

Medical Education, Training & Research

HSE Strategy

Chairman's Introduction

The Medical Education, Training and Research (METR) Committee was established by Prof. Drumm, CEO of the Health Service Executive (HSE) in June 2006 to make recommendations to the HSE's Management Team and Board on a strategy for medical education, training and research in the HSE. The Committee acknowledged from the outset the interdisciplinary nature of education, training and research in the wider sense.

The work of the Committee in addressing its five specific terms of reference was progressed against a backdrop of legislation and Government policy which clearly identified a central role for the HSE in medical education, training and research. The implementation of the recommendations of the Report of the Working Group on Undergraduate Medical Education and Training ("Fottrell Report") and the Report of the Postgraduate Medical Education and Training Group ("Buttimer Report"), had directed major funding streams from Government to the HSE. There was therefore a clear, urgent need for the HSE to actively engage in the actioning of these reforms, even before the METR Committee had completed its deliberations. Accordingly, the Committee also took on an immediate operational role, to ensure the appropriate management of targeted METR funding, details of which are included in the strategy. This operational role provided the Committee with the opportunity to gain a deeper understanding of the evolving role of the HSE in medical education, training and research, and to develop strong relationships with educational and research partners.

The Committee undertook wide-ranging consultations with all of the key stakeholders in medical education, training and research and is grateful to each of these stakeholders for their time and effort in completing the Committee's questionnaire and engaging enthusiastically in the process.

The recommendations of the Committee are based on the five terms of reference assigned to the Committee and are specifically focussed on medical education, training and research. However, while not strictly within the remit of the Committee, it is recommended that a multi professional Education, Training and Research Management Sub-Committee be established by the CEO within the HSE to ensure the co-ordination and alignment of all education, training and research functions throughout the HSE of all disciplines.

I would like to thank the members of the Committee for their commitment and input into the drafting of this strategy and in particular to pay a special tribute to the enormous contribution made by John Magner, HSE HR Directorate, and Mary-Jo Biggs and Ciara Mellett, HSE Office of the CEO Directorate, in both the Committee's operational role and final drafting of this report.

The recommendations contained in this strategy have been endorsed by both the Management Team and the Board of the HSE. This represents a firm commitment, at the highest level, to place high-quality education, training and research at the centre of the HSE's mission and to actively and collegially contribute to the shaping of future medical education and research policy and practice in Ireland.

Dunganan Musinia V. FituCan

aux fined

Professor Muiris X. FitzGerald Chairman

CONTENTS

1.0	Introduction 1.1 Background	3
	1.2 METR Committee	4
	1.3 Context	4
	1.3.1 Legislative Framework	5
	1.3.2 HSE Board	6
	1.3.3 Policy Framework – Medical Education & Training	7
	1.3.4 Policy Framework – Research	9
	1.4 Structures and Relationships	12
2.0	Consultation Process	14
3.0	Medical Education & Training	16
	3.1 Key Messages from Consultation Process	16
	3.2 Priority Issues	17
	3.3 International Context	17
	3.4 Recommendations	19
	3.4.1 Strategic Vision and Framework	20
	3.4.2 Relationships and Linkages	22
	3.4.3 Implications of Fottrell & Buttimer Reports and Medical	
	Practitioners Act	23
	3.4.4 Arrangements regarding PgMDB	26
4.0	Research	27
	4.1 Key Messages from Consultation Process	27
	4.2 Priority Issues	28
	4.3 International Context	28
	4.4 Recommendations	30
	4.4.1 Strategic Vision and Framework	31
	4.4.2 Relationships and Linkages	33
	4.4.3 Implications of Fottrell & Buttimer Reports	35
5.0	Recommendations	36
	5.1 HSE-METR Structures	36
	5.2 Integration of Education, Training & Research within the HSE	41
	Appendices	43
	A – Bibliography	43
	B – Membership of HSE-METR Committee	44
	C – METR Stakeholders	45

1.0 Introduction

1.1 Background

In February 2006, the Reports of the Working Group on Undergraduate Medical Education and Training (Fottrell Report) and the Postgraduate Medical Education and Training Group (Buttimer Report) were published. Both of these reports made key recommendations regarding the organisation, structure, delivery, management, co-ordination and funding of undergraduate and postgraduate medical education and training respectively. Taken together the two reports provided an integrated implementation strategy to enhance and modernise medical education and training across the continuum from undergraduate education to specialist training.

The broad thrust of the recommendations of these two major reports was accepted by Government. To deliver on the reform programme outlined, large scale changes across the education and health sectors were acknowledged as being necessary. These changes require formal collaboration between the multiple inter-dependent stakeholders involved in undergraduate and postgraduate medical education and training and in research, including the Department of Health & Children (DoHC), Department of Education and Science (DoES), Department of Finance (DoF), Higher Education Authority (HEA), Health Service Executive (HSE), Medical Council, Medical Schools, recognised postgraduate training bodies, voluntary agencies, clinical sites, the Postgraduate Medical and Dental Board (PgMDB) and the Health Research Board (HRB).

The HSE has a central role to play in delivering this reform programme. This role is underpinned by

- the policy framework developed by the Fottrell and Buttimer Reports and Government reports on research,
- the legal obligations set out in the Health Act 2004 and Medical Practitioner Act 2007,
- the HSE's role as the primary health service provider and health service commissioner in the state.
- the HSE's direct involvement in medical education and training via the provision of clinical placements,
- the HSE's de facto status as the biggest employer in the state of doctors trained by the undergraduate and postgraduate educational system and
- the fact that a significant proportion of health research takes place on HSE and HSEfunded clinical sites.

1.2 HSE-METR Committee

In response to the Fottrell and Buttimer Reports and in recognition of the need for the HSE to develop a planned and centrally co-ordinated response to the medical education and training reform programme being engaged in on a national basis, the CEO of the HSE in June 2006 established a Committee to focus specifically on medical education, training and research (METR), the terms of reference of which are provided below. Owing to the specific urgency pertaining to the development of medical education, training and research (as distinct from other health service disciplines), the work of the Committee was focussed on its specified terms of reference. However, the interdisciplinary nature of education, training and research was acknowledged from the outset and is reflected in the recommendations of the committee.

The terms of reference of the METR Committee were as follows,

- to develop a <u>strategic vision</u> and <u>policy framework</u> for the HSE in respect of Medical Education, Training and Research,
- to advise on the appropriate <u>relationships and linkages</u> with other relevant parties and stakeholders in METR,
- to examine the <u>implications</u> of the Fottrell report, the Buttimer report and the imminent revised Medical Practitioners Act for the HSE and advise on <u>appropriate</u> <u>responses</u>,
- to examine and develop the most <u>appropriate arrangements</u> in relation to the streamlining of relevant aspects of the Postgraduate Medical and Dental Board functions into the HSE and
- to advise on the <u>appropriate structures</u> for Medical Education, Training and Research within the Health Service Executive and the most appropriate <u>governance</u> <u>arrangements</u> to be applied in relation to same.

The membership of the HSE-METR Committee is provided at Appendix B.

1.3 Context

At the time of the establishment of the committee, a significant policy background was already in place in relation to (i) **medical education and training** and (ii) **research**. This policy background was underpinned by both an established and developing legal framework. An outline is given below regarding the key factors which contributed to the context in which the Committee initiated and carried out its work.

