challenges

Respondents were asked about the key challenges in relation to public health medicine profession over the coming five years. Some looked to the public health challenges facing Ireland, such as obesity, ageing, and chronic disease, as key issues to be faced by public health physicians. Others focused on the issues within the profession and associated structures and operations.

Key challenges identified include the profile of the public health medical workforce, with a large cohort approaching retirement and consequent need for workforce and succession planning and recruitment. Obtaining consultant status is seen as a key challenge by many.

A number indicated that a challenge for the profession is “survival”, i.e. to maintain its identity and function within the health system. The structures, leadership, and management of public health medicine need addressing, according to many comments. Similarly, a challenge identified by some respondents is the change in the structures and delivery elsewhere in the HSE, and how public health medicine fits into (or does not align with) this reform.

5.6.2 Goals for Public Health Medicine

We asked respondents to consider what the key goals for the profession should be. Similar to the previous question, many considered this in light of public health outcomes, including reductions in obesity, smoking, and other harms, and influencing improvements in national health outcomes, whereas others focused on goals relating to the speciality itself.

In relation to the latter, key goals identified by respondents included a clearly defined and structured national public health function, a national strategy for public health medicine, consultant status to place the specialty on a par with others, addressing the succession and workforce challenges, and a clear role for the profession in relation to influencing national health policy and service improvement.

However, 80% (n=67) of respondents indicated that they felt the goals identified were not achievable under the current public health structures. Increased staff resources, an improved organisational structure, and recognition of the role of public health medicine at national and policy level were key changes needed to achieve goals, according to respondents.

5.6.3 *Barriers to Development of Public Health Medicine*

Respondents considered what barriers, if any, existed to the development of public health medicine. Principal issues cited echoed many issues already raised, including current structures, management, and leadership; the issue of consultant status and perceived lack of parity of esteem; the lack of recognition of the value of what public health physicians do and a perceived low profile for the profession, resulting in a lack of influence at policy level; and significant issues with staff morale and motivation arising from many of the foregoing issues.

6 Key Issues Arising from Our Analysis

6.1 External Stakeholder Submissions and Consultations

6.1.1 Overview

This section is not focused on any specific aspects of our terms of reference, but instead draws together the key issues emerging from stakeholder consultations and analysis conducted by our team.

As noted in Section 1.4 above, we engaged with a range of stakeholders during the course of this assignment, through a series of meetings and consideration of written submissions from stakeholder organisations. These were typically detailed documents which had been well-researched and which presented considerable depth of content in respect of the issues central to our terms of reference.

As agreed with the stakeholders concerned, the submissions we received have been included as appendices to this report.

It is not our intention in this document to provide a detailed summary of the points raised or proposals tabled by stakeholders during the consultation process or within their written submissions, nor do we intend to provide a line-by-line critique of the content of the submissions. Instead, this section of our report is intended to set out a broad synopsis of the main themes contained within the consultation process, focusing particularly on the areas where there is agreement or a shared perspective, and also on those aspects where differences of opinion may be observed.

6.1.2 A Shared View of the Ideal State of Public Health Medicine

It is noteworthy that there is a considerable degree of unanimity amongst stakeholders regarding the main components of an effective public health function. Several consultees referred to the European Regional Office of WHO's definition²⁸ of ten essential public health operations (EPHOs), centred "around three main areas of service delivery: Health Protection, Disease Prevention and Health Promotion" and "informed by robust public health intelligence and enhanced by enablers". These are very similar to the list of 11 Essential Public Health Functions identified by another region of WHO and listed earlier in this report. The ten EPHOs are:

- EPHO1: Surveillance of population health and wellbeing;
- EPHO2: Monitoring and response to health hazards and emergencies;
- EPHO3: Health protection including environmental occupational, food safety and others;
- EPHO4: Health Promotion including action to address social determinants and health inequity;
- EPHO5: Disease prevention, including early detection of illness;
- EPHO6: Assuring governance for health and wellbeing;

²⁸ <http://www.euro.who.int/en/health-topics/Health-systems/public-health-services/policy/the-10-essential-public-health-operations> - further details on each EPHO are provided by the WHO on its website at this location.

- EPHO7: Assuring a sufficient and competent public health workforce;
- EPHO8: Assuring sustainable organisational structures and financing;
- EPHO9: Advocacy communication and social mobilisation for health;
- EPH10: Advancing public health research to inform policy and practice.

Reference was also made by many stakeholders to the need for an integrated approach to the delivery of the ten components, rather than vertical programmes. In that context, it was pointed out that integrated public health agencies had been introduced in some jurisdictions, including England, Wales, Canada and Sweden, amongst others.

The wider contribution of public health was also stressed by several stakeholders; the Faculty of Public Health Medicine, for instance, stressed that a “strong public health medicine function should be an integral component of national health policy”, a point that was echoed by many others with whom we engaged. Within that context, a significant theme from many consultees was the need for a clear vision and strategic plan to be developed for the public health function; it was generally felt that such vision and strategy were lacking at present, and several stakeholders expressed the hope that this report might go some way towards meeting that requirement.

6.1.3 **Collective Submission – July 2017**

During the preparation of this report, we received a joint letter co-signed by representatives of the following:

- The Faculty of Public Health Medicine, RCPI;
- The Irish Medical Organisation;
- Directors of Departments of Public Health in Ireland;
- Public Health Medicine Early Career Network;
- Specialist Registrars in Public Health Medicine.

The co-signatories of this letter stressed their belief that “*there is strong agreement across organisations and groups representing public health physicians in Ireland that the Public Health service needs to be substantially strengthened, and that this service should consist of adequately resourced multi-disciplinary teams*”. They also emphasised their belief that “*a strategic plan and reformed structures are required*” to enable public health function to improve the health of the population in line with international standards. The letter stated the belief of the co-signatories that the following are required:

- a Public Health management structure “*consisting of a national Public Health centre and regional departments of Public Health, collaborating to maximise efficiency and value for money, and to provide a comprehensive, safe service*”;
- a “*national level team... for each of the domains of Public Health Medicine, i.e. health protection, health improvement, health service improvement and health intelligence*”;
- regional departments of Public Health which are “*resourced and empowered to deliver across all the domains of practice, addressing national strategic priorities, and working with CHOs and hospital groups, adjusted as appropriate to local circumstances*”;
- the granting of a contract to Specialists in Public Health Medicine which is common with that of consultants working in hospitals.

The above represents, at a very high level, the critical strategic points made by the co-signatories of the letter, but we recognise that each of the organisations concerned has made one or more separate, detailed submissions to Crowe Horwath as part of this review. We have considered this material in depth and, with the permission of the organisations concerned, we presented their submissions in full within the appendices of this report. Given the detail involved, covering a broad range of issues directly related to the role and function of public health physicians, we do not attempt in this report to provide a summary of the points made in these submissions, but we would instead encourage readers of this report to read the submissions and take their content into account when considering our independent analysis, conclusions and recommendations.

6.1.4 HSE Health and Wellbeing Submission – May 2017

A detailed submission was received from the National Director of Health and Wellbeing within the HSE in May 2017, setting out the HSE’s corporate view of how the public health function might best develop in the coming years.

The HSE submission places the public health function in context, referring to a programme of work being led by the National Director “*to develop a future operating model for all seven services within the Health and Wellbeing Division*”, of which Public Health is one. The document states that “*there is no consensus within Public Health leadership on a future operating model for public health services*”, and also states that “*the Directors of Public Health, in the main, have a strong view that current structures, priorities and ways of doing business are fit for purpose and do not merit any substantial change*”.

The document highlights the various strategic reforms ongoing within the HSE, including the organisational realignment which involves the creation of three new top management positions a Chief Strategy and Planning Officer, a Chief Operations Officer (both positions are now filled and will perform the functions of Deputy Directors General of the HSE), and a Chief Medical Officer / Medical Director (or similar – the position is as yet unconfirmed and unfilled).

(At the time of writing, the National Director of Health and Wellbeing’s reporting line has recently been changed and this area has now come under the responsibility of the Chief Strategy and Planning Officer.)

The submission from the National Director of Health and Wellbeing focuses on a number of key points, which we summarise below as they represent fundamental issues where change is required (as with the other stakeholder submissions, the full document is included in the appendices to this report):

- Public health medical expertise is needed for the national functions of population needs assessment, service specification and design, planning and commissioning health services as well as for national health protection functions. All national work has (or should have) direct local implications and its purpose is to influence and support local delivery. However, “*very often traditional local public health work has been ineffectual and/or inefficient as national frameworks are not in place to enable systematisation of approaches to deliver population health gain, even at local area level.*”
- Balancing the national functions at the centre of the HSE, local public health medical expertise is required for the delivery of effective health protection services, on a geographical basis – however, the “*governance and reporting structures would need to change*”.

- Recognising that 60% of Public Health Specialists / Directors intend to retire before 2025, and that there are “supply” difficulties in respect of new entrants into public health medicine, there is a need for *“the existing resource that is locally based in Departments of Public Health... to be re-focussed to deliver more effectively across priority areas – to deliver better value for money, to use our skills and expertise more efficiently and effectively and to make measurable impacts on a smaller number of priority areas. This will require a deployment of Public Health Specialist resources with specific and appropriate expertise from local Departments of Public Health to services led by the National Centre. This in time will be augmented by the recruitment of Specialists directly into these priority areas.”*
- The key areas of focus at national level, requiring public health medical expertise and leadership, should be:
 - Health Protection and Health Protection Surveillance
 - Health Service Design and Specification (Health Service Improvement)
 - Research and Health Intelligence
 - Healthy Ireland and Policy Priority Programmes.
- Regional public health departments should be realigned to new geographies – this would need to take into account the need for strengthening of the broader health protection infrastructure across all healthcare settings, including the role of GPs and other health professionals.

With regard to staffing requirements, the key points made by the HSE document include:

- National staffing levels for health protection, Health Protection Surveillance and National Immunisation are “reasonably adequate for the current level of service”
- Health Protection services need a stronger skill mix balance across teams (currently there is significant variability in skills mix across local Departments of Public Health) to both ensure and allow Public Health Specialists to work to their full potential. The full capability of the health services need to be leveraged when addressing the skills mix question. The role of GPs, hospital pharmacists, infection control nurses etc. need to be examined so that each professions’ contribution and role and responsibility is clearly articulated and agreed.
- Strong national leadership is also required to identify key priorities and align resources to support the work accordingly.
- Public health specialists and other multi-disciplinary staff will be required to support work on health service design and specification, to be led by the Medical Director of the HSE.

The submission notes that releasing public health specialists from their local duties to undertake national work has been “extremely challenging”, and also calls *inter alia* for modernisation of the current Out of Hours services, and for enhanced training in leadership competencies.

6.1.5 Department of Health Submission – June 2017

The submission from the Department of Health sets down the context within which public health medicine functions in Ireland, and in particular notes that, as highlighted in the 2017 Sláintecare report from the Oireachtas Committee on the Future of Healthcare, Ireland’s ageing population and the increasing prevalence of chronic diseases will require a strong reorientation away from the current emphasis on acute and episodic care towards prevention,

self-care, and primary care that is well coordinated and integrated. It notes the requirements for an appreciation of the wider forces impacting on health and the importance of health equity, for a commitment to continuous improvement of the quality of health services and the safeguarding of high standards of care, and in particular for clinical leadership to help shift the focus from the individual patient to the wider population.

In its submission, the Department “*recognises that it is these attributes that Public Health Physicians should bring – and be facilitated to bring - to the Irish health system*”, and notes its hope that this current review will “*detail the measures required to ensure that [the specialty] operates in an effective, sustainable manner into the future*”.

The Department also notes that the structures within which Public Health Physicians operate have largely been unchanged within the HSE, despite substantial reorganisation of other aspects of the health system. In particular, it is noted that “*there has been a lack of strategic direction for the specialty and it has failed to function as a coherent whole, with increasing tension between the demands of health protection and the other domains of Public Health Medicine, and between local and national priorities*”.

It is also noted that public health doctors have had limited involvement in health intelligence, health service improvement and health improvement, and that much of their work has been focused on health protection and on meeting legislative responsibilities with regard to communicable disease. The Department recognises that there is a “*lack of clarity regarding individual and unit roles and responsibilities*” and a “*lack of career progression opportunities for individual members of the specialty*”, which has resulted in a demotivated workforce.

The Department takes the view that “the specialty of Public Health Medicine should be reformed and strengthened such that the skills and expertise which are unique to Public Health Physicians can be leveraged to ensure maximum return for the Irish health service”. At a practical level, this will mean such features as:

- strengthening the function of health protection work at local level in terms of both reactive disease and outbreak control and proactive prevention work;
- creating more explicit linkages between surveillance activities and local control activities;
- having clarity around the strategic objectives, performance management and measurement of outputs and outcomes;
- reforming the out-of-hours service for health protection;
- changing the role of the Public Health Physician from that of a supporting role to that of leading transformation and the development of the health system, and leading greater integration of the health system with wider society.

6.2 SWOT Analysis

6.2.1 Preamble

The following paragraphs set out Crowe Horwath’s independent assessment of the strengths, weaknesses, opportunities and threats pertaining to the practice of public health medicine in Ireland; these issues are central to our analysis of the items included in the Department’s terms of reference for this assignment.

The following analysis is not intended to be exhaustive or to deal with every aspect of public health medicine; rather, it presents the most significant features requiring attention by the Department, the HSE, the Faculty and other relevant stakeholders as part of the consideration of this report.

6.2.2 *Strengths*

The following are the major strengths relating to public health medicine in Ireland at present:

- Highly-trained and experienced public health medical workforce whose members are passionate about their profession and its contribution to the health and wellbeing of the population;
- Significant contributions made by many Public Health Physicians to successful initiatives which have had a positive impact on the Irish health service, including Healthy Ireland, National Cancer Control and cancer screening programmes, initiatives in tobacco control, health technology assessment, improvements in quality and safety, and others;
- Despite concerns about the attractiveness of the profession and matters such as status and remuneration, there is a cohort of enthusiastic and committed younger public health doctors who are determined to maximise their contribution and extend the role of Public Health Physicians;
- Significant interest and commitment at the most senior levels of the Department of Health / Office of the CMO and the HSE to developing public health to its maximum potential.

6.2.3 *Weaknesses*

The key weaknesses include:

- Lack of a clear plan for the development of the public health workforce in Ireland – whilst much of the thinking expressed to Crowe Horwath by stakeholders during the consultation period was sound and recognised the potential for development and innovation, there is no single strategic document which articulates this thinking and to which all stakeholders are signed up. We note that there are a number of well-developed strategic initiatives in place with regard to public health, including those in the areas of obesity, smoking, exercise and the broad framework of Healthy Ireland – within that context, there is in our view a clear need for a detailed plan which can articulate how these initiatives can be successfully implemented, with particular reference to the delivery structures and workforce development approaches required to support them;
- Failure of many Public Health Physicians to move outside their current core area of health protection and to take on new responsibilities in areas such as health improvement, health service improvement and health intelligence;
- Lack of leadership within the profession, and clear differences between those public health physicians who see their profession as being predominantly focused on local health protection issues, and those who see it as needing to contribute more broadly at a national level;
- Lack of alignment with other HSE structures – public health at local level continues to operate within the pre-2005 health board structures and is somewhat disconnected from HSE national structures, with an overall lack of cohesion evident;
- Poor staff morale and a feeling of disconnectedness and/or being undervalued amongst many Public Health Physicians;

- Lack of clarity around roles and responsibilities of Public Health Physicians, both locally and nationally;
- Apparent imbalances and inconsistency regarding the structure of public health departments across the HSE – in some, the vast majority of staff report directly to the local Director of Public Health (creating an unnecessarily large span of control), whereas others have introduced local organisational structures more reflective of good management practice;
- Continued focus on the medical contribution to public health and failure to introduce greater degrees of multi-disciplinary training and working within public health, to include those from other professional backgrounds, such as nurses, allied health professionals, information scientists, health economists, planners, environmental health officers, and others;
- Low profile of specialty within the medical profession, within the HSE, within DoH, and in the public eye.

6.2.4 Opportunities

The key opportunities for public health medicine in Ireland include:

- Major public health challenges facing the health system (ageing, chronic disease, etc.) – create a significant opportunity for the public health medical profession to play a key role both in future health service planning and delivery and in involving the health system in cross-sectoral co-operation to improve health;
- Public Health Physicians can play an increasing part in planning and assisting delivery of acute care from within the hospital system – as is the case in a very small number of examples at present in Ireland;
- Potential for the development of a public health workforce drawn from non-medical backgrounds under medical leadership;
- Development of new corporate structures within the HSE will create significant opportunities for public health doctors working in areas such as health intelligence, service improvement and clinical strategy;
- Greater opportunities to work collaboratively with other agencies (local authorities, other State bodies, charities, etc.) on cross-sectoral projects to enhance the health of the population and to address public health challenges in areas such as housing and education.

6.2.5 Threats

Major threats to the public health medical function include the following:

- Loss of experienced staff who are likely to be attracted to practise in public health medicine in other jurisdictions;
- Difficulties in attracting new medical entrants into the profession due to actual or perceived lack of attractiveness around career structures, status, remuneration, and supports, and – for those new entrants who are attracted in – the challenge in keeping them enthused and developing attractive roles for them nationally and locally, unless the public health function as a whole can be modernised and brought into line with international best practice;

- Sub-optimal performance in some areas of public health, such as information science and health economics, because of inadequate specialists in non-medical areas;
- Large numbers due to retire in coming years, creating issues around succession planning, exacerbating the recruitment issues, and losing key experience and expertise.

7 Future Role of the Public Health Physician in Ireland

7.1 Overview

This section is designed to meet the following requirements set out within our terms of reference:

- *The future role of the public health physician in Ireland, in the context of the projected requirement for public health medical services, with consideration of any requirement for post-CSCST sub-specialisation, having regard to the planned review of these services, being led by the Director of Health and Wellbeing in the HSE*
- *The responsibilities of PHPs with respect to national and international legislative frameworks*
- *The responsibilities of PHPs with respect to national healthcare reform and the role of Public Health Medical services in relation to healthcare reform requirements*

Taking into account the issues examined within Section 6 above, we believe that there is a significant unity of thinking within the Irish health system regarding what public health physicians should do and how their contributions might be maximised. Where differences of opinion and emphasis occur, they tend to be around how the transition from the current state to the desired destination might be achieved, and around the resources and governance structures which might be in place post-reform. The status and remuneration of public health doctors is also a major feature of this debate.

Notwithstanding this unity of thinking, it would also appear that some public health physicians are more comfortable in focusing predominantly on health protection issues at the local level, and that the transition from the former health boards to the HSE in 2005 has not worked particularly well. In some parts of the country, the delivery of public health medical services has not changed markedly since the last review conducted by the present authors (as part of Capita) for the Public Health Review Group in 2000/01.

7.2 Sláintecare Report

The Sláintecare report produced in May 2017 by the Oireachtas Committee on the Future of Healthcare, whilst presenting a broad vision for the future of health service provision in Ireland and emphasising the importance of public health as a concept, does not refer to the future role of public health physicians or other healthcare professionals working in public health, with one exception – it points to the increasing contribution that GPs can make in this field:

*The current GP contract negotiations can facilitate new ways of working so that GPs are incentivised to carry out health promotion/public health work, disease prevention, delivery of integrated care and management of chronic diseases including mental health and multi-morbidities.*²⁹

29 Sláintecare report, p22. Oireachtas Committee on the Future of Healthcare, May 2017.

7.3 Need for a National Development Plan for the Public Health Workforce

We note that the Sláintecare report refers to the Healthy Ireland initiative as “Ireland’s public health strategy”, and that the subtitle on the front of the Healthy Ireland document refers to it as “A Framework for Improved Health and Wellbeing 2013 – 2025”. Our assessment is that whilst Healthy Ireland contains many excellent proposals and initiatives which are firmly in line with international best practice, it is more of a framework for improving public health and well-being rather than a detailed roadmap for the implementation of these various proposals and initiatives.

(We note that the Hospital Groups have published local plans for how they will implement Health Ireland within their services, and that the Community Healthcare Organisations are now following suit with similar plans due to be published in early 2018.)

Against that backdrop, what is needed now to support the Healthy Ireland initiative is a detailed plan for the development of the staff resources, skills, competencies and organisational infrastructure required to achieve successful implementation of the various Healthy Ireland initiatives. Currently, there is no plan for the development of the public health workforce in place within the HSE or the Department of Health, and whilst many of the documents which appear in the appendices of this report articulate very clearly a wide range of strategic considerations, no single coherent development plan exists.

Gaining consensus will be essential if public health is to move forward. We strongly recommend that the HSE, in conjunction with the Department of Health, should take the lead in developing a new national development plan for the public health workforce, including the following:

- Future priorities and objectives;
- Health service needs / current and future requirements;
- Opportunities for public health to maximise its professional impact:
 - National initiatives;
 - Local public health services;
 - Priority setting;
- Governance and structures;
- Collaboration with local authorities and other stakeholders;
- Professional development and workforce diversification;
- Key performance indicators and targets;
- Timescales.

Ultimately, this must be a public health workforce development plan for all, and should cover all parts of the Irish health care system and other key stakeholders such as local authorities. It should reflect the themes contained within Healthy Ireland and the development of the plan should involve inputs from a range of disciplines and organisations in order to build the necessary consensus.

All of this ties in quite neatly with the vision presented in the Sláintecare report, the implementation of which will greatly benefit from – and indeed require – considerable input from public health practitioners in areas such as ongoing population health needs assessment, health intelligence and health research supports, which will inform the

development of new evidence based models of care and the planning, implementation and ongoing evaluation of new service delivery models. The opportunities for public health doctors to make a very significant contribution to this transformative work are significant, and will require changes to roles, structures and ways of working as recommended in this report.

7.4 Structures and Governance

7.4.1 Design Parameters for Public Health Structures

Ultimately, decisions in relation to the organisational structures and governance arrangements pertaining to public health physicians are a matter for the HSE. However, as noted earlier within Section 6, the current structures in which public health doctors are employed at local level bear more similarity to the former Health Boards than to the present organisational arrangements within the HSE, and there is a lack of cohesion within public health medicine which needs to be addressed.

Our recommendation is that the HSE should develop a significantly (and possibly even radically) different organisational model for the delivery of public health services, in line with the proposed new public health strategy discussed above. Whilst we are not making prescriptive recommendations, we would strongly suggest that the new organisational model for public health should be built around a series of core concepts, as follows:

- A strong national Public Health function at the centre of the HSE which contributes effectively to major service design and policy implementation, to research and health intelligence activities, and to the achievement of the goals set out within the Healthy Ireland initiative - in all of these areas, public health physicians should be playing a significant and proactive role (i.e. drivers rather than passengers);
- National coordination of health protection and surveillance functions, including national leadership of major health protection crises and incidents;
- A strong network of regional public health professionals focused on local health protection issues, liaising closely with the national coordination centre;
- Above all, strong leadership is required within the profession at the national level, with regional public health managers reporting to the national leadership (see below).

7.4.2 Leadership within Public Health

The implementation of the national strategies to improve the public health of the population is dependent on having a committed, appropriately trained and skilled public health workforce operating within a clear plan for the public health system that will maximise its effectiveness across all areas of activity. The effective operation of the public health system will require that it develops a robust and systematic approach to performance monitoring and management.

Key to this will be the recruitment and development of a cadre of public health leaders who have the capacity to provide the impetus for a step change in how the system functions.

The development of management and leadership capability and calibre of public health professionals should be regarded as a priority for the system. It needs to be acknowledged that the leadership development needs of public health professionals differs significantly from doctors involved in clinical practice or in clinical management. The trans-sectoral nature of much of the public health action, and many of the programmes, that are required for the 21st

Century dictates that broader, including international, approaches to management and leadership development are needed in the realm of public health.

7.4.3 Workforce Diversity

A fundamental feature of this organisational model should be that it is not wholly dependent upon public health physicians, but should include a more diverse public health workforce which features doctors, nurses, planners, information scientists, health economists and other health and managerial professionals. We would expect that, in line with international practice, the majority of those within the public health function would be medically qualified, but a significant minority would come from other professional backgrounds but possess appropriate public health skills and competencies. Some project work would also involve non-medically qualified individuals from these fields being brought into the public health function for defined periods, for example through secondment.

The precise staffing breakdown, and the question of the ratio of public health doctors to other staff, would be a matter for the HSE to determine during the design of the new model, but this will also be influenced by the significant retirement rate for public health doctors in the coming 5 to 10 years and the capacity of the HSE to train new specialists in public health medicine. It is likely that any delay in recruiting and training new public health doctors will accelerate the need for other healthcare professionals to be introduced into this functional area, which in turn will create new challenges in respect of the design and delivery of appropriate training.

7.4.4 Hub and Spoke Model

The organisational model envisaged is a “hub and spoke” type, whereby the centre (the hub) fulfils a coordinating role, set standards and policies, provides leadership, and also centralises expertise in critical areas within the central location. The local areas (spokes) deliver more focused services which are specific to their local populations but which also draw from, and inform/contribute to, the national centre. The question arises as to how many spokes might be involved within the new organisational model for public health, and whilst this is fundamentally a matter for the HSE, we would suggest that a smaller number of regional locations would be preferable to the current arrangement, partly to ensure that resources can be concentrated in regional offices which possess critical mass, and partly to break away from the legacy of the former Health Boards.

One option for consideration by the HSE would be the development of regional public health spokes which are coterminous with two or three Community Health Organisations (CHOs), as this may have benefits in terms of the planning of geographically-based services and the contribution which public health professionals might make to community and primary care, whilst also facilitating the more active involvement in public health of primary care practitioners such as GPs, Public Health Nurses and other healthcare professionals who form part of the CHO.

Within this general context, we see the clear need for the public health function to work closely with other parts of the wider health care system, including Hospital Groups/Trusts, CHOs, general practitioners, and others. This would include the opportunity for public health physicians to undertake placements in other parts of the healthcare system, for example within acute hospitals, something which the international evidence suggests has been of benefit in other jurisdictions.

7.5 Future Scenario – A Day in the Life of a Director of Public Health

In order to illustrate what the future role of a senior public health physician in Ireland might look like if the changes recommended in this report were to be implemented, the following scenario shows what might be expected of a typical “day in the life” of a Director of Public Health within a new model of working. [This is intentionally presented as a scenario set some years into the future; it contains a number of elements which are very different from the current role of a Director of Public Health in Ireland.]

There were only two meetings in the diary of Dr Maguire for Thursday 11th March, 2021. They were a long postponed and much overdue meeting with the Chief Executive of the County Council to discuss housing and a range of other issues, and a routine catch-up with the senior public health staff to discuss current work progress and decide who was going to lead the writing of the annual public health report. The rest of the day was to be spent getting on top of the week’s accumulated emails and making some outstanding return phone calls. On top of that was an interview with the local radio station on health advice for students going off to university. The ever-varied mix of issues she dealt with was one of the things that made life as a Director of Public Health so interesting.

The new and dynamic County Manager had wasted no time in revitalising some of the Council functions and Dr Maguire was particularly keen to help in making their new planning strapline, “Developing Sustainable Communities”, a reality as far as the health of the population was concerned. She had been provided with a great briefing document by one of her senior staff who came from a planning background but was making a career in public health. She felt well equipped with evidence to show that healthy urban planning could bring real health benefits to the population and save money in the medium and long term. She was also keen to discuss how the emergency plan for a local festival was being developed, given that there was an intention to upscale the whole size of the event and attract very large numbers of young people for the three-day festival. Her public health colleagues had already expressed concern about the need for medical facilities to be made available at the festival site in the future.

After a successful meeting, in which the new County Manager had raised as an additional item how the public health team might work with his head of leisure services on a campaign to increase the use that children and young people were making of the Council’s parks and playgrounds, Dr Maguire headed off to the radio station. She preferred to do the interview live in the studio as it gave her a chance to have a quick word with the producer about some health issues that might make interesting content for future programmes. Then it was back to the office. Top of the list of calls was with the Medical Director of the local hospital who wanted to discuss some public health input into a needs assessment for a new cataract surgical service that they wanted to develop locally. Happily, one of the newly appointed consultants of public health in her department had specialised in services planning and clinical effectiveness. There was quick agreement on providing some public health input and Dr Maguire also took the opportunity of raising the possibility of the hospital taking the lead on a new initiative to raise breastfeeding rates, which were well under the desired level.

A string of telephone calls and email responses took up quite a bit of time but by the time the staff meeting started Dr Maguire was happy that everything was under control, although the call about illegal dumping of hazardous waste close to a drinking water abstraction point was going to need an urgent response. The staff meeting started with a quick discussion about who needed to be involved in the hazardous waste issue, and one of the public health physicians excused himself to go and deal with it. The meeting welcomed the two new consultant staff and noted that it was the first time that a consultant from a non-medical background had been appointed. It was hoped that her expertise in health economics added to her highly successful public health training, including a spell at WHO, would make her a very valuable addition to the team. It was also an opportunity to welcome back a long-standing consultant who had been on secondment to a national programme for the last nine months. The staff meeting ran through the agenda of current issues and gave particular attention to the latest quarterly performance figures on how public health programmes were doing in their area compared to the rest of the country. It was agreed that the new problems with amber traffic lights should be dealt with as a priority; particularly the slide in childhood immunisation rates and the problems with waiting times and accessing treatment for substance misuse.

The final part of the afternoon was, for Dr Maguire at least, the most pleasant and stimulating part of the day. The teaching session with the trainees in public health was something she took care to prepare for as they were renowned for asking difficult and challenging questions. The fact that there were two general practice trainees doing attachments to the Department at the moment only increased the importance of making it a valuable learning experience. By the time Dr Maguire had taken them through the range of scenarios she had carefully constructed, she had happily made her decision on who would be the best trainee to put to work with the County Council on planning for the health aspects of the bigger, better festival.

The above scenario is designed to reflect the main responsibilities which a typical Director of Public Health might expect to have within the new environment outlined in this report, and to depict the primary focus and strategic context of the role. It is not intended to represent every single duty which a Director of Public Health might perform, and it also assumes that Directors and other public health physicians would continue to adhere to national and international legislative frameworks. However, it assumes that the responsibilities of the Medical Officer of Health role as defined in the 1949 legislation would merely become part of a much broader remit and not remain as the primary focus, as it is for some at present; indeed, Directors and other public health physicians need to act within a much wider range of legislative provisions, and we are simply recommending the adoption of a more balanced approach which takes into account all dimensions of public health medicine, including health protection.

Within the above context, we note that the main elements of legislation under which public health physicians operate concern, for the most part, infectious diseases. The broader role of public health physicians and the task of preventing and dealing with infectious disease outbreaks have both developed substantially since the 1940s. The Department of Health may wish to give consideration to reviewing and updating the legislation under which public health physicians carry out their functions.

8 Future Higher Specialist Training Arrangements

8.1 Overview

This section is designed to meet the following requirements set out within our terms of reference:

- *The current and future curriculum and content of the specialist training scheme and associated arrangements to facilitate and develop training of PHPs with a recognised qualification that facilitates reciprocity internationally, who can avail of overseas post-CSCST fellowships and sub-specialty training, to bring additional expertise to the Public Health Medicine community in Ireland*

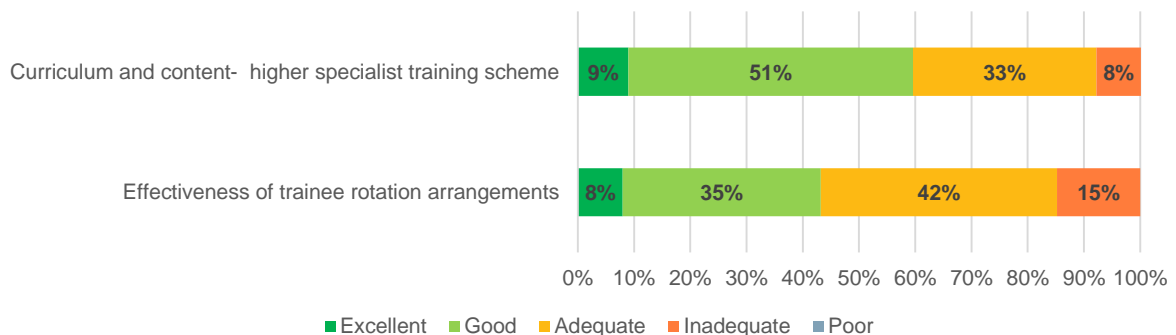
When considering the future higher specialist training arrangements for public health physicians, there are a number of key factors to be considered. One is the current HST arrangements, and our findings in relation to the effectiveness of these; another is the future needs of the profession in terms of the skills and expertise that will be required for the delivery of public health medicine into the future; and a third is the forecasted requirement for public health physicians in Ireland and the role of the higher specialist training scheme in meeting this need.

8.2 Current HST Scheme Considerations

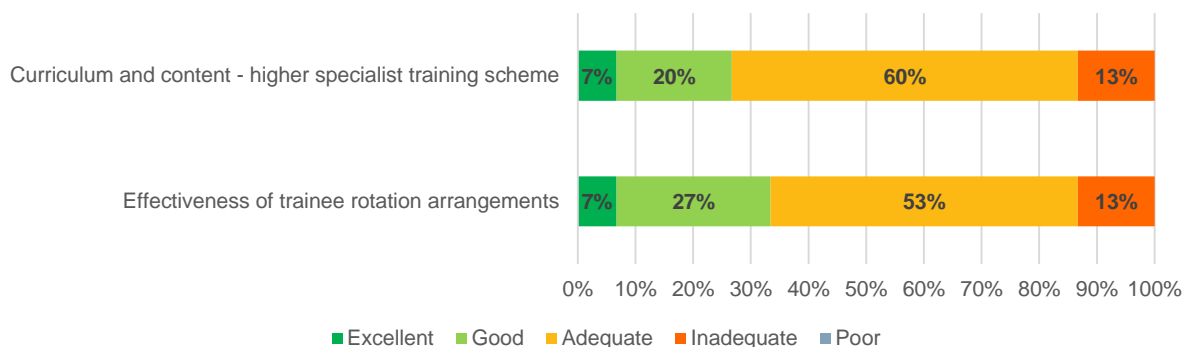
As has been set out in previous sections, the current HST scheme is approved by the Medical Council for admission to the specialist register, and is well-regarded by stakeholders. Our review has not identified any fundamental concerns about the content or structure of the higher specialist training scheme and would not propose substantive change on foot of such concerns.

It is apparent that there is general satisfaction among stakeholders with the curriculum and content of the HST scheme, and with the SpR training rotation arrangements. However, as illustrated in the charts below, those participating in the HST scheme are less likely to rate it as “good” or “excellent”, with the majority considering the curriculum and training arrangements to be “adequate”.

Overall rating by survey respondents of public health medicine higher specialist training scheme:



Rating by those in training of public health medicine higher specialist training scheme:



Whilst no respondents considered these aspects of the HST scheme to be “poor”, and few “inadequate”, it does appear that some consideration might be given to why those on the current HST scheme in particular do not rate it as highly as might be preferred.

Comments in the survey in relation to the HST scheme expressed a desire to see more emphasis placed on leadership, management, and communications skills development opportunities: this aligns with the vision for more developed leadership of public health medicine from within the profession and should be taken into consideration in future HST scheme development.

8.3 Skills and Expertise for Delivery of Public Health Medicine in the Future

This review has identified a potential to develop the profession of public health medicine further in Ireland, with the capacity to deliver more and have a greater impact on health outcomes.

As the profession’s role and function develops, the HST scheme will be required to ensure that it continues to deliver the development of the associated skills and competences for public health physicians. The scope and scale of this will depend on the pace of change and reform in relation to the role of public health medicine within the HSE and elsewhere in the health system.

Close ties should be maintained between the Faculty of Public Health Medicine, the Department of Health, the HSE, and other key stakeholders to ensure that the higher specialist training scheme remains relevant and equips the public health physicians of the future with the necessary skills and expertise to continue to deliver a high quality public health medicine service. This also includes the requirement for public health professionals to support the work of colleagues across the full spectrum of work undertaken by the HSE, and to maximise the impact of public health in areas such as health intelligence, service development, planning, and so forth.

8.4 Forecast Requirements for PHPs

As is set out elsewhere in the report, there is a substantial challenge facing the profession in the immediate future in relation to the imminent retirement of a large cohort of public health physicians. Almost 60% of current SPHMs are aged 55 or older, with nearly 30% aged 60 or

older. This creates the requirement to recruit considerable numbers into the profession within a relatively short timeframe. The requirement to recruit additional public health physicians to meet the needs of the profession is substantial even if no additional posts are approved to, for example, increase the public health medicine workforce to enable it to deliver on expanded or additional services. If such an expansion of the profession is envisaged, the recruitment needs become even more acute and pressing, and appropriate funding will need to be identified and supported by the Department of Health.

This presents a challenge to the higher specialist training scheme, which, although it had 28 participants in 2017, may have difficulty, at current rates, to fulfil all of the need for public health physicians as the impact of retirements becomes evident and any expansion of the role comes on stream. A review of the capacity of the HST scheme to train higher numbers will be required, to consider the availability of training placement opportunities (given the limited number of Departments of Public Health and any potential reform of structures); the number of training supervisors available, in particular as they themselves approach retirement; and other resources required to deliver the HST scheme to larger numbers of prospective public health medicine practitioners.

9 Developing the Public Health Medical Workforce

9.1 Overview

This section is designed to meet the following requirements set out within our terms of reference:

- *The future recruitment (including replacement) rates required to fill public health medical posts in order to ensure the viability and future development of the specialty and the specialist training scheme, in the context of the projected need for public health medical services.*
- *The status and attractiveness, including in respect of remuneration, of public health medicine as a career option.*
- *Measures to give PHPs the opportunity to follow a variety of career paths, work in diverse roles, including combining academic posts and expert HSE posts with their Specialist in Public Health Medicine post, similar to consultants in other specialties. PHPs should be facilitated to utilise their expertise, and enjoy a rewarding, challenging career with recognised career progression, and flexibility in work patterns.*
- *Measures to enhance the awareness of Public Health Medicine as a career option at undergraduate level and during the intern year Measures to give PHPs the opportunity to follow a variety of career paths, work in diverse roles, including combining academic posts and expert HSE posts with their Specialist in Public Health Medicine post, similar to consultants in other specialties. PHPs should be facilitated to utilise their expertise, and enjoy a rewarding, challenging career with recognised career progression, and flexibility in work patterns.*
- *Governance, organisational, resourcing, and relevant workforce issues including workforce requirement numbers, taking into account the projected need for Public Health Medical services, including international comparisons with Public Health services and functions in similar sized nations*

9.2 Future Workforce Requirements

9.2.1 Age Profile of the Current Public Health Medicine Workforce

Regardless of any potential to reform or expand the public health medicine workforce, a critical consideration for the public health function is the age profile of current public health physicians.

The table below is taken from current Medical Council registration data in respect of those on the Specialist Register in Public Health Medicine. It breaks down the age profile of the current workforce, as follows:

Age Cohort	Number of SPHMs	% of workforce
35-39	6	5.4%
40-44	10	9.0%
45-49	12	10.8%
50-54	18	16.2%
55-59	33	29.7%
60-64	22	19.8%
65-69	8	7.2%
70+	2	1.8%
Total	111	100.0%

As can be seen, 28.8% of SPHMs are aged 60 or over, with a further 29.7% aged 55 or over. This is compared to 25.2% who are under the age of 50. The average age of SPHMs is 54.7.

9.2.2 Forecast Requirements Arising from Retirement Rates

When we consider the impact in relation to the number of retirements that can be expected over the coming years, we have looked at this from the perspective of expected retirement ages ranging from 61 to 67.³⁰ These figures are based on the Medical Council specialist register data, with a total of 111 public health specialists currently registered. Whilst we cannot be certain whether all of these are currently practising in public health medicine in Ireland, the age profile and future retirements can still be usefully explored using this data.

Retirement	2018*	2019	2020	2021	2022	2023	2024	2025	2026	2027
At age 67	7	3	1	2	4	10	5	8	10	5
At age 66	10	1	2	4	10	5	8	10	5	5
At age 65	11	2	4	10	5	8	10	5	5	5
At age 64	13	4	10	5	8	10	5	5	5	2
At age 63	17	10	5	8	10	5	5	5	2	4
At age 62	27	5	8	10	5	5	5	2	4	2
At age 61	32	8	10	5	5	5	2	4	2	4

³⁰ We note that the State Pension (both contributory and non-contributory) is payable at age 66 (age 67 from 2021, age 68 from 2028) [source: Pensions Authority website]. We also note that the minimum retirement age is 65 for people who joined the public service after 1 April 2004. For people who joined the public service after 1 January 2013 the minimum retirement age is 66 and the mandatory retirement age is 70 [source: Citizens Information website].

Retirement	Total in next 5 years	%	Total in next 10 years	%
At age 67	17	15%	55	50%
At age 66	27	24%	60	54%
At age 65	32	29%	65	59%
At age 64	40	36%	67	60%
At age 63	50	45%	71	64%
At age 62	55	50%	73	66%
At age 61	60	54%	77	69%

** The high figures for 2018 are something of an outlier as they assume that all those who are currently on the specialist register over the age used for modelling will retire next year along with those approaching these ages in 2018. In reality, some of this cohort may retire in a more gradual fashion but remain in line for retirement in the relatively short term. Nonetheless, spreading these retirements over 5 or 10 years would still result in similar totals overall.*

Taking three sample ages, we can see that approximately 55, or 50% of the workforce, is due to retire in the coming five years if they do so on reaching the age of **62**, with a total of 73, or 66% of the current workforce, retiring within the next ten years if they opt for 62 as the retirement age.

An estimated 32, or 28.8% of the workforce, is due to retire in the next five years if they do so at the age of **65**. Within ten years, 58.6% or 65 specialists in public health medicine are due to retire if they choose 65 as their retirement age.

If the average retirement age is **67**, we can see that 17, or 15.3%, are due to retire within five years, with 55, or 49.5%, within the next ten years.

These figures do not take into account attrition rates from other factors, such as early retirement, long-term illness, moving to another profession, moving abroad, and so on. An illustration of the current rate of turnover on the specialist register is to note that the Medical Council recorded 107 on the register in 2015, with the current figure at 111, a net increase of 4 over two years. The figure of 107 represented an increase of 4 on the previous year. As mentioned above, it is not known if all those active on the specialist register are working as public health physicians within the health system.

9.2.3 Pressure Points

A feature of the figures above is that there are a number of key years or “pressure points” as we look ahead, where larger than average numbers may be in line for retirement in the same year. It will be particularly important to consider the planning of training and of recruitment in light of these years. For example, taking into account a four-year HST scheme, the “pressure point” of potential block of 10 retirees in 2021 (based on retirement at the age of 65) is an imminent challenge.

9.3 Addressing the Workforce Requirements

9.3.1 Training

As outlined in Section 8, the capacity of the higher specialist training scheme to meet the needs of the workforce will need urgent consideration. This is particularly important in terms of planning for pressure points in the coming years and in terms of also facilitating the overall development of the profession and any additional or expanded role it may play into the future.

The Department of Health and the HSE should work closely with the Faculty of Public Health Medicine to optimise the capacity of the higher specialist training scheme to meet the needs of the public health medicine workforce over the coming years.

9.3.2 Recruitment

It is possible that an increased focus on recruitment of public health specialists from elsewhere may be required in order to meet the challenge of maintaining or increasing the public health medicine workforce.

In this case, consideration will need to be given to how such proactive recruitment might be undertaken, the most appropriate markets for recruiting skilled public health physicians, and the relative competitiveness of the posts in terms of attracting public health physicians from elsewhere.

9.3.3 Diversification of the Workforce

An alternative approach, to complement rather than replace the above activities, is to consider whether elements of what is currently undertaken by public health physicians could be achieved by the employment of other types of public health staff, such as infection control nurses (and nursing staff who can work on other elements of public health), epidemiologists, data analysts, and so on. Whilst these and other staff already work alongside public health physicians in the Irish health system, in other jurisdictions there has been a greater delegation of duties and activities previously reserved for medical staff to other public health professionals along with access for non-medical graduates to public health training programmes. This diversification of the public health workforce may enable public health physicians both to devote their skills and expertise to more challenging and impactful activity and to fulfil the remit of the public health function with less of a requirement to train and recruit additional public health doctors.

9.3.4 How Many Recruits Are Required?

Consideration of all of the issues set out above brings us to a central question in this analysis: how many public health physicians need to be recruited into the Irish health system over the next decade?

It is difficult to give a definitive or precise answer to this question, for several reasons:

- The model of public health in Ireland is likely to change, perhaps significantly, in terms of the role and function of public health physicians – within this report, we have made various recommendations and referred to certain possibilities for change, all of which need to be discussed by stakeholders and relevant decisions made;

- The question of skill-mix and workforce composition is critical – if more non-medical staff are employed within public health, this will have an impact upon the numbers of public health doctors required;
- Related to this, the predominantly medicalised nature of Public Health in Ireland means that the Irish health system is unable to take full advantage of the potential contribution of public health professionals who have had a core training in a discipline other than medicine – if and when this changes, it will impact on the number of doctors needed;
- The lack of certainty as to when current public health doctors will retire is another complicating factor – if all public health doctors work until they are 67, then 17 will retire in the next 5 years, whereas the number retiring increases more than threefold, to 60 doctors (54% of the workforce), if they were all to retire at age 61.

On that basis, we are reluctant to provide a definitive number with regard to the extent of recruitment required in the coming years. However, we can say the following:

- If we assume that a median retirement age of 64 were to apply, then simply replacing retiring public health doctors on a like-with-like basis will mean hiring 40 new entrants³¹ to the workforce over the next five years – not including provision for replacement of other, younger doctors who may leave public health practice for other reasons;
- Further recruitment will probably be required if the development of new structures for public health, and the introduction of leadership roles (as recommended in Section 7.4.2 and elsewhere within this report), are to be taken forward.

On that basis, we believe that it would not be unreasonable for c. 10 new entrants into public health medicine to be recruited into the system each year for the next five years, in order for existing capacity to be maintained and to provide additional scope for enhanced leadership. However, this matter needs to be examined in detail as part of the implementation of the various measures recommended in this report, and it may be that this recruitment level will change once a clear model for public health is drawn up, and decisions made in respect of the precise role and function of public health physicians within this new model.

9.4 Public Health Medicine: A Destination of Choice?

9.4.1 *Status, Grading and Pay*

Consistently during our consultation process, we heard from many public health physicians that their branch of the medical profession is unattractive in career terms to many doctors, and that a significant proportion of those who are currently practising in public health are seeking to extend their careers elsewhere, either in other branches of medicine or by taking more attractive public health jobs within the UK, including Northern Ireland.

Overwhelmingly, those public health doctors whom we met are practising in this field because they are passionate about public health medicine and its capacity to exert significant influence on health improvement and the development of health services in Ireland, and thereby to benefit the health and well-being of the whole population.

The issue of the status of public health physicians in Ireland is clearly seen to be a major problem by a substantial proportion of the current medical workforce in public health. This is

³¹ This number is derived from the tables presented in Section 9.2.2

fuelled by the lower status indicated by public health physicians not having the title of “consultant” despite having undertaken a postgraduate training programme of the same duration and structure as their clinical colleagues.

The significant variation in exchange rates which has taken place recently has had the effect of reducing differentials in basic pay between Ireland and the UK. However, because public health physicians at consultant level in the UK are on a par with their clinical colleagues they are eligible for clinical excellence awards which over the course of a career can substantially enhance salary – for some, this may in effect mean a doubling of their remuneration.

As a direct consequence of this differential, a number of the public health physicians to whom we spoke during the course of this review indicated that they felt that their future career opportunities would be more likely to be realised in the UK than in Ireland, and that the primary reason for this was the opportunity to gain consultant status and to enhance their salary prospects. Furthermore, the retirement of a large number of public health specialists within the next 5 to 10 years will place very significant strain upon the public health function, and the HSE will need to offer attractive and competitive remuneration packages if it is to be successful in the difficult task filling these positions.

Our stark assessment is that under the current arrangements, and bearing in mind the demand for doctors within a challenging medical labour market, the HSE and other employers in Ireland will struggle to recruit and retain high-calibre public health physicians, and will also struggle to attract doctors to enter the specialist training route for public health. Unless addressed, status and remuneration will increasingly act as major obstacles to the development of the profession of public health medicine.

Our recommendation to the Department of Health is that serious and urgent consideration should be given to the awarding of consultant status to those public health doctors who meet defined criteria in respect of academic qualifications and experience, and that their remuneration package should be reviewed to ensure that competitive and attractive salary packages can be offered. In return, the duties of public health physicians should be formally revised to reflect the broad range of activities and responsibilities described in Section 7 above, and achievement of consultant status and enhanced remuneration should be contingent upon significant progress being made in the revision of the role and function of public health physicians in line with these changes.

9.4.2 *Enhancing the Attractiveness of the Profession*

In essence, significant reform of public health services will be required to make this a more attractive profession which can become a destination of choice for younger doctors. This will require the development of a new strategy for public health service provision, and also the measures outlined earlier in this report with regard to the development of a more diversified workforce, the establishment of a new organisational model on a “hub and spoke” basis, further enhancement of the training arrangements, and so forth. The opportunities for placements and joint appointments should be strongly considered by the HSE as a mechanism for encouraging doctors to specialise in public health medicine, and this would also tend to make this a more attractive area to work.

9.4.3 Career Paths for Public Health Physicians

The current training pathway for public health physicians is very closely aligned to the training programmes for hospital specialists in that it prepares doctors for a career in one particular specialty. The nature of public health practice requires the ability to work with colleagues in other specialties, including general practice. It would add to the attractiveness of public health training if it was possible to combine it with training in another medical specialty. This would enable a doctor to develop a career where they might combine public health practice with clinical practice to the advantage of both.

This would be most easy to achieve in relation to general practice, due to its shorter training period, where it is possible to design a programme that would result in a doctor being qualified to work in general practice but also have achieved specialist registration in public health medicine. Similarly, it should be possible to explore joint accreditation training programmes between public health medicine and relevant clinical specialties such as community paediatrics and child health, and infectious diseases.

Many public health physicians find teaching and research rewarding and fulfilling activities. It is to the advantage of both academic public health and service public health to have strong connections and interaction between the two settings. The creation of formal joint appointment posts between medical schools and both local departments of public health medicine and relevant national public health settings, would enhance the attractiveness of the specialty and benefit both organisations.

The post of Director of Public Health carries with it clear responsibilities for leadership at a local level and should be seen as a significant opportunity for career progression. Similarly, opportunities will arise for public health physicians to undertake national lead roles within HSE and other organisations on a temporary or permanent basis. In addition, the Department of Health has a requirement for public health physicians, including a Chief Medical Officer, in carrying out its important role on behalf of Government. These varied opportunities clearly indicate the need for an ongoing development programme supporting public health physicians who wish to move into leadership positions at some point in their career.

Increasingly, opportunities in the international sphere may be of interest to public health physicians at certain stages of their career. Doctors may be interested in a long-term or short-term post in the international civil service, such as with the World Health Organization or EU, or with international non-governmental organisations. Public health in Ireland should have an active engagement with international public health organisations and enhanced opportunities should be available during public health training to undertake secondments in international settings.

10 Conclusions and Recommendations

10.1 Conclusions

Our principal findings and conclusions arising from this review are as follows:

- Public health physicians in Ireland work in a variety of roles across the health system, but most are based in the eight HSE public health departments across Ireland. Health protection is the dominant activity for most public health doctors.
- The higher specialist training scheme in place to train graduate and experienced doctors for public health medicine has a competency-based approach and is accepted by the Medical Council for the purpose of entry to the specialist register for public health medicine.
- It is clear that the structure and organisation of higher specialty training in public health medicine in Ireland is on a par with higher specialty training programs in other medical specialties. Public health medicine is currently a mono specialty training programme. Some other medical specialties have developed training programmes that take an integrated approach and permit some trainees to develop competencies in two specialties. In particular, dual training programmes are currently available between general internal medicine and a range of other medical specialties. These structured programmes ensure that trainees gain all the competencies in both specialties and trainees thus receive Certificates of Satisfactory Completion of Specialist Training in both specialties.
- The development of dual training programmes between public health medicine and other relevant medical specialties (such as general practice, infectious diseases, community paediatrics and occupational medicine) would be a positive and welcome development. This, plus expansion of the range of attachments available for those training in the specialty, would be likely to further enhance the attractiveness of public health and also aid the longer-term career development of consultants.
- Our survey of public health physicians indicated a high level of dissatisfaction with current contracts, status, and remuneration, with a clear desire to see these addressed by means of the approval of consultant status for Specialists in Public Health Medicine. The survey also, however, emphasised the commitment to the principles of public health medicine and a belief in the importance of the function and its impact among respondents.
- External stakeholder consultation and submissions emphasised the need to develop a common and coherent vision for public health medicine; to strengthen and resource the public health medicine function; and to ensure a strategic approach within a reformed structure.
- Fundamental strategic and structural change is needed to move the public health function forward and to develop the role of the public health physician. A new national strategy for public health is required, and a new organisational model, envisaged as a “hub and spoke” type structure, whose staffing should not be wholly dependent upon public health physicians, but should include a more diverse public health workforce.
- We have no fundamental concerns about the content or structure of the higher specialist training scheme and would not propose substantive change on foot of such concerns. However, close ties should be maintained between the Faculty of Public Health Medicine, the Department of Health, the HSE, and other key stakeholders to ensure that the HST scheme remains relevant, and the predicted shortfall in public

health doctors in the coming years represents a challenge to the HST scheme's capacity to fulfil the needs of the profession.

- The age profile of the current public health medicine workforce is such that large cohorts of the profession are due to retire within the next 5-10 years, representing a considerable challenge to the public health system. Measures to address this must be considered and implemented rapidly to ensure that this does not further impact on the capacity of the public health function to protect and improve health for the population.
- Predicting the precise number of new entrants into public health medicine required over the next five years is extremely difficult, due to the fact that decisions are yet to be taken on the role and function of public health physicians within any new service delivery model arising from this report, along with uncertainty regarding the exact numbers likely to retire in the coming years. However, if we assume that a median retirement age of 64 were to apply, then simply replacing retiring public health doctors on a like-with-like basis will mean recruiting 40 new entrants to the workforce over the next five years – not including provision for any younger doctors who may leave public health practice for other reasons. Further recruitment will probably be required if the development of new structures for public health, and the introduction of leadership roles (as recommended within this report), are to be taken forward.
- The issue of the status of public health physicians in Ireland is clearly seen to be a major problem by a substantial proportion of the current medical workforce in public health. Enhancing the profession's attractiveness should, as noted above, include joint specialist training with, for example, general practice, and the creation of joint posts with academic institutions.
- Linked closely to status, the attractive remuneration packages available for public health physicians within the UK is likely to create a situation where the Irish health system will be increasingly unable to recruit and retain high calibre public health doctors, at a time when it will need to increase significantly the number of new entrants into the specialty over the next 5 to 10 years in order simply to replace the large numbers who will be retiring. Under present circumstances, the status and remuneration available to senior public health doctors in Ireland will make it difficult for Irish employers to compete within a very demanding global medical labour market.

10.2 Recommendations

Arising from the above findings and conclusions, we make the following recommendations:

- a) We strongly recommend that the HSE, in conjunction with the Department of Health, should take the lead in creating a new national operational plan for the development of the public health function, including the following:
 - National initiatives;
 - Local public health services;
 - Maximising standards in the implementation of health protection policy;
 - Priority setting;
 - Collaboration with local authorities and other stakeholders;
 - Professional development and workforce diversification;
 - Key performance indicators and targets;
 - Timescales.

- b) We recommend that the Department of Health, in conjunction with the HSE, should undertake a review of the legislation underpinning the public health function in Ireland, with particular focus on helping the profession to move away from the constraints of the 1947 Act and to embrace a more modern approach to public health, as outlined within this report.
- c) We recommend that the HSE should develop a significantly (and possibly even radically) different organisational model for the delivery of public health services, in line with the proposed new public health workforce development plan, built around a series of core concepts, as follows:
- A strong national Public Health function at the centre of the HSE which contributes effectively to major service design and policy implementation, to research and health intelligence activities, and to the achievement of the goals set out within the Healthy Ireland initiative – in all of these areas, public health physicians should be playing a significant and proactive role;
 - National coordination and leadership of health protection and surveillance functions, including national leadership of major health protection crises and incidents;
 - A strong network of regional public health professionals focused on local health protection issues, reporting to the national coordination centre;
 - Strong leadership is required within the profession at the national level, with senior public health doctors at regional level reporting to the national leadership – this will require the identification of specific leadership roles within any new structures to be developed within the HSE.
 - A “hub and spoke” organisation model, whereby the centre (the hub) fulfils a coordinating role, set standards and policies, provides leadership, and also centralises expertise in critical areas within the central location.
- d) The Department of Health and the HSE should work closely with the Faculty of Public Health Medicine to optimise the capacity of the higher specialist training scheme to meet the needs of the public health medicine workforce over the coming years. The HST scheme should follow the development of the public health function, particularly in respect of the placement of SpRs into new roles in areas such as health intelligence, service improvement, strategic planning and elsewhere.
- e) The HST scheme should contain a significant element devoted to the leadership role which public health doctors will be increasingly expected to play within the revised model for public health medicine set out in this report, with a view to maximising the contribution of public health doctors across the full spectrum of healthcare services.
- f) Taking into account the expected large number of retirements of public health doctors in the coming years, we believe that it would not be unreasonable for c. 10 new entrants into public health medicine to be recruited into the system each year for the next five years, in order for existing capacity to be maintained and to provide additional scope for enhanced leadership. However, this matter needs to be examined in detail as part of the implementation of the various measures recommended in this report, and it may be that this recruitment level will change once a clear model for public health is drawn up, and decisions made in respect of the precise role and function of public health physicians within this new model.
- g) In line with the above recommendation, the Department of Health (in liaison with the HSE and the Faculty) should ensure that an accurate picture is maintained of the public health workforce in the coming years, through continued update of workforce information across

- all relevant employing organisations, supplemented as necessary by a census of the public health workforce (e.g. every five years).
- h) There should also be an ongoing development programme supporting public health physicians who wish to move into leadership positions in their career.
 - i) We recommend that consideration be given to proactive recruitment in the most appropriate markets outside Ireland for recruiting skilled public health physicians.
 - j) We recommend diversification of the public health workforce to devolve more duties and responsibilities to public health staff from non-medical backgrounds.
 - k) We recommend the exploration of dual training programmes combining training in public health medicine with training in appropriate other medical specialties such as general practice, occupational health and infectious diseases.
 - l) We recommend the creation of formal joint appointment posts between medical schools and both local departments of public health medicine and relevant national public health settings.
 - m) We recommend further engagement with international public health organisations and enhanced opportunities during public health training to undertake secondments in international settings.
 - n) We recommend that the Department of Health should give serious consideration to the awarding of consultant status to those public health doctors who meet defined criteria in respect of academic qualifications and experience, and that their remuneration package should be reviewed to ensure that competitive and attractive salary packages can be offered. In return, the duties of public health physicians should be formally revised to reflect the broad range of activities and responsibilities described in Section 7 of this report, the attainment of the leadership roles described above, and the maximisation of the contribution to the health system as a whole to be made by public health doctors. The achievement of consultant status and enhanced remuneration should be contingent upon significant progress being made in the revision and enhancement of the role and function of public health physicians in line with these changes.

10.3 Implementation and Ownership of Change

Our final comment in this report relates to the implementation of the various recommendations set out in the preceding paragraphs.

In overall terms, the recommendations we have made represent a substantial package of reforms which will introduce transformative change to public health medicine in Ireland, and will also affect other professionals working in the field of public health now and in the future. If these recommendations are implemented in full, we would expect that the delivery of public health services will be quite radically different in five years' time from what exists at present – in terms of the role and function of public health doctors, the value they add, the service model within which they work, their collaboration with other professionals, and the status they enjoy.

Introducing these changes as part of a composite package of reform will require focus, dedication, and leadership. In our view, there are no half-measures: to achieve the benefits set out above, the full package should be implemented. A project team should be assembled to take forward the implementation process, and given that this matter is of national strategic importance and that public health physicians work across a range of State-funded healthcare organisations, we believe that the implementation process should be led from the Office of the

Chief Medical Officer in the Department of Health, rather than from within any of the health agencies. Strong leadership and ownership of the process will be essential, as will excellent co-operation between the key stakeholders within an interest in the future of public health – in particular, the Department of Health, the HSE, the Faculty of Public Health Medicine, and the Irish Medical Organisation.

Once this report has been finalised and endorsed by all of the stakeholders, we would recommend that, as a first step, the planning of the implementation process should commence without delay. This should include:

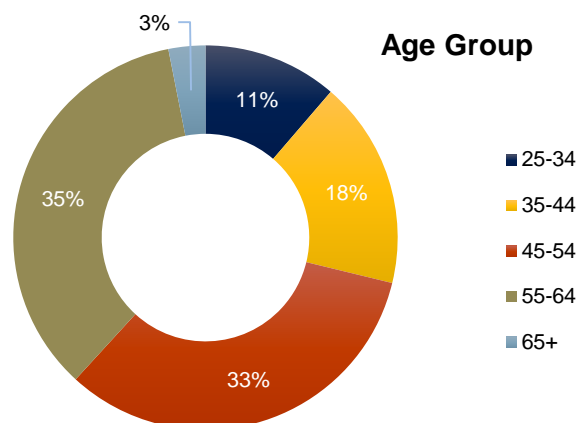
- Development of a detailed implementation plan;
- Identification of timelines, milestones and deliverables;
- Identification and assignment of implementation resources;
- Appointment of an implementation Project Manager;
- Estimation of implementation costs and ring-fencing of budget;
- Establishment of implementation governance and accountability arrangements;
- Agreement of progress reporting arrangements and timescales.

Appendix 1

Outputs from Survey of Public Health Physicians

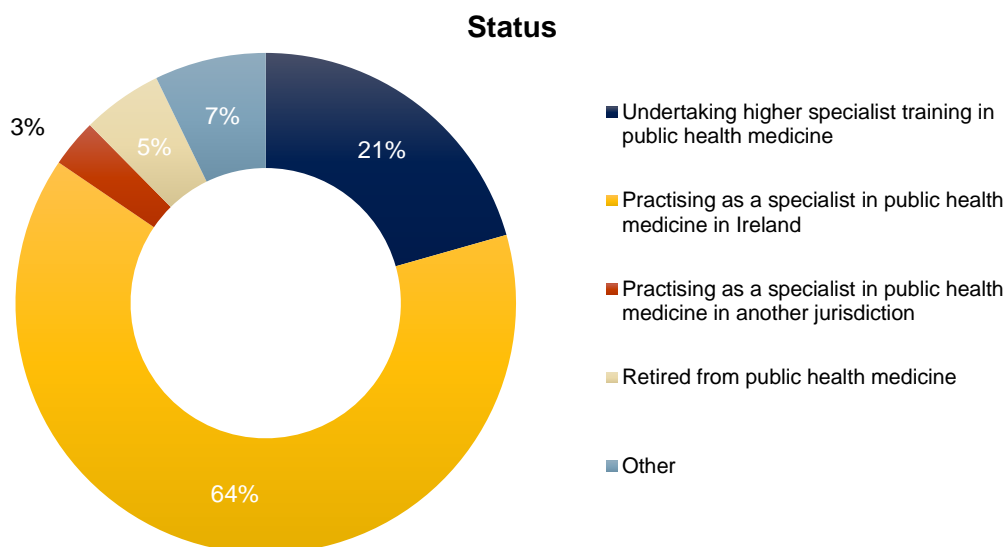
Survey Outputs

Age group	%	Number
25-34	11%	11
35-44	18%	17
45-54	33%	32
55-64	35%	34
65+	3%	3
Total	100%	97



Gender	%	Number
Female	76%	71
Male	25%	23
Total	100%	94

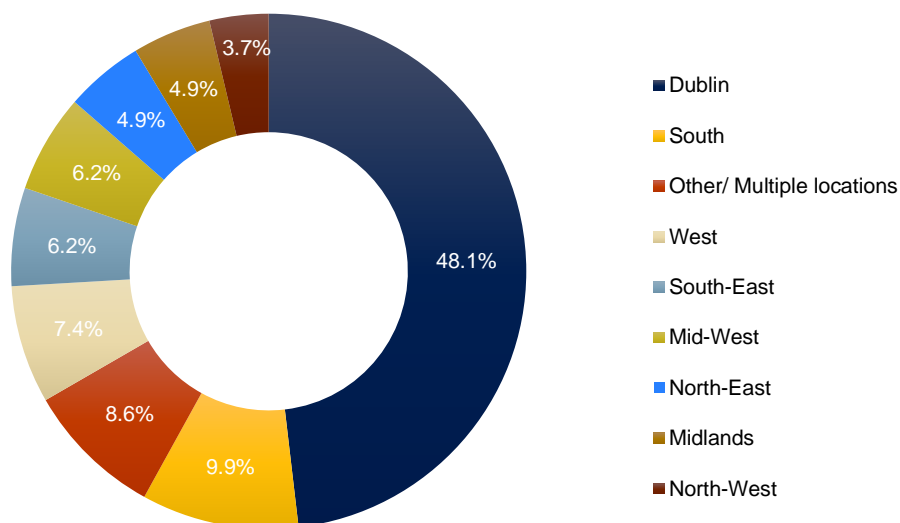
Status	%	Number
Undertaking higher specialist training in public health medicine	21%	20
Practising as a specialist in public health medicine in Ireland	64%	62
Practising as a specialist in public health medicine in another jurisdiction	3%	3
Retired from public health medicine	5%	5
Other	7%	7
Total	100%	97



Full-time/part-time	%	Number
Full-time	73%	60
Part-time	27%	22
Total	100%	82

Location	%	Number
Dublin	48%	39
Cork	10%	8
Other/ Multiple locations	9%	7
Galway	7%	6
Kilkenny	6%	5
Limerick	6%	5
Meath	5%	4
Offaly	5%	4
Donegal	3%	2
Sligo	1%	1
Total	100%	81

Location



Organisation	%	Number
HSE Public Health Department	62%	50
Health Protection Surveillance Centre	9%	7
Department of Health	6%	5
National Cancer Control Programme	5%	4
Other	5%	4
National Immunisation Office	4%	3
Health Intelligence Unit	3%	2
Academic Institution	3%	2
More than one organisation	3%	2
HSE Health & Wellbeing	1%	1
Safefood	1%	1
Total	100%	81

Length of time in public health medicine	Years
Mean	17
Minimum	1
Maximum	35

Length of time in current role	Years
Mean	7
Minimum	0
Maximum	21

Activity	Health promotion		Health protection		Health service improvement		Health intelligence		Other
	Local	National	Local	National	Local	National	Local	National	Other duties
% of total respondents >0%	26%	41%	62%	61%	29%	52%	26%	41%	37%
Number undertaking more than 0%	21	34	51	50	24	43	21	34	30
% of total respondents	62%	73%	82%	82%	63%	72%	60%	68%	48%
Number including those with 0%	51	60	67	67	52	59	49	56	39
Mean for those performing function	9%	16%	37%	34%	13%	31%	8%	20%	33%
Mean overall	4%	9%	27%	25%	6%	23%	4%	12%	25%
Minimum	0%	0%	0%	0%	0%	0%	0%	0%	0%
Maximum	50%	100%	100%	100%	50%	100%	20%	100%	100%

Duties and responsibilities clear?	%	Number
Yes	79%	61
No	21%	16
Total	100%	77

Annual work plan?	%	Number
Yes	66%	52
No	34%	27
Total	100%	79

Explicit objectives or goals?	%	Number
Yes	68%	54
No	32%	25
Total	100%	79

Empowered to carry out remit?	%	Number
Health promotion	17%	16
Health protection	45%	44
Health service provision	17%	16
Leadership of population health	22%	21

Reasons for feeling disempowered include:

- a lack of clarity both within and outside the profession about the roles of public health physicians, in particular in areas outside health protection;
- a lack of integration into the management and power structures of the health system;
- lack of parity with other medical colleagues; absence of legislation underpinning the wider role of public health medicine;
- the “hiving off” of responsibility for health promotion, environmental health, etc., from the public health function, leading to further blurring of the distinctiveness of public health medicine;
- lack of resources, in particular for non-health protection activity;
- lack of capacity and/or ability to maintain skills when health protection dominates.