1.3.1 Legislative Framework

At the time of the establishment of the HSE-METR Committee, the legislative framework in relation to the role of the HSE in medical education and training was primarily defined by the **Health Act 2004**. This Act provided for the establishment of the HSE and charged the HSE with the management and delivery of health and personal social services to the population. Within Section 7 of this Act, specific accountability and responsibility is assigned to the HSE in relation **education and training**, as follows:

"The Executive shall...to the extent practicable and necessary to enable the Executive to perform its functions, facilitate the education and training of (i) students training to be registered medical practitioners, nurses or other health professionals, and (ii) its employees and the employees of service providers."

Section 7 of the Health Act 2004 also assigns a statutory responsibility to the HSE in respect of **research**. Sections 7(6) and (7) of the Act state the following:

"The Executive may undertake, commission or collaborate in research projects on issues relating to health and personal social services, but, in considering whether to do so it shall have regard to any decision by another body or person within the State to undertake, commission or collaborate in such projects."

"[This] includes the power to collaborate in research projects involving parties from outside the State."

In addition, at the time of the HSE-METR Committee commencing its work the new <u>Medical Practitioners Act</u> was in Bill format. The HSE-METR Committee was immediately asked to play a lead role in defining the response of the HSE to the proposals in the Bill that related to medical education and training. In May of 2007, the Bill was passed by both Houses of the Oireachtas. At the time of writing, the Minster for Health and Children had not yet enacted the new legislation.

The overall objective of the Medical Practitioners Act 2007 is to introduce a comprehensive system for the regulation of all medical practitioners, with a view to ensuring that they are appropriately qualified and competent to practise medicine and deliver health services safely to the public. The Act aims to protect the public by promoting and ensuring high standards of professional conduct and professional education and training and competence among registered medical practitioners. The Act has extensive implications for a range of bodies involved in undergraduate and postgraduate medical education and training in terms of their roles and responsibilities, in particular the HSE, the HEA, the Postgraduate Medical and

Dental Board and the Medical Council, including its recognised panel of Postgraduate Training Bodies.

The Act specifies in detail the new and substantial range of duties the HSE now has in relation to medical and dental education and training. The Act confers on the HSE a substantially enhanced, legislatively-backed central role, which is to be underpinned by the development of collaborative working relationships with key educational partners, including the Medical Council, the Dental Council, the Medical Schools, Postgraduate Training Bodies recognised by the Medical Council and the Higher Education Authority.

Specifically this Act, under Part 10, requires the HSE

- to facilitate the education of students training to be registered medical practitioners,
- to promote the development of specialist medical and dental education and training and to co-ordinate such developments in co-operation with the Medical Council, the Dental Council and the medical and dental training bodies,
- in co-operation with the medical and dental training bodies and after consultation with the Higher Education Authority, to undertake appropriate workforce planning with a view to meeting the staffing and training needs of the health service on an ongoing basis,
- to assess on an annual basis the number and type of training posts required by the health service and to put these proposals to the Medical Council and
- to advise the Minister on medical and dental education after consultation with medical and dental training bodies and other appropriate bodies.

In addition, provision is made in the Act for the transfer of most of the Postgraduate Medical and Dental Board's legislative responsibilities to the HSE, upon the Board's dissolution.

1.3.2 HSE Board

The central role of the HSE in medical education training and research was bolstered by the HSE Board's acknowledgement of the seminal importance of high quality education, training and research for the health service as being a key factor in the Board's pursuit of excellent standards in health care provision. The HSE Board established an Education Training and Research Committee under the Chairmanship of Professor Michael Murphy. The Committee's interim framework was welcomed by the Board at its meeting in July 2006. The Board committed itself to developing within the HSE the necessary organisational structures and resources needed to provide the HSE with the capacity to play a major role in the education, training and continuing professional development of its entire workforce in conjunction with key educational partners. The Board, furthermore, committed the HSE to work with all

existing bodies to achieve the highest possible standards in all aspects of health related programmes and courses.

The Board has acknowledged the role of the HSE in facilitating research in the life sciences and related translational research and recognises the importance of research in terms of the potential to improve our health services, as well as contribute to economic and social development. The desire to foster a research ethos within the HSE, as espoused by the Board, is shared by the Committee. The HSE-METR Committee is aware of the Board's encouragement of the conduct of research across the entire spectrum of the health service and throughout all levels of the organisation and is fully supportive of this aim. However, given the immediate imperative to develop medical education, training and research policies and structures urgently dictated by the Fottrell & Buttimer Reports, the HSE-METR Committee focussed on designing a framework and structure to deliver on that pressing mandate, while at the same time ensuring that its recommendations were compatible with developments envisaged by the HSE Board in all professional areas.

The Board has indicated its support for a single multidisciplinary education, training and research structure in the HSE, covering medical, dental, nursing, health and social care professionals and management. In formulating the recommendations contained in this report, the Committee was cognisant of this objective. The requirement to develop a METR structure in the HSE, in light of immediate statutory and policy obligations on the HSE, while in parallel, acknowledging the appropriateness of a single education, training and research function, is explored further in Chapter 5.

1.3.3 Policy Framework – Medical Education & Training

Fottrell Report: Medical Education in Ireland- A New Direction, 2006

The Working Group on Undergraduate Medical Education and Training was charged with examining and making recommendations relating to the organisation and delivery of undergraduate medical education and training in Ireland with a view to ensuring a high quality system in line with best international practice. The Group in its report made a number of radical recommendations in a range of critical areas in medical education and training. These addressed such issues as (1) entry requirements to medicine, (2) expansion of undergraduate medical education places, (3) funding models, (4) governance arrangements between medical schools and clinical sites, (5) curricular reform, (6) educational infrastructure and (7) academic manpower.

Buttimer Report: Preparing Doctors to meet the Health Needs of the 21st Century - Report of the Postgraduate Medical Education and Training Group, 2006

This report makes wide-ranging recommendations to ensure that the postgraduate education of doctors is based on coherent integrated educational policies, features a reformed governance structure and performs at the highest possible international standard, in order to produce the specialist manpower requirements of a changing health service. Such a system would also be responsive to the flexible training needs of postgraduate doctors and their specialist trainers. The executive summary recommends major involvement of the HSE in postgraduate education. There are explicit recommendations to the HSE to establish "a robust medical education structure (HSE-MET)". Special emphasis was laid on ensuring that the HSE-MET structure "should have sufficient independence to avoid the risk of being overwhelmed by service pressures", and that it "should also have a strong role in the governance of medical education and training". The Report suggests important additional roles for HSE-MET, including that it "should facilitate the integration and streamlining of undergraduate, postgraduate and continuing medical education/continuing professional development by developing evidence-based implementation strategies, plans and outcome measures, so as to ensure that students progress from competence to proficiency in their careers in a multidisciplinary setting at the different levels of training". Following the publication of the Buttimer Report the CEO of the HSE, Professor Brendan Drumm, set up the current HSE-METR Committee to recommend, inter alia, the future organisation of HSE-METR functions envisaged and recommended in the Buttimer Report.

In addition, arising from the recommendations in the Fottrell and Buttimer reports, an Inter-Departmental Policy Steering Group on Medical Education and Training was established, jointly chaired by senior officials of the Department of Health & Children and the Department of Education & Science. The HSE is represented on this group by two senior officials.

The Inter-Departmental Group subsequently established, in early 2007, the National Committee on Medical Education and Training. The National Committee is independently chaired and its membership is drawn from the range of interested parties – the Department of Health & Children, the Department of Education & Science, Health Service Executive, Higher Education Authority, Medical Council, Postgraduate Medical and Dental Board, Deans of the Medical Schools, Forum of Irish Postgraduate Medical Training Bodies, the Irish Hospital Consultant Association (IHCA), Irish Medical Organisation (IMO), Irish Patients Association and the Union of Students of Ireland. The HSE has two senior representatives on this Committee and provides the joint Secretariat to the Committee, along with the HEA.

1.3.4 Policy Framework - Research

Research is a key driver of Ireland's knowledge-based economy. The statutory responsibilities assigned to the HSE under the Health Act 2004 place on the HSE an onus to ensure that its priorities and interests in research in the health service are developed for the benefit of patients and clients of the HSE and the population in general, while also enhancing the Irish health service and the knowledge-economy of Ireland. There is now an opportunity to position the HSE as a leading advocate for and participant in health research. The importance of an evidence base for high quality efficient health services has long been recognised. The establishment of a unified HSE presents the opportunity to link patient needs with research strategy on an integrated national basis. The HSE should also be a significant contributor to the debate on research priorities, in conjunction with its research partners.

Historic underinvestment in all research activities in Ireland is acknowledged. The EU target for R&D spending is 3% of GDP by 2010, with two-thirds of this to come from industry. Ireland has some way to go to reach this target, as current spending is 1.6% of GDP. The National R&D Action Plan sets a target of 2.5% of GNP by 2010, with two-thirds to come from industry. It is also recognised by Government that the current level of funding for health research in Ireland is too low. In Ireland, 0.25% of overall health expenditure currently goes to health research. This compares with 1.6% of the NHS budget in the UK.

In addition to addressing financial resources, the HSE must increase its organisational and intellectual capacity for research throughout all levels of the organisation. Of critical importance to any health service is translational research, whereby the knowledge learned through scientific research is applied to the manner in which healthcare is provided and health services are delivered. Equally, translational research allows scientific research to be informed by patient-need and the priorities of the health service. For the HSE, the development of translational clinical research, as well as health services research and population health research, is crucial. By ensuring that research is encouraged and supported throughout the organisation, the HSE can improve the efficiency, effectiveness and utilisation of services, enhance the health of the population and promote the development of innovative new therapies, diagnostic tests and improved medical and surgical devices.

HSE Commitment to Research

Since its establishment, the importance of developing the role of the HSE in the research arena has been recognised at the highest levels of the organisation, including the Board through its Education, Training and Research Committee. The HSE's Corporate Plan 2005-2008 highlighted the importance of linking research with evidence based services, leading to better health outcomes. Furthermore, in 2006 the Population Health Directorate prepared a

draft discussion document setting out broad principles which would underpin research in the HSE. This document highlighted the importance of collaboration, both internally and externally, for the promotion of health research, the development of a research culture in the HSE and the need to increase research capacity and funding for research in the HSE.

A number of national reports and strategies in relation to research, and more specifically health research, have been published over the past few years. Government policy on health research forms the basis of the recommendations provided throughout this report. A common theme throughout all of the various reports is the importance of research in developing our health services to enhance the health of the population and as a vital component to maintaining our knowledge-based economy. Each report highlighted the current low level of investment in both these areas and made recommendations as to how this funding deficit could be remedied.

Making Knowledge Work for Health

The Strategy "Making Knowledge Work for Health" (DoHC, 2001) highlighted the importance of research in improving the efficiency and effectiveness of the health services and in driving the wider knowledge-based economy and society. It identified two pillars of health research – (i) Science for health (lab-based research, clinical trials, etc.) and (ii) R&D for health (population health research, etc.). The HRB was identified as the lead organisation for supporting the 'science for health' pillar. In relation to the 'R&D for health' pillar, the strategy recommended the appointment of an R&D Officer in the DoHC, with regional R&D officers throughout the health service. While this recommendation has been superseded by that of the Advisory Council (2006, see below) and the establishment of the HSE, the principle of bringing an integrated, central, national focus to research, coupled with local dissemination, is noteworthy.

Strategy for Science, Technology and Innovation

Government support for health research was reaffirmed through the publication of the Strategy for Science, Technology and Innovation (SSTI), 2006, with the section dealing with health being built on the earlier strategy, "Making Knowledge Work for Health". SSTI recommends, inter alia, the development of a number of centres of world significance in translational health research and that each clinical research centre should have strong links with both academia and the health services, which would attract linkages with and investment by the pharmaceutical, diagnostics and medical devices industry, both nationally and internationally.

Towards Better Health

Aspects of the STI Strategy relating to health research are developed in a more specific manner through "Towards Better Health – Achieving a Step Change in Health Research in Ireland" (Advisory Council for STI/Forfás, 2006), which was jointly launched by the Minister for Health & Children and the Minister for Enterprise, Trade & Employment. The key recommendations were

- (1) the appointment of a Head of Research Policy at the DoHC (at Assistant Secretary level),
- (2) the establishment of a cross-departmental/agency Health Research Group,
- (3) the establishment of an expert advisory group to advise the Health Research Group on funding priorities and
- (4) the establishment of a Forum of stakeholders.

Arising from *Towards Better Health*, an Interdepartmental Health Research Group has recently been established jointly by the Department of Health and Children and the Department of Enterprise, Trade and Employment. Significantly, the HSE is represented at senior executive level on this Group.

Fottrell & Buttimer Reports

Government support of health research was further cemented in the Buttimer Report (*Preparing Ireland's Doctors to meet the Health Needs of the 21st Century*) and Fottrell Report (*Medical Education in Ireland – A New Direction*), which were published in 2006. While the principal focus of the reports is medical education and training, both reports **emphasise the importance of the integration of research at both undergraduate and postgraduate levels of medical education**. The Fottrell Report makes particular recommendations in relation to an increase in the number of academic clinicians. As well as being key medical education posts, academic clinician posts will also contribute to the development of health research at the highest level.

The Buttimer Report highlights the importance of medical education and training being interlinked with a wider research environment, with research being a central component of postgraduate medical education and training. It suggests that as an initial step, modules on research methodologies should be incorporated into all courses. Other suggestions include funding graduates to undertake research at accredited sites either in Ireland or abroad and funding of PhD programmes to encourage medical graduates to pursue careers in research. These latter recommendations are currently being implemented by the HSE as a result of high-level discussions with the Deans of the Medical Schools, the HRB and the Forum of Postgraduate Medical Training Bodies.

1.4 Structures and Relationships

At the time of the establishment of the Committee, the HSE did not have a system-wide structured approach to medical education and training or to research. Many of the arrangements and relationships with external agencies and stakeholders (the medical schools and the postgraduate training bodies) had developed in an ad hoc informal manner via the former health board structures. There were no explicit mechanisms in place to address issues in a unified manner on a national basis across all the relevant HSE Directorates including NHO, PCCC and Population Health. This policy deficit was highlighted when, in tandem with the HSE-METR Committee being established, new funding streams from the Department of Health and Children to the HSE were developed which were specifically ring-fenced for medical education, training and research as part of the implementation of the recommendations of the Fottrell and Buttimer Reports.

The Committee subsequently adopted a dual role, under the auspices of the National Director, Office of the CEO, being both responsible for

- a) developing a strategy for the HSE in relation to medical education, training and research (see terms of reference) and
- b) being the operational co-ordinating body, with overall responsibility for the management of the allocated funding.