Engagement with other organisations	%
Other public health medicine staff	68%
Department of Health	59%
Hospital consultants	58%
HSE Public Health management	56%
Hospital microbiologists	56%
HSE Health & Wellbeing management	54%
Academics in public health	52%
Public health laboratory	51%
Non-governmental organisations	47%
Hospital management	47%
Community health organisations	44%
HSE Clinical Leads	41%
Local authorities	39%
Government departments (other than Health)	37%
Hospital group management	32%
Irish Water	31%
HIQA	27%
An Garda Síochána	24%
Other	24%

Rating of Respect from, Influence on, and Co-operation with Other Organisations

Respect	Level - least (1) to most (5)					Total
	1	2	3	4	5	
Organisation						
Department of Health	27%	23%	21%	14%	14%	100%
HSE Clinical Leads	8%	13%	42%	24%	13%	100%
HIQA	4%	12%	20%	40%	24%	100%
HSE Public Health management	17%	19%	20%	32%	13%	100%
HSE Health & Wellbeing management	33%	21%	23%	14%	10%	100%
Irish Water	7%	18%	32%	29%	14%	100%
Non-governmental organisations	2%	5%	24%	48%	21%	100%
Local authorities	0%	17%	25%	42%	17%	100%
Government departments (other than Health)	6%	20%	31%	23%	20%	100%
Other public health medicine staff	3%	2%	19%	44%	33%	100%
Community health organisations	5%	13%	25%	38%	20%	100%
Public health laboratory	2%	4%	22%	41%	30%	100%
Academics in public health	2%	8%	25%	31%	35%	100%
Hospital microbiologists	0%	6%	25%	48%	21%	100%
Hospital consultants	22%	22%	30%	24%	2%	100%
Hospital management	18%	16%	27%	33%	7%	100%
Hospital group management	13%	13%	37%	20%	17%	100%

Respect	Level - least (1) to most (5)					
Organisation	1	2	3	4	5	Total
An Garda Síochána	0%	0%	22%	39%	39%	100%
Other	0%	20%	0%	40%	40%	100%

Influence	Level - least (1) to most (5)					
Organisation	1	2	3	4	5	Total
Department of Health	41%	20%	29%	9%	2%	100%
HSE Clinical Leads	10%	26%	39%	23%	3%	100%
HIQA	20%	16%	28%	32%	4%	100%
HSE Public Health management	15%	24%	32%	26%	4%	100%
HSE Health & Wellbeing management	37%	20%	29%	10%	4%	100%
Irish Water	7%	4%	39%	46%	4%	100%
Non-governmental organisations	7%	7%	45%	26%	14%	100%
Local authorities	8%	14%	36%	28%	14%	100%
Government departments (other than Health)	14%	31%	23%	23%	9%	100%
Other public health medicine staff	2%	2%	25%	50%	22%	100%
Community health organisations	13%	20%	28%	28%	13%	100%
Public health laboratory	2%	9%	36%	34%	19%	100%
Academics in public health	8%	16%	39%	22%	14%	100%
Hospital microbiologists	2%	10%	37%	39%	14%	100%
Hospital consultants	34%	17%	36%	11%	2%	100%
Hospital management	20%	27%	31%	18%	4%	100%
Hospital group management	17%	27%	40%	13%	3%	100%
An Garda Síochána	4%	9%	30%	48%	9%	100%
Other	0%	13%	20%	40%	27%	100%

Co-operation	Level - least (1) to most (5)					
Organisation	1	2	3	4	5	Total
Department of Health	27%	14%	36%	16%	7%	100%
HSE Clinical Leads	10%	21%	33%	23%	13%	100%
HIQA	8%	12%	24%	36%	20%	100%
HSE Public Health management	17%	15%	30%	30%	9%	100%
HSE Health & Wellbeing management	22%	29%	24%	16%	10%	100%
Irish Water	7%	14%	46%	25%	7%	100%
Non-governmental organisations	2%	10%	29%	45%	14%	100%
Local authorities	0%	19%	25%	36%	19%	100%
Government departments (other than Health)	11%	20%	31%	23%	14%	100%
Other public health medicine staff	0%	3%	16%	47%	34%	100%
Community health organisations	5%	18%	28%	35%	15%	100%
Public health laboratory	0%	2%	19%	45%	34%	100%
Academics in public health	6%	10%	27%	29%	29%	100%

Co-operation	Level - least (1) to most (5)					
Organisation	1	2	3	4	5	Total
Hospital microbiologists	2%	2%	33%	42%	21%	100%
Hospital consultants	15%	28%	42%	11%	4%	100%
Hospital management	18%	16%	44%	18%	4%	100%
Hospital group management	10%	20%	50%	17%	3%	100%
An Garda Síochána	0%	0%	26%	48%	26%	100%
Other	0%	13%	13%	40%	33%	100%

	Level - least (1) to most (5)					
Influence on areas of hospital-based delivery	1	2	3	4	5	Total
Quality assurance functions	15%	36%	27%	18%	5%	100%
Population health protection	0%	18%	19%	49%	14%	100%

Outbreak situation - sufficiently well-linked to area hospitals?	%	Number
Yes	66%	37
No	34%	19
Total	100%	56

Resources		Excellent	Good	Adequate	Inadequate	Poor
Overall levels of resources and support	%	4%	12%	17%	45%	21%
	Number	3	9	13	34	16

Staff available to support role	%
Specialists in public health medicine	46%
SpRs	47%
Senior Medical Officers	45%
Nursing staff	41%
Surveillance scientists	52%
Researchers	43%
Administrative support	67%
Other staff	21%

Staff reporting directly?	%	Number
Yes	36%	27
No	64%	48
Total	100%	75

Number of staff reporting directly	
<i>Number answering question</i>	26
Mean	7.4
Median	5.5
Minimum	1.0
Maximum	26.0

Resources - rating of quality	No of answers	Excellent		Good		Adequate		Inadequate		Poor	
		No.	%	No.	%	No.	%	No.	%	No.	%
Office space	76	22	29%	29	38%	16	21%	6	8%	3	4%
ICT	76	11	15%	21	28%	29	38%	9	12%	6	8%
Staff numbers	73	1	1%	17	23%	14	19%	31	43%	10	14%
Staff quality	71	19	27%	32	45%	10	14%	10	14%	0	0%
Training	74	7	10%	26	35%	27	37%	13	18%	1	1%
Interaction with other organisations	75	8	11%	33	44%	20	27%	13	17%	1	1%
Management/strategy	75	9	12%	13	17%	21	28%	19	25%	13	17%
Organisational structure	76	3	4%	16	21%	21	28%	25	33%	11	15%

Suggested improvements to public health physicians' workplaces include changes to ICT (such as clinical information systems); training; the filling of vacant posts; and recruitment of additional staff (in particular support roles and research staff). With reference specifically to organisation structures, many called for a clear national public health function with clear responsibilities, resources, and structures; other suggested improvements included better cohesion and integration of services.

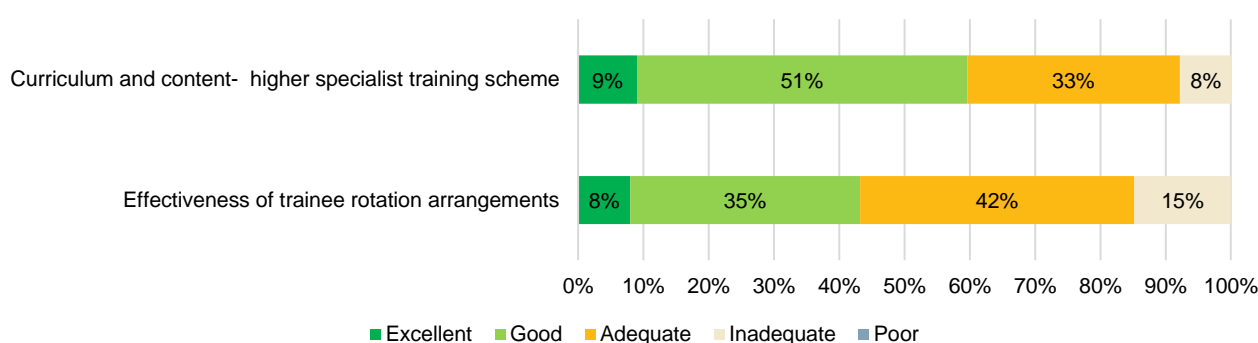
Deficiencies in regard to particular skills	%	Number
Yes	74%	62
No	26%	22
Total	100%	84

Skills suggested as of concern include leadership, communications, health economics, and management.

Confident in own professional practice	%	Number
Yes	90%	78
No	10%	9
Total	100%	87

Rating of Education and Training

Rating	Excellent	Good	Adequate	Inadequate	Poor	Total
Curriculum and content- higher specialist training scheme	9%	51%	33%	8%	0%	100%
Effectiveness of trainee rotation arrangements	8%	35%	42%	15%	0%	100%



- Management, communication, and leadership should be more prominent in curriculum.

Merit in sub-specialisation	%	Number
Yes	78%	69
No	22%	19
Total	100%	88

- Subspecialisation would allow for more development of key skills in specific areas, which is seen as difficult to achieve when “everyone is a generalist”;
- Speciality is seen as very broad currently, with a wide range of duties and associated skills and competencies required, with consequent opportunities for subspecialisation;
- Mechanism for career development in an otherwise “flat” career structure;
- Concern that in a relatively small country and with the numbers working in public health medicine, significant subspecialisation may be impractical.

Facilitated to link to other specialities/settings for cross-learning	%	Number
Yes	59%	44
No	41%	31
Total	100%	75

- Opportunities are seen as limited

Facilitated to link to other countries' public health systems or settings for cross-learning	%	Number
Yes	49%	37
No	51%	38
Total	100%	75

- Lack of funding
- Lack of access to opportunities

Plan to stay in public health medicine	%	Number
Yes	88%	79
No	12%	11
Total	100%	90

- Desire to work in public health medicine but not in Ireland;
- Lack of a consultant contract;
- Lack of opportunity to do work other than health protection;
- Desire to work face-to-face with patients.

	No of answers	Very good	Good	Average	Poor	Very poor	Total
Career advancement/progression prospects	87	7%	23%	25%	30%	15%	100%
	87	6	20	22	26	13	87

- Lack of opportunity in relation to advancement given the relatively flat structures, with only 8 Director positions nationally, these being lifetime appointments and therefore offering limited turnover;
- Negative perception of the role of Director of Public Health, with the managerial and administrative responsibilities involved;
- Uncertainty about availability of permanent roles for those who are on or have recently completed the Higher Specialist Training Scheme
- Approaching retirement and that therefore their career was not going to develop further;
- Dublin-centric nature of other opportunities at national level.

Satisfied with current SPH contracts	%	Number
Yes	8%	7
No	92%	77
Total	100%	84

- Contracts should be similar to those offered to other physicians who have completed higher specialist training schemes, i.e. consultant contracts;
- Incremental points and grades within the contract;
- Desire to see the contract include changes to the out-of-hours services.

Desire to see consultant status	%	Number
Yes	96%	86
No	4%	4
Total	100%	90

Satisfied with current remuneration	%	Number
Yes	7%	6
No	93%	84
Total	100%	90

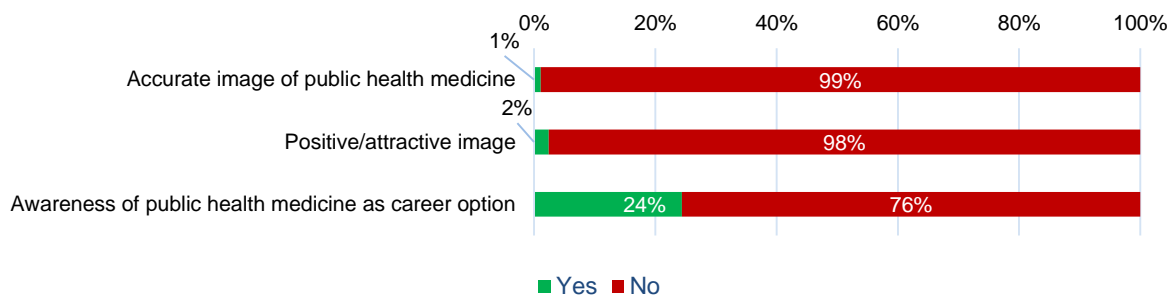
- Should be brought into line with other medical specialties;
- Many mentioned specifically that the status that would be forthcoming from an upgrade in title, from peers and the public, was as important as the remuneration.

Contract - fair approach to on-call payments	%	Number
Yes	4%	3
No	96%	65
Total	100%	68

- On-call duties were introduced as an interim measure and were not part of a contract but have remained in place;
- Remuneration for on-call duties was a key reason for dissatisfaction: perceived to be very low for the time commitment involved, and/or when compared to arrangements in other medical specialties or services.

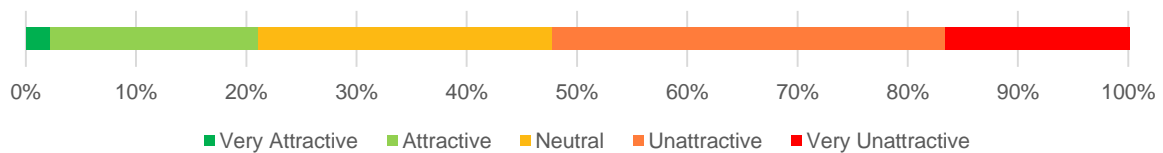
Public health medicine perceptions	Yes		No	
	%	Number	%	Number
Accurate image of public health medicine	1%	1	99%	88
Positive/attractive image	2%	2	98%	82
Awareness of public health medicine as career option	24%	20	76%	62

Perceptions of career in public health medicine among students/interns



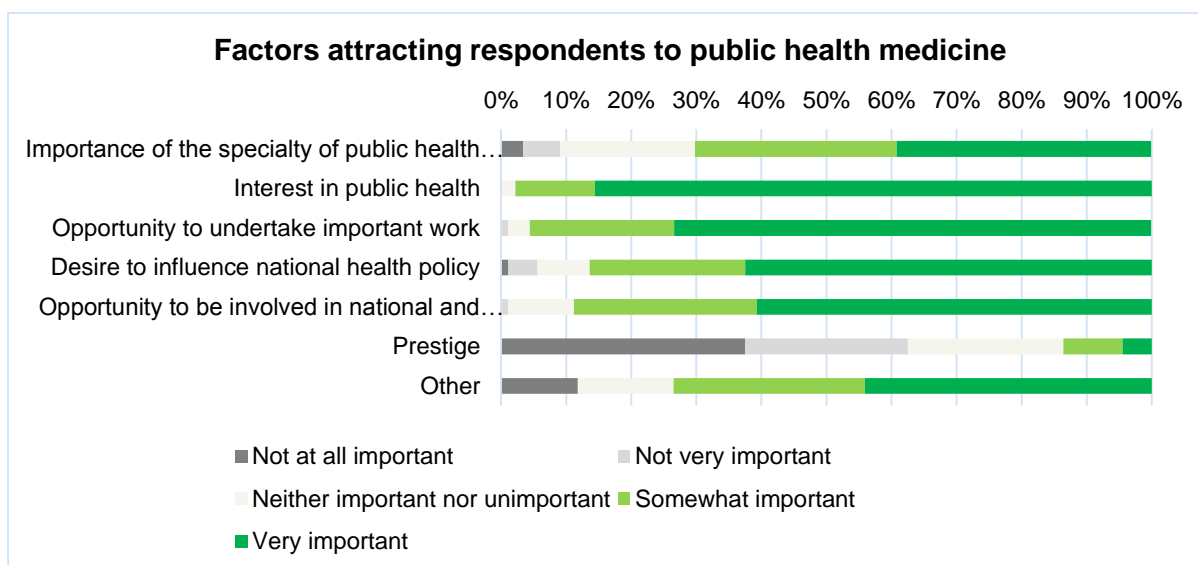
Attractiveness of public health medicine as a career option	%	Number
Very Attractive	2%	2
Attractive	19%	17
Neutral	27%	24
Unattractive	36%	32
Very Unattractive	17%	15
Total	100%	90

Attractiveness of Public Health Medicine as a career



	<i>No of answers</i>	Not at all important		Not very important		Neither important nor unimportant		Somewhat important		Very important	
		No.	%	No.	%	No.	%	No.	%	No.	%
Factors attracting to public health medicine											
Importance of the specialty of public health medicine	87	3	3%	5	6%	18	21%	27	31%	34	39%
Interest in public health	90	0	0%	0	0%	2	2%	11	12%	77	86%
Opportunity to undertake important work	90	0	0%	1	1%	3	3%	20	22%	66	73%
Desire to influence national health policy	88	1	1%	4	5%	7	8%	21	24%	55	63%

		Not at all important		Not very important		Neither important nor unimportant		Somewhat important		Very important	
		No.	%	No.	%	No.	%	No.	%	No.	%
Factors attracting to public health medicine	No of answers										
Opportunity to be involved in national and international health challenges	89	0	0%	1	1%	9	10%	25	28%	54	61%
Prestige	88	33	38%	22	25%	21	24%	8	9%	4	5%
Other	34	4	12%	0	0%	5	15%	10	29%	15	44%



- Some commented that they sought a specialty that facilitated a work/life balance.

How to improve the attractiveness of the profession?

- Contract, status, and remuneration key factors – these need to be on a par with other medical specialties in order to attract physicians to public health;
- Creation of more joint academic appointments to enable public health physicians to undertake teaching;
- Overall increase in the “visibility” of the profession publicly;
- More exposure to public health medicine in undergraduate training;
- Improving the perception within the overall medical profession of the value of public health medicine.

Key Challenges

- Public health challenges facing Ireland, such as obesity, ageing, and chronic disease;
- Profile of the public health medical workforce: large cohort approaching retirement and consequent need for workforce and succession planning and recruitment
- Obtaining consultant status;
- “Survival”, i.e. to maintain identity and function within the health system
- Structures, leadership, and management of public health medicine need addressing;
- Change in the structures and delivery elsewhere in the HSE, and how public health medicine fits into (or does not align with) this.

Goals for Public Health Medicine

- Improved public health outcomes, including reductions in obesity, smoking, and other harms, and influencing improvements in national health outcomes;
- Clearly defined and structured national public health function;
- National strategy for public health medicine;
- Consultant status to place the specialty on a par with others;
- Addressing succession and workforce challenges;
- Clear role for the profession in relation to influencing national health policy and service improvement.

Goals achievable in current structure?	%	Number
Yes	20%	17
No	80%	67
Total	100%	84

Barriers to Development of Public Health Medicine

- Current structures, management, and leadership;
- Consultant status and perceived lack of parity of esteem;
- Lack of recognition of the value of what public health physicians do and a low profile for the profession – lack of influence at policy level;
- Staff morale and motivation.

Appendix 2

Stakeholders Consulted

List of Stakeholders Consulted

Department of Health
Health Service Executive
Faculty of Public Health Medicine of the Royal College of Physicians in Ireland
Directors of Departments of Public Health
Irish Medical Organisation
Representatives of Specialist Registrars in Public Health Medicine
Academics in Public Health Medicine
Public Health Physicians (via survey)

Appendix 3

Submission from Department of Health

**Department of Health Submission to the
Crowe Horwath review of Public Health Medicine in Ireland
June 2017**

Strategic Context

It has been well documented that the healthcare system in Ireland, in common with similar healthcare systems worldwide, faces significant challenges as a result of an increasing, aging population, health inequalities, increased prevalence of chronic diseases, service capacity deficits and funding challenges, exacerbated by the cost demands arising from ever advancing scientific and technical developments.

Overall population in Ireland has been rising steadily in the last decade and is projected to increase by a further 4.9% by 2021. In addition, Ireland's population is ageing, with projections suggesting that between 2011 and 2021, the population aged 65 and over will increase by 38%, while the number of people aged over 85 years is currently increasing by approximately 3.3% each year. As a consequence of these demographic changes, together with changes in the lifestyle habits and risk factor profiles of the population, the health service must respond to changing patterns of need, with chronic disease now accounting for 80% of all GP visits, 40% of hospital admissions, and 75% of hospital bed days in Ireland.

In order to address these challenges, the Department of Health has committed to the development of a new model of care which will ensure that health care becomes more integrated and continuous, person-centred, and that it is delivered at the lowest level of complexity, with a decisive shift towards Primary Care. While the immediate challenges facing the health service need to be addressed, the Department is also committed to the achievement of broader reform over the medium and long-term. In addition to changing the current model of care, this commitment is also reflected in the development and implementation of the Healthy Ireland agenda and in the ongoing efforts to reform the management structure of the health service.

Significant progress has been made in recent years in promoting population health and tackling a variety of public health challenges through the development of a range of policies under Healthy Ireland. The focus will now increasingly shift to driving, monitoring and evaluating the implementation of these policies, in collaboration with other Government Departments and cross-sectoral stakeholders.

The Department is also committed to ensuring the provision of safe, high quality care services and recognises that there is a need to continuously improve the quality of decision making, inform prioritisation and policy development and demonstrate transparency and accountability in decision making, both within the Department and across our health services. In addition, there is recognition of the need for comprehensive, joined-up and accurate information in a timely manner for service planning, development and integration, budget management, demand forecasting, for the benefit of both the service user/patient and the management of healthcare provision.

Future policy direction will be further guided by the response to the Committee on the Future of Healthcare *Sláintecare* Report, May 2017 which will be submitted to Cabinet in coming weeks. As outlined by the Minister for Health in his opening statement to the Committee on the Future of Healthcare, the challenge facing the health service is to find a sustainable means of bringing about significant improvements in access, without losing focus on other crucial goals such as patient safety, efficiency and cost effectiveness. The overarching objective must be population well-being and disease prevention as set out in the Healthy Ireland agenda.

Public Health Medicine

Public health practice is an approach to maintaining and improving the health of populations that is based on the principles of social justice, attention to human rights and equity, evidence-informed policy and practice, and addressing the underlying determinants of health.

A core component of the multi-sectoral effort that is public health practice is Public Health Medicine, the medical speciality which is primarily concerned with the health and care of populations. The work of Public Health Physicians is premised on the interconnectivity of five main building blocks (evidence base, risk assessment, policy development, program implementation and evaluation).

While Public Health Medicine has its origins in sanitation and communicable disease control, the last fifty years have seen the specialty evolve to encompass four key domains of practice;

- health protection (communicable disease surveillance and control)
- health improvement (health promotion and control of non-communicable disease)
- health service quality improvement
- health intelligence.

Through their undergraduate and post-graduate training, Public Health Physicians have key skills, training and expertise to advocate for health, to advise on the most effective use of resources for a given population and they are uniquely qualified to identify, implement and evaluate evidence-based, cost-effective (low technology, low cost) strategic approaches to maintaining and improving health at both individual and societal levels.

As noted above, and as highlighted in the 2017 *Sláintecare* Report from the Oireachtas Committee on the Future of Healthcare, Ireland's ageing population and the increasing prevalence of chronic diseases require a strong re-orientation away from the current emphasis on acute and episodic care towards prevention, self-care, and primary care that is well co-ordinated and integrated. This re-orientation requires an appreciation of the wider forces impacting on health (the 'social determinants') and the importance of health equity, a commitment to continuously improving the quality of health services and safeguarding high standards of care (clinical governance) and, above all, clinical leadership which aims to shift the focus from the individual patient to the wider population that needs to be served.

The Department recognises that it is these attributes that Public Health Physicians should bring – and be facilitated to bring - to the Irish health system and it is in this context that the Department welcomes the review of Public Health Medicine by Crowe-Horwath. It is intended that this review

will outline the current status of the specialty in Ireland and detail the measures required to ensure that it operates in an effective, sustainable manner into the future.

Current Status of Public Health Medicine in Ireland

The Department is aware of the limitations currently associated with the specialty of Public Health Medicine in Ireland and recognises that the full potential of the specialty as set out above has not been realised. When the Departments of Public Health were first established, the Director of Public Health as a member of each Health Board executive team had arguably a clear mandate and role to act both within the health service and across other sectors in all the domains of public health practice.

Since the establishment of the HSE, despite substantial reorganisation of national, community and hospital-level structures within the health system, the structures within which Public Health Physicians have operated (Eight local Departments of Public Health) have remained largely unchanged. There has been a lack of strategic direction for the specialty and it has failed to function as a coherent whole, with increasing tension between the demands of health protection and the other domains of Public Health Medicine, and between local and national priorities.

Much of the work undertaken by Departments of Public Health within the HSE over the last decade has been focused on health protection and on meeting legislative responsibilities with respect to communicable disease. They have had more limited involvement in health intelligence, health service improvement and health improvement.

These issues have led to a lack of clarity regarding individual and unit roles and responsibilities and the Department is aware that this, combined with a lack of career progression opportunities for individual members of the specialty, has resulted in a de-motivated workforce.

Despite these issues, the Department recognises that individual Public Health Physicians have made substantive contributions to many of the most successful initiatives undertaken within the Irish health service, including to the development and implementation of

- Healthy Ireland
- specific initiatives around patient quality and safety
- tobacco control
- sexual health
- successive cardiovascular strategies
- health technology assessment
- the national cancer control and cancer screening programmes
- the national clinical programmes
- global health programme

However, the great majority of this work has had low visibility, has largely been in supporting functions and Public Health Physicians have had minimal opportunity to take on visible leadership roles and responsibilities within the health service.

The Department is committed to the continued development of policy and legislative frameworks which will support public health protection in Ireland. Health protection has formed the focus of much of the work of Public Health Physicians in recent years and the specialty has been to the forefront in the ongoing development and review of related clinical guidance, in outbreak response and control, and in acting as liaison with international organisations (EHO, ECDC) and ensuring that Ireland meets its obligations under the International Health Regulations. At national level, the Health Protection Surveillance Centre and the National Immunisation Office have effective systems in place for surveillance and immunisation respectively.

However, the Department considers that there is potential to improve the function of health protection work at local level in relation to reactive communicable disease and outbreak control, and also with respect to proactive prevention. Consideration should be given to creating more explicit linkages between surveillance activities and local control activities and having clarity around the strategic direction, objectives, performance management and measurement of outputs and outcomes to ensure that the health protection service is effective and sustainable. Furthermore, the Department recognises that the model of out-of-hours service for health protection needs to be reviewed to ensure the most effective deployment of a highly skilled and limited resource.

The Department acknowledges that Public Health Physicians work in a variety of settings and there are many who work outside of HSE structures, including in the Department of Health, in academia and in the Faculty of Public Health with the Royal College of Physicians of Ireland. The contribution of these members of the speciality should be recognised, both in relation to their role in policy development and, more specifically, in relation to the advocacy and leadership roles which they have played in highlighting the need for long-term, population-level approaches to how we approach health service planning and implementation in Ireland. The Department further acknowledges that in order for the full potential for Public Health Physicians to work in, and bring a health focus to, non-health sector specific roles would require significant expansion of the speciality.

The future of Public Health Medicine in Ireland

It is the Department's view that the specialty of Public Health Medicine should be reformed and strengthened such that the skills and expertise which are unique to Public Health Physicians can be leveraged to ensure maximum return for the Irish health service.

While recognising the substantial increases in training numbers into the Higher Specialist Training (HST) programme in recent years, it is acknowledged that these additional numbers, while perhaps sufficient to replace existing Public Health Physicians as they retire will not provide for significant expansion of the speciality. Therefore, if the specialty is to overcome the difficulties outlined above, the roles and responsibilities of the Public Health Physician will need to evolve compared with those demonstrated heretofore. Specifically, the role of the Public Health Physician must move from that of a supporting role to that of leading transformation and development of the health system, and leading greater integration of the health system with wider society.

In addition to leadership roles in health protection at local and national level, graduates from the HST programme should be primed to take on management and/or leadership roles both within

health and wellbeing and across the health service, and within the Department of Health and other related agencies. The HST programme should increasingly focus on leadership development and should encompass administration and management, policy development and implementation (science), clinical governance and quality and safety in healthcare. Future graduates should be able to and be expected to lead on

- Policy development at national level
- Policy implementation at all levels
- Health intelligence, data analysis and interpretation at CHO/HG and national level
- Health Technology Assessment at national level
- The quality and safety agenda at all levels
- Clinical leadership at all levels
- Clinical governance at all levels

While it is not the Department's intention to identify the specific structures which should be in place at local or national level in relation to Public Health Medicine, it is the Department's view that these arrangements should ensure that the specialty

- operates coherently
- is balanced across the four domains of Public Health
- maximises the skills and potential contribution of Public Health Physicians in maintaining and improving the health and wellbeing of the population, and
- ensures adequate and defined career progression opportunities for Public Health Physicians at local and national level.

The roles and responsibilities of individual Public Health Physicians at local and national level should be clearly defined, as should their local and national roles in contributing to the implementation of Healthy Ireland and specifically in ensuring increased inter-sectoral cooperation beyond traditional health settings. Mechanisms should be in place for performance assessment.

The status and remuneration of Public Health Physicians should give due regard to their training, to their legislative responsibilities and to the intrinsic value of the work undertaken by these clinicians. Recognising the global market forces against which Ireland must compete, this status and remuneration should be cognisant of the historic low base from which the specialty is attempting to emerge and should be commensurate with the need to continue to attract and retain the highest calibre trainees and Public Health Physicians who are prepared to engage in the necessary transformation of the specialty itself, while simultaneously committing to taking a leadership role in the achievement of the strategic priorities underpinning the ongoing reform of the health system.

[DoH. 20 June 2017]

Appendix 4

Submission from Health Service Executive

A Model for Public Health Medicine

MacCraith Review Submission
National Director, Health and Wellbeing Division, HSE

May 2017



Building a Better Health Service

CARE COMPASSION TRUST LEARNING

Introduction

Considerations regarding the future model for Public Health set out in this document represent the views of the National Director, Health and Wellbeing Division in the HSE. This document was prepared following a request from the Department of Health for my view as National Director, Health and Wellbeing, on the best future governance model for the provision of public health services in the HSE. The considerations set out here are informed by my experience over the last five years in developing the *Healthy Ireland Framework* in the Department of Health (2012/2013), in leading transformative change in the health service to implement *Healthy Ireland* across all healthcare settings and finally in running the operations of the Health and Wellbeing Division in the HSE over the last four years (2013/2017). Four domains of knowledge and experience inform these considerations. These include:

1. Clear understanding of the opportunities now available to significantly develop Public Health medicine and place this speciality, and the broader population health approach, front and centre in healthcare reform in Ireland
2. Clear understanding of how implementation of a new governance model for Public Health will realise opportunities to make genuine improvements in the health of people living in Ireland, reduce likely threats to human health, and support the reduction of health and wellbeing inequalities across our communities
3. Knowledge and experience of the realities of managing transformative change and delivering results in operationally complex and resource limited environments and the time, processes and people issues that impact on successful delivery of change
4. Knowledge of the culture and operating environments within Departments of Public Health and levels of support for new ways of thinking and new ways of working.