Though this dual role did expand hugely the scope and work of the Committee and impacted on the timescales for the finalisation of the Strategy now presented, this operational role allowed the Committee to undergo significant learning experiences. In particular, key insights were obtained through the Committee's direct involvement in

- (1) the HSE Capital Audit of Medical Training Facilities on clinical sites with the HEA,
- (2) capital and non-capital postgraduate programmes with the Forum of Postgraduate Training Bodies,
- (3) quality assurance of HSE aspects of the Graduate Entry to Medicine bids submitted to the HEA by Irish Medical Schools,
- (4) issues relating to Academic Clinicians, with the HRB, HEA and the Medical Schools,
- (5) development of PhD Fellowship Programme for medical graduates in conjunction with the HRB,
- (6) consultation with the HRB on the development of a Research Methodology Support Centre,
- (7) planning of Clinical Skills Laboratory projects on the TCD/ St James's Hospital and the UCC/Cork University Hospital sites,
- (8) meetings on future relationships between the Medical Council and the HSE,
- (9) participation in the Interdepartmental Policy Steering Group on Medical Education and Training and the Interdepartmental Health Research Group and

(10) participation in the National Committee on Medical Education and Training.

Essentially, these major operational activities allowed the Committee to simultaneously "road-test" many elements of the recommendations to the HSE that emerged from the Committee's concurrent wide-ranging consultation process. The experience gained from these 'real-life', complex, high-level interactions, with a wide array of educational and statutory partners, powerfully informed our recommendations in respect of all five of our terms of reference.

2.0 Consultation Process

The need to engage immediately in an extensive consultation process with internal and external stakeholders and educational partners was identified as a key step in the initial work of the Committee. To this end, the Chair of the Committee, Prof. M. X. FitzGerald, was mandated to engage directly with the leadership of major educational interests, both nationally and internationally. Accordingly, over 20 lengthy high-level meetings were engaged in during the first 8 weeks. Simultaneous with this process, the Committee undertook a formal written structured consultation process, which involved over 20 different key agencies and stakeholders. These included the Department of Health & Children, the Department of Finance, the Department of Education and Science, the Higher Education Authority, the Health Research Board, the Postgraduate Medical and Dental Board, the Medical Council, the Dental Council, the Forum of Irish Postgraduate Training Bodies, the five medical schools, the Institutes of Technology, Science Foundation Ireland, the Irish Hospital Consultants Association, the Irish Medical Organisation, the HSE Population Health Directorate, the HSE NHO Directorate, the HSE PCCC Directorate, the HSE Finance Directorate and the HSE HR Directorate.

Input into the deliberations of the Committee was sought in a specific and focused format, which was designed around the terms of reference and deliverables of the Committee. Specifically the stakeholders above were invited to identify from their own perspective;

- the top five principles that the HSE should adopt in developing its strategic vision and policy framework for medical education training and research (Term of reference 1),
- the top five operating principles that the HSE should employ in engaging with other relevant parties and stakeholders in medical education training and research (Term of reference 2),
- the top five issues that the HSE should prioritise in relation to implementing the Fottrell and Buttimer reports (Term of reference 3),
- the top five priority suggestions/ comments on the role being assigned to the HSE in the area of medical education training and research in the then Medical Practitioners Bill (Term of reference 3),
- the top five suggestions in relation to the HSE incorporating and developing the functions of the Postgraduate Medical and Dental Board (Term of reference 4),
- the top five elements that should feature in ensuring a robust medical education training and research organisational structure within the HSE (Term of reference 5) and
- the top five principles that the HSE should adopt in putting in place appropriate governance arrangements for medical education training and research (Term of reference 5).

Parallel to this consultation process being carried out external to the Committee, a similar exercise was undertaken within the Committee, with each member being requested to complete the consultation document. A composite Committee response to the consultation document was then compiled.

A remarkable response rate of 90% was achieved in relation to the external consultation process. A striking aspect of the consultation process was the high degree of concordance between responses from (1) the diverse stakeholders consulted and (2) the HSE-METR Committee itself. The combined responses were subsequently discussed at an externally facilitated "think-tank" meeting of the HSE-METR Committee and a consensus view was arrived at in order to assist in drafting a document addressing the five terms of reference set out by the CEO.

The key messages received from the consultation process in relation to (i) medical education and training and (ii) research are set out in the relevant sections which follow.

Note on structure of chapters 3, 4 & 5

For the purposes of clarity and logical sequencing, the following sections address (a) Medical Education and Training and (b) Research separately, because of the distinctive and particular characteristics of these areas. Each of these two areas is dealt with in respect of each of the five Terms of Reference. Chapter 5 addresses the fifth term of reference (structures and governance arrangements) for medical education, training and research.

3.0 Medical Education and Training

As outlined in the previous chapter, the Committee undertook a written consultation process with various stakeholders. Provided below are the key messages arising from this process that relate to medical education and training. The key messages relating to research are set out in the next chapter.

3.1 MET - Key Messages from Consultation Process

An overview of the key messages received from this process is given below:

- The MET role in the HSE must develop and function independently of service delivery pressures. This would ensure that MET principles, priorities, deliverables and funding were not de-railed or undermined by the inevitable pressures which will arise within the HSE from its service delivery responsibilities.
- The HSE MET function must be prominently positioned at the centre of the HSE structure. The importance of a designated budget was highlighted.
- Medical education and training needs to be professionally managed, planned and integrated along the continuum of undergraduate to postgraduate levels.
- The HSE needs to develop real and collaborative relationships with its
 educational partners to ensure that the reform process on-going in medical
 education and training is delivered.
- These relationships need to include the collaborative development of policy documents and business plans.
- All parties involved in developing the MET agenda must have a commitment to developing and implementing the highest standards of training and education, which would be benchmarked against recognised international best practice.
- The need for all training and education programmes to undergo regular quality assurance processes.
- The requirement for **transparent decision-making** within the HSE MET function.
- The HSE MET function would need to be underpinned by strong financial controls and clear lines of accountability.
- The need for clarity regarding the role and responsibilities for all parties involved in medical education and training in Ireland was a recurrent theme.
- The need for medical education and training to reflect the changing needs of the health service as it develops and responds to a changing health environment. In order to ensure this, it was proposed that an appropriate interface needed to be developed between the HSE MET function and the critical related service areas in order to ensure constant alignment of training activities and health service requirements.

- The need for MET programmes to comply with the Training Principles set out in the Buttimer Report and to adhere to the European Working Time Directive (EWTD).
- The HSE MET function must be a resilient one which is responsive to changing needs, demands and direction, both in relation to internal stakeholders and its external educational partners.
- To ensure and underpin this responsiveness, structured communications networks with stakeholders are needed.
- Investment in and development of medical education and training must demonstrate value for money to ensure that the public ultimately benefit from a Medical Education and Training system delivered to international best practice standards.
- The development and reform of medical education and training by all parties and the development of a new MET role within the HSE must have an explicit commitment to the highest standards of patient care and safety.

3.2 MET - Priority Issues

Part of the consultation process undertaken by the Committee requested that stakeholders identify their **key immediate priority issues** in relation to the implementation of the recommendations contained in the Fottrell and Buttimer Reports. The priorities identified ranged across the entire continuum of medical education and training and highlighted the wide array of interests and responsibilities that stakeholders and partners have in relation to the MET reform. An overview of the key issues received from this process is given below:

- Protected time for trainers and trainees for education.
- Expansion of academic clinician posts and career pathways.
- Investment in educational infrastructure.
- Accelerated expansion of medical school places.
- Governance and management of intern year.
- Investment in medical education and training programmes on all clinical sites.
- Management of non-training posts on clinical sites.
- Definition of quality and quantity of clinical training places.
- Development of workforce planning.
- Training schemes to facilitate entry to the Specialist Register.
- Development of multi-disciplinary approach to training.
- Retention of staff through streamlined career pathways.

3.3 MET - International Context

In considering the role and positioning of a HSE-METR function in the education and training of doctors it is important to briefly describe the complex interactive environment in which it

will operate from both a national and an international perspective. In particular, it is instructive to examine recent trends in how health services have begun to become more substantively involved in how doctors are trained and how they maintain lifelong professional competence. Internationally, the landscape of undergraduate and postgraduate education systems features extraordinary diversity in terms of governance models, curriculum delivery, funding sources, assessment methods, accreditation procedures and regulatory frameworks. No common model exists.

However, what is remarkably similar in all jurisdictions is that health service sites are heavily utilised for the entire continuum of professional medical education. International trends show the following:

- Close to 60% of undergraduate medical training now occurs on health service clinical sites. Students are increasingly allocated to an expanding array of diverse sites, particularly in primary care and in the community health services.
- Postgraduate medical education occurs almost exclusively on clinical sites.
- Regulatory and accreditation bodies increasingly insist on more rigorous formal organisational, pedagogic and infrastructural standards for education programmes on clinical sites, which have major logistical, financial and service provision implications for the health services.
- New teaching models (accelerated or Graduate Entry Programmes) involve even more intensive use of clinical health service sites, with less activity on traditional university-based campuses.
- Legislative requirements for regular lifelong competence assurance assessments for all doctors have added hugely to the educational involvement of the health service.

These trends dictate that, internationally, the educational involvement of the health service is rapidly growing and has prompted organisational reform to manage the more complex and formalised relationships that must now be engaged in with their educational partners and regulatory bodies. In Ireland, this need is even more urgent because of (1) the imperative to respond rapidly to the sweeping changes required by the Fottrell and Buttimer Reports, (2) the new responsibilities assigned to the HSE under the 2007 Medical Practitioners Act and (3) the current dearth of formal dedicated MET structures within the HSE.

Globally, many health services have created a variety of education liaison structures in order to facilitate the requirements of educational institutions. This largely facilitatory role has been the dominant model internationally. Thus, the World Federation of Medical Education (WFME) accreditation standards require formalised liaison arrangements between medical education institutions and the relevant health service interests to ensure educational delivery.

Similarly, the Australian Medical Council requires that medical schools have "constructive partnerships with relevant health departments".

However, there are emerging trends internationally where health services are becoming more assertively involved in contributing to the setting of educational agendas, in order to reflect the realities of the health service environment. These include

- involvement in contributing to how curricular content is determined, in order to ensure greater relevance to service realities and changes in healthcare delivery models, in particular the shift towards multi-professional team care models,
- promoting independent agencies that determine medical education standards which are benchmarked against best international practice (for example, the creation of the independent Postgraduate Medical Education and Training Board – PMETB – in the UK),
- the establishment of Health Service Agencies for reform of medical manpower career pathways (e.g. Modernising Medical Careers in the UK DHSS) and
- advocating new career pathways responsive to service delivery demands (e.g. the introduction of Acute Medicine Physicians in the UK and the creation of Hospitalists in the USA).

These established international trends clearly set a precedent for a prominent and active role for the HSE-METR in contributing to the reforms in medical education in Ireland in partnership with the relevant educational partners and statutory agencies.

This active, central role is clearly signalled by the inclusion of two slots for HSE management members on the imminent new Medical Council, created by the 2007 Act.

It is evident, therefore, that a strongly resourced HSE-METR function has the potential to make a major contribution to actively shaping medical education agendas in partnership with the Medical Council and its associated recognised Postgraduate Training Bodies, the Medical Schools and the HEA.

3.4 MET - Recommendations

The recommendations set out in this section have been closely linked with the terms of reference of the Committee and broadly outline (a) the guiding principles for medical education, training and research in the HSE and (b) the roles and responsibilities assigned to this function. Throughout the course of the Committee's work, the important interdependency of medical education and training and research became clear. For this reason, as signalled in Chapter 2, a combined section dealing with the proposed structure for medical education, training and research is presented in the final chapter (chapter 5). In the

case of the other terms of reference, recommendations are provided separately for (i) medical education and training and (ii) research.

3.4.1 First Term of Reference – Strategic Vision and Framework

Taking into consideration (1) the principles embodied in the HSE Board ETR Committee Interim Framework, (2) the input received from the external consultation process, (3) the key insights and learning experience achieved via its operational role and (4) international trends in the reorganisation of medical education and training, the Committee recommends that the following key principles should form the basis of the strategic vision and framework for the development of a clearly defined MET function within the HSE:

- The HSE will play a central role in the organisation, structure, management, co-ordination and funding of medical education and training in Ireland given its significant statutorily-based MET policy and executive functions and accountability in the delivery of the MET reform programme.
- In recognising the critical roles of other stakeholders and educational partners in the strategic development and delivery of medical education and training and the need to manage this complex set of relationships in a professional manner, the HSE will develop real and sustained collaborative partnerships with stakeholders/partners which will be underpinned by jointly developed policies and projects, clear and measurable work plans and, where appropriate, clear and concise service level agreements.
- The HSE in striving to deliver a world class service will be committed to promoting the highest standards of medical education and training in Ireland benchmarked to the highest international standards. This will be achieved by means of external accreditation and development of robust externally audited quality assurance and quality improvement processes, both for itself and other stakeholders involved in the MET process.
- In contributing to the medical education and training reform programme and delivering on its commitments and responsibilities, the HSE will develop a transparent and robust decision-making and governance system; clear and measurable work plans; accountability in terms of value for money, audit and review; a multi-annual planned approach and dedicated MET funding and other MET resources.
- As a national body with a fundamental interest in the quality and provision of medical education and training at all stages, the HSE will develop and facilitate a

seamless integrated approach to MET, from vision/policy development, through to strategy, organisation, resourcing, delivery and evaluation, in collaboration with its educational partners. This integrated approach will be adopted by the HSE across the continuum of undergraduate, postgraduate, through to continuing professional development (CPD), and also across medical specialties, institutions, training bodies, service delivery sites and in collaboration with other health professional education programmes.

- HSE will focus on ensuring that the medical education and training system from undergraduate to postgraduate to continuing professional development is responsive and in step with the needs of the Irish health service. This will ensure that the HSE is in a position, in collaboration and consultation with its educational partners, to ensure that the MET system is producing the right number and type of doctors and specialists with the right level and type of training and with a strong commitment to patient-centred interdisciplinary team work, high ethical principles and lifelong learning.
- In promoting best practice in medical education and training, the HSE will ensure that the inevitable service pressures will not undermine or derail the delivery of the HSE's medical education and training work plan.
- In playing a key facilitator and collaborator role, the HSE will encourage unified and common approaches to medical education and training with other stakeholders in order to minimise overlap and duplication in the system and ensure a common direction.
- In making investments in medical education and training, the HSE will aim to ensure a high quality environment for medical education and training and will address such issues as educational infrastructure and facilities on clinical sites. The HSE will adopt the principle espoused in the Fottrell and Buttimer Reports that educational funding streams will follow trainees.
- Ensuring and enhancing the quality of care, well being and safety of the patient/ service user is a core principle of the HSE in engaging in the medical education and training reform process.
- In promoting best practice in medical education and training, the HSE identifies the
 potential of ICT in advancing this objective and will support investment in
 educational ICT infrastructure.

The HSE recognises the importance of interdisciplinary education, training and research across all its staff and service domains and to this extent the HSE will promote and support interdisciplinary education and training at undergraduate, postgraduate and continuing professional development levels.