Commitment to any future model of Public Health will involve significant consultation with staff at every level of the service, including public health physicians working outside of the Health and Wellbeing Division, and indeed outside of the HSE and with professional and representative bodies.

Considerations outlined in this paper are also part of the options being scoped as part of a programme of work I am leading to develop a future operating model for all seven services within the Health and Wellbeing Division. The options specific to Public Health have been developed with the Assistant National Director Public Health and the Directors of Public Health Departments, and via the senior management team of the Health and Wellbeing Division. There is no consensus within Public Health leadership on a future operating model for public health services, and while the Assistant National Director of Public Health and Directors of Public Health Departments were part of the option development process, it does not mean that they agreed with all or any options. As per previous briefings to the Department of Health, the Directors of Public Health, in the main, have a strong view that current structures, priorities and ways of doing business are fit for purpose and do not merit any substantial change. All options (for all services within the Division) are currently being discussed with Chief Officers of the Community Healthcare Organisations (CHOs) and CEOs of Hospital Groups, among others, with the intention of reflecting these very senior views into the discussion. Following this, I intend to embark on a substantive consultation process with Public Health staff and other stakeholders on the final list of viable options.

It is my intention to engage with the Department of Health to agree how this process which I am leading can best support the MacCraith work being led by the Department of Health. I hope, my views expressed here will help inform consideration and deliberations on the future model of Public Health.

Dr. Stephanie O’Keeffe
National Director, Health and Wellbeing

Table of Contents

Introduction.....	ii
1 Context for Healthcare Reform in the Republic of Ireland.....	5
1.1 Oireachtas Committee on Future Healthcare.....	5
1.2 Reform in the HSE: Community Healthcare Organisations, Hospital Groups and National Centre	7
1.2.1 National Centre Transformation Programme.....	7
2 Service Areas and Capabilities Core to the Future of the Irish Health System	10
2.1 Health and Wellbeing Reform to improve population health	10
2.2. Planning for Health	10
2.3 Service Specification and Improvement	11
3 Public Health Service Delivery Model – Now & Into the Future	13
3.1 Current Model of Delivery (Staff numbers refer to WTE).....	13
<u>3.1.1</u> Enablers	17
3.2 Grading and Remuneration	18
3.3 Summary.....	18
Appendix 1.....	20

1 Context for Healthcare Reform in the Republic of Ireland

As public health expenditures globally continue to grow and governments grapple with the challenge of high demand and insufficient budget to meet that demand, the need for strong and effective planning of health services is ever more critical. This is no different in Ireland as the healthcare system is facing significant challenges, including those arising from an ageing population, increasing prevalence of chronic illness, long waiting lists, service capacity deficits, significantly increased demand and funding challenges.

The Government's health reform programme aims to improve the population's health, assist health services staff to improve services to the public, and demonstrate to taxpayers that value for money is being delivered. Improved health and wellbeing has been a core pillar of healthcare reform since 2012 and has remained a priority of the last two governments. This pillar of reform demarcates a shift in policy, service design and practice away from simply treating sick people to keeping people healthy. It also underscores the need for a whole-of-government approach to addressing the wider determinants of health.

For this reason, the Department of Health is leading a new, whole-of-Government, whole-of-society approach to health improvement, *Healthy Ireland – A Framework for Improved Health and Wellbeing 2013-2025*. The Health and Wellbeing Division has been working to ensure that new structural and service developments result in enhanced and more effective co-operation and collaboration within the health sector and with key cross-sectoral partners. The Health and Wellbeing Division is playing a significant role in contributing to implementation plans and leading and directing implementation of many of the actions detailed in *Healthy Ireland* – within the public health service and with key external partners at national and local levels.

Meanwhile, the other pillars of reform – service, structural and financial, are all progressing with the intention of supporting more sustainable models of integrated care, with a clear objective that health promotion and improvement be the hallmarks of our future health and social care delivery systems.

A significant reform support infrastructure (Programme for Health Service Improvement (PHIS)) has been put in place across the HSE to support reform efforts and to embed reform objectives in daily management practice and healthcare planning functions. A big focus of the PHIS has been on strengthening reform governance and building skills and teams capable of taking a programmatic approach to multiple reform requirements and objectives. The later sections of this paper will briefly set out the opportunities and indeed, requirements for Public Health practice to support and lead in several new functions being created as a result of these reform efforts.

1.1 Oireachtas Committee on Future Healthcare

Acknowledging the need to address the unprecedented challenges facing health and social care services, a Special Committee - the Oireachtas Committee on the Future of Healthcare - was established in 2016 by the Minister for Health to achieve cross-party consensus and make recommendations on a single 10 year vision for healthcare and the direction of health policy in Ireland.ⁱ Re-orienting the model of care towards primary and community care and away from the current focus on acute episodic hospital care is again under examination. This Committee is due to report in the coming weeks.

The Committee will make its recommendations to the Dáil based on its examination of available research, analysis of written submissions received and oral evidence given during public hearings.

In July 2016, the Committee invited written submissions from interested representative bodies, individuals and groupings. Submissions were invited in relation particularly to three areas: overall strategy, primary care and the funding model. A 'Planning for Health Group', comprised mainly of public health staff working in Health Intelligence and Departments of Public Health, Health and Wellbeing Division, prepared a discussion document to support the Committees deliberations and present the views of the HSE on key actions required to put the health services on a more sustainable footing. It is acknowledged by the Director General of the HSE and the HSE's Leadership Team that the organisation needs to invest more heavily in this type of research and analysis to better support the translation of evidence into financial estimates, planning cycles and resourcing decisions.

While the Committee's report is in the final stages of preparation, it seems clear at this stage that there may be some significant areas of consensus. These include in particular the need for universal healthcare, integrated care, and for the reorientation of services towards primary care.

Health promotion and prevention are seen as a key priority and a crucial aspect of any healthcare strategy. Many submissions received from stakeholder's reference the *Healthy Ireland Framework* as a positive policy direction that should be resourced and implemented as an effective prevention measure. Children's groups emphasise the need to invest in early childhood development, health promotion and prevention services in order to improve future health outcomes.

The Minister for Health in recent communications has emphasised the need to:

- Shift our model of care towards more comprehensive and accessible primary care.
- Increase health service capacity, in the form of physical infrastructure and staffing, to address unmet need and future demographic requirements
- Exploit the full potential of integrated care programmes and eHealth to achieve service integration around the needs of patients across primary, community and acute care
- Strengthen incentives for providers to effectively respond to unmet health care needs by ramping up Activity Based Funding
- Empower the voice of the clinician and provide them with opportunities to contribute to the management of our health services
- Further develop Hospital Groups and Community Healthcare Organisations, align them geographically and, as they develop, devolve greater decision-making and accountability
- Follow this with the provision of a statutory basis for Hospital and Community Healthcare Organisations, operating as integrated delivery systems within defined geographic areas
- Once statutory responsibilities and accountabilities are devolved from the centre to Hospital and Community Healthcare Organisations, dismantle the HSE and replace it with a much leaner national health agency. In the interim, reform the existing legislation within which the HSE operates to improve governance.

ⁱ Houses of the Oireachtas (2016). Committee on the Future of Healthcare - Interim Report Interim Report. <http://www.oireachtas.ie/parliament/media/committees/futureofhealthcare/Interim-Report-on-the-Future-of-Healthcare.pdf>

1.2 Reform in the HSE: Community Healthcare Organisations, Hospital Groups and National Centre

In the last 50 years there have been two waves of major structural reform to health service governance and delivery in Ireland: regional health boards replaced the preceding Local Authority system for health through the Health Act 1970;ⁱⁱ and the Health Service Executive (HSE), was established through the Health Act 2004, taking over the running of the health service from the regional health boards on 1st January 2005.ⁱⁱⁱ Latterly, governance of the HSE was reformed through the Health Service Executive (Governance) Act 2013, which removed the HSE board and established a Directorate directly accountable to the Minister for Health.^{iv} The intention of the then Government was that the HSE would be abolished by 2016 and replaced with a Commissioning Agency strategically purchasing care using activity-based funding from autonomous Hospital Groups and Community Healthcare Organisations (CHOs) accountable to boards for a population benefitting from universal health insurance.^{v, vi, vii, viii}

Significant work is being undertaken to complete the organisation of Hospital Groups and CHOs, with further plans underway to re-organise management arrangements to give effect to a commissioning model and a separation between operational and strategic planning roles. The Programme for Health Service Improvement (PHSI) has been increasing its capacity to provide direct support to service managers and reform leaders to ensure reforms are progressing.

A CHO Reform Programme is well advanced and is supporting the successful implementation of new Operating Models, structures and ways of working for all CHOs.

A Hospital Group Reform Programme is also established but not as advanced as the CHO reform in terms of aligning thinking regarding operating models, structures and ways of working in Hospital Groups.

A National Centre Reform Programme is also well established and has made significant progress on scoping core elements of the future needs and functionality of a new HSE that is expected to be more focused on strategy and commissioning for health need and improved health outcomes into the future. The next section (1.2.1) provides some more detail on this.

The Health and Wellbeing Division is feeding into this national work by developing and presenting potential future operating models for all Health and Wellbeing Services. The intent behind this work, now well evolved, is to ensure our services are fully aligned with emergent operating models on the delivery and national planning sides. This work is critical to ensure our services are relevant, fit for purpose and operate in a way that enables maximum impact and efficiency across all Health and Wellbeing services. This work is also tactical, as it is critically important that the Health and Wellbeing Division can communicate a clear position with regard to future requirements for the services within its operations, in order to influence the outcome. It is especially important to complete this work and demonstrate consensus regarding the outcomes and recommendations and provide clarity, if required, with regard to where opinions differ and why.

1.2.1 National Centre Transformation Programme

In 2016 the National Centre Transformation Programme began the process to develop the future vision for the National Centre in the context of 'commissioning' and the strategy set out

for the HSE in the years prior. Through a series of workshops, the Programme developed a high level view of the future of the National Centre (HSE) and the various functions that would reside within.

The following extract has been taken from the paper on the 'Evidence Informed Commissioning Cycle' that was produced as part of this process:

The evidence informed 'Commissioning' cycle has been defined to guide the development of the future National Centre in order to establish an environment in Ireland that adopts and demonstrate the behaviours of a high performing health system. The following is defined in order for the National Centre to '**think nationally**' while the Delivery System '**delivers locally**'.

The role of the National Centre in the Evidence Informed 'Commissioning' Cycle:

- Work in close collaboration with the Department on ensuring there are multi-year strategies for the health service, which are coherent with the direction of health care policy
- Ensure the strategic plans and priorities for the health system are clearly articulated
- Assess the needs of the population and the resources needed across Ireland in order to fairly and equitably allocate funding
- Act as a role model for quality and service improvement and provide support to the Service Delivery entities in achieving their quality goals. Provide guidance and help to Service Delivery entities when they are not achieving their quality goals
- Enable and support the Service Delivery entities so that they can deliver the best outcomes for patients and service users. Allow input and guidance when it is required by the Service Delivery entity or it is deemed necessary through performance requirements
- Develop executive and clinical leadership and improve the organisation's capacity and capability to empower staff to make the right decisions
- Lead the information charge by creating a culture of openness and transparency of information, allowing information to be analysed and used to inform decision making
- Prioritise areas to meet the needs of the population while balancing budget constraints
- Support and enable consistent service designs that support integrated delivery of services and to ensure they are led by clinicians
- Co-ordinate and facilitate service planning activities across the Service Delivery entities in order to develop a consolidated plan for the Irish health system that can be measured
- Ensure services are specified in a manner that allow Service Delivery entities to understand the expectations and that can be measured in terms of value, access and quality
- Ensure quality and patient safety is embedded into the processes performed at a National Level as well as at a Service Delivery level
- Support and enable patient engagement in all decision making about the health service
- Support and enable Service Delivery teams working together to improve services for patients and service users
- Monitor the performance of the Service Delivery entities in order to identify key areas of improvement and ensure that patient outcomes and quality standard are being met
- Support, enable and monitor the Service Delivery entities to ensure there is equitable access and care on a national basis.

The National Centre Transformation Programme is currently in the process of further developing the high level vision set out in the 'Evidence Informed Commissioning Cycle' paper. While the detailed design for the future system is still in development and cannot be fully developed without clarity on final outputs from the Future Healthcare Committee report, there are a number of areas for consideration for both Health and Wellbeing services more generally and Public Health. In particular, consideration needs to be given to the fact that any future direction of travel will require:

- Augmentation to the research, analytic and planning processes and capabilities in the National Centre and delivery organisations
- Augmentation of service specification capability via clinical strategy and programmes
- Augmentation of quality assurance and performance improvement processes and ways of working including a move to outcomes and values based healthcare funding models
- Continued development of a whole of society, whole of government approach to population health improvement and augmentation of the public health service role to sustain successes to date.

ⁱⁱ Health Act, 1970. <http://www.irishstatutebook.ie/eli/1970/act/1/enacted/en/print.html>

ⁱⁱⁱ Health Act, 2004. <http://www.irishstatutebook.ie/eli/2004/act/42/enacted/en/print.html>

^{iv} Health Service Executive (Governance) Act, 2013. <https://www.oireachtas.ie/documents/bills28/acts/2013/a2313.pdf>

^v Department of Health (2012). Future Health – A Strategic Framework for Reform of the Health Service 2012 – 2015. <http://health.gov.ie/blog/publications/future-health-a-strategic-framework-for-reform-of-the-health-service-2012-2015/>

^{vi} Department of Health (2013). The Establishment of Hospital Groups as a Transition to Independent Hospital Trusts and The Framework for Development – Securing the Future of Smaller Hospitals. <http://health.gov.ie/future-health/reforming-our-hospitals-2/hospital-groups/>

^{vii} HSE (2014). Community Healthcare Organisations – Report and Recommendations of the Integrated Service Area Review Group. <http://www.hse.ie/eng/services/publications/corporate/CHORreport.html>

^{viii} HSE (2015). Activity-based funding programme implementation plan 2015 – 2017. http://health.gov.ie/wp-content/uploads/2015/07/ABF_Implementation_Plan_20_05_2015.pdf

2 Service Areas and Capabilities Core to the Future of the Irish Health System

Considering the developments made to date in implementation of service, financial, structural and health and wellbeing reforms and the proposed future changes as set out in the previous section, there is a significant opportunity for Public Health Medicine to spearhead and contribute to these developments. Public Health Medicine and a population health approach will be fundamental to building capacity in a number of key service areas and skills, in particular those that are fundamental to the successful delivery of the proposed future model for healthcare in Ireland, e.g. evidenced based healthcare, integrated models of care, values based funding, quality and population health improvement.

2.1 Health and Wellbeing Reform to improve population health

As highlighted previously Health and Wellbeing has been recognised on numerous occasions as a fundamental component of the successful delivery of healthcare in the future. To this end significant reforms are underway in all of the services that currently make up 'Health and Wellbeing' in the HSE, in addition to hospital and community services. A three year implementation plan for *Healthy Ireland* in the health service sets out the actions and actors required to make *Healthy Ireland* a reality in the Irish public health service. Teams have been established, with clear governance and accountability mechanisms in place to support the systematic roll-out of this plan across the health service and with cross-sectoral stakeholders and partners.

Policy Priority Programmes and national leads have been put in place for a range of policy domains, ranging from healthy eating/active living, to sexual health. This has resulted in real translation of national strategy into local planning and delivery across the organisation. Research and Communications capability to support this work continues to be developed. Outcome measurement is a feature of this work with a view to honing our strategies to more effectively target inequity in health outcomes. Capability has also been developed to standardise local delivery of *Healthy Ireland* across HSE services.

The Policy Priority Programmes are a support to this work, but separate capability has been developed nationally to drive out this work with health service managers and key external partners. A national *Healthy Ireland* team, with planning and performance oversight capability is in place driving this work forward. This work spans all levels of healthcare management and delivery. For example, work is being coordinated nationally to increase the skill base of all health service representatives on local authority structures to ensure the health service is playing a strong role in supporting local community approaches to health improvement.

The National Director has been working with the senior management team of the Health and Wellbeing Division, and with other national Directors, to institute these changes and build this capability to sustain consistent and effective implementation, over time, of government health strategy.

2.2 Planning for Health

The ability to plan for health needs of the population is fundamental to the successful delivery of healthcare and is a core Public Health service area and capability. With this in mind the National Director established a 'Planning for Health' team comprised mainly of Public Health Doctors, to begin

developing analytical capability and analytic outputs to support and underpin health service planning and delivery. This team, working in conjunction with the national Health Intelligence Unit, has augmented our capability to analyse and interpret health data. The intention is to build, over time, a robust evidence base to support a more evidence informed approach to estimates and resource assessment, linked to service planning and resource allocation decisions. A number of reports have now been published by this team that attempt to utilise current population projections, disease prevalence and service utilisation data and knowledge to inform service design and improve health outcomes in the longer term. This work is still in its infancy and has the capability to truly transform healthcare planning and service delivery and indeed, improve population health.

2.3 Service Specification and Improvement

The history of healthcare reform in Ireland clearly indicates a persistent challenge in bridging the gap between vision and delivery of change, with strategic reviews rehearsing similar themes and progress reports showing gaps in implementation.^{ix} And while it should be recognised that much has been delivered in the area of strengthening primary care within the broader context of health service reform,^x delivering a decisive shift in the balance between acute hospital care and primary care has never been achieved, despite being widely acknowledged as the key to securing the future of health and social care in Ireland.

Rebalancing health service delivery to overcome the traditional focus on acute episodic hospital care and reorient towards an integrated approach in primary and community care has been on the national policy agenda in Ireland for at least thirty years.^{xi} Internationally, this strategic repositioning of health services is recognised as better enabling health systems to meet the challenge of escalating demand for health care stemming from population ageing and rising levels of chronic diseases, while at the same time ensuring more sustainable health expenditure, safeguarding access to care, addressing inequalities in health and, critically, delivering the best value for population health.^{xii,xiii,xiv}

This agenda has become increasingly central to government health policy over the last 30 years. This Government, through its programme published in May 2016, committed to sustaining increases in the annual health budget and prioritising efforts to increase access to safe, timely care, as close to patients' homes as possible, achieving this in part through a focus on developing an enhanced primary care system.^{xv}

Clinical leadership is critical to our successes and future success. The National Clinical Strategy and Programmes established in 2010 aim to improve and standardise patient care. They are a key change vehicle for the Health and Wellbeing Division. Clinical leadership of the Clinical Programmes is a critical success factor and has been supported by close collaboration between the HSE and the Forum of Irish Postgraduate Medical Training Bodies working in partnership with patients, nursing and therapy leads.

The National Clinical Programmes are overseeing the development of a suite of Integrated Care Pathways that design models of best care across the continuum of health services from primary to secondary to tertiary and quaternary care.

These clinical Programmes are structured and managed so as to allow more alignment between clinical strategy and operational delivery.

This restructuring will allow for better alignment of the National Clinical Programmes with the priorities of the Oireachtas Committee on the Future of Healthcare, in particular improved health and

wellbeing/health outcomes and will facilitate strategic development of priority programmes which take full account of available resources, current deficits, clinical evidence and emerging developments. These Programmes will be monitored against an agreed benefits realisation plan.

^{ix} See for example how health care delivery configuration direction identified in the Fitzgerald Report (Government of Ireland (1968). Outline of the future hospital system - report of the consultative council on general hospital services [Fitzgerald report]. <http://www.lenus.ie/hse/bitstream/10147/46113/1/11424.pdf>) is reviewed by HIQA in relation to services in the Mid-West (Health Information and Quality Authority (2009). Report of the investigation into the quality and safety of services and supporting arrangements provided by HSE at Mid-Western Regional Hospital Ennis https://www.hiqa.ie/sites/default/files/2017-01/investigation_report_mid-western_regional_ennis.pdf) and identified again in the Higgins report (Department of Health (2013). The Establishment of Hospital Groups as a Transition to Independent Hospital Trusts and The Framework for Development – Securing the Future of Smaller Hospitals. <http://health.gov.ie/future-health/reforming-our-hospitals-2/hospital-groups/>).

^x Houses of the Oireachtas (2010). Joint Committee on Health and Children Second Report. Report on Primary Medical Care in the Community, February 2010. https://www.oireachtas.ie/viewdoc.asp?fn=/documents/Committees30thDail/J-HealthChildren/Reports_2009/20100210.doc

^{xi} Department of Health (1986). Health - the wider dimensions (a consultative document on health policy). <http://www.lenus.ie/hse/bitstream/10147/121287/1/HealthWiderDimensionsDec1986.pdf>

^{xii} World Health Organisation (2008). The World Health Report 2008 - Primary Health Care (Now More Than Ever). <http://www.who.int/whr/2008/en/>

^{xiii} Starfield B, et al. (2005). Contribution of primary care to health systems and health. *Milbank Quarterly*, 83(3):457–502.

^{xiv} Macinko J, et al. (2003). The contribution of primary care systems to health outcomes within Organization for Economic Cooperation and Development (OECD) countries, 1970–1998. *Health Services Research*, 38(3):831– 865.

^{xv} Department of An Taoiseach (2016). A Programme for a Partnership Government. http://www.taoiseach.gov.ie/eng/Work_Of_The_Department/Programme_for_Government/A_Programme_for_a_Partnership_Government.pdf

3 Public Health Service Delivery Model – Now & Into the Future

3.1 Current Model of Delivery (Staff numbers refer to WTE)

There is a total of 67 Public Health Medical Staff working within the HSE and 59.2 within the Health and Wellbeing Division. The majority of these staff are employed in Regional Departments of Public Health that were established under the Health Boards in 1995. There are currently eight Departments, each led by a Director of Public Health covering the following areas:

- East
- North East
- North West
- West
- Mid West
- Midlands
- South
- South East

These Departments cover the geographical areas served by the former Health Boards. There are 7.5 Directors of Public Health and 34.7 Specialists in Public Health Medicine (SPHM) working across the eight Departments.

There are seven SPHMs employed in the Health Protection Surveillance Centre (HPSC) and 1.5 SPHMs in the National Immunisation Office (NIO). The Departments of Public Health, the HPSC and the NIO are all part of the Health and Wellbeing Division and report through the Assistant National Director, Public Health, who reports to the National Director, Health and Wellbeing Division.

A National Health Intelligence Unit, comprising of four SPHMs and support staff, carries out a range of national Health Intelligence functions and services. This Unit reports directly to the National Director, Health and Wellbeing Division.

In 2013, a National Clinical Advisor and Programme Group Lead (NCAGL) was jointly appointed between the Health and Wellbeing and the Clinical Strategy and Programmes Divisions. This national multi-disciplinary team leads on all aspects of health service improvement and clinical design from a population health perspective. There is 1.6 SPHM supporting the NCAGL, 0.5 reporting directly.

Public Health Medical Staff are also employed in other areas of the health service including:

- National Cancer Control Programme (3 SPHMs)
- Quality Improvement Division (2 SPHMs)
- Social Inclusion, Primary Care Division (0.8 Director of Public Health)
- A number of Public Health Specialists are directly employed by Hospital Groups (2 SPHMs).

There is one Director of Public Health and one SPHM currently on secondment from the HSE to the Department of Health.

Two staff hold joint academic posts (Director of a Public Health Department and SPHM from Health Intelligence).

There are also Public Health Specialists employed outside the HSE, directly by the Department of Health, in statutory agencies and in Universities.

Each Regional Department of Public Health is led by a Director of Public Health and has a number of Specialist staff employed. In addition, there are Senior Medical Officers, Infection Control Nurses, Surveillance Scientists, Researchers and administrative staff in the departments. The ratio of Specialist to support staff varies considerably across departments.

In total, there are 254.3 staff employed within the Health and Wellbeing Division for the Public Health function. See Appendix 1 for full details.

The draft Public Health Workforce Strategy (2014) prepared by the Assistant National Director of Public Health stated that almost 50% of time of the Directors of Public Health and Specialists was spent in the area of health protection; approximately 22% in the area of policy, planning and service development (this included health protection services and local health services as well as national health service work); 6% in the area of health intelligence; 7% in the area of health improvement; and the remainder (approximately 15%) on management, research or training.

As stated earlier, since the enactment of the 2013 Health Service Executive (Governance) Act, there has been increased focus on national health intelligence capability and expertise for the design of clinical models of care. Public Health Specialist expertise is essential to how these activities are undertaken in the future. To date, it has been extremely challenging to get agreement for the release of staff from local duties in Public Health Departments to undertake such national work. This has impacted on the pace at which we have been able to deliver and progress priority programmes of work to support and drive a new way of working across the health services in Ireland.

3.2 Meeting Short to Medium Term Priorities

Public Health Medical expertise is needed for the National Centre functions of population needs assessment, service specification and design, planning and commissioning health services as well as for national health protection functions. It is very important to acknowledge that all national work has (or should have) direct local implications; indeed the purpose of national work is to influence local delivery (within health services and with external partners). All national work in Public Health contributes to and directly informs local delivery. Very often traditional local public health work has been ineffectual and/or inefficient as national frameworks are not in place to enable systematisation of approaches to deliver population health gain, even at local area level.

Public Health Medical expertise is also required at the local level to provide comprehensive geographically based health protection services. To fulfil these priorities, governance and reporting structures would need to change. There is no impediment, arising from public health legislation, to the HSE in deciding to change governance and reporting lines and reconfigure the services it is responsible for funding and delivering.

There is and will continue to be a limited supply of Public Health Specialist skills. Surveys carried out in 2013/14 indicated that 60% of Public Health Specialists/Directors intended retiring before 2025. The service is already experiencing retirements in this group and has had some difficulties replacing them with the numbers coming off the training scheme.

It currently takes four years to train Doctors on a higher specialist training scheme. Therefore, even with increased intakes during recent years into the training scheme it is unlikely that the service will be able to do more than provide replacements for retirements in the immediate future.

This deficit in capacity is being acutely experienced at the moment in terms of the lack of staff to deliver on the identified national priorities. To address this situation in the short term, the existing resource that is locally based in Departments of Public Health needs to be re-focussed to deliver more effectively across priority areas – to deliver better value for money, to use our skills and expertise more efficiently and effectively and to make measurable impacts on a smaller number of priority areas. This will require a deployment of Public Health Specialist resources with specific and appropriate expertise from local Departments of Public Health to services led by the National Centre. This in time will be augmented by the recruitment of Specialists directly into these priority areas.

There are a number of options to consider in terms of how better, more effective and more standardised health protection services can be delivered across the country. Ways in which better efficiencies, synergies and quality outputs can be realised by connecting our surveillance and control services and functions requires serious consideration. The size of the geography aligned to health protection work also requires review. A larger geography could realise greater efficiencies but would require a strengthening of the broader health protection infrastructure across all healthcare settings. The role of GPs and other health professionals would need to be considered, as they would be required to play a defined role in local health protection work, to allow public health specialists offer a support and advisory service to those health professionals working directly with patients at the coalface of health and social care service delivery. Mechanisms to enable this approach would need to be fully exercised to realise these opportunities.

At national level Public Health medical expertise and leadership is required for four priority areas into the future:

- Health Protection and Health Protection Surveillance
- Health Service Design and Specification (Health Service Improvement)
- Research and Health Intelligence
- Healthy Ireland and Policy Priority Programmes

Any re-alignment of Regional Departments of Public Health to new geographies will require consultation with key stakeholders.

Staffing Requirements – short to medium term

Multidisciplinary teams, with levels of Public Health Specialist staff specified, will need to be in place at both national and local levels.

In the main, national staffing levels for health protection, Health Protection Surveillance and National Immunisation are reasonably adequate for the current level of service. A National Health Protection surveillance function, led by a senior public health physician, will strategically lead the development of health protection services, through national frameworks, development of standard operating procedures, training, coordination, advice, audit and surveillance. The linkage with local health protection teams requires consideration in the context of both opportunities to improve and raise standards and accountability arrangements that will ensure delivery. Through the development of standard operating procedures, duplication of effort will be reduced at local level and consistency in high quality delivery of services can be achieved across the country. Health Protection services need a stronger skill mix balance across teams (currently there is significant variability in skills mix across

local Departments of Public Health) to both ensure and allow Public Health Specialists to work to their full potential. The full capability of the health services need to be leveraged when addressing the skills mix question. The role of GPs, hospital pharmacists, infection control nurses etc. need to be examined so that each professions' contribution and role and responsibility is clearly articulated and agreed. Strong national leadership is also required to identify key priorities and align resources to support the work accordingly.

A new augmented Research and Development Unit is being developed in the National Centre. An Assistant National Director, Research and Development is currently being recruited. It is considered that this function will encompass the existing National Health Intelligence Unit. Additional Public Health Specialists and other multidisciplinary staff will be re-deployed and recruited to deliver on national priorities and in particular, to produce robust population needs assessments (at national, CHO and Hospital Group levels) and to design evidenced-based resource allocation modelling. Elements of this function and association structural and reporting considerations are currently being explored via the Centre Programme reform work-stream, supported by PHSI and sponsored by the Director General.

The Health Service Design and Specification function will be led by the new Medical Director role at national level, reporting to the Director General. It is intended that the preventative and health and wellbeing portfolio will be led by the National Clinical Advisor and Group Programme Lead for Health and Wellbeing. Public Health Specialists and a range of multidisciplinary staff will be required to support effective delivery of this programme of work. As articulated in section 3.1 it has been extremely challenging to get agreement for the release of staff from local duties in Public Health Departments to undertake this national work. This has compromised the pace at which we have been able to deliver on national priorities aligned to chronic disease prevention and management and other integrated clinical programmes.

Enablers

The implementation of this new proposed model will require fundamental changes to three critical areas:

1. Out of Hours Service

There is a need to modernise the Out of Hours service which is critical to providing emergency cover and advice on emergency public health queries.

The service needs to be standardised and reorganised as a national service, making more efficient use of our expert resources. The interim Out of Hours service that is currently being provided for many years requires a significant amount of Specialist support on a weekly basis covering comparatively small geographic areas. Reports on activity for the Out of Hours service show that, in the main, queries are low in number. In many parts of England a far more efficient system has been in operation for many years where a fewer number of clinicians provide cover and advice for a much larger geographic area.

2. Training

In order to prepare higher specialist trainees for a lifetime's career in Public Health Medicine it will be necessary for them to achieve the competencies across all domains of Public Health Medicine within their training programme. However, it is also important that individuals can choose to focus, especially in their latter years, on particular domains i.e. health protection, health service improvement or health intelligence, to develop sub specialist skills in these areas. It's important that Public Health Physicians of the future have the opportunity to follow a variety of career paths and work in diverse roles similar to consultants in other specialties. The health services require Public Health Physicians who have an enhanced expertise in these areas and the ability to become "true experts" in a field, and this is seen by many doctors as providing a rewarding and challenging career.

A critical training competency required for effective public health practice is the development of leadership skills and ability to lead, manage and empower large scale transformative change –within health and wellbeing services, across the health system and across the wider health eco-system to fully deliver on population health improvement from a determinants perspective. Rising levels of chronic disease, growth in threats to human health from antimicrobial resistance, to climate change, exponential and unsustainable increases in demand for public health services, developments in social media and communications, rising health inequalities, disruptive technologies, all create new challenges and opportunities for public health practice. In order to respond to these challenges a different kind of leadership is required. The skills required for effective leadership in this complex, changing environment include the ability to communicate and influence effectively, to guide organisational behaviour and decision making, the ability to adapt and change in response to internal and external realities, cultivate cross-divisional networks and relationships; work in interdisciplinary teams, challenge widely held views and assumptions (in oneself and in others); apply scientific rigour to healthcare delivery problems; and build and sustain communities of practice capable to responding in a sustainable and effective way to these challenges. This Review process provides an important opportunity to identify the essential components leadership practice and to create the training and working conditions to nurture and develop these skills in current and future generations of Public Health doctors.

3. Recruitment strategy

The number of Specialist Registrars taken into the service each year was doubled in 2014 and went from four to eight new trainees. Notwithstanding this investment, it is anticipated that due to the age profile of the existing workforce we will be challenged to grow the size of workforce to any discernible degree in the medium term. Current investment needs to be sustained at a minimum, and increased if a new model is agreed, to augment total numbers working across the domains of public health. It is worth noting that the Training Scheme is attracting very high calibre individuals, attributable in no small way to the large emphasis being placed on population health improvement nationally and via *Healthy Ireland*.

3.2 Grading and Remuneration

Creating an exciting and rewarding career pathway is essential for the future of the public health speciality. The MacCraith Review provides an opportunity to agree final recommendations, specifically with regard to remuneration.