3.4.2 Second Term of Reference – Relationships and Linkages

The management, funding and delivery of undergraduate and postgraduate medical education and training in Ireland involves over twenty-five different and independent agencies and organisations. Each of these stakeholders plays a unique role in ensuring that the Government policy on medical education and training is delivered upon.

A key function of the HSE will be the management of these strategic relationships and linkages, with a view to developing common and agreed work plans and ensuring that medical education and training is responsive to the changing needs of the Irish health service. The development of real and substantial collaborative partnerships by the HSE with the key stakeholders and its educational partners involved in medical education and training is a pre-requisite for the delivery of the reform agenda.

The principle of parity of esteem between the HSE and all stakeholders, both internal and external, will be afforded, with the development of collaborative partnerships being founded on excellent communications, clear and transparent decision making and the development of common agendas. The unique role and requirements of individual agencies will be recognised during this process.

In order to ensure that the HSE is in a position to deliver on its designated executive roles and responsibilities in line with the medical education and training reform programme, it is recommended that the HSE engage with its stakeholders and educational partners via the development of collaborative and robust bilateral relationships. Based on legislative requirements, specific relationships will be established and maintained by the HSE with the Department of Health & Children and the Medical Council.

An illustration of the relevant stakeholders and partners is given at Appendix C.

During the course of the work of the Committee, a significant number of these collaborative relationships have been established at the instigation of the Committee in order to ensure a partnership approach to specific projects and actions. This approach has allowed the relevant external and internal expertise in the sector to engage with the HSE MET function in a timely and focused manner. Examples of such successful bilateral relationships include

- (1) the development of HSE sponsored **PhD Fellowships** in collaboration with the Health Research Board,
- (2) the on-going implementation of the **academic clinicians** initiative in consultation with the medical schools, clinical sites, HSE service directorates and the HEA.
- (3) the completion of **the capital audit of educational infrastructure on clinical sites** in consultation with the NHO, PCCC, the HSE Estates Directorate, the HSE ICT Directorate, the postgraduate training bodies, the medical schools, the DoHC, the DoES and the HEA and
- (4) investment by the HSE in the secretariat to the Forum of Irish Postgraduate Medical Training Bodies, by funding two administrative posts and collaborating with the Forum on projects such as the HSE's Programme for subscribed SpR training abroad.

3.4.3 Third Term of Reference – Implications of Fottrell, Buttimer and Medical Practitioners Act

Fottrell - Report on Undergraduate Medical Education

In reviewing the report, the Committee identified a number of key areas that have specific and significant implications for the HSE, which the HSE will need to engage with and respond to accordingly through its MET function. These include the areas of:

- Curriculum Reform the HSE will need to engage with its educational partners to ensure that (1) the curriculum reform programme is delivered across hospital, primary care and community sites, (2) the changing patterns and needs of the health service are reflected in the curriculum reform programme and (3) that clinical placements provided by the HSE are supported and resourced appropriately through dedicated educational funding systems identified in the Fottrell Report to enable the necessary changes to take place.
- Academic Clinician Posts the HSE has a key role in collaborating with the medical schools and the HEA with a view to ensuring that this initiative will produce a spread of specialist academic posts across a wide array of disciplines and settings, fill identified gaps, augment areas that are of unique strength of national importance, be aligned with national health strategies and priorities, foster multi-disciplinary inter-professional education and feature strong collaborative linkages across all Irish Medical Schools.
- Teaching Staff on Clinical Sites the HSE must ensure, with its educational partners, that appropriate contractual arrangements to support the dual role of clinicians, in both providing clinical service and participating in programmed undergraduate teaching activities are in place. Such dual arrangements must be explicitly defined in order to

satisfy external educational accreditation bodies' requirements for guaranteed educational curriculum delivery by accredited clinician-trainers and educators.

- Student Placements on Clinical Sites the radical restructuring of student clinical placements to new and more diverse clinical sites and the additional clinical placements required by the implementation of the graduate entry programme and expansion of EU medical students numbers, as recommended in Fottrell, pose major logistical and organisational challenges for the HSE. The HSE will work with the medical schools to facilitate the appropriate structuring of agreed medical student placements across the full range of clinical sites with minimum disruption or pressure on service delivery priorities. This responsibility will include ensuring that the appropriate governance arrangements are in place between the health sector and the educational sector in relation to managing, supporting and resourcing these placements. This role will also extend to existing clinical placements, many of which are delivered in the context of historic underinvestment in clinical sites.
- Teaching Infrastructure Major deficiencies in teaching infrastructure on clinical sites highlighted in the Fottrell Report and now quantified in the HSE's Capital Audit report require to be urgently addressed. Specific recommendations for every HSE site and health sector site are contained in the latter report and represent a major logistical challenge that the HSE-METR function must lead, in collaboration with the HEA and the Medical Schools.

Buttimer Report - Report of the Postgraduate Medical Education and Training Group

This Report devotes about one-third of its Executive Summary to the recommendations it assigns primarily to the HSE in a future integrated postgraduate education national plan. The HSE will need to respond in the following manner in order to deliver on the postgraduate education reform programme:

- 1) Set up a HSE-METR structure with the characteristics defined in the Buttimer Report, including a major degree of independence that will attract the trust of the key partners, such as the Medical Council, the Medical Schools, the Postgraduate Training Bodies, the Universities and the Health Research Board. This key issue makes it imperative that the structure is positioned centrally in the organisation and is cross-Directorate in its operations.
- 2) Resource the HSE-METR structure to deliver on its new empowered role in the governance of medical education and training (recommendation 2 of the Buttimer Report). Critical to this is the appointment of senior management and clinical academic educational expertise with supporting specialist staff.

- 3) The HSE-METR must carry out or commission the following urgent tasks specifically assigned to it in the Buttimer Report including:
- a) Independent expert evaluation of the training value of NCHD posts and the creation of a matching scheme for all NCHDs and interns based on transparent and published criteria.
- b) Facilitate the integration and streamlining of undergraduate, postgraduate and continuing medical education/continuing professional development by designing evidence-based implementation strategies, plans and outcome measures, in conjunction with its education partners.
- c) Address the current fragmentation in the coordination, management, inspection, control and funding of postgraduate medical educational and training in Ireland, in conjunction with its education partners.
- d) Facilitate the proper development of undergraduate and postgraduate education in primary healthcare, given the critical role assigned to Primary Care and General Practice in the health service Transformation Programme.
- e) Allocate sufficient funding for medical education and training. Such funding will be provided by the HSE in line with Government allocation.
- f) Develop a standardised financial system for the funding allocations to postgraduate medical education and training bodies, with suitable governance and accountability structures that ensure value for money.
- g) Assess the educational and training implications of newer manpower models, likely to emerge from the health reform process.
- h) Address specific areas defined in the Buttimer report, including flexible/part-time training, time-limited schemes for entry onto the register of medical specialists, doctors to train abroad in subspecialties, academic/clinician training pathways, new academic clinician appointments, family-friendly training programmes and the development of generic education modules with Universities in ethics, communication and management skills.

Medical Practitioners Act 2007

Part 10 of the Medical Practitioners Act 2007 sets out the responsibilities of the HSE in relation to medical education and training and essentially provides the HSE with the statutory responsibility and authority to implement the key recommendations of the Fottrell and Buttimer Reports.

In addition to the responsibilities deriving from the Fottrell and Buttimer Reports outlined above, the Act places a particular responsibility on the HSE, in cooperation with the medical and dental training bodies and after consultation with the HEA, to undertake appropriate workforce planning with a view to meeting the medical staffing and training needs of the

health service on an ongoing basis. In particular, the HSE is required to assess on an annual basis the number and type of medical training posts required by the service and to put these proposals to the Medical Council.

The development of a robust manpower planning function is a key challenge for the HSE. The HSE is currently developing a manpower planning function encompassing all grades employed by the HSE. In light of the immediate requirements set out in the Medical Practitioners Act 2007, proposals in respect of medical manpower will receive priority attention. METR should maintain an ongoing close working relationship with the manpower planning function.

3.4.4 Fourth Term of Reference – Arrangements regarding Postgraduate Medical and Dental Board (PgMDB)

Under the Medical Practitioners Act 2007, the preponderance of the functions of the Postgraduate Medical and Dental Board will transfer to the HSE upon dissolution of the Board by the Minister for Health & Children. Many of these functions relate to postgraduate medical education and training but some also relate to postgraduate dental education and training. As a result, the HSE will develop links with the Dental Council as well as the recognised dental training bodies to ensure a consistent and cohesive integration of the functions of the PgMDB.

The responsibilities of the PgMDB will be transferred to HSE to be managed and delivered in the context of the overall medical education and training reform programme. The functions assigned to the PgMDB in relation to dentistry will transfer to the HSE and will form part of the responsibilities of the HSE-METR function of the HSE. The funding associated with these functions will also transfer to the HSE METR Unit, to ensure continuity of support for existing commitments to current postgraduate education programmes in Medicine and Dentistry.

The DoHC has initiated detailed discussions with the PgMDB and the HSE on the arrangements for the integration of the PgMDB into the HSE.

4.0 Research

As outlined in Chapter 2, the Committee undertook a written consultation process with various stakeholders. Provided below are the key messages arising from this process which relate to research.

4.1 Research – Key Messages from the Consultation

Process

- Research should be a core value and a core activity of the HSE.
- Investment in research is critical to protecting the health of the population, ensuring the highest quality of patient care and of the training of the next generation of health professionals, and in promoting innovation.
- Research should be afforded independence from service pressures.
- The desirability of a **designated research budget** was advocated.
- A dedicated team within the HSE, with appropriate expertise, should be put in place to lead and develop its research functions.
- Research priorities should be developed and implemented in conjunction with relevant partners, both internal and external.
- Translational research should be a key focus of the HSE.
- Health services and population health research should be priority areas.
- Research should be a standard component of medical training and of other health professionals at undergraduate and postgraduate levels.
- The importance of protected time, research infrastructure and methodological support to health service employees for the undertaking of wellplanned structured research.
- The HSE should contribute to the development of a knowledge society and economy through the support of ethically conducted research.
- Joint academic/research appointments, to include an associated commitment to clinical care, should be made jointly by the HSE and Higher Education Institutes.
- Clear accountability should be established in respect of research activities.
- Governance arrangements and policies in relation to ethics, clinical trials and intellectual property should be put in place.
- The importance of a research-friendly approach in attracting and retaining high quality staff.
- Promote innovation in the development of new therapies and diagnostics.
- The HSE research function must be underpinned by strong financial controls and clear lines of accountability.

- Investment in research must demonstrate value for money to ensure that patient care benefits from research activity delivered to international best standards.
- Investment and participation in clinical research and the setting of research priorities must reflect the changing needs of the health service and be responsive to the changing healthcare environment.
- Participation in research must reflect the multidisciplinary nature of health services.
- The HSE must encourage widespread instruction in research methodology and a positive research ethos to ensure a critical analytical approach and best evidencebased health services.
- The HSE and the higher education institutions must develop a career pathway for research staff.
- The development of research in the HSE must be underpinned by an explicit commitment to highest standards of patient care and safety.

4.2 Research - Priority Issues

- Protected time for research for clinicians at all levels.
- Evidence-based practice.
- Health services research to inform best practice throughout the organisation.
- Acquisition of generic research skills for HSE staff.
- Research methodology support structures.
- Independence in terms of service pressures, designated funding etc.
- Collaboration with research partners.
- Focus on translational research.
- Establish regional clinical research centres.
- Population health research and preventative medicine research.
- Pathways for academic clinicians and clinician scientists.
- Appropriate governance arrangements.

4.3 Research - International Context

The positioning of the HSE in respect of its research mission and role must be seen against a global backdrop where several models exist. An international perspective of the arrangements arrived at in several comparator countries has been reviewed in the HSE Board ETR Committee's interim framework. Essentially, there is wide variation in the degree of direct involvement of health services in research, ranging from the creation of major internal health service institutes, to a less prominent direct role featuring an emphasis on policy input to and liaison with separate independent or arms-length national research institutes and funding agencies.

Internationally significant shifts in research priorities have contributed to radical reviews of health research relevance, performance and contribution, not only to improved indices of patient outcomes but also to the development and advancement of the knowledge society and economy. Examples of these trends include:

- driven clinical encounter between the sick patient and the academic clinician is closely linked to laboratory research conducted by University-based research scientists to create a "bench-to-bedside" synergy. This has resulted in the emergence of intensive research "clusters" on major health service clinical sites usually large Teaching Hospitals with the creation of Clinical and Translational Research Centres and Clinical Trials Units. These involve close partnerships between the health service, universities and increasingly with biopharmaceutical, diagnostics and device industry Research and Development interests. This bench-to-bedside model has been further extended in concept to incorporate population health, encapsulated in the term "bench-to-bedside-to-community" research, involving liaison with Public Health Preventative Medicine, Population Health and Epidemiology (including genetic interests).
- (2) Emergence of Health Services Research (HSR) as a priority focus of direct interest to national health service systems. A variety of HSR Institutes, units and departments have been created in different jurisdictions. Most feature strong partnerships between health service management, R & D, health professionals and University clinical-based departments such as Health Economics, Business Management, Public Health, Epidemiology, Statistics, etc. The focus for such research ranges from the setting up of sophisticated Health Information Systems to systematic cost-benefit analysis of many aspects of health service delivery including assessing the effectiveness of individual therapies, entire care programmes, optimum staff deployment profiles, management efficiency and patient feedback and satisfaction strategies.
- Medicine and Population Health in contributing to research. The reorientation of services towards these three areas creates the imperative for an evidence base to support such services. The research arena has often been dominated by the traditional influence of long established hospital-based biomedical research. This is reflected internationally in the lower priority and funding base accorded to initiatives in primary care and community/population related projects. This neglected potential is now recognised internationally and in Ireland in many national research review documents. The preferred template for enhanced high quality research output in

these areas is through strong liaison with University-based Departments of Primary Care, Public Health and Preventive Medicine in conjunction with, for example, Institutes and Faculties of Public Health, Colleges of General Practitioners and other cognate groups.

- (4) Growing acceptance that health research quality and outputs must be rigorously assessed and audited to ensure the highest standards of performance and value for money. Internationally, there is a growing consensus that investment in health research must be justified by measurable "gains" for the individual, patient groups, the health service, the population as a whole, society and the knowledge-economy. To that end, most countries now insist that health research is rigorously peer reviewed by specialist agencies to justify funding and to ensure that it delivers on pre-set targets to justify ongoing investment.
- (5) Successful health research within a health service is crucially dependent on nurturing and supporting a research ethos throughout the organisation and on attracting research leaders of the highest calibre by providing comprehensive research facilities, in conjunction with research partners and funding agencies.