At present, there are two career posts for Public Health Physicians, that of Director of Public Health and that of Specialist in Public Health Medicine, neither have incremental credit, nor any higher responsibility allowances as may exist for other clinical specialties. This is seen as one of a number of barriers in attracting specialists to take up positions of leadership in the service. It will be necessary to provide a career progression pathway, with suitable remuneration to encourage Doctors to fully utilise their expertise, take up challenging leadership career positions and be recognised for career progression purposes. It is acknowledged that salary is not the only, nor the primary factor influencing career progression or motivation in staff to take on or lead in different portfolios of work however; it is an important area that needs to be addressed.

Career progression for other staff who are key to an effective and efficient model including Surveillance Scientists, Public Health Researchers and Infection Control Nurses should also be examined to facilitate attractiveness and retention issues.

3.3 Summary

The importance of public health medicine and its potential to significantly contribute to and enhance the planning, design and delivery of healthcare in Ireland cannot be overstated. Its critical role in protecting the public from threats to health and wellbeing must continue to be promoted and developed, in partnership with key agencies and organisations. It is imperative that Health Protection work is seen to be valued, especially by those working in the service, and that clear efforts are being made to modernise management and standardise operational procedures to make this work more effective, more efficient and visible.

Implementing a new operating model provides a real opportunity for overall enhancement of public health medicine as a career choice. It is acknowledged that this will be challenging for Public Health physicians as roles and responsibilities will need to change to meet the needs of our changing health services and changing population. There is a clear need for a greater voice for public health as we endeavour to address the sustainability issues in our health system and the imperative to strengthen our efforts in prevention and health and wellbeing. A whole-of-organisation perspective is essential and through a

The Future of Public Health Medicine

new way of training, delivering and managing public health this significant and valuable expertise can be fully leveraged.

The opportunity provided by this Review needs to be seized and fully exercised to allow public health medicine hold a leadership role, front and centre, in the future of health and healthcare in Ireland.

Appendix 1

Public Health Medical Staff & Multi-disciplinary Support Staff in HSE February 2017

	Total WTE	Public Health WTE
Regional Departments of Public Health		
East	35.8	10.6
North East	9.7	1.8
North West	23.6	4.6
West	20.9	5.2
MidWest	14.7	4.8
Midlands	20.7	5
South	39.1	5.3
South East	21.9	4.9
<i>Regional Departments Total</i>	<i>186.4</i>	<i>42.2</i>
Health Protection Surveillance Centre	37.8	7
National Immunisation Office	7.5	1.5
National Office, Public Health	3	1
National Health Intelligence Unit	15	4.9
Health Service Improvement	<u>4.6</u>	<u>2.6</u>
<i>Health and Wellbeing Division Total</i>	<i>254.3</i>	<i>59.2</i>
HSE Divisions/Hospitals	<u>0</u>	<u>7.8</u>
<i>HSE Total</i>	<i>254.3</i>	<i>67</i>

Appendix 5
Submission from Faculty of Public Health Medicine
in the Royal College of Physicians in Ireland



FACULTY OF PUBLIC HEALTH MEDICINE

ROYAL COLLEGE OF
PHYSICIANS OF IRELAND

Mr. Shane McQuillan
Crowe Horwath
Marine House
Clanwilliam Place
Dublin 2

28/4/2017

Dear Shane

Thank you for the opportunity to meet with yourself, Gabriel and Vanya on 6th March.

At that meeting, the Faculty was asked to provide more detail on its views on the future development of the specialty of public health medicine in Ireland.

Drawing on the results of our survey of Members and Fellows in January 2017 and having consulted with our Board, we have drawn up proposals which will deliver a future fit-for-purpose public health medicine service in Ireland. This paper builds on the submission which we previously sent to you. It outlines our vision for a strong public health medicine service and the proposals which we feel would need to be implemented to achieve this. These proposals are outlined under 6 headings:

- Policy and strategy
- Structures
- Resources and workforce planning
- Leadership and consultant status
- Academic links
- Training in public health medicine

We would like to have the opportunity to meet with you again to discuss this follow-up submission and to answer any queries that you might have in relation to it. Thanking you.

Yours sincerely

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Dean
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Faculty of Public Health Medicine Proposal on the Development of a Fit for Purpose Public Health Medicine Service in Ireland

27th April 2017

1. Background

The health of the population and the health services in Ireland face unprecedented challenges. There is an opportunity now to shift policy to achieve a more sustainable future. A population health approach will be essential in this policy shift to maintain health, manage demand and improve access to high quality services.

These views were expressed in a recent speech by the Minister for Health to the Joint Oireachtas Committee on the Future of Healthcare and echo the views of that Committee, as outlined in its Second Interim Report. Similar opinions were expressed in *'Towards 2026 – A Future Direction for Irish Healthcare'*, Royal College of Physicians of Ireland (March 2017), reflecting the concepts outlined in *'Healthy Ireland'* (Appendix 1).

In setting out its proposals for the future of the public health medicine service in Ireland, the focus of the Faculty of Public Health Medicine is on promoting and protecting the health of the population, addressing health inequalities and ensuring that public health physicians are facilitated to maximise their input into planning and evaluating population health policies and interventions.

2. The role of public health physicians in implementing a population health approach

A population health approach is fundamental to the practice of public health and public health medicine. Public health physicians (Specialists in Public Health Medicine and Directors of Public Health) have key skills, training and expertise in advising on the most effective use of resources for the benefit of the population as a whole, acting as agents for change and avoiding possible sectoral interests and biases.

Public health physicians:

- assess, diagnose and advise on the current and future health and health service needs of the population
- identify priority topics and groups for health improvement and disease prevention
- provide independent, impartial and evidence-informed input to health service planning and incident management
- have clinical responsibility for individuals, groups and the population to prevent and control infectious disease, and provide a response to national and international incidents¹

¹ Such work is underpinned by national and international legislation. The main relevant legislation includes the Health Act 1947; Health (Duties of Officers) Orders 1949; Infectious Disease Regulations 1981; WHO International Health Regulations 2005; Decision No 1082/2013 of the European Parliament on serious cross-border threats to health; Drinking Water Regulations 2014. The legislation underpinning the Medical Officer of Health (MOH) function relates not just to infectious diseases but also to the broader determinants of health.

- bring a medical perspective to health technology assessment and economic evaluations
- advocate for the health and well-being of the population both within and outside the health sector.

Public health physicians work across the four key domains of public health practice: Health Improvement, Health Service Improvement, Health Protection and Health Intelligence.² Because of the rigor of their training and their involvement in continuous professional development, public health physicians are a quality-assured workforce.

Much of the work of public health physicians is necessarily invisible, as it may lie in persuasion rather than in direction, and it is not always possible to accurately quantify outcomes, especially because of the preventive and long term nature of many public health interventions.

There is evidence, however, that public health interventions offer considerable returns on investment, as shown in a recent systematic review.³ In this review, the median return on investment was found to be 14 to 1 for all interventions, rising to 27 to 1 for nationwide interventions. In addition, contrary to what is often assumed, returns on investment were achieved within a short timeframe (less than one year) as well as over the longer term.

3. Current challenges

A strong public health medicine service is consistent with the direction of national health policies and can facilitate policy implementation. In recent years, there has been a reduced investment in the public health medicine service. This has posed challenges in maintaining the current service and has constrained public health physicians in contributing to new health service initiatives. The following challenges to current public health medicine practice have been identified:

- The position, status and number of leadership posts in public health medicine have been reduced due to changes in the health service structure. There are fewer public health medicine leadership positions on national and local senior management teams. This has limited the ability of public health physicians to provide a population health perspective to policy development, provide public health advice to health service managers and advocate on behalf of the population within the health sector. The loss of such leadership and advisory opportunities has reduced the visibility and impact of public health medicine overall within the health service.

² **Health Improvement:** developing an integrated approach to promoting health and preventing disease, with a particular emphasis on health inequalities.

Health Service Improvement: working towards delivering effective, efficient and accessible health services.

Health Protection: taking an 'all-hazards' approach to the prevention and control of infectious disease and environmental and radiation risks, and providing an emergency response to major incidents and health threats.

Health Intelligence: using population health surveillance and monitoring of trends, and using an evidence-based assessment of policies, programmes and services, to inform health planning.

³ Masters R, Anwar E, Collins B, et al. Return on investment of public health interventions: a systematic review. *J Epidemiol Comm Health* Mar 2017. Accessed on 27/04/2017 at: <http://jech.bmj.com/content/jech/early/2017/03/07/jech-2016-208141.full.pdf>

- The diminished capacity of Departments of Public Health has reduced their previously valued input to local health service planning and implementation, as well as their advocacy role with health service managers and non-health sectors for their local populations.
- Delays in the timely appointment of graduates of the higher specialist training programme in public health medicine to vacant specialist positions has created uncertainty and impacted on capacity.
- Without an agreed method of identifying priorities, public health physicians have been compromised between different work requests (i.e. national and local; urgent and planned; health protection and non-health protection).
- The speciality of public health medicine has not been valued equally to other medical specialties at a health policy level. The lack of consultant status is a reflection of the lack of recognition by government of the importance of a population health approach.
- In this country, compared to other similar jurisdictions, the numbers and skill-mix in the broader public health workforce are limited, with minimal opportunities for training and career progression. This narrows the range of perspectives and skills in tackling health and health service issues.

These challenges, and future proposed changes in health service structures, have led to concerns of further fragmentation and a reduction in the public health medicine workforce. There is a particular concern about its inability to mount a surge response for future urgent health threats, posing a risk to our national health security. The current interim out-of-hours service, which has been identified as unsafe, is another such concern.

4. Towards a strong Public Health Medicine Service

Vision

The Faculty of Public Health Medicine (FPHM) advocates a unified and integrated, fully-resourced public health function, delivering across all domains at national and local levels, and across all services and sectors which impact on health. Public health physicians play an essential and leading role in the delivery of this function in Ireland.

Proposals to strengthen Public Health Medicine within the public health function

Achieving the vision of a strong public health medicine service will require the implementation of all of the proposals outlined below.

Policy and strategy:

- A strong public health medicine function should be an integral component of national health policy.
- A strategic plan is required to develop the public health medicine service and transition to a strong service which effectively and efficiently serves population health and health service needs.

- This strategic plan will address structural reform, resource allocation, multiannual and annual service planning, and performance management.

Structures:

- The future structures to deliver the public health medicine function must be sustainable within the changing healthcare management environment.
- The FPHM advocates a single public health function consisting of a National Centre for Public Health (NCPH), serving the national needs and an integral component of the HSE's proposed National Centre, and Regional Departments of Public Health (RDsPH), delivering services at a local level on a geographical basis. Strong collaborative relationships will be developed and maintained between the NCPH and RDsPH.
 - The NCPH will cover all domains of public health practice, deliver on international and national responsibilities and provide expert advice on health and the health service needs of the population. The NCPH will work with the proposed HSE National Centre and with hospital and community health services, and will work seamlessly with RDsPH in delivering the public health function.
 - The RDsPH will deliver for the population that they serve across all domains of public health practice and across the health service (e.g. hospital groups and community healthcare organisations) and other sectors that impact on population health. These departments will be essential drivers of policy implementation at a local level. They will be led and managed by a Director of Public Health, working to national priorities and in accordance with relevant legislation.
- These structures will be underpinned by clear governance (including clear lines of professional and managerial responsibility and accountability) and communication arrangements and will allow for agreed public health business plans at national and regional level.
- These structures will facilitate public health medicine input into all domains of practice, nationally and locally, enabling a public health physician to work across domains as required by the service and with an agreed work portfolio.

Resources and workforce planning:

- A critical mass of public health physicians is required to implement the strategic plan for public health medicine and to provide resilience to respond to local, national and international emergencies, including in health service delivery and health protection.
- Workforce planning and investment is required for the broad public health workforce to deliver the overall public health agenda. Attention to the most appropriate skill mix will enable an efficient use of resources.
- Training, professional development and promotional opportunities are required across the public health workforce.

- Consideration should be given to ensuring that senior leadership positions are for a fixed term. This would provide for a constant refreshing of ideas and enthusiasm, and allow for career advancement opportunities.
- Substantial investment in modern ICT capability is essential to deliver efficiencies and integrated working.

Leadership and Consultant status:

- Public health physicians will have the status and position within service structures to provide leadership on all aspects of health improvement and service planning. Public health physicians in senior management positions will be members of senior management teams.
- A Consultant in Public Health Medicine will be the substantive post for a specialist in public health medicine working in the public service. This will:
 - acknowledge and highlight the specific expertise and leadership skills of public health physicians, thus improving their capacity to work with national, hospital and primary care colleagues, with other professionals, and across health service and other sector boundaries
 - attract to the specialty the brightest and the best physicians who are committed to population health and health policy
 - assure their authority to plan, manage and deliver their own service
 - enable them to advocate for the health and service needs of the population for which they are responsible
 - reflect their clinical responsibilities and the equivalence of their training with other specialties.

Academic links:

- The NCPH and the RDsPH will have formal academic links with universities and other relevant third level institutions to achieve greater integration between the healthcare agenda and the research, innovation and implementation science agendas
- The strategic plan will identify joint working opportunities, in particular additional formal joint academic and service appointments.

Training in Public Health Medicine:

- Structures, as described above, will facilitate higher specialist training across all domains of public health medicine practice, at local and national levels.
- The joint service and academic appointments, as described above, will facilitate the enhanced awareness of public health medicine as a career option at undergraduate level.
- Dual accreditation with relevant specialties, such as microbiology, infectious disease, geriatric, respiratory, genitourinary or emergency medicine, general practice, and psychiatry,

will be explored by the FPHM. Progress will be facilitated if differences in job contracts for graduates of the different specialty training schemes are addressed.

- Opportunities for post-CSCST sub-specialist training will be explored by the FPHM, taking population health and health service needs into account. Sub-specialisation should not diminish the generalist workforce, fragment the public health medicine function or reduce surge capacity.

5. Conclusion

The Faculty of Public Health Medicine (FPHM) acknowledges the challenges facing the health of the Irish population and the health services, and considers that a strong, vibrant and modern public health medicine specialty can play a key role in identifying and driving forward solutions to these challenges.

The FPHM recognises the need for change within the public health medicine service in order to re-position the specialty where it can best influence and achieve results across the health service and other sectors that impact on health. The FPHM is committed to working with all the relevant players in pursuit of these objectives.

Appendix 1

A: Extracts from the Second Interim Report of the Joint Oireachtas Committee on the Future of Healthcare, January 2017

Demographic pressures and bed capacity

The theme of demographic pressures on services emerges from all stakeholder groups. Population growth, the rising numbers of older people, and the increased incidence of chronic disease and co-morbidity are all identified as putting escalating demand on all health and social care services. Health promotion and disease prevention are seen as essential to managing these pressures. Additionally, many submissions emphasised the need to increase bed capacity in the system.

... themes that have emerged include:

- Overwhelming consensus on the critical importance of health promotion and prevention of ill-health in the interest both of improved public health and financial sustainability.

B: Joint Oireachtas Committee on the Future of Healthcare Extracts from the Opening Statement by Minister for Health Simon Harris T.D. 22nd March 2017

'.....the overarching objective must be population well-being and disease prevention – what we refer to as the *Healthy Ireland* agenda.

Over the next decade we need to get past the stage of constant fire-fighting to a place where we can have a mature debate about how to set priorities and where to develop our services.

Health inequality is a major issue, and will become even more marked in the years ahead, unless we find ways to serve all of our people better.

.. I am convinced that Hospital Groups and CHOs should be geographically aligned.

.. Today, the great challenge is the management of chronic disease - which is to say long term conditions which can be treated but not cured. In some respects, chronic disease is simply a feature of living longer, but in many cases the onset of disease is influenced by lifestyle factors including diet, exercise, smoking and alcohol consumption.'

C: Towards 2026, Royal College of Physicians of Ireland, March 2017

Recommendation 2: Keeping people well

There must be sustained cross-governmental and cross-societal commitment to reduce ill-health through addressing lifestyle trends and inequalities in health outcomes.

D: Healthy Ireland: Four Goals

1. Increase the proportion of people who are healthy at all stages of life
2. Reduce health inequalities
3. Protect the public from threats to health and wellbeing
4. Create an environment where every individual and sector of society can play their part in achieving a healthy Ireland.

Appendix 6

Directors of Public Health Submission

Directors of Public Health

Developing and Building a Public Health Function for Ireland in Alignment with the Strategic Direction of the Health Service

Key message

The Directors of Public Health Group recommend a new Public Health division for the Public Health function, headed by a National Director of Public Health. This division would coordinate the integrated approach to public health functions and operations across the health service and other sectors.

Background

Departments of Public Health are responsible within their defined population for the delivery of:

- Measurable health improvement;
- Health Protection including actions for the prevention and control of infectious diseases, environmental hazards, and response to emergencies that threaten health;
- Public health input to health and care service planning and commissioning;
- Reduction of health inequalities

The model below, is a structure that places Public Health in the best position to deliver on this purpose within the proposed new structure of the HSE. The following were used in the developing of the model:

- Change objectives and design principles are proposed for the future Public Health function in Ireland. These are outlined in detail in Appendix 1 and 2.
- The WHO Essential Public Health Operations¹ and relevant Irish legislation on public health statutory functions which are summarised below.
- The advantages of the model and the issues to be addressed are considered and summarised in Appendix 3.

¹ <http://www.euro.who.int/en/health-topics/Health-systems/public-health-services/policy/the-10-essential-public-health-operations>

Public Health Operations and Domains of Practice

The World Health Organisation (WHO) defines the ten Essential Public Health Operations (EPHOs) as: **intelligence operations**

- surveillance
- monitoring and preparedness for response
- informing health assessments

which inform the areas of **public health service delivery operations**

- health protection,
- health promotion
- disease prevention

and are enhanced by **enabling operations**

- governance
- workforce
- funding
- communications
- research.

WHO describes the most effective and efficient method of delivering these operations is through an integrated approach, rather than through vertical programmes.

Public Health practice in Ireland is usually grouped into four domains which intersect with each other and align with the EPHOs: **Health Protection, Health Improvement, Health Services** and **Health Intelligence**.

Statutory functions in Public Health

The Medical Officer of Health (MOH) function is delegated/assigned to Directors of Public Health (DPH) and Specialists in Public Health Medicine (SPHM).

Under the Health (Duties of Officers) Order, 1949², the purpose of the MOH is to advise (Duty 1): involving the provision of accurate public health advice to the appropriate bodies such as health services, emergency services, environmental agencies, local authorities and other organisations. The MOH “*shall inform himself as respects all influences affecting or threatening to affect injuriously the public health in the county and as respects the causes, origin and distribution of diseases in the county*” (Duty 2). The law requires Public Health Departments to undertake health surveillance, public health risk assessment and investigation: the MOH is mandated by the Infectious Disease Regulations 1981³ to work with and across all divisions of the health services and with external agencies in order to successfully implement the legislation. “*On becoming aware, whether from a notification or intimation under these Regulations or otherwise, of a case or a suspected case of an infectious disease or of a probable source of infection with such disease, a medical officer of health, or a health officer on the advice of a medical officer of health, shall make such enquiries and take such steps as are necessary or desirable for investigating the nature and*

² <http://www.irishstatutebook.ie/eli/1949/si/128/made/en/print>

³ <http://www.irishstatutebook.ie/eli/1981/si/390/made/en/print>

source of such infection, for preventing the spread of such infection and for removing conditions favourable to such infection”.

The state is legally obliged to provide an adequate response to protect the nation’s security under International Health Regulations (IHR)⁴.

Core elements of the proposed model

The Directors of Public Health Group recommends a new internal public health division for the Public Health function, similar to the National Cancer Control Programme (NCCP), headed by a National Director of Public Health.

- This would coordinate the integrated approach to public health functions and operations across the health service and other sectors. All services will be nationally managed including Regional Offices with local Public Health Functions
- The National Director of Public Health will lead the public health service, coordinate public health operations, and require a support team. This strong centre will be supported by domain leads (e.g. Lead for Health Service Improvement, Health Improvement etc) and topic leads (e.g. Healthcare Associated Infection, Patient Safety and Health Inequalities) who lead multidisciplinary units nationally.
- A Planning and Performance Support will be needed for the National Director of Public Health to generate and monitor the annual operational Plan for Public Health.
- Regional Departments of Public Health will be retained and deliver on local and national responsibilities for the full range of public health functions. All departments would be required to contribute to all EPHOs and domains of practice at a regional/local and national level, including health service planning and strategy. DsPH will be responsible for regional implementation of policies, advocacy on behalf of population, management of departments and allocation of staff to national Public Health programmes etc.
- Departments of Public Health will continue to be Royal College of Physicians of Ireland Faculty of Public Health Medicine of Ireland (RCPI FPHMI) accredited Higher Specialist Training sites for Higher Specialist Training in Public Health Medicine. Training for other cadres of staff will be developed in Departments of Public Health and other relevant agencies.
- The regional Departments of Public Health will continue to be headed by the regional Director of Public Health (DPH). Specialists in Public Health Medicine (SPHM) will continue to be appointed to Departments of Public Health, supported by the governance structure of the Departments of Public Health and with line

⁴ http://www.who.int/topics/international_health_regulations/en/

management by the DPH. SPHMs working outside Public Health departments will have a line management to a DPH and written secondment agreements. They will continue to support health protection rotas within the Department. Continued appointment of SPHM staff and support staff to Departments of Public Health is needed to sustain core capacity for the EPHOs including out of hours service, response to World Health Organisation International Health Regulations alerts and incidents, and Public Health Emergencies of International Concern, and for general Health Protection surge capacity when required.

- Health Protection is mandated by the Infectious Disease Regulations 1981. Under this proposed new structure, the Director of the Health Protection Surveillance Centre (HPSC) would report to the National Director of Public Health. The Director of the HPSC would be focal point for International Health Regulations and provide technical expertise on all hazards health protection issues. The National Director of Public Health will be the national coordinator for the all hazards response Health Protection role encompassing operational response, immunisation and surveillance of Infectious Diseases, Environment and Health, and Public Health Major Emergency Management.
- Other Public Health Functions, mandated by the Health (Duties of Officers) Order, 1949, would continue in order to fulfil essential public health operations: health protection, disease prevention, health promotion, health service public health, all underpinned by health intelligence and knowledge management. Fulfilment of the public health mandate will be enabled by capacity building and professional development, with continuation of the training function, and developing and improving public health research.
- The HSE Health Intelligence Unit will be located within the public health function as it includes core public health operations underpinning all the public health functions. It should be developed appropriately to link surveillance systems, needs assessments, health service planning, and research and knowledge management.
- Close working relationships need to be maintained with the Health Promotion and Improvement and Environmental Health functions.
- In line with the proposed Health Service structure the Chief Operations Officer, Chief Strategy and Planning Officer, and the National Medical Director would commission needed public health competence and expertise from the National Director of Public Health. We suggest that the Public Health Division is placed under the National HSE Medical Director as this ensures Public Health are best placed to deliver on functions – which are across all boundaries/division including strategy and planning and operations.
- A Planning and Performance function would be created in the Office of the National Director of Public Health in order to produce an annual Public Health Operational Plan and monitor and evaluate its actions.

- Possible working groups / domain activities of the National Public Health Unit could include (while emphasising the interactions between domains):
 - Health Protection Surveillance Centre including all hazards response, public health aspects of Environmental Health, Healthcare Acquired Infections
 - Healthcare Improvement, Quality and Patient Safety
 - Health Inequalities, Public Health aspects of Social Inclusion and Exclusion
 - Public Health aspects of Health Promotion and Improvement
 - Public Health aspects of Emergency Planning
 - Global Public Health
 - Screening
 - Communications
 - Planning and Performance, Funding, Governance
 - Knowledge Management, Health Intelligence, Research

Conclusion

The benefits of the proposed structure ensuring that the Public Health service are best placed to deliver on their purpose: improving the health of the public, promote health and wellbeing, and contribute to evidence-based health service development, while maintaining and developing the four domains of Public Health practice: Health Protection, Health Improvement, Health Services, and Health Intelligence aligned with the EPHOs.

Appendix 1

Future Public Health Service for Ireland

Change Objectives for Public Health

1. To strengthen adherence to key Public Health legislation as it relates to the Medical Officer for Health function, Infectious Diseases and our international commitment to the International Health regulations.

- To enable this level of response, which is provided through the MOH function, DPH and SPHM must be positioned within the structure of the health system to direct all necessary measures required.

2. To strengthen delivery of Public Health across all domains of Public Health practice at a national and regional/local level to ensure the population receives a world class Public Health Service

- Within the domains of Health Protection, Health Improvement, Health Services and Health Intelligence the following functions and operations require specialised national and regional/local coordination:

Domain	National	Regional
Health Protection	Surveillance of threats (e.g. Infectious disease, environmental hazards); generation of evidence based guideline/policy development using an all hazards approach; National Epidemiologist role; International Health Regulations (IHR) focal point; monitoring and reporting on immunisation uptake; generation of evidence based guideline/policies; horizon scanning for threats.	Collection of data to input into national surveillance of threats (e.g. Infectious disease, Environmental hazards); providing practitioner input into shaping evidence based guideline/policy development using an all hazards approach; control of communicable disease and environmental hazards by issuing advice, coordinating outbreak control meetings, being a member of the local Crisis Management Team, enforcing legislation.
Health improvement	Generation of evidence based guideline/policies for prevention; coordination of national screening programmes and generation of evidence based guideline/policy development for these programmes; monitoring and reporting on uptake.	Providing practitioner input into shaping evidence based guideline/policy development prevention and health promotion; drive implementation of national policies in partnership with local organisations cognisant of the strategic direction of the <i>Healthy Ireland</i> strategy; piloting complex interventions at a regional/local level.
Health Services	Health service planning and generation of evidence based guideline/policies to address	Support regional organisations in relation to quality improvement and service development through

	these; Health Technology Assessment; health service quality.	expert advice; drive implementation of national policies in partnership with regional/local organisations; evaluate health services.
Health Intelligence	Development of systems and processes to collect data on the determinants of health, the causes of ill-health and patterns of health and ill-health in a population (including needs assessment); analysis and communication of findings relating to these; generation of evidence based guidelines/policies; translation of these findings and evidence base into recommendations for action; conduct Health Policy Impact Assessment.	Support regional/local needs assessment; develop local capacity for data collection; improve knowledge translation through communication of findings and increasing local capacity in relation to critical appraisal of evidence and understanding key statistics in relation to health.

3. To improve technology within the service so as to enable key public health activities such as surveillance and health protection control activities

- Commission a health protection case management system which is compatible with the Electronic Health Record and other HSE IT developments including the environmental health system
- Improve surveillance system which should receive information from the case management system and laboratories and environmental health systems
- Structure to remain within the HSE so as to avoid potential data protection issues

4. To strengthen accountability and governance throughout the Public Health delivery model

- Clear accountability and governance arrangements and reporting structure
- IT Systems to enable capture of appropriate KPIs to measure performance of the system
- Clear roles and responsibilities, each roles should be defined as local or national, or a mix
- Expert groups with defined and complementary TORs to cover all domains of Public Health practice, linking local and national Public Health

5. To strengthen the independent voice of Public Health so as to enable advocacy on behalf of the population.

- The operating model remain independent of other arms of HSE provision so as to maintain impartiality.

6. To strengthen national and international leadership in Public Health

- National lead for Public Health who has technical training and expertise in Public Health
- National function covering all domains of Public Health practice reporting to national lead.

7. To strengthen regional/local leadership in Public Health

This will be led by a Director of Public Health who will be responsible within their defined population for the delivery of:

- Measurable health improvement;
- Health Protection including emergency response;
- Public health input to health and care service planning;
- Reduction of health inequalities.

8. To improve capacity for generating evidence in relation to population need, inequalities, guideline and policy development.

- Strong national coordinating function for these but who are responsive to requests for these both within and outside the HSE.
- Development of integrated evidence and intelligence strategy which includes training and development plan
- Strong links to stakeholders so as to enable consistent consultation on these capacities

9. To increase synergy within Public Health and reduce duplication of activities where possible while also maintaining surge capacity

- Expert groups with defined and complementary terms of reference to cover all domains of Public Health practice, linking local and national Public Health
- Public Health staff in one integrated regional/local and national function with clear lines of communication and ability to create surge capacity

10. To foster areas of expertise required in Public Health and ensure these meet current and future requirements

- Structure that supports Public Health training of SpRs in relation to supervision and also provision of rotations that will enable exposure to all domains of public health practice.
- A recurring workforce plan including training audits and horizon scanning for new skills requirements
- Development of defined national and local portfolios of work
- Training budgets
- Development of the non medical Public Health staff with career structures

11. To strengthen working arrangements between Public Health and their colleagues in Environmental Health, Health promotion, Emergency Planning and Screening.

- The Public Health Operating Model will develop MOUs for work between them and their colleagues
- These will be designed to be reviewed regularly so as to meet future requirements

12. To strengthen working relationships between Public Health and Hospital Groups and CHOs, both at a national and regional/local level

- The Public Health Operating Model will be strong structure which will wrap around the emerging structures of CHOs and HGs and will be robust during reorganisation

- The Public Health Operating Model will develop MOUs for work between them and the other parts of the HSE

13. To strengthen working relationships between Public Health and external organisations including local authorities, universities, community and voluntary sector, etc.

- The Public Health Operating Model will be strong structure providing consistent contact points with these organisations at a local level
- At a national level the Public Health Operating Model will engage with these in relation to strategy and influence these agendas.

14. To improve workforce planning to ensure that the Public Health workforce has adequate capacity and capability to deliver its services

- A recurring workforce plan including training audits and horizon scanning for new skills requirements
- To continue to provide training to SpRs in Public Health Medicine across all domains of practice of Public Health

15. To strengthen Public Health capacity and capability to enable implementation of key national strategies such as Healthy Ireland.

- A recurring workforce plan including training audits and horizon scanning for new skills requirements
- Strong local Public Health to enable implementation and evaluation of the key national strategies at a local level
- Expert groups with defined and complementary TORs to cover all domains of Public Health practice, linking local and national Public Health

16. To follow international best practice in relation to public health roles and structures and provide clear structures to strengthen collaboration with international public health structures e.g. WHO, PHE etc.

- Roles required by legislation both national and international to be defined and filled
- Key roles identified and remunerated according to international levels
- Strong national centre with regional/local functions
- Coverage of all domains of Public Health practice.

17. The operating model will consist of strong national and local structure which facilitate working with other H&WB divisions and will also align with other parts of the HSE nationally and locally.

- The operating model has defined local and national functions and defined ways of working with other parts of the HSE, ensuring coverage of all of the domains of public health practice both locally and nationally and a consistent provision of services to stakeholders.
- The operating model will stay within the HSE to facilitate co-working.

Appendix 2

Future Public Health Service for Ireland

Design Principles for Public Health

1. The structure of Public Health will fulfil its legislative requirements in relation to the Medical officer for Health function, Infectious Diseases, and the International Health Regulations.

- Public Health must be positioned within the structure of the health system to direct all necessary measures required.

2. The operating model will consist of strong national and local structure which facilitate working with other H&WB divisions and will also align with other parts of the HSE nationally and locally.

- The operating model has defined local and national functions and defined ways of working with other parts of the HSE, ensuring coverage of all of the domains of public health practice both locally and nationally and a consistent provision of services to stakeholders.
- The operating model will stay within the HSE to facilitate co-working.

3. Public Health activities will be carried out at the most appropriate level.

- The operating model has defined local and national responsibilities with appropriate reporting arrangements.

4. The structure of Public Health will enable coverage of all domains of Public Health practice i.e. Health Protection, Health Improvement, Health Services and Health Intelligence at both a national and regional/local level

- The operating model has full coverage of all domains of practice and ensures there is adequate capacity and capability at local and national level.

5. Follow international best practice in relation to public health roles and structures and provide clear structures to strengthen collaboration with international public health structures e.g. WHO, PHE etc.

- The operating model has defined roles meeting international requirements and a unified function to facilitate communication throughout.

6. The public health operating model will have clear governance and accountability arrangements both nationally and locally, which will allow measurement of activities and outcomes.

- The governance and accountability arrangements are explicit with a clear definition of local and national functions
- Communication between the national and local functions is enabled in both directions
- Reporting is to a national Public Health function

7. Increase synergy within Public Health and reduce duplication of activities where possible while also maintaining surge capacity

- The operating model allows for working with colleagues at a local and national level
- Staff can be mobilised from different parts of the operating model in incidents requiring surge capacity

8. Technology will be utilised to optimise high quality work and will be consistent with current HSE plans.

- The operating model allows for a seamless link between local and national systems particularly in the areas of surveillance and health protection case management
- Structure to remain within the HSE so as to avoid potential data protection issues and allow links between the EHR, laboratories etc.