Mindful of these considerations, the HSE-METR Committee has incorporated in its recommendations several key elements to capture these international trends and new health research directions, as well as the rich information contained in the HSE-METR Committee consultation process.

4.4 Research - Recommendations

The recommendations set out in this section have been closely linked with the terms of reference of the Committee and broadly outline the guiding principles for research in the HSE and the roles and responsibilities assigned to this function. Throughout the course of the Committee's work, the important interdependency of medical education, training and research became clear. For this reason, a combined section, dealing with the proposed structure for medical education, training and research is presented in the final chapter. In the case of the other terms of reference, recommendations are provided separately for (i) medical education and training and (ii) research.

While the remit of the Committee was medical education, training and research, the Committee has taken the wider view of health research, as distinct from purely medical research alone, in the context of the HSE's legislative framework to undertake, commission and collaborate in research projects on issues related to health and personal social services.

4.4.1 First Term of Reference - Strategic Vision and Framework

The HSE is a large and varied organisation, providing health and personal social services to the population of Ireland. Given the recognised importance of research, not only to the type of services that we provide to our patients and clients but to the manner in which we deliver these services, it is crucial that research is given a central focus within the HSE, with its own budget, expertise and structures.

The role of the HSE in research has, to a very large extent, been underdeveloped to date. However, the Board's ETR Committee interim framework has strongly emphasised the critical importance of promoting a central research vision as a core value and activity of the HSE. The HSE is now further committed to that principle, that a strong research culture is fostered and that links with all appropriate external agencies and institutions are forged and developed.

As stated earlier in the report, **translational research** must be a crucial focus of the HSE. Translational research is the interface between biomedical science and clinical care and has been supported by the Government through various strategies and reports. The preponderance of translational research takes place on major HSE owned or funded teaching hospital sites. The HSE must, therefore, be a strong and active partner in facilitating translational research with its University Medical School partners. Furthermore, the HSE must be a major player in patient-responsive developments in drugs, devices and diagnostics, not alone because much of the related research will take place on HSE owned or funded sites but also because advances will benefit patients and promote and enhance Ireland's knowledge-economy.

Population and primary health research must also be a key focus area in the HSE particularly given its potential in detecting and tracking health behaviours and illness trends and in designing preventative health strategies for the HSE.

In addition, **health services research** must be prioritised to ensure evidence-based provision of health services. Developments in this area inform the most effective and efficient ways of delivering services. A particular research collaboration in respect of service quality is likely to develop with the Health Information and Quality Authority (HIQA) recently established in May 2007.

The Committee has identified general principles which synopsise the strategic vision for research in the HSE. These are listed below:

• The enhancement of the Irish health service through the development by the HSE of its role in health research.

- HSE participation in national policy determining fora, such as the Interdepartmental Health Research Group.
- The HSE will foster a culture of research on an interdisciplinary basis throughout all levels of the organisation and through collaboration with partner organisations, covering medical research, population health and public health research, primary care research, health services and management research etc. Research awareness will be developed throughout the organisation with a view to emphasising, facilitating and encouraging a strong evidence base for all of the services provided.
- The assignment of funding to enable the HSE to fund / co-fund appropriate health research.
- The HSE will place an emphasis on translational (patient based) research, population health (preventative) research, and health services research.
- The development of clinical research centres at regional level which will facilitate the development of translational research in particular.
- The HSE acknowledges the critical interdependency of research and education. The HSE is determined that **research must be central to medical education** at both undergraduate and postgraduate level and that research also forms a **key component of the training of all health professionals**. The interlinking of research and education will ensure an **integrated multidisciplinary structure**, making the HSE a foremost example of a knowledge based health service internationally and a formidable contributor to Ireland's knowledge-economy.
- Staff at all levels, in all services and functions throughout the organisation, will be encouraged to undertake structured research across all disciplines, working collaboratively with partners nationally and internationally and linked to service improvement and outcomes. The HSE will aim to provide the appropriate training and resources to facilitate this. In addition, the HSE is supportive of the development, by the HRB, of a Research Methodology Centre which will be an important resource for all research undertaken in the health arena, including that undertaken by the HSE.

- The HSE will move towards the integration of research with health and social services, while ensuring that time protected from service provision may be afforded to structured research activities, to optimise the benefits accruing to the health service.
- Investment in ICT to facilitate the development of research databases and information systems, online research education support, etc.
- The importance of facilitating consultants to undertake structured research should be reflected in the consultants' contract, in recognition of the leadership role of consultants in translational research, in particular, and the desire of many consultants to participate in such research.
- As with all services and functions of the HSE, optimum patient care and safety will be paramount.

4.4.2 Second Term of Reference - Relationships and Linkages

The HSE acknowledges the important role played by many Government departments, agencies and other bodies in the field of health research. The HSE wishes to enter into long-lasting partnerships with relevant organisations and agencies to ensure the appropriate development of health research for the benefit of the population, the health service and the economy. It is crucial that the various stakeholders involved in health research in Ireland attain clarity around their independent roles and mandates to ensure the best possible outcomes.

The HSE's Medical Education, Training and Research Unit will do the following:

- Develop and maintain strong links with the many and varied research partners and stakeholders, both internal and external to the HSE, across the spectrum of medicine, nursing, primary care, therapies, etc.
- Develop and maintain appropriate research liaison with and access to specialist expertise already available in, for example, universities and the HRB's Research Methodology Centre, in areas such as bench research, basic laboratory techniques, biostatistics, bioinformatics, epidemiology, health economics, ethics and behavioural science, etc.
- Support collaboration with partner organisations, both nationally and internationally.

- Establish and maintain links with relevant internal partners in the HSE, to ensure that the research priorities of the various parts of the organisation are brought to the fore. Such internal stakeholders would include the Expert Advisory Groups, who represent an important policy development force within the HSE and the services Directorates of Population Health, the National Hospitals Office and PCCC.
- Explore and optimise the use of collaborative funding available for research through, for example, the Cross Border Programme for Research and Education and the European Union Framework Programme. This will require discussion with other organisations, such as Enterprise Ireland where the expertise in such developments is available.
- Develop links with international centres of research excellence as provided for in Section 7(7) of the Health Act 2004 and recommended in the Government's STI and the EU Framework.
- Explore, with relevant partners, funding for intercalated degrees which should reflect
 the variety of beneficiaries and sources available Enterprise, Trade & Employment,
 and Health & Education.

Many of the relationships with key external partners have already been developed through the course of the work of the Committee in relation to specific projects. These include, for example,

- the implementation of the academic clinician training pathway initiative, the posts arising from which will be key drivers of future health research,
- the development, in conjunction with the HRB, of the PhD Fellowship Scheme for medical graduates, which represents an important first step in developing research pathways for clinicians (the first phase of this scheme has been implemented in 2007) and
- the HRB and HSE have worked closely on the development by the HRB of a Research Methodology Support Centre.

The HSE sees the HRB as a key partner in the development of a strong research function in the HSE. The strong links developed to date with the HRB are encouraging and will be critical to the successful development of the HSE's research ambitions.

The HSE has also learned from work to date in relation to **clinical research centres** (CRC), one of which has been developed on the site of St. James's Hospital, while a second is being

developed on the site of UCHG. The experience gained from these developments will inform the further establishment of clinical research centres at other locations.

An illustration of the relevant stakeholders and partners is given at Appendix C.

4.4.3 Third Term of Reference - Implications of the Fottrell & Buttimer Reports

The key recommendation relating to research arising from the **Fottrell Report** is the proposed increase