Appendix 3

The advantages of the proposed model and issues to be addressed

Advantages

- Complies with legislation
- Strengthened governance
- Strengthens national public health function while retaining local function and regional offices
- Ensures continued Public Health contribution to all elements of the Health Service i.e. national and regional, strategy and planning and operational (Similar to the Clinical programme leads we have both a national strategic role and also an operational arm in Departments of Public Health).
- Placing the Public Health Function under the remit of the Medical Director ensures Public Health are best placed to deliver on functions – which are across all boundaries/division.
- It would ensure continuing the essential Higher Specialist Training role in Public Health Medicine with the accredited general public health training sites located in Departments of Public Health to ensure this capacity is maintained and developed.
- National domain leads and topic leads (HCAI, quality and patient safety, Health Inequalities etc) will be able to strengthen communication and working between regional and national (provides leadership opportunities)
- Full domain coverage nationally and locally
- Full domain coverage across health protection, health services improvement, health improvement, health intelligence will be required at a local level and portfolios will need to be defined and allocated
- Independence of voice and impartiality maintained
- Reduction of duplication and increased efficiency
- Small impact on staffing numbers and least organisationally disruptive
- Maintains training standards for SpRs in Public Health to train across domains of Public Health
- Structure is flexible to any future changes in HSE structure
- Stays within HSE which avoids issues with data sharing
- Simple structure with clear accountability to senior leaders with Public Health expertise
- Strengthening of implementation
- Increased consistency in Public Health priorities and messages
- Synergy and maintenance of surge capacity
- Expert groups have correct governance

Issues to be addressed

- Training and up skilling required for new domains of practice
- A small number of new roles to be defined

Appendix 7

Irish Medical Organisation Submission

Irish Medical Organisation
Submission to Review of Role, Training and Career Structures of
Public Health Physicians in Ireland

By Crowe Horwath

March 2017

Introduction

The IMO is aware that substantial information has been provided in submissions to inform the Review of the Role, Training and Career Structures of Public Health Physicians¹ (PHPs) in Ireland. In particular, the Public Health Sub-Committee of the IMO wishes to acknowledge the work of the Non Consultant Hospital Doctor (NCHD) Committee and of other colleagues in describing current training and public health services in Ireland, and also supports the recommendations of the following reports which have been made available to Crowe Horwath by the IMO (report number 1) or by their authors (reports number 2 and 3):

1. Submission to Crowe Horwath with regard to their review of Public Health Medicine in Ireland on behalf of the NCHD Committee of the Irish Medical Organisation, February 2017
2. Dee A, Glynn R, Kelly I, O'Connor L. 'Status and Remuneration of Specialists in Public Health Medicine in Ireland. A review of developments since 1990 up to the current position in 2015', May 2015
3. Dee A, Glynn R, Kelly I, Mason Mohan C. 'Public Health Medicine in Ireland- Looking to the Future', December 2016

The Report from the NCHD Committee is based on information and consultation involving all trainees in Public Health Medicine in late 2016 and therefore may be taken as reflecting all of their views.

¹ As a representative organisation, the IMO includes all medically qualified personnel working in Departments of Public Health or in other agencies as being Public Health Physicians, employed as Assistant National Director, Director of Public Health, Specialist in Public Health Medicine or Senior Medical Officer



The 'Status and Remuneration' and 'Looking to the Future' reports were widely circulated and feedback was taken into account in the final versions. There have been ongoing discussions by the Sub-Committee and some consultation with members on the matters covered by the two reports by Dee and colleagues. While it can't be said that all IMO Public Health members are in full agreement with the entire content of both reports, there is agreement on priority issues such as consultant status, the need for fully resourced services, and for the structures which are proposed in order to provide governance of PHPs working across all domains of practice, with integration between those working at national and local levels.

We need not repeat the content of these reports, believing that the Crowe Horwath team has received substantial information on the role of Public Health Physicians in general and on their training, current roles and the structures in which they work in Ireland.

From the perspective of IMO Public Health members, we wish to briefly highlight concerns and proposed solutions with regard to strategic and workforce planning, and structures for public health services, including the current reform of HSE structures.

Additionally we wish to submit an additional document to make the case from business and economic perspectives for adequate staffing and remuneration of SMOs, consultant status for SPHMs, with appointments akin to Hospital Clinical Directors for DPHs.

Strategic and Workforce Planning

Summary of Concerns

Strategic Planning:

- Lack of a strategic approach to planning for public health, including workforce planning

Service Planning:

- Inadequate annual service planning process to take account of all the domains of practice



- Requests for Public Health input to national and other projects throughout the year presents challenges in planning the work of local Departments of Public Health

Staffing:

- Failure to increase staffing to take account of the increase in size and complexity of the population
- Failure to fill vacancies in a timely manner, with posts remaining vacant for long periods or being lost entirely to the public health service
- Current plans to fill vacancies on a permanent basis are confined to the Department of Public Health in the North East, which has extremely low staffing ratios, and to posts at national level
- Staffing has been identified in risk assessments submitted to management by DPHs. The IMO has informed management of the Health and Wellbeing Directorate that the erosion of staff in Departments of Public Health is a risk to population health as well as to IMO members. We do not know if the Senior Management Team of the HSE and the Department of Health have been informed of the risks arising from not filling public health medical posts
- The IMO is particularly concerned about the delay in advertising SPHM posts. It is known in advance when medical staff are due to retire and when vacancies will arise. It is also known well in advance when SpRs are due to complete training and receive their Certificate of Satisfactory of Specialist Training. The absence of succession planning and creation of short term, temporary, *ad hoc* posts creates unnecessary challenges for SpRs in planning basic short term necessities such as accommodation, as well as in planning their careers. This practice carries risks in relation to retention of SpRs in Ireland, as well as reduced efficiency due to absence of handover of portfolios, and loss of corporate memory and expertise.



Recommendations

- A Strategic Plan for Public Health in Ireland, including a workforce plan, is required to support the transition to a high quality public health service. Priority deficiencies such as staffing should be addressed without waiting for an agreed final Plan
- Posts at national and local levels should be filled in parallel; the creation and filling of posts at national level should not be achieved through reducing staff in local Departments of Public Health, or at the expense of filling vacancies in local departments.
- Vacancies should be filled in a timely manner
- HR procedures for PHPs should be similar to those for other staff in the HSE and the public service, with transparency in regard to filling temporary positions, avoidance of long term temporary posts, and timely recruitment of those completing training to permanent posts in order to retain them within the publicly funded health services.

Structures and 'Reform'

Summary of Concerns

Communications and Efficiency

- Currently those PHPs working outside of health protection, whether based in Departments of Public Health or in other services, e.g. Clinical Strategy and Programmes, National Cancer Control Programme, Quality Improvement Division, Hospital Groups, are not linked back to their colleagues through management structures or other mechanisms. This results in lack of clarity on governance for those based in Public Health Departments who work mainly for directorates other than Health and Wellbeing and should be addressed in proposals to restructure public health services
- The inadequate structures and processes for communication and collaboration, apart from health protection (communicable diseases and environmental health), impacts on the capacity to share and integrate work across settings. The current dispersal of the small number of public health staff across



directorates reduces the capacity of Public Health Departments to build on work done nationally. This in turn impacts on the supports which Departments of Public Health can provide to acute and community services for the population they serve

- There is a concern that the current small number of joint or part-time positions in academic departments will be reduced when the current incumbents retire.

Plans for Reform:

- The HSE is undergoing another change in management structures to three Directorates: Operational, Strategic Planning and Medical
- Information from the Oireachtas Committee on Health which is working on a ten year plan for health services suggests that boundaries of Community Health Organisations and the constituent hospitals of Hospitals Groups may be changed. The probability of such changes should be taken into account in any proposed restructuring of public health
- The majority of health services are delivered by frontline staff, supported by local management. In general, shifting the boundaries or altering management structures impacts little on the day to day delivery of those services by the staff already in situ. This is not the case for public health services. Public Health Departments serve several counties, usually from a single base, with minimal staffing at other locations. Changed structures need to take into account the requirement for public health staff attached to Public Health Departments to be based within a reasonable distance from the people and services they support. This enables them to get to know their population and to make meaningful, productive connections with community and acute services in their area.
- There are concerns that it may be proposed to split public health into 'Operational Public Health' i.e. on the one hand the Departments of Public Health to deliver services across domains at local level and the NIO, and on the other hand 'Strategic Planning Public Health' for work at national level, including support for commissioning health services. It is unclear where the Health Protection Surveillance Centre would fit in such a model as it supports



local services when required, as well as working nationally and internationally. This type of restructuring would exacerbate the current challenges facing the specialty to deliver across the domains of practice, to provide surge capacity when required, and to support the implementation of nationally developed plans at local level.

Moral Hazard:

- The IMO has been informed that senior management of the HSE would, in principle, support change of status for SPHMs from specialist to consultant, on condition that PHPs cooperate (yet again) with planned reforms
- No information has been provided on the proposed restructuring so there has been no opportunity for the IMO to discuss the proposals with management or to consult with members
- The requirement that PHPs must conform to new structures in order to gain consultant status presents ethical challenges and dilemmas. It is strongly believed that improved status would enable PHPs to increase their effectiveness and thereby benefit the populations they serve. However, there would be a conflict of interest if PHPs consider that whatever restructuring is proposed would adversely affect the public health function and population health, while potentially benefitting them at a personal level.

Recommendations

Key principles for revised structures for public health in Ireland should be:

- The creation of a single, sustainable public health function
- Enabling public health staff to deliver across the domains of public health practice at national and local levels
- National management to lead on strategic planning and monitoring of performance



- Delegation of authority and ensuring the autonomy of DPHs to plan and manage services in their departments, with flexibility to respond to local needs while being accountable to national management
- Supporting the standardisation of work processes and resources across local Departments of Public Health
- Ensuring that public health staff working in settings other than public health services are integrated with the main body of public health services, to enable transfer of information and collaboration
- Linking each Department of Public Health to an academic department, thereby enriching the expertise available to the HSE and to the medical school.

Structures for Public Health Services in Ireland

- While the Terms of Reference of the Review relate mainly to training, recruitment and retention of PHPs, attractive career paths which are also included in the Terms of Reference are dependent on structures which enable effective, efficient delivery of services
- Reports numbers 1 and 3 referenced on page 1 of this submission set out specific proposals for structures of public health services in Ireland in the future. The Public Health Sub-Committee of the IMO supports those proposals and encourages the Review Group to adopt them as viable, efficient, sustainable proposals for the delivery of high quality public health services in Ireland in the future.



Appendix 8
Specialist Registrars in Public Health Medicine
Submission (via the NCHD Committee of the IMO)

**Submission to Crowe Horwath with regard to their review of Public Health Medicine in Ireland
on behalf of the NCHD Committee of the Irish Medical Organisation
February 2017**

This paper has been developed following two face to face meetings with Specialist Trainees in Public Health Medicine in November 2016 and January 2017. These meetings were arranged in light of the impending review of Public Health Medicine by Crowe Horwath, as recommended by the MacCraith Review (June 2014). The meetings sought to elicit trainees' views on their training, the current status of the Specialty of Public Health Medicine (PHM) in Ireland and the future of the Specialty within the Irish health service. All trainees in the Specialty were given the opportunity to comment on the draft version of this report prior to its finalisation.

What would make PHM more attractive to potential trainees?

1. Parity of esteem/status and remuneration

Trainees were unanimous in their opinion that parity of esteem/status and remuneration with all other consultant colleagues is essential to the future viability of PHM as a specialty in Ireland. The reasons for this were as follows:

1. Equal pay for equal work. Specialists in Public Health Medicine (SPHMs) are trained in a manner identical to consultants in other specialties. While the specific responsibilities of individual practitioners vary considerably across all medical specialties, SPHMs – by nature of their unique mandate under the Medical Officer of Health legislation – are tasked with duties which are over and above those of consultants in other disciplines. All consultants and SPHMs have responsibility to a greater or lesser degree for individual patients. In addition, SPHMs have responsibility for safeguarding the health of the wider population, whether in relation to international (e.g. Ebola, Zika) or local (e.g. e.coli, meningococcal disease) health threats or in relation to the evolving needs of that population (e.g. obesity, ageing). Failure to recognise the importance of this role – and the statutory duty of the State in protecting citizens from these threats – jeopardises the future effectiveness and sustainability of surveillance, preparedness and response activities for which SPHMs (and ultimately the State through the International Health Regulations) are responsible.

2. Medical graduates are highly sought after globally and Ireland is currently experiencing a crisis in medical manpower. If the speciality wishes to attract *the best* medical graduates then it must be on an equal footing with other specialties with respect to status and remuneration. This is all the more relevant with respect to PHM, as Ireland is unique internationally in not according SPHMs equal status with their colleagues in all other specialties.

3. PHM has traditionally been tasked with reviewing and appraising available evidence, planning for future demographic needs and, crucially, *leading change* within our health services. In an era in which our population is ageing, chronic disease burden continues to grow and the need for integrated care is increasingly recognised, SPHMs are uniquely positioned to prioritise evidence-based preventive strategies and to ensure the provision of cost effective (and often cost saving), sustainable solutions to these challenges. Their current status hampers these activities however and makes it almost impossible for SPHMs to convince and lead their medical colleagues in what are

inevitably difficult courses of action for which there may be no immediate gain – such as, for example, service reorganisation.

2. Strengthen the role and function of local Department's of Public Health

Local assessment of need and implementation of response to that need has always been the cornerstone of PHM and it is what has attracted the majority of current trainees to the specialty. Unfortunately a number of factors have combined to erode and restrict the remit of local Departments of Public Health in Ireland:

- 1) progressively decreasing staffing levels
- 2) the inability to adopt internal team-based approaches to Public Health Medicine
- 3) the lack of dedicated budgets (and the consequent inability to set and address local priorities) for local Directors of Public Health
- 4) the blurring of local and national priorities
- 5) the lack of a strategic vision by policymakers and management for local Departments of Public Health at both individual and collective levels

These issues must be addressed if trainees are to continue to be attracted to, and ultimately remain within, the specialty.

3. Provide clarity around the structure and function of PHM within the health service as a whole and restore those areas of responsibility for which Public Health Medicine has traditionally been responsible

All trainees agreed that they are unclear about where Public Health Medicine currently fits within the health service as a whole. This relates particularly to the erosion of responsibility for areas of the health service for which PHM has traditionally been accountable – and for which, in many cases, those working in the specialty remain legally responsible under Medical Officer of Health legislation.

Several trainees were attracted to the specialty because of its perceived involvement in health promotion, policy development and implementation, and health service leadership and management. However, these domains of public health have been progressively detached from PHM as a specialty in Ireland.

As medically trained doctors who are now developing specialist skills in epidemiology, health needs assessment, health promotion and health service improvement, trainees are frustrated and disappointed that the specialty is not being utilised more productively to benefit the health service as a whole. We trained as medical doctors to effect change at an individual patient level; we are now training as Public Health Specialists to effect change at the population level.

If the health service continues to denigrate the specialty so that it is no longer possible to effect this change then potential trainees are far less likely to be attracted to it in future.

4. Continue to develop rotations in which trainees can develop additional skill-sets

There is general agreement that the training programme has improved significantly over the past number of years and the development of additional rotations outside of Departments of Public Health was welcomed.

There is an increasing expectation that SPRs should be involved in 'national' work during their training programme. While many SPRs have a particular interest in this kind of work, there was agreement that – in general – this work has tended to involve the performance of secretarial, administrative or background research which others wish to delegate. Too often, these roles are misinterpreted by trainers as demonstrating leadership and/or management competencies when, in fact, they are largely or entirely fulfilling a service need.

There was unanimity in agreement that trainers do not need to be working in the same site as their trainee in order to fulfil their role effectively and the absence of an on-site trainer should no longer preclude the development of new rotations in different departments and organisations.

5. Provision of a Masters in Public Health (MPH)

The Masters in Public Health (MPH) was viewed as a core component of the training programme and there was agreement that its provision has been integral to the increased popularity of the training programme in recent years. Nearly all trainees agreed that this needs to be protected if the training programme is to maintain its appeal. In addition, there was agreement that the requirement for all SPHMs to hold an MPH was central not only to the credibility of SPHMs at a national level, but also to ensure that Irish-trained Specialists can continue to compete for jobs in the international arena.

6. Improve exposure to PHM during medical school

Only a small minority of trainees had meaningful exposure to PHM during their time at medical school. Virtually no one had had undergraduate experience of the practical side of the specialty, in sharp contrast with their experience and exposure to other medical specialties. It was felt that the relationship between local Departments of Public Health and their relevant medical schools needed to be strengthened so that at least some medical students are provided with structured opportunities to experience PHM at an early stage.

7. Consider the development of a Basic Specialist Training Programme (BST) in PHM

While trainees had diverse opinions as to the potential value of a Basic Specialist Training Programme (BST) in PHM, there was agreement that this issue should be examined, with a view towards

1. the potential value of this experience for individual trainees and
2. the potential value to the Specialty as a whole in enabling a better understanding of Public Health Medicine across other specialties.

- - - -

In response to the specific concerns raised by trainees in relation to points two and three above at the meeting in November 2016, a second meeting was organised which focused specifically on the structure of PHM within the HSE in Ireland. This meeting was used to develop a set of principles which trainees have agreed should underlie any reorganisation of Public Health Medicine within the HSE.

These principles highlight trainees' desire to be part of a Specialty which has clear strategic direction, clear governance and accountability mechanisms in place and which – crucially – provides trainees with career pathways which are analogous to those of their hospital consultant colleagues and which provides an impetus for improvement and development throughout their careers. The absence of these principles in any reorganisation would impact very negatively on the future attractiveness of PHM as a career option.

1. PHM should consist of local and national work streams. These should work together as a single entity and contribute to a defined national strategy under the leadership of a National Director of Public Health (hereafter referred to as the 'National Director').
2. The National Director should be medically trained with post-graduate specialist training in PHM. He/she would be responsible for ensuring that Ireland meets its commitments under Medical Officer of Health Legislation (including, but not limited to health protection) and the International Health Regulations.
3. The National Director should form part of the senior management team of the HSE.
4. The National Director should be responsible for the development, monitoring and updating of an overall National Public Health Strategy which sets out what local Department's of Public Health and the national 'Units'(see below) should aim to achieve collectively.
5. The National Public Health Strategy should be an integrated strategy that includes health protection, disease prevention (health promotion), health services planning and health intelligence.
6. The National Public Health Strategy should be a function of an aggregate Health Needs Assessment of the country and take into account the diversity of needs at local levels. Flexibility to allow local Departments of Public Health to respond to specific local needs should be built into the Strategy.
7. Each local Department of Public Health should develop an Annual Service Plan, based on Health Needs Assessment of the local population and which takes cognisance of the priorities set out by the National Director in the National Public Health Strategy.
8. The Annual Service Plan should be agreed between the local Director of Public Health (DPH) and the National Director. A budget that is commensurate with the scope of the agreed Annual Service Plan should be established and should be managed and reported on by the DPH.

9. The local DPH should be accountable for the performance of their Department against the agreed Annual Service Plan and against agreed key performance indicators.
10. Local Departments of Public Health should be allocated resources – monetary, manpower, infrastructure and information systems – commensurate with their obligations under the agreed Annual Service Plan and national legislation. These resources should allow them to meet the core functions underpinning the local delivery of Public Health, as set out by the Faculty of Public Health of the Royal College of Physicians of the United Kingdom (attached);
 - Health Protection
 - Health Improvement
 - Health Services
 - Public Health Intelligence
 - Academic Public Health
 - Workforce Development
11. The role of DPH should be analogous to that of Clinical Director in the hospital setting. Appointments should be for a fixed term – five years – with the option of re-interviewing for a further five years if desired.
12. Those appointed to DPH posts should not hold two DPH posts concurrently, either at local or national level (see below), or any combination of the two.
13. Each local Department of Public Health should have a Business Manager.
14. Specialists in Public Health Medicine (SPHMs) and other staff working in local Departments of Public Health should be accountable to their DPH. While it is expected that they would collaborate with the national 'Units' (see below), they would be employed by and paid by their local Department of Public Health. Their primary responsibility would be to serve the needs of their local population, and formal mechanisms which recognise the primacy of this local commitment should be instituted.
15. Each local Department of Public Health should have formal links with an academic/teaching institution.
16. All SPHMs working in local Departments of Public Health should contribute to the provision of an Out of Hours on call service, as required under Medical Officer of Health legislation. The ability to opt out from this commitment should be in exceptional circumstances only and transparent processes should be in place through which this could occur. This, however, is premised on the development of a safe, fit-for-purpose Out of Hours service – something that is not currently in place.
17. A number of national Public Health Medicine 'Units' (e.g. health protection, health intelligence, health service improvement, health promotion) should also be developed.

18. Each 'Unit' should be led by a National Lead – at DPH level - who would report to the National Director. Appointments to the role of National Lead should be for a fixed term – five years – with the option of re-interviewing for a further five years if desired.
19. Each national 'Unit' should develop an Annual Service Plan, based on assessment of national strategic priorities, as set out in the National Public Health Strategy.
20. The Annual Service Plan should be agreed between the National Lead for each 'Unit' and the National Director.
21. The National Lead for each 'Unit' should be accountable for the performance of their 'Unit' against the agreed Annual Service Plan and against agreed key performance indicators.
22. Each national 'Unit' should be allocated resources – monetary, manpower, infrastructure and information systems – commensurate with their obligations under the agreed Annual Service Plan.
23. SPHMs and other staff working in the national 'Units' should be accountable to the National Lead for their 'Unit'. While it is expected that they would collaborate with local Departments of Public Health, they would be employed by, and paid by, their national 'Unit', and their primary responsibility would be to serve the needs of the population from a national perspective, as set out in the National Public Health Strategy.
24. Whether working at local or national level, SPHMs should function as team leaders – analogous to the role of a hospital consultant. Depending on their specific role, this team should consist of an appropriately resourced skill-mix, which may include Specialist Registrars in Public Health Medicine, Senior Medical Officers, Environmental Health Officers, Infectious Disease Nurses, Health Promotion Officers, Information Scientists, Research Officers, Health Economists, Statisticians, and Administrative Staff.
25. Whether working at local or national level, SPHMs should have clear annual programmes of work, based on their Departmental/'Unit' Annual Service Plan and they should be accountable for their performance against that programme of work and against agreed key performance indicators.
26. All permanent appointments, whether at National Director, DPH/National Lead or SPHM level, and whether at local or national level, should take place through an open, transparent process which ensures that all those who are eligible to apply are given the opportunity to do so.

Appendix 9
Joint Submission from Public Health
Representatives



**FACULTY OF
PUBLIC HEALTH
MEDICINE**

ROYAL COLLEGE OF
PHYSICIANS OF IRELAND

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Mr. Shane McQuillan,
Crowe Horwath
Marine House, Clanwilliam Place,
Grand Canal Dock,
Dublin 2

2nd July 2017

Dear Mr. McQuillan,

As you will be aware, several documents have been submitted to you as part of Crowe Horwath's ongoing review of Public Health Medicine in Ireland. Representatives from the following groups met recently to discuss these submissions:

- Faculty of Public Health Medicine, Royal College of Physicians of Ireland
- The Irish Medical Organisation
- Directors of Departments of Public Health in Ireland
- Public Health Medicine Early Career Network
- Specialist Registrars in Public Health Medicine

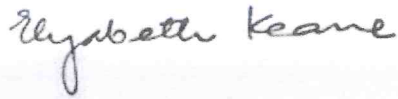
The representatives believed it important to put on record that there is strong agreement across organisations and groups representing public health physicians in Ireland that the Public Health service needs to be substantially strengthened, and that this service should consist of adequately resourced multi-disciplinary teams. It is also agreed that a strategic plan and reformed structures are required to ensure a high quality, flexible yet sustainable Public Health service as appropriate to a modern, open economy. The following are considered essential for a Public Health service which delivers on our purpose of improving the health of the population and which meets international standards:

- A Public Health management structure should be established consisting of a national Public Health centre and regional departments of Public Health, collaborating to maximise efficiency and value for money, and to provide a comprehensive, safe service.
- A national level team is required for each of the domains of Public Health Medicine, i.e. health protection, health improvement, health service improvement and health intelligence.
- In accordance with legislative requirements, regional departments of Public Health should be resourced and empowered to deliver across all the domains of practice, addressing national strategic priorities, and working with CHOs and hospital groups, adjusted as appropriate to local circumstances.
- In order to address the urgent challenges of population health in Ireland and in line with their expertise acquired through higher specialist training, their clinical expertise and professional autonomy, Specialists in Public Health Medicine should be granted a contract common with that of consultants working in hospitals.

Representatives of the following organisations are in agreement that these reforms are essential to deliver a 'fit for purpose' Public Health service for the Irish population as well as to meet our international obligations.


Signed:

On behalf of:



Professor Elizabeth Keane

Faculty of Public Health Medicine, Royal
College of Physicians of Ireland



Dr. Ina Kelly

The Irish Medical Organisation



Dr. Mai Mannix

Directors of Departments of Public Health



Dr. Sinead Donohue

Public Health Medicine Early Career Network



Dr. Ronan Glynn

Specialist Registrars in Public Health Medicine

Appendix 10
Public Health Medicine Early Career Network
Submission to the MacCraith Review



**Public Health Medicine
Early Career Network**

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**Submission to the
MacCraith Review of
Public Health Medicine**

February 2017

Contents

1. Summary and Key Recommendations	3
2. What is Public Health	5
3. Contributions of Public Health to Health and Wellbeing.....	6
4. The need to invest in public health.....	10
5. What happens when a public health service is diminished or under-resourced?.....	12
6. Key Recommendations for Public Health Medicine in Ireland	14
7. Future role of Consultants in Public Health Medicine in Ireland.....	15
8. Current and future curriculum for Public Health Medicine	19
9. Future recruitment in Public Health Medicine	25
10. Status and attractiveness of Public Health Medicine	28
11. Enhancing awareness of Public Health Medicine	30
12. Career opportunities in Public Health Medicine.....	32
13. Appendices.....	34
Appendix A - What other jurisdictions say about Public Health.....	34
Appendix B – Examples of impact of underinvestment in Public Health	35
Appendix C – PHMECN Recommendations for Public Health Medicine in Ireland	38
14. REFERENCES	44

1. Summary and Key Recommendations

Public Health Medicine is an important and integral part of the health services of Ireland. It contributes to improvements in the health and wellbeing of the population through its core functions of health protection, health improvement, health service improvement and knowledge management. The work undertaken by Consultants in Public Health Medicine (CsPHM), under the Medical Officer of Health (MoH) Legislation, is broad and is fully in line with the HSE goals to:

- Increase the proportion of people who are healthy at all stages of life
- Reduce health inequalities
- Protect the public from threats to their health and wellbeing

The threats to the public include both well-understood threats, such as infectious diseases, but also the growing threat of non-communicable diseases (NCD). The 2002 Wanless report called for more Public Health services to deal with the inexorable rise in health service usage and costs. As it is in the UK, Public Health in Ireland is part of the solution for a sustainable health service model in an era of advancing technology, higher user expectation and an ageing population. Among other actions, Public Health works to prevent disease, enable early identification of disease and advise on service models for managing disease. This report outlines many examples where Public Health Medicine has and continues to contribute to the health of the population.

This document provides a narrative giving the views of the Public Health Medicine Early Career Network (PHMECN) members on each of the Terms of Reference of the MacCraith Review from our perspective within the system in Ireland. The PHMECN is a positive peer support network for recently appointed and/or early career Consultants in Public Health Medicine (CPHM).

Throughout the document 'Specialists in Public Health Medicine' are referred to as 'Consultants in Public Health Medicine' (CPHM) in acknowledgement that the role we take in the health services in Ireland, as senior medical professionals providing specialist expertise to the system and as senior decision makers within teams, is equivalent to our consultant colleagues in other specialties within Ireland and to our Consultant Public Health colleagues in other jurisdictions.

This document makes wide ranging recommendations on approaches for the future development and strengthening of Public Health Medicine, covering aspects of training, post-training development, structural support, professional recognition, workforce planning, departmental, national and individual job planning and academic opportunities. The intention of the PHMECN throughout this document is to highlight the ways that CsPHM can be supported to use their skills and make best use of resources to enhance the impact that Public Health Medicine can make on the health of the population of Ireland.

The PHMECN would be very willing to engage with the Review team to discuss this document and support the work they are doing.

The key recommendations are:

- 1.1 A vision for Public Health that encompasses all domains of Public Health, that is built on consensus and has the needs of the population at its core.**
- 1.2 Planning, both service plans and workforce plans, for the future based on the vision and the paradigm shifts that are likely in the next ten years. The need to proactively source the budget for these developments on an ongoing basis**
- 1.3 Improved communication and transparency across the speciality**
- 1.4 A strengthened contract for Consultants in Public Health Medicine to align it with the Medical Officer of Health functions and responsibilities, to recognise the senior medical decision making role (i.e. consultant role) that CsPHM deliver and to develop appropriate structures and supports to enable CsPHM to carry out their duties safely and effectively. This should also address the current unsafe out of hours service**
- 1.5 The structures for Public Health Medicine within the health services should be supportive of the function of the role and the role should reflect all of the requirements of the MOH function and the vision for Public Health**
- 1.6 Clearer structures to deliver the national Public Health function across all domains while ensuring that local Departments of Public Health are robust and can deliver on their responsibilities safely and in a timely manner**
- 1.7 Consultants in Public Health Medicine to have defined work portfolios and job plans to ensure all domains of Public Health are delivered equitably**
- 1.8 As a small developed country, there is a requirement to have sufficient surge capacity and mechanisms within the system to support unexpected events with minimal disruption to longer-term public health projects**
- 1.9 Departments of Public Health should have adequate business and other supports so that Departments are safe, can meet HSE business requirements and that Consultants in Public Health Medicine can work as part of a multidisciplinary team to deliver on Public Health plans**

2. What is Public Health

Public Health is most often defined as “the science and art of promoting and protecting health and well-being, preventing ill-health and prolonging life through the organised efforts of society”ⁱ

Unique features of Public Health Medicine as a speciality include:

- Adopting a broad perspective, beyond illness and disease, addresses health and the broad and social determinants of health
- Is cognisant always of the environments in which people live and exist
- Focuses on prevention – individual behaviours, population level interventions, and societal change
- Recognises health inequalities and inequities that exist and works to reduce these
- Is evidence-based
- Works across all aspects of the healthcare system
- Collaborates with and influences external stakeholders to protect health and the environment
- Involves all aspects of government and society
- Advocates for the population in particular those vulnerable and socially excluded populations
- Supports and enables communities
- Works to improve the services delivered to those with illness and disease through assessment of need, strategic development, appraisal of effectiveness and efficiency, planning, implementation and evaluation

For a review of the role of Public Health in other jurisdictions see [Appendix A](#)

3. Contributions of Public Health to Health and Wellbeing

Contributions of Public Health Medicine to the health of the Irish population

Public Health Medicine can understand, quantify and address the health needs of the population, especially for those groups in greatest need. Specifically, Public Health Medicine functions as an “honest broker” and utilises the skills mix from the unique multidisciplinary teams and networks to present analyses of health issues and problems in a logical and coherent fashion. Actions recommended by Public Health Medicine are based not only in terms of practicality and finance, but also formulated in cognisance of society’s current values and ethics.

Public Health Medicine is grounded in the sciences which includes not only epidemiology and biomedical science, but also environmental, sociological, economic and political sciences. We utilise the best available evidence in relation to addressing needs. Although we are a small community within the health service, our sphere of influence is quite broad through influence and co-operation with other sectors of the health service. Also, uniquely for doctors in Ireland, we work closely with a range of the non-health service agencies and departments whose work impacts on health and wellbeing of our population.

Public Health Medicine in Ireland is actively driving the agenda of the HSE vision for “*A healthier Ireland with a high quality health service valued by all*” which includes

- Increasing the proportion of people who are healthy at all stages of life
- Reducing health inequalities
- Protecting the public from threats to their health and wellbeing

The sphere of Public Health Medicine work in Ireland is clearly, by necessity, quite broad. The main themes in the current priority areas of action are as follows:

- Leading on and supporting planning and preparedness
- Health Intelligence and provision of expertise on interventions to promote and protect the health of populations
- Health management, service planning, audit, evaluation, monitoring
- Research, guidelines and dissemination of information
- Communication to public as well as range of other audiences
- Collaborative work at both local and national level, across the various levels of care and through interagency partnerships

Table1 outlines a number of examples where Public Health Medicine, has contributed and continues to contribute to the health of the Irish population.

Table 1: Contributions of Public Health Medicine to the health of the Irish population

Public Health Domain	Topic Area	Examples
Health Protection	Management and control of infectious diseases	<ul style="list-style-type: none"> ➤ Communicable diseases and chemical, biological, radiological and nuclear (CBRN) through the structures for surveillance and response (under MOH legislation) ➤ The number of TB cases has fallen dramatically since the beginning of the century because of public health actions. ➤ Leading the response to emerging threats such as SARS, Pandemic Flu, Avian flu, Ebola and Zika. ➤ Management and control of outbreaks of infectious diseases in the community and across all sections of the health and social care system ➤ Working with acute hospitals and community facilities (public and private) to prevent and reduce healthcare associated infections (HCAI)
	Immunisation	<ul style="list-style-type: none"> ➤ Introduced a Men C vaccination programme which saw the crude incidence rate drop from 8 per 100,000 population to <1 per 100,000 between 1999 and 2015 ➤ Planning and implementation of a national HPV vaccination programme ➤ Continual revision and delivery of a national immunisation programme protecting children and adults from infectious diseases. ➤ Key members of the National Immunisation Advisory Committee
	Evidence-based national guidelines	<ul style="list-style-type: none"> ➤ Bacterial meningitis, sepsis, blood borne viruses, legionella and other opportunistic pathogens of plumbing systems, vaccine-preventable diseases, gastro-intestinal diseases, zoonotic diseases, sexually-transmitted infections. ➤ New emerging health protection threats such as viral haemorrhagic fevers, MERS-CoV and Zika virus. ➤ Expert advice to Government regarding threats of international concern.
	Port health	<ul style="list-style-type: none"> ➤ Development of protocols and procedures for dealing with incidents at ports throughout the country ➤ Development and delivery of intra and interdisciplinary training in area port health ➤ Management of incidents e.g. IID outbreaks on cruise ships, legionella contamination on passenger ferry, advice during Ebola crisis to commercial ferries from affected countries
	Health Technology Assessments	<ul style="list-style-type: none"> ➤ BCG vaccination ➤ Electronic Early Warning systems. ➤ Introduction of HPV vaccination ➤ The National Health Technology Unit for assessment of medical devices is led by Public Health Medicine
	Environmental public health	<ul style="list-style-type: none"> ➤ Work with Environmental Health Service and local authorities throughout the country to ensure safe drinking water to the population ➤ Cluster Investigations <ul style="list-style-type: none"> ○ Alleged cancer cluster ○ Alleged vCJD cluster ➤ Clusters of animal and human health purported to be associated with environmental factors

		<ul style="list-style-type: none"> ➤ Air quality index ➤ Seveso sites ➤ Development of a national standardised systematic water quality alert system for home haemodialysis patients in conjunction with the National Renal Office and the national water utility
Health Services Improvement	Strategy development	<ul style="list-style-type: none"> ➤ Supported and developed national strategies on Paediatric palliative care. ➤ Working to implement the national cancer strategy and provide a national cancer genetics service. ➤ Working to expand the neonatal bloodspot screening programme to identify and prevent the consequences of severe metabolic and genetic disorders.
	Service evaluations	<ul style="list-style-type: none"> ➤ National evaluation of community intervention teams ➤ Bed utilisation studies throughout the country ➤ Regional assessment of palliative care services, demonstrating service gaps and risks. ➤ Provided public health and epidemiological support to an International Review Group and the development of an All Island service model for children and adults with congenital heart disease ➤ Participated in and supported national clinical programmes in such areas as CVD, Stroke, Epilepsy, COPD, Asthma, diabetes ➤ Led first Irish national quality improvement collaborative that achieved a 73% reduction in pressure ulcers amongst participating teams within a six month timeframe.
	National Clinical Audit	<ul style="list-style-type: none"> ➤ Specialty Quality Improvement Programme Histopathology ➤ Specialty Quality Improvement Programme GI endoscopy ➤ Specialty Quality Improvement Programme Radiology ➤ Irish Hip Fracture Registry ➤ National Audit of Hospital Mortality ➤ National Stroke Audit ➤ Heart Watch (national audit of acute myocardial events)
	Child Health	<ul style="list-style-type: none"> ➤ Led on the original Best Health for Children and now leading on the review of that, now called 'The Healthy Childhood Programme. ➤ Collaborating with the Integrated Children's Programme on implementation of a targeted Ultrasound programme for Developmental Dysplasia of the Hips ➤ Led for the HSE on securing funding for Nurture, a €11 million 3-year partnership project to enhance the delivery of Child Health Services. Now contributing to the delivery of that project
	Other health service improvement areas	<ul style="list-style-type: none"> ➤ Child Health Information systems ➤ Partnered with the National Social Care Division and National Primary Care Division to develop Quality Profiles of their services, which provide information on the quality of clinical care in a format that allows evaluation of those services to direct health service improvement activities. ➤ Development and publication of the HSE Framework for Improving Quality in our Health Services. This framework sets out the 6 key drivers to achieve a culture of continuous quality improvement in health and social care. ➤ Championed the establishment of the National Patient Forum and Patients for Patient Safety Ireland to allow the voice of

		<p>the patient and family influence health care service design and delivery</p> <ul style="list-style-type: none"> ➤ Teaching and training of undergraduate and postgraduate medical students, Specialist Registrars in PHM and other specialities, and other health care professionals and health service staff ➤ Provided training to more than 700 health care professionals/multidisciplinary teams to build knowledge and skill in health service improvement to support transformation agenda ➤ Research and publication in peer reviewed journals ➤ Provision of specialist advice to hospital committees and hospital groups e.g. Infection Prevention and Control Committees
Health Improvement		<ul style="list-style-type: none"> ➤ Smoking ban ➤ Screening programmes ➤ Diabetic retinopathy screening ➤ Newborn blood spot ➤ Breast cancer Screening ➤ Cervical cancer screening ➤ Advocacy – smoking, alcohol, obesity, road safety ➤ Sexual Health Forums – establishment of county-level Sexual Health Forums which are interagency groups that look at the wider context of sexual health and work together to improve sexual health in the area. ➤ Healthy Counties project: This project involves advocacy at a local and national level and working with elected representatives in the Council, and on the LECP; establishment of a core interagency group to build stronger partnerships, development of a Health Impact Assessment approach to show how partnership can enhance outcomes.
Global Health		<ul style="list-style-type: none"> ➤ Memorandum of Understanding (MoU) with Irish Aid ➤ Chair of Global Health Workforce Alliance leading the establishment of new WHO Global Health Workforce Network ➤ Collaboration with Mozambique and development of a QI training programme for teams from the Ministry of Health and 15 hospitals ➤ ESTHER Programme <ul style="list-style-type: none"> ○ 12 small grants awarded to facilitate new partnerships ○ Chair of European ESTHER Alliance ○ EQUALS Initiative ○ MoU signed with Royal College of Physicians of Ireland ○ Collaboration started with Irish Medical and Surgical Trade Association
Health Intelligence		<ul style="list-style-type: none"> ➤ Health Atlas Ireland ➤ Health Profiles ➤ EUROCAT - European Congenital Anomalies Registries

4. The need to invest in public health

- **Healthcare needs and therefore costs decline with improvements in the health of the public through health promotion and disease prevention**
- **Public health interventions such as immunisation, mental health promotion, promotion of physical activity can give return on investment within 1-2 years**
- **Immunisation, tobacco cessation, alcohol interventions, cardiovascular primary prevention interventions, bowel and cervical cancer screening and sexually transmitted infection (STI) screening are all public health interventions that are evidence based, cost effective and reduce disease burden for the population.**

The Wanless Report in 2002ⁱⁱ identified five factors which would result in lower projected overall health service resource requirements one of which was more success in public health. Health care needs would decline with improvements in public health. The Review's model illustrated that lifestyle changes such as stopping smoking, increased physical activity and better diet could have a major impact on the required level of health care resources. The review concluded that if there were to be more success in implementing public health measures then the long-term costs of health care treatment could be limited.

Healthy People 2010ⁱⁱⁱ and the proposed Healthy People 2020^{iv} in the USA set out a comprehensive public health plan and key objectives include the strengthening of public health services. Public health infrastructure was named as a key focus area of the plan with various measures recommended to ensure that all areas and agencies within the USA have the infrastructure to provide essential public health services effectively.

The impact of current and projected demographics and risk factor and disease trends underpin the critical need to invest in public health. These include:

- Ageing populations with higher rates of NCDs have increased demand, while health care costs have generally increased.
- The costs of health inequalities – the total welfare loss across 25 European countries – are estimated at 9.4% of gross domestic product (GDP) or €980 billion.
- Cardiovascular disease (CVD) and cancer cost the countries of the European Union (EU) €169 billion and €124 billion respectively each year.
- Tobacco use reduces overall national incomes by up to 3.6%.
- Air pollution from road traffic costs the countries of the EU €25 billion, while road traffic injuries cost €153 billion each year.
- Obesity accounts for 1–3% of total health expenditure in most countries; physical inactivity costs up to €300 per European inhabitant per year.
- Mental illness costs the economy £110 billion per year in the United Kingdom and represents 10.8% of the health service budget

The WHO in 2011 illustrated the economic consequences of Non-Communicable Diseases (NCDs). Under a “business as usual” scenario where intervention efforts remain static and rates of NCDs continue to increase as populations grow and age, cumulative economic losses to low- and middle-income countries (LMICs) from the four diseases (cardiovascular disease, diabetes, cancer and chronic respiratory diseases) are estimated to surpass US\$ 7 trillion over the period 2011-2025 (an

average of nearly US\$ 500 billion per year). This yearly loss is equivalent to approximately 4% of these countries' current annual output.

The Organisation for Economic Co-operation and Development (OECD) predicts that, according to current trends, if nothing is done the cost of health care will double by 2050, reaching almost 13% of GDP.^v In the cost-containment scenario, a group of countries including Ireland, stands out with increases of health and long-term care spending at or above 4% of GDP, over the period 2005-50 partially due to combined rapid ageing with strong projected growth of some non-demographic factors, such as a substantial shift from family-provided (informal) to publicly-provided (formal) long-term care. For Ireland, the report predicts that in 2050 the percentage of GDP spent on health care and long term care will be 14.5% or 11.3% under the cost-pressure model or cost-containment model respectively.

Contrary to popular belief, investment in public health preventative interventions can give returns on investment within 1–2 years **Error! Bookmark not defined.** Examples include mental health promotion; violence prevention; healthy employment; road traffic injury prevention; promoting physical activity; housing insulation; and vaccinations

It is estimated that only 3% of national health sector budgets in Europe (range: 0.6–8.2%) is currently spent on public health and prevention, indicating scope for increases in public health investment in order to enhance cost-effective health and wider outcomes.

Maciosek et al^{vi} recently updated their assessment of the potential impact of evidence-based clinical preventive services in terms of their cost-effectiveness and clinically preventable burden, as measured by quality-adjusted life years (QALYs) saved. The top 10 of the 28 preventive services they assessed are listed below:

- Immunisation: Implementation of routine childhood immunisation programmes
- Tobacco use in youths: interventions to prevent initiation, including education or brief counselling
- Tobacco use in adults: Screen adults for tobacco use and provide brief cessation counselling and pharmacotherapy
- Alcohol misuse in adults: Screen adults' misuse and provide brief counselling to reduce alcohol use
- Aspirin chemoprevention for primary prevention of CVD in adults ages 50-59 y, with $\leq 10\%$, 10-y CVD risk and other factors
- Cervical cancer screening in women aged 21 to 65 y with cytology (Papanicolaou smear) every 3 years
- Colorectal cancer screening in adults aged 50-75 y routinely
- Chlamydia and gonorrhoea screening in sexually active women aged ≤ 24 y, and in older women at increased risk for infection
- Screening routinely for lipid disorders in men aged >35 y, and younger men and women of all ages who are at increased risk of CHD. Treat with lipid-lowering medications
- Hypertension screening routinely in all adults and treat with antihypertensive medication to prevent the incidence of CVD

5. What happens when a public health service is diminished or under-resourced?

The following are examples of what happens when public health is diminished or under resourced. Further details of all examples are available in [Appendix B](#)

- **TB:** Increased incidence of TB and emergence of multidrug resistant TB due to under resourcing of public health TB interventions
- **Drinking water related outbreaks:** Outbreaks of human illness associated with drinking water supplies: e.g. Walkerton multi-bacterial waterborne outbreak, Canada 2000^{vii}
- **SARS:** A review of the SARS Outbreak in 2003 highlighted lack of surge capacity in clinical and public health systems, challenges to regional capacity for outbreak containment, surveillance, information management, and infection control and lack of coordinated business processes across institutions and jurisdictions for outbreak management and emergency response.
- **HIV/AIDS:** UNAIDS have estimated what could happen if country investment in HIV prevention and treatment programmes remains at current levels. Maintaining 2013 levels of coverage of prevention and antiretroviral therapy services through to 2030 could result in the number of people becoming newly infected with HIV rising to nearly 2.4 million in 2030. If countries stop investing numbers could increase to 2010 levels by 2030, wiping out 40 years of gains.
- **H1N1 Influenza:** The 2009 H1N1 pandemic highlighted the need for strengthened preparedness including the establishment of a more extensive global public health reserve workforce that could be mobilized as part of a sustained emergency response, the creation of a contingency fund for public health emergencies to support surge capacity, and pursuit of a comprehensive research and evaluation programme.
- **Ebola:** The recent Ebola outbreak in West Africa demonstrated again the lack of preparedness and responsiveness for a global epidemic and the under-investment in health systems to detect and control outbreaks of infectious diseases
- **Natural disasters:** Natural disasters such as flooding or heat-waves are particularly difficult to plan for but can be extremely costly. Health and environmental impact assessments, including estimation of future trends and costs, are helpful methods to quantify the likelihood and impact of risks.
- **Population level preventive services:** Substantial opportunity exists to improve population health and additional QALYs could be gained if the provision of evidence based preventive services was increased.

Recommendations

6. Key Recommendations for Public Health Medicine in Ireland

The Recommendations sections of the document (sections 6-12) addresses each of the Review Terms of Reference (ToR) individually and makes recommendations under each one. The key recommendations are outlined here in section six.

There is a need for:

- 6.1 A vision for Public Health that encompasses all domains of Public Health, that is built on consensus and has the needs of the population at its core.**
- 6.2 Planning, both service plans and workforce plans, for the future based on the vision and the paradigm shifts that are likely in the next ten years. The need to proactively source the budget for these developments on an ongoing basis**
- 6.3 Improved communication and transparency across the speciality**
- 6.4 A strengthened contract for Consultants in Public Health Medicine to align it with the Medical Officer of Health functions and responsibilities, to recognise the senior medical decision making role (i.e. consultant role) that CsPHM deliver and to develop appropriate structures and supports to enable CsPHM to carry out their duties safely and effectively. This should also address the current unsafe out of hours service**
- 6.5 The structures for Public Health Medicine within the health services should be supportive of the function of the role and the role should reflect all of the requirements of the MOH function and the vision for Public Health**
- 6.6 Clearer structures to deliver the national Public Health function across all domains while ensuring that local Departments of Public Health are robust and can deliver on their responsibilities safely and in a timely manner**
- 6.7 Consultants in Public Health Medicine to have defined work portfolios and job plans to ensure all domains of Public Health are delivered equitably**
- 6.8 As a small developed country, there is a requirement to have sufficient surge capacity and mechanisms within the system to support unexpected events with minimal disruption to longer-term PH projects**
- 6.9 Departments of Public Health should have adequate business and other supports so that Departments are safe, can meet HSE business requirements and that Consultants in Public Health Medicine can work as part of a multidisciplinary team to deliver on Public Health plans**

Sections 7-12 provide recommendations from the PHMECN on each of the ToR supported by robust rationales for these recommendations. A full list of all recommendations is available at [Appendix C](#)

7. Future role of Consultants in Public Health Medicine in Ireland

Recommendations:

7.1 CsPHM should be positioned in the health services in such a way that they can work across all divisions of the health sector and with all external agencies and stakeholders.

Rationale

This would enable CsPHM to:

- work more effectively to improve population health
- work more effectively to influence all determinants of health, for example, education, housing, employment etc.
- lead on the delivery of co-ordinated and integrated care across all divisions of the health services, e.g. acute hospitals, Community Healthcare Organisations (CHOs), Primary Care, and Mental Health, resulting in health service improvement including improved quality of care and cost effectiveness.

7.2 Future HSE reform should ensure the ability of CsPHM to fulfil their statutory requirement and provide a service to the whole population. CsPHM should be aligned with, rather than subsumed into, other HSE divisions.

Rationale

Under Health (Duties of Officers) Order, 1949 CsPHM shall “inform himself as respects all influences affecting or threatening to affect injuriously the public health in the county and as respects the causes, origin and distribution of diseases in the county”.

Infectious disease regulations mandate CsPHM to work with and across all divisions of the health services and with external agencies in order to successfully implement the legislation. “On becoming aware, whether from a notification or intimation under these Regulations or otherwise, of a case or a suspected case of an infectious disease or of a probable source of infection with such disease, a medical officer of health, or a health officer on the advice of a medical officer of health, shall make such enquiries and take such steps as are necessary or desirable for investigating the nature and source of such infection, for preventing the spread of such infection and for removing conditions favourable to such infection”.

The state is legally obliged to provide an adequate response to protect the nation’s security under International Health Regulations (IHR). To enable this IHR response, which is provided by CsPHMs, CsPHM must be positioned within the structure of the health system to direct all necessary measures required.

Appropriate alignment will also enable CsPHM to:

- work more effectively to improve population health
- work more effectively to influence all determinants of health, for example, education, housing, employment etc.
- lead on the delivery of co-ordinated and integrated care across all divisions of the health sector services e.g. acute hospitals, CHOs, Primary Care, Mental Health resulting in health services improvement including improved quality of care and cost effectiveness

7.3 The future role of the CPHM should ensure the ability to continuously advocate for the health of the population in Ireland.

Rationale

Advocacy is a core public health competency and area of expertise of CsPHM which must be preserved in to the future

CsPHM must advocate on behalf of the population in the face of social injustices and inequities without being constrained by their employment contract. The current consultant contract allows consultants to advocate on behalf of their patients. CsPHM should be able to similarly advocate on behalf of their populations.

7.4 All CsPHM should have a specialist portfolio i.e. in domains of health improvement, health service improvement, health intelligence or health protection and maintain a core level of competence in health protection.

Rationale

This would:

- improve capacity across all domains of Public Health Medicine in order to support and deliver on government policy and HSE service and operational plans
- facilitate service delivery/implementation at local level and leadership/support to national strategy and planning
- address surge capacity within Public Health Medicine into the future
- allow the development of expertise

7.5 Departments of Public Health Medicine should appoint CsPHM to specific roles/portfolios

Rationale

This would:

- match CPHM skill sets and experience with the needs of the public health department
- enable CsPHM to further develop their expertise in a given role/portfolio
- improve efficiency and effectiveness of service delivery

7.6 There is a commitment from senior management to ensure professional and career development for all CsPHM working in public health medicine in Ireland.

Rationale

CsPHM should have opportunities to further develop specialist skills through, for example, fellowships, MDs, PHDs.

7.7 There is further development of a multidisciplinary public health workforce to support CsPHM.

Rationale

This would improve the delivery of services for Public Health Medicine in Ireland.

Currently there is inadequate support for CsPHM due to a lack of other allied public health professionals, for example epidemiologists, research officers, statisticians, IT professionals, community development workers, outreach workers etc.

7.8 An adequately and appropriately resourced out of hours public health service should be put in place.

Rationale

The interim out-of-hours service was reviewed by an external independent public health consultant in 2009 and deemed to be wholly inadequate and unsafe.

A number of recommendations were made. However, little progress has been made on implementation of these recommendations.

Significant clinical risk for the service and the organisation has been allowed to continue.

7.9 CsPHM should have equal parity with other medical specialities in terms of recognition, status and remuneration.

Rationale

This would:

- Recognise and value the important role they have
- attract doctors to the speciality to maintain the future role of the CsPHM in Ireland
- ensure adequate Public Health Medicine capacity in Ireland into the future given the projected increased requirement for public health medical services due to:
 - Increasing population
 - Ageing population
 - Increasing survival rates from cancer, CVD, etc
 - Increasing prevalence of chronic diseases and patients with multiple co-morbidities
 - Increasing service demands and service user expectations
 - Increasing levels of service activity leading to a critical need for evidence based decisions around service provision, development, and funding
- enhance the profile of the speciality in to the future which would empower CsPHM to work more effectively with relevant stake holders maximising health for all.

7.10 There should be increased number of joint academic/HSE consultant positions in Public Health Medicine.

Rationale

The research being undertaken by academic public health is not always aligned with the areas of work or priorities of the public health service. Therefore this would

- enable greater coordination of research and practice for the benefit of the population and health service
- enhance research translation

These positions would result in increased input into undergraduate and postgraduate training from CsPHM who are actively involved in service delivery

7.11 Future developments of public health medicine in Ireland should be informed by a national policy on public health medical services that would include a robust analysis of population need for public health medical services and a work force plan.

Rationale

This would:

- identify gaps where the core areas Health Improvement, Health Service Improvement, Health Intelligence and Health Protection are not being developed appropriately, both in terms of training and service provision.
- address current deficits in needs based strategic planning that is focused on the present or orientated towards the future
- enable budgeting and financial planning and the development of ring-fenced funding for public health medical services

7.12 If formal subspecialisation is to be considered, this should be informed by the national policy on public health medical services as in recommendation 11 above.

Rationale

Given the small size of the Irish population and public health workforce, the current best strategy for Public Health in Ireland would be for CsPHM to work in specialist portfolios as opposed to sub-specialising.

Working in specialist portfolios rather than sub-specialising would maintain flexibility and surge capacity within the public health medical workforce.

8. Current and future curriculum for Public Health Medicine

Recommendations

- 8.1 The training programme for Public Health Medicine should ensure that all trainees have an opportunity to get adequate training time and experience opportunities across the core pillars of Public Health Medicine (Health Improvement, Health Service Improvement, Health Intelligence and Health Protection) through a planned portfolio of work in a range of placements**

Rationale

As these four areas are accepted as the core practices of public health medicine practice, both nationally and internationally, then training needs to reflect these domains to ensure trainee competence and depth of work experience across all areas.

- 8.2 Trainees should aim to specialise in one of these areas in the latter years of training so that they can start to build networks and expert knowledge in their chosen area.**

Rationale

With equal exposure to all domains of Public Health Medicine during training, trainees will naturally develop an interest in certain areas. This interest could be best harnessed by providing and promoting opportunities for registrars to further specialise. This will provide a deeper understanding of their core area of interest and will build on their expertise. It would also provide diversity and resilience to the specific domain.

- 8.3 Central planning of training opportunities in all core competencies prior to commencement of training and training years so that there is planned exposure of trainees to all necessary competencies and better planning of training placements**

Rationale

Competencies and record of training should match the core competencies required by public health practitioners. Further, opportunities to gather these competencies should be carefully considered. Consideration needs to apply to what locations and trainers are most suited to lead and guide the acquisition of these competencies, and how they can be available across a national training programme. A disproportionate amount of time and resources in public health medicine are currently directed at health protection. Health protection training is currently unstructured and based on service requirements, rather than on requirements for training. This is principally due to staffing within Departments of Public Health Medicine and the need to meet legislative obligations. There is a danger that the training programme becomes excessively orientated to aspects of infectious disease public health. The reduced involvement as a specialty in health services improvement and health improvement and the lack of capacity and experience in Public Health Departments (PHDs) in the area of health intelligence and knowledge management reduces the opportunities for trainees to meaningfully acquire competencies in these areas. As a result of the variation in

the work of different CsPHM and departments, trainees have different training experiences depending on their placements.

8.4 Include Improvement Science as a core stream in the curriculum, in order to ensure CsPHM are trained to lead in quality and health service improvement.

Rationale

Improvement Science is particularly important for CsPHM as the work and successful implementation of health improvement strategies is crucial to improving population level health. This requires significant leadership and knowledge of the science. Exposure to this as part of the HST curriculum would enable new CsPHM to better take this work on.

8.5 Further development of the HST programme should be informed by the renewed vision for Public Health Medicine

Rationale

The role of the CPHM in Ireland is not well understood outside of public health, but even within, consultants have different ideas of what their job is. It is hard to train the next generation without a vision of what the future of public health will be like in Ireland, and therefore what it will be like to work as a consultant.

8.6 The case should be made for extension of the duration of the training programme to five years

Rationale

The training programme has remained four years despite the introduction of the Masters of Public Health (MPH) into the first year. Whilst this is welcome on many fronts, it has in reality shortened the duration of available training time and therefore makes it difficult to get sufficient experience in the remaining time. It also restricts the ability to avail of any specialist placements abroad.

8.7 Specialist Registrars should be encouraged, supported, and facilitated to undertake specialist placements/fellowships when they are training

Rationale

Currently, there is no sub specialty training, even at an infectious diseases level, within Ireland. The workforce requirements of public health skills are varied and significant and this needs to be reflected at a training level by facilitating registrars to undertake specialist placements, or fellowships, as part of the training pathway. This will better help enable competency to grow and be resilient within the workforce and for registrars to provide specific skill sets at the completion of their training.

8.8 Additional training capacity in areas where opportunities are limited in Ireland perhaps because of population size should be sought elsewhere e.g. the UK

Rationale

There are few opportunities within Ireland for very specific public health roles, for example public health genetics, neither is there any clear route within training to seek these opportunities through overseas fellowships etc. However, international collaboration or experience at a training level could help train and enable these skills within Ireland therefore increasing the breadth of the training programme and competencies available here in the longer term.

8.9 Post CSCST fellowships, MDs and PhDs within Ireland should be progressed and supported.

Rationale

Post CSCST fellowships or academic work allows emerging graduates to develop specialist skills within a particular field of practice. Within other specialities it is common practice to pursue a fellowship or an MD/ PhD towards the end of training or post CSCST. At present there are no post CSCST fellowships, academic or otherwise, in Ireland and the faculty has not supported their progression. There are not the same opportunities for overseas post CSCST fellowships in public health as exist for other specialties. The opportunities to pursue MDs, PhDs or other research opportunities, as in other specialties, are limited for a number of reasons. Linkages between academic public health and service public health are poor. Very few consultants have a role in both and as research funding is limited the type of research being undertaken by academic public health departments is not always aligned with the areas of work or skills that would be beneficial to service public health medicine. While new trainees now have the opportunity to undertake PhDs, recent graduates and those towards the end of training have not had these opportunities. In order for emerging consultants to develop specialist skills on par with that of other specialties these opportunities should be progressed. Consideration should be given as to how best specific experiences can be provided and progressed within Ireland – potentially with international supporting collaboration.

8.10 The establishment of a National Environmental Public Health unit would greatly facilitate training in this competency

Rationale

The lack of a national unit for environmental public health results in a serious challenge to developing expertise within the Public Health Medicine workforce, training programme and therefore to developing core skills for trainees.

8.11 The recommended full review of the National TB service should be carried out and should consider the requirements for PH HST in TB control and surveillance

Rationale

TB contact management is not part of the HST curriculum yet CsPHM provide clinical supervision for TB clinics. Specialist Registrars (SpRs) with previous experience in this area through working as a public health Senior Medical Officer (SMO) may already have significant skill and expertise in this area but SpRs entering the programme from other specialities may not. This should be considered early in the structured training in health protection and considered as part of the centralised planning of training opportunities.

8.12 A standardised objective assessment system should be established to ensure that those emerging from the training programme have the skills required to drive public health into the future.

Rationale

Whilst the role of a public health consultant both within and outside the speciality is often less clear than other clinical disciplines, a clarity and vision for CsPHM needs to be clearly outlined such that it is possible to train the next generation with the core skills, competencies and drive to fulfil the vision of public health for this country. These need to be assessed through a standardised and objective process.

8.13 There is an acknowledged need to continue recruitment of a sufficient number of Public Health Specialist Registrars. However, there is an equal need to ensure there are sufficient consultant posts for those exiting the HST programme.

Rationale

The focus seems to be on recruiting as many SpRs as possible rather than ensuring that emerging CsPHM are as skilled as possible and have opportunities to compete for posts within Ireland, at the conclusion of training.

8.14 If capacity within the system that ensures SpRs have adequate training opportunities cannot be guaranteed, then consideration should be given to reducing trainee numbers until such capacity is assured.

Rationale

As previously stated public health medicine in Ireland has become increasingly health protection focussed over recent years and this clearly creates capacity issues for opportunities outside of the health protection domain, specifically within health services improvement, health improvement, health intelligence and knowledge management. If these opportunities can only be provided to a certain number of registrars, then this should be reflected in the rate at which registrars are recruited on to the training programme.

8.15 Consideration should be given to shorter duration of training in health protection and placements in PHDs with high volumes of infectious disease notifications and incidents. Placement could also incorporate a specific placement within a TB team who have a sufficient volume of TB cases to ensure adequate exposure and training.

Rationale

To enable, standardise and time focus the health protection part of the training programme, specific rotations in high volume departments could be organised to ensure the correct breadth and depth of competencies are achieved within the health protection domain. This would also allow a clarity and distinction between training time allocation for health protection competencies and non-health protection competencies.

8.16 Training locations that do not enable SpRs to take on leadership roles should not be allocated to final year SpRs

Rationale

SpRs in their final year are not always enabled to progressively take on more leadership roles. Some locations do not enable SpRs to take on leadership roles, or it is more difficult to facilitate this. These locations should be identified and therefore not be allocated to final year SpRs.

8.17 Pre-HST training positions in Public Health Medicine should be developed for NCHDs at pre-registrar level

Rationale

Currently there is no post-graduate training in Public Health Medicine outside of the HST programme. Developing pre-registrar NCHD training positions in Public Health Medicine would expose more young healthcare professionals to Public Health Medicine as a career opportunity. The change from acute clinical specialities in hospital or primary care to the specialty of Public Health Medicine is often under-estimated. Recent IMC surveys indicated a significant level of dissatisfaction amongst Public Health SpRs. Providing these pre-registrar opportunities would allow potentially interested NCHDs the opportunity to experience Public Health Medicine before making the decision and commitment to pursue a HST programme in the specialty.

8.18 Develop a mentorship programme for SpRs in Public Health Medicine

Rationale

A mentorship programme should provide SpRs with support and guidance throughout the duration of the training programme, in terms of progress, learning and training needs, gaps in experience, addressing difficulties the trainee may encounter, providing support and liaising with the NSD and others if necessary.

8.19 There should be improved standardisation of the quality of HST

Rationale

Training is not standardised across training locations and there is considerable variation in e.g. trainer input and support, opportunities to gain competencies. This means that registrars are not necessarily emerging with a similar core skill set. A standardised HST programme would ensure capacity and competence is gained across all domains of public health medicine.

Training is often weighted to service requirements rather than attainment of core competencies, and central planning of training opportunities across the training pathway will help also protect the balance of service requirements and competency acquisition. Further it should be acknowledged that public health processes and tasks are much longer-term but in order to meet competencies in the timeframe of the training programme and training placements, SpRs engage mainly in discrete pieces of work and may not have sufficient exposure to the process (and the time) it takes to get to the point where stakeholders are engaged and ready for that piece of work. Without that learning it is hard to transition to a consultant post.

9. Future recruitment in Public Health Medicine

Introduction

To ensure the viability and future development of the speciality of Public Health Medicine (PHM) it is important that the human resources required to deliver safe and effective public health medical services are clearly outlined and any gaps to facilitate that delivery are identified and addressed in an equitable manner. The report, *Economist Intelligence Unit Financing the Future - Choices and challenges in global health 2015*, outlined the biggest consequences of inadequate public health medical services which included pressure on emergency services, return of eradicated diseases such as TB, increases in communicable diseases and widening of the poverty gap.

At present the public health medicine workforce in Ireland face significant manpower challenges. A ***HSE Public Health Medicine Manpower Planning Report 2014***, illustrates a number of key points:

- Within ten years **53%** of 2014 workforce intended to retire, with just under **10%** retiring in the following five years (**2013-2018**).
- **For the time period 2019-2024**, assuming the attrition rate remains stable and the placement of SpRs who have completed the programme remains at 88.5%, there would be a requirement for an average of 10.0 WTE to be recruited to the HST each year over the period 2019-2024 to provide 36.7 CPHM to maintain staffing at 2003 levels in 2024.
- Based on the UK Faculty of Public Health recommendation of 25 CsPHM per 1,000,000 population, this would mean a requirement of 115 CPHM in 2014, rising to between 119.5 – 124.8 by 2021 depending on population projection model used. This figure is significantly above the current number of sanctioned posts (67 WTE)

Recommendations

The following recommendations outline some key issues that need to be addressed to strengthen PHM man-power and its capacity to deliver its core functions:

9.1 There is an urgent need to develop a vision for Public Health Medicine in Ireland and a clear plan to achieve this vision which includes an outline of the function of PHM and the roles and responsibilities of CsPHM

Rationale

Lack of a cohesive vision for PHM in Ireland hampers the articulation of clear functions, roles and responsibilities in PHM and makes gap analyses and succession planning more difficult. This has led to the perception that the role of the CPHM is undervalued by senior management in the HSE and Department of Health. An ambiguity in the system at large, regarding the role of PHM contributes to continued inequity in recognition of contribution and subsequent failure to provide parity with other medical specialities in terms of recognition and remuneration. Due to the lack of clarity around the CPHM role, status and remuneration are not in keeping with the level of training, expertise skills and experience of candidates.

In addition, due to an ageing workforce, increasing number of retirements, no succession planning to date and chronic under-resourcing, there has been a failure to fill existing vacancies and implement the recruitment level as per 2003 industrial action agreements which in itself is below requirements for PHM outlined in other jurisdictions such as the UK.

9.2 Work force requirements need to be aligned with the vision and core functions of PHM and a modern workforce supported by a cost-benefit analysis.

Rationale

Core functions of PHM include Health Improvement, Health Service Improvement, Health Intelligence and Health Protection. When CsPHM are recruited to public health departments without allocation to a specific PH domain and without skill matching with core functions, in order to enable an equal contribution across all four domains of PH practice and particularly if subspecialisation is envisaged, PHM needs to expand and not just replace. Given the far reaching impact of a robust public health medicine system, there is a need to develop and articulate a case for a steady increase in numbers across all grades and demonstrate the increased productivity that such an investment will produce. Furthermore, a better understanding of the responsibilities and expertise that a CPHM has to offer would facilitate clinical independence of position and ability to advocate for patients to be made explicit in line with a consultant contract.

9.3 Workforce planning and recruitment of CsPHM should be based on the following principles:

- Timely advertising and processing of consultant posts,
- Development of appropriate job descriptions and contracts that reflect the expertise, roles, responsibilities, and degree of training required for positions,
- Open and transparent processes for appointments to positions,
- Recruitment to specific portfolios / domains of work,
- Recruitment based on identified need and skill matching and not just based on WTE numbers.
- Matching trainee numbers and available posts,

Rationale

Recently there has been a welcome increase in the number of applications to the HST programme and an increasing number of SpRs. However, many of them remain uncertain as to whether they will remain in public health medicine in Ireland at the end of their training because of an unstructured post-training recruitment process, a lack of clinical/professional independence and autonomy and a perception of more attractive options overseas.

9.4 Establish links with the NDTP to ensure the current and future workforce needs of Public Health Medicine are adequately assessed and addressed.

Better linkages with NDTP would allow more focus on Public Health Medicine needs. Capacity gaps could be addressed in a more dynamic manner while minimising duplication and inefficiencies and allow for more effective succession planning.

10. Status and attractiveness of Public Health Medicine

The attractiveness of Public Health Medicine as a career option is hampered by a number of factors:

- Lack of Consultant status at the end of training, which results in a perceived lack of respect from both peers and HSE management
- Lack of a national Public Health Structure
- Lack of support for local Public Health Departments with very little resources being invested and no local public health budgets apart from that required to support the running of the department
- Lack of clarity around roles and responsibilities, especially when engaging in work at a national level
- Lack of clarity around roles and responsibilities within local departments, with few people working to specified portfolios
- Loss of opportunity for Public Health to engage directly with HSE senior management at a national level
- Lack of career progression – once a specialist the only other promotional prospect is to a Director of Public Health (DPH) or Assistant National Director (AND) role, opportunities that are low in number and do not arise often
- Vulnerability of the specialty to every change of structure within the HSE with the voice of public health becoming progressively less authoritative

Reforms required/recommended:

10.1 Contract

A Type A consultant contract (which allows no private practice) is required for Consultants in Public Health Medicine, with requisite development of an accurate job description.

Rationale

The current contract is outdated and hampers our ability to work across the system with authority. The current CPHM current contract is totally insufficient and does not describe the consultant role undertaken by CsPHMs, and is unfit for purpose.

A type A consultant contract will also:

- Recognise our training, qualifications, and expertise
- Address the expired interim Out Of Hours Public Health Medicine service and the risks associated with this
- Address employment injustice which is not consistent with international Public Health Medicine parity with other medical disciplines and currently an industrial relations issue in Ireland
- Address inappropriate inferior status – which is completely inconsistent with the assignment of the Medical Officer of Health statutory function - so ensuring sustainability of this service that is vital to health security
- Address the ethical issue of recruiting to an inequitable specialty without informing candidates transparently of the unequal status at qualification
- Retain SpRs following qualification - as opposed to losing them to more attractive and better paid options overseas

- Maximise the influence and effectiveness of Public Health Medicine in solving health service challenges hence providing maximum value for money – currently very topical and urgent.
- Clarify roles, which is essential under modern HR policy. This will also clarify responsibility, accountability and autonomy/authority.
- Maximise the benefit for the health service and population through more appropriate use of Public Health Medical expertise.
- Benefits would include consultant provided health intelligence to inform health services funding, planning and development.
- Address the issue of career progression, as progression up the salary scale is possible even when promotional opportunities are not.

10.2 Structuring the service at the appropriate senior level in the health service.

Rationale

The expertise from Public Health Medicine is required at overall decision-making level in accordance with the objective of the HSE *“The object of the Executive is to use the resources available to it in the most beneficial, effective and efficient manner to improve, promote and protect the health and welfare of the public” (Health Act 2004)*. There is no equivalent in Ireland to Public Health England, or Public Health Wales, or the proposed new Public Health Scotland. A National Public Health structure is required in Ireland, and would work to support the HSE Leadership team in the delivery of the Health Service. This would also protect Public Health (which is currently based only in eight local departments) from being vulnerable to each reorganisation of the health services, and would retain Public Health as an identifiable single entity and a national service that can fulfil national, local and, crucially, international obligations on behalf of the Government.

10.3 Investment in Public Health Medicine and resourcing Public Health Medicine to achieve maximum quality of service with simultaneous development of the rest of the public health workforce to eliminate non-consultant tasks from the day-to-day work of a CPHM

Rationale

Filling CPHM vacancies in a timely manner will address health risks from gaps in service and will avoid interim arrangements that are neither transparent nor perceived as fair. Provision of appropriate support services – scientific and administrative - will maximise the productivity of this consultant provided service. A fully functional public and preventive health service is essential at both local and national levels.

10.4 Appropriate portfolios should cover national and local population needs and consider the flexibility and dynamism required for changing needs over time.

Rationale

The absence of recruitment to local or national portfolios means that recruitment, which is managed nationally, is not meeting service needs. A DPH should be able to advertise a CPHM job and specify “Health Services Lead” so that candidates applying for a job know what is needed and involved.

11. Enhancing awareness of Public Health Medicine

Recommendations

- 11.1** Consultants in public health medicine should be actively involved in teaching undergraduate students and postgraduate SpRs in other specialties
- 11.2** Undergraduate training:
- The undergraduate public health curriculum should be modern, relevant and have greater involvement from practising consultants in public health medicine
 - There should be standardisation of the public health curriculum across universities.
 - The public health curriculum should be delivered and assessed using methods appropriate to the learning objectives.
 - The public health curriculum should not be delivered in isolation and should be incorporated into other disciplines as a systems-based approach
 - Opportunities to gain experience in public health as an undergraduate should be progressed through funded summer research projects, final year projects etc.
- 11.3** Postgraduate training:
- There should be greater exposure of SpRs in other specialties to consultants in public health medicine and to public health principles during their postgraduate training. This can be achieved through:
 - Pre-HST training positions in PHM for NCHDs at pre-registrar level
 - Inclusion of Public Health topics in intern teaching programmes.
 - Inclusion of Public Health principles in the Basic Specialist Training curriculum of other specialties. The learning can be delivered through study days and online teaching.
- 11.4** Links should be developed between Departments of Public Health and/ or the Faculty with universities, affiliated medical academies, teaching and training units within acute hospitals, and other postgraduate training bodies to provide public health input into curriculums and other educational activities (e.g. grand rounds in hospitals)
- 11.5** In order for a career in public health medicine to compete as a career option with other specialties the profile of a CPHM needs to be improved through
- A clear vision and understanding of the specialty
 - Contractual arrangements, including remuneration that are on a par with other specialities.

Rationale

Delivery of a modern and relevant public health curriculum at undergraduate level and as part of early postgraduate training is important not just to attract potential applicants but also to ensure those who will follow other career paths have an understanding, appreciation of and place value on public health principles.

At present, the public health curriculum in undergraduate medicine programmes varies between colleges and can be limited in terms of time allocated and scope. In addition there is

little public health input into postgraduate curriculums of other specialties. The result is a poor awareness of and understanding of public health medicine as a career.

Exposure to positive role models has been shown to strongly influence career choice in medical students and early career doctors. At present there is limited exposure to CsPHM during undergraduate and postgraduate training. Undergraduate public health curriculums are often delivered by academic doctors and non-medical public health academics. While a multidisciplinary approach in teaching delivery is not unwelcome, without exposure to practicing consultants in public health students may not consider public health as a career option.

A significant component of a public health curriculum will be within the affective domain of learning, concerning attitudes and an understanding of wider determinants of health. In other specialities or subjects within the medical curriculum cognitive and psychomotor domains of learning predominate. Learning in the affective domain requires a different approach than cognitive and psychomotor learning. The public health curriculum should use appropriate teaching and assessment methods to meet its learning objectives such as small group learning.

Public health medicine or social medicine is often taught separate to other subjects which may make it seem irrelevant to medical students who are clinically focused. Public health should be incorporated into all other subjects to improve its relevance.

Joint HSE and academic posts would facilitate greater input of practicing consultants in public health medicine into undergraduate curriculum planning and delivery. Positions as 'clinical tutors' or 'clinical lecturers' as exist for other specialities, primarily for teaching purposes should be progressed for public health. These posts are often filled by senior NCHDs or those post CSCST and give position holders opportunities to advance teaching skills, undertake research and progress academic links.

Opportunities to gain experience in public health prior to entry into HST should be developed. Undergraduate opportunities such as summer research projects, placements, and final year projects and postgraduate pre-HST training rotations should be developed to allow potential applicants to gain an understanding of what the speciality entails before committing to HST.

The current contractual arrangements, including, the lower status and financial remuneration of consultants in public health may be a barrier to potential applicants. The lower financial remuneration may be a particular barrier for graduate entry students who may have incurred significant financial debts during training.

In addition, the current issues facing the public health medicine service in Ireland and the uncertainty about its future within the overall health service make it difficult to promote the speciality as an option.

12. Career opportunities in Public Health Medicine

Current Issues

- Lack of career flexibility which limits opportunities for a multi-sectoral public health approach. Secondments are ad hoc and informal with no formal processes and no backfill. There are no opportunities for joint academic posts.
- Public health careers need to be innovative to be able to address emerging issues requiring new expertise
- There is limited progression or facility to change direction in CPHM posts and no succession planning.
- In most Departments of Public Health, there is no opportunity for CsPHM to gain management experience outside the DPH role
- Lack of skill matching of CPHM to identified needs of (a) Departments of Public Health (no needs/gap analysis) and (b) national expert roles
- Expectation that most CPHM will be 'generalists' and cover a broad portfolio across the domains of Public Health mitigates against developing expertise in specific areas, and can result in CPHM becoming deskilled in areas they may have previously developed; opportunities to develop specific areas of interest /expertise are very dependent on individual line managers
- Expectation that local CPHM take on national expert roles not necessarily reflective of their experience or skills limits the provision of actual public health expertise and affects CPHM credibility when liaising with clinical or other expert colleagues at national level
- Expectation that local CsPHM will occupy national roles, that are unsupported by formal structures, governance and staff, therefore limiting the ability to deliver meaningful change; lack of backfill of secondees leaves local departments understaffed & leads to lack of goodwill towards secondments
- Travel to & from Dublin for attendance at meetings for regionally-based CPHM who are allocated national pieces of work can significantly impact on work-life balance & disadvantages regionally-based CPHM; this is a significant barrier to regionally-based CsPHM taking on national roles
- Lack of basic IT which would facilitate remote working (i.e. remote email access) for CsPHM in some areas
- Limited recognition & utilisation of the 'added value' (skills & expertise) that Public Health Medicine training can provide across the HSE, due to years of silo working; this results in a lack of opportunities for CsPHM to work in the HSE outside of the Health & Wellbeing Division
- No formal opportunities for joint academic posts (some have developed ad hoc); the demands of service work limit the ability to network with academic departments

- Current arrangements for flexible working can impact negatively on colleagues; currently, if a CPHM goes part-time their DPH cannot recruit someone else for the remaining hours and the surplus pay budget is taken away permanently after the next financial year.
- System of CPHM appointments: current 'panel' system does not show a value for professional or personal life. People should know what post and the location of the post they are applying for

Recommendations

1. The domains of expertise that PH needs to cover need to be established formally, and local Public Health departments structured to cover these areas
2. CPHM appointments should be to specified portfolios and locations of work (e.g. local health protection role *or* combined local and academic role *or* local and national expert role, *or* national expert role in X topic) based on relevant skills and experience
3. Formal processes of filling national expert roles and secondment roles need to be established. This should include formal agreements which describe arrangements for backfill, the governance and reporting relationships, the duration of the role (secondments should be time limited to allow others in the system to avail of them), arrangements for starting/stopping secondment, and review timelines. The appointment process should include open competition (formal expressions of interest with transparent interview/ skill-match process)
4. Expand secondments beyond traditional CPHM post locations e.g. to other HSE Divisions such as Social Inclusion; this would facilitate multi-sectoral working
5. Opportunities for secondment/academic linkages should be identified and listed. Consideration could be given to research partnerships between universities and the HSE similar to NIHR Health Protection Research Units in England e.g. 'Public Health Research Units'
6. Consultant contract should be awarded which would facilitate joint service & academic appointments
7. Contracts should allow more flexibility for part time working & job-sharing positions; flexible working from home - with appropriate IT support - should be facilitated especially for those undertaking national roles where significant amounts of travel are required
8. Enablers of expertise development should be identified for the different domains of public health practice e.g. training, IT, specific secondments etc.
9. Opportunity to develop expertise in specialised areas should start at SpR level. There should also be the opportunity for post-CSCST fellowships.

13. Appendices

Appendix A - What other jurisdictions say about Public Health

Key principles identified in **New Zealand**¹ to inform and shape public health service delivery include:

- Focus on health of communities rather than individuals
- Influence health determinants
- Reduce health disparities
- Base practice on the best available evidence (*and data – added*)
- Build effective partnerships across the health sector and other sectors
- Remain responsive to new and emerging health threats

The Public Health Agency in **Canada** categorised 36 public health core competencies into seven categories¹:

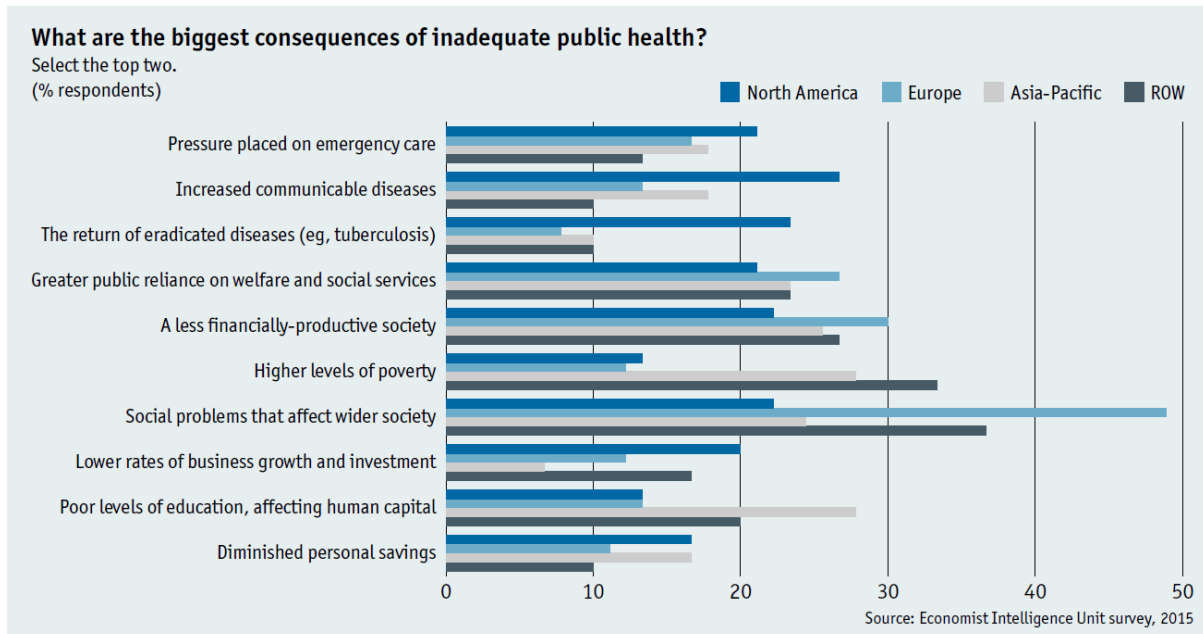
- public health sciences (including behavioural and social sciences, biostatistics, epidemiology, environmental public health, demography, infectious diseases, and psychosocial difficulties);
- assessment and analysis;
- policy and program planning, implementation and evaluation;
- partnerships, collaboration and advocacy;
- diversity and inclusiveness;
- communication;
- leadership.

The public health skills and knowledge framework developed as a **UK** wide resource through collaboration between all lead public health agencies across the UK¹ provides for:

- Description of functions for individuals, teams and organisations to deliver public health outcomes
- A point of reference for individuals and management for personal and workforce development
- A tool to facilitate development of job descriptions and roles
- A reference for the development of standards of practice and training curricula

Appendix B – Examples of impact of underinvestment in Public Health

The Intelligence Unit of the Economist, in its document *Financing the future - Choices and challenges in global health^{viii}*, identifies the biggest consequences of inadequate public health as:



Inadequate public health services can cause broader social and economic problems such as low workforce productivity and poor educational performance that widen gaps between rich and poor. Governments can do much to improve their citizen's health by embracing a more holistic approach to healthcare. This means addressing everything from education to housing and pollution. The difficulty with this approach is that often government agencies' budgets for healthcare are not integrated with public financing for social care, housing, education or environmental protection. Nevertheless, growing evidence of links between health and issues such as lifestyle, education and the environment means governments should find new ways of bringing together disparate agencies to work on mutual goals.

TB USA^{ix}

In the 1960s in the USA significant declines in the incidence of TB had occurred and there was every possibility that the disease could be eliminated. However, the declining incidence induced complacency and neglect for this disease. After several years of decreasing federal support, in 1972 categorical federal funding for tuberculosis control was eliminated entirely. It was not reinstated for 9 years, and then only at a very reduced level. This led to the resurgence of TB in the USA in the late 1980s, early 1990's. Commitment and funding of the TB programme in the USA was only restored following outbreaks of multidrug resistant TB amongst healthcare workers. Considerably more money was required to regain control of the disease than would have been required previously to maintain control.

It should be noted that complacency and reduced funding for TB control was not confined to the USA. In 1989 the World Health Organisation had a TB budget of only \$2.5 million for global TB control, and a staff of only two professionals. Interest amongst the scientific community and funding agencies also declined and scientific publications in this field decreased by almost 50 percent between 1968 and 1980.

Walkerton multi-bacterial waterborne outbreak, Canada 2000^x

In May and June 2000, Walkerton in Ontario, Canada experienced the largest multibacterial (E coli O157:H7 and Campylobacter species) waterborne outbreak in Canada. The number of Walkerton residents that became ill was approximately 1286 (26% of the total Walkerton population). The overall estimated number of cases associated with the outbreak was over 2300 people. There were 6 fatalities. The outbreak was regarded as a “call to action to the regulators, water utility operators and public health community alike to ensure vigilance in ensuring the safety of our drinking water, a fundamental key to health.”

The SARS outbreak in Canada

The global SARS outbreak that occurred in 2003 impacted most on Asia. Outside of Asia, Canada was the country hardest hit. By August 2003, there had been 438 probable and suspect SARS cases in Canada, including 44 deaths. Health care workers were particularly affected, more than 100 became ill and three died.

As a result of the SARS outbreak, Health Canada commissioned a third-party assessment of public health efforts and lessons learned for ongoing and future infectious disease control.^{xi} SARS placed unprecedented demands on the public health system, challenging regional capacity for outbreak containment, surveillance, information management, and infection control. A great many systemic deficiencies in the response to SARS were identified. Among these were:

- lack of surge capacity in the clinical and public health systems;
- inadequate capacity for epidemiologic investigation of the outbreak;
- lack of coordinated business processes across institutions and jurisdictions for outbreak management and emergency response;
- inadequacies in institutional outbreak management protocols, infection control, and infectious disease surveillance;
- weak links between public health and the personal health services system, including primary care, institutions, and home care.

The authors estimated that expenditures on public health in 2002-2003 accounted for only 1.8% to 2.5% of total health expenditure.

The committee that undertook this work referred back to the work of an Expert Working Group on Emerging Infectious Disease in 1993 (the Lac Tremblant group), a group that was established in response to the global spread of HIV^{xii}. The Lac Tremblant group made similar recommendations a decade earlier including:

- a national strategy for surveillance and control of emerging and resurgent infections
- support and enhancement of the public health infrastructure necessary for surveillance and timely interventions for emerging and resurgent infections
- strengthening of the capacity and flexibility to investigate outbreaks of potential emerging and resurgent infections

HIV/AIDS

Between the early 1980s and 2000 the prevalence rate of HIV infection in sub-Saharan Africa increased from less than 1% to 12%, representing an increase in the number of people living with

HIV infection from less than 1 million to 22 million.^{xiii} During this time, the HIV/AIDS epidemic was not sufficiently prioritised or resourced by either African governments or international donors. In sub-Saharan Africa, the total amount of official development assistance declined in the 1990s, to about \$3 per HIV-infected person by 1999.^{xiv} **During the 1990s the per capita growth in Africa was 3 times lower than it should have been if the HIV/AIDS epidemic had not occurred.** By the end of the 1990's the international focus on the pandemic began to attract billions of dollars that was invested in sub-Saharan Africa to tackle the crisis. These investments have contributed to the observed decline in HIV prevalence. Between 2000 and December 2005, HIV prevalence rates among adults were reported to have decreased in more than two-thirds of the countries in sub-Saharan Africa, falling from a mean rate of 10% to 7.5%.^{xiii}

UNAIDS have estimated what could happen if countries stop investing in HIV prevention and treatment programmes. The number of people acquiring HIV infection could increase to 2010 levels by 2030, wiping out 40 years of gains. They have also estimated what could happen if investment remains at current levels. Maintaining 2013 levels of coverage of prevention and antiretroviral therapy services through to 2030 could result in the number of people becoming newly infected with HIV rising to nearly 2.4 million in 2030. HIV services must reach at least 85% of all sex workers, gay men, other men who have sex with men and transgender people, and harm-reduction programmes must reach at least 40% of people who use drugs by 2020. Countries that build on existing programmes and reach these targets could prevent 13.1 million people acquiring HIV infection and prevent 9.2 million deaths by 2030.^{xv}

H1N1 Influenza pandemic

In 2010, a review committee was convened under the provisions of the Internal Health Regulations to evaluate the response to the 2009 H1N1 influenza pandemic and assess the level of global preparedness for similar events in the future.^{xvi} As the committee concluded, "The world is ill-prepared to respond to a severe influenza pandemic or to any similarly global and threatening public-health emergency." The committee's recommendations for strengthened preparedness included calls for the establishment of a more extensive global public health reserve workforce that could be mobilized as part of a sustained emergency response, the creation of a contingency fund for public health emergencies to support surge capacity, and pursuit of a comprehensive research and evaluation programme. The committee noted that these needs could not be met by WHO acting alone and required collaboration with the international community.

Ebola

The recent Ebola outbreak in West Africa demonstrated again the lack of preparedness and responsiveness for a global epidemic and the under-investment in health systems to detect and control outbreaks of infectious diseases. Many commentators and reviews have referred to the deficits evident in national and international responses.^{xvii xviii xix xx xxi}

The WHO in a report in January 2015^{xxii} identified many factors that contributed to undetected spread of the Ebola virus and impeded rapid containment including:

- West African countries, which had never experienced an Ebola outbreak, were poorly prepared for this unfamiliar and unexpected disease at every level, from early detection of the first cases to orchestrating an appropriate response. In Guinea, it took nearly three months for health officials and their international partners to identify the Ebola virus as the causative agent.

- The Ebola outbreak demonstrated the lack of international capacity to respond to a severe, sustained, and geographically dispersed public health crisis. Governments and their partners, including WHO, were overwhelmed by unprecedented demands driven by culture and geography as well as logistical challenges.
- Despite a multitude of international agencies responding to the crisis and taking on responsibilities that went beyond their traditional areas of work and expertise, capacity was insufficient for most of the time or not available where it was needed most.

It appears that lessons were not learnt from the response to the SARS outbreak in 2003 or the global influenza pandemic in 2009.

Natural disasters

Natural disasters such as flooding or heat-waves – are particularly difficult to plan for but can be extremely costly. Flooding in 2007 gave rise to £3 billion of damages in the United Kingdom (Pitt, 2008).

These types of natural disasters are very hard to predict and the impact of climate change increases the probability and severity of extreme events while reducing their predictability.

Health and environmental impact assessments, including estimation of future trends and costs, are helpful methods to quantify the likelihood and impact of risks. In response to anticipated risks, policy-makers can build capacity and ensure preparedness of systems and development and testing of emergency plans.

It is essential to invest in and modernize health protection services – including control of communicable diseases, environmental health and emergency preparedness – in order to address these current and future public health challenges

Population level preventive services

Maciosek et al^{vi} demonstrated the substantial opportunity that exists to improve population health and the additional QALYs that could be gained if the provision of evidence based preventive services was increased. They demonstrated that 1.3 million more healthy life years could be gained for a single year's birth cohort simply by increasing the uptake of the top-tier services identified from current rates to 90%. The authors recommend that "individual clinicians, medical groups, and health systems should review preventive service utilisation rates of the populations they serve to identify opportunities to reduce delivery gaps at the local level". They also recommend that local disparities in utilisation of high-priority services are assessed and that care processes are targeted to close these gaps.

Appendix C – PHMECN Recommendations for Public Health Medicine in Ireland

Future role of CsPHM

- CsPHM should be positioned in the health services in such a way that they can work across all divisions of the health sector and with all external agencies and stakeholders.
- Future HSE reform should ensure the ability of CsPHM to fulfil their statutory requirement and provide a service to the whole population. CsPHM should be aligned with, rather than subsumed into, other HSE divisions.
- The future role of the CPHM should ensure the ability to continuously advocate for the health of the population in Ireland.
- All CsPHM should have a specialist portfolio i.e. in domains of health improvement, health service improvement, health intelligence or health protection and maintain a core level of competence in health protection.
- Public Health Departments should appoint CsPHM to specific roles/portfolios
- There is a commitment from senior management to ensure professional and career development for all CsPHM working in public health medicine in Ireland.
- There is further development of a multidisciplinary public health workforce to support CsPHM.
- An adequately and appropriately resourced out of hours public health service should be put in place.
- CsPHM should have equal parity with other medical specialities in terms of recognition, status and remuneration.
- There should be increased number of joint academic/HSE consultant positions in Public Health Medicine.
- Future developments of public health medicine in Ireland should be informed by a national policy on Public Health Medical Services that would include a robust analysis of population need for public health medical services and a work force plan.
- If formal subspecialisation is to be considered, this should be informed by the national policy on public health medical services as in recommendation above.

Current and future curriculum for Public Health Medicine

- The core areas of Public Health Medicine (Health Improvement, Health Service Improvement, Health Intelligence and Health Protection) should have a planned and equal division of core training time and experience for SpRs.
- SpRs should aim to specialise in one of these areas in the latter years of training so that they can start to build networks and expert knowledge in their chosen area.
- Central planning of training opportunities in all core competencies prior to commencement of training and training years so that there is planned exposure of SpRs to all necessary competencies and better planning of training placements

- Include Improvement Science as a core stream in the curriculum as this would place CPHMs very well to lead in quality and health service improvement.
- Develop a vision and plan for public health in Ireland, which would inform any further development of the HST training programme.
- The case should be made for extension of the duration of the training programme to 5 years
- SpRs should be encouraged, supported, and facilitated to undertake specialist placements/fellowships when they are training
- Additional training capacity in areas where opportunities are limited in Ireland perhaps because of population size should be sought elsewhere e.g. the UK
- Post CSCST fellowships, MDs and PhDs within Ireland should be progressed and supported.
- The establishment of a National Environmental Public Health unit would greatly facilitate training in this competency
- The recommended full review of the National TB service should be carried out and should consider the requirements for PH HST in TB control and surveillance
- A standardised objective assessment system should be established to ensure that those emerging from the training programme have the skills required to drive public health into the future.
- There is an acknowledged need to continue recruitment of a sufficient number of PH SpRs. However, there is an equal need to ensure there are sufficient consultant posts for those exiting the HST programme.
- If capacity within the system that ensures SpRs have adequate training opportunities cannot be guaranteed, then consideration should be given to reducing trainee numbers until such capacity is assured.
- Consideration should be given to shorter duration of training in health protection and placements in PHDs with high volumes of infectious disease notifications and incidents eg PHD East. Placement here could also incorporate a specific placement within the TB team who have a sufficient volume of TB cases to ensure adequate exposure and training.
- Training locations that do not enable SpRs to take on leadership roles should not be allocated to final year SpRs
- Pre-HST training positions in PHM should be developed for NCHDs at pre-registrar level
- Develop a mentorship programme for SpRs in PHM
- There should be improved standardisation of the quality of HST

Future recruitment in Public Health Medicine

- There is an urgent need to develop a vision for Public Health Medicine in Ireland and a clear plan to achieve this vision which includes an outline of the function of PHM and the roles and responsibilities of the Public Health Physician (CPHM).

- Work force requirements need to be aligned with the vision and core functions of PHM and a modern workforce supported by a cost-benefit analysis.
- PHM training requirements need to align with core PHM functions and work-force planning findings and ensure that PHM recruitment is facilitated by:
 - Matching trainee numbers and available posts,
 - Timely advertising and processing of consultant posts,
 - Development of appropriate job descriptions and contracts that reflect the expertise, roles, responsibilities, and degree of training required for positions,
 - Open and transparent processes for appointments to positions,
 - Recruitment to specific portfolios / domains of work,
 - Recruitment based on identified need and skill matching and not just based on WTE numbers.
- Establish a unit within DOH or HSE devoted to Work Force Planning (WFP).

Status and attractiveness of Public Health Medicine

- A Type A consultant contract (which allows no private practice) is required for Consultants in Public Health Medicine, with requisite development of an accurate job description.
- Structuring the service at the appropriate senior level in the health service.
- Investment in Public Health Medicine and resourcing Public Health Medicine to achieve maximum quality of service with simultaneous development of the rest of the public health workforce to eliminate non-consultant tasks from the day-to-day work of a CPHM
- Appropriate portfolios should cover national and local population needs appropriately and consider the flexibility and dynamism required for changing needs over time.

Enhancing awareness of Public Health Medicine

- Consultants in public health medicine should be actively involved in teaching undergraduate students and postgraduate SpRs in other specialties
- Undergraduate training:
 - The undergraduate public health curriculum should be modern, relevant and have greater involvement from practising consultants in public health medicine

- There should be standardisation of the public health curriculum across universities.
 - The public health curriculum should be delivered and assessed using methods appropriate to the learning objectives.
 - The public health curriculum should not be delivered in isolation and should be incorporated into other disciplines as a systems-based approach
 - Opportunities to gain experience in public health as an undergraduate should be progressed through funded summer research projects, final year projects etc.
- Postgraduate training:
 - There should be greater exposure of SpRs in other specialties to consultants in public health medicine and to public health principles during their postgraduate training. This can be achieved through:
 - Pre-HST training positions in PHM should be developed for NCHDs at pre-registrar level
 - Inclusion of Public Health topics in intern teaching programmes.
 - Inclusion of Public Health principles in the Basic Specialist Training curriculum of other specialties. The learning can be delivered through study days and online teaching
 - Links should be developed between Departments of Public Health and/ or the Faculty with universities, affiliated medical academies, teaching and training units within acute hospitals, and other postgraduate training bodies to provide public health input into curriculums and other educational activities (e.g. grand rounds in hospitals)
 - In order for a career in public health medicine to compete as a career option with other specialties and profile of a consultant in public health medicine needs to be improved
 - A clear vision and understanding of the specialty is needed
 - Contractual arrangements, including remuneration need to be on par with other specialties.

Career opportunities in Public Health Medicine

- The domains of expertise that PH needs to cover need to be established formally, and local Public Health departments structured to cover these areas
- CPHM appointments should be to specified portfolios & locations of work (e.g. local health protection role or combined local + academic role or local + national expert role, or national expert role in X topic) based on relevant skills & experience
- Formal processes of filling national expert roles and secondment roles need to be established. This should include formal agreements which describe arrangements for backfill, the governance and reporting relationships, the duration of the role (secondments should be time limited to allow others in the system to avail of them), arrangements for starting/stopping secondment, review timelines. The appointment process should include open competition (formal expressions of interest with transparent interview/ skill-match process)
- Expand secondments beyond traditional CPHM post locations e.g. to other HSE Divisions such as Social Inclusion; this would facilitate multi-sectoral working
- Opportunities for secondment/academic linkages should be identified and listed; consider research partnerships between universities and the HSE similar to NIHR Health Protection Research Units in England e.g. 'Public Health Research Units'
- Consultant contract should be awarded which would facilitate joint service & academic appointments
- Contracts should allow more flexibility for part time working & job-sharing positions; flexible working from home - with appropriate IT support - should be facilitated especially for those undertaking national roles where significant amounts of travel are required
- Enablers of expertise development should be identified for the different domains of public health practice e.g. training, IT, specific secondments etc.
- Opportunity to develop expertise in specialised areas should start at SpR level. There should be the opportunity for post-CSCST fellowships.

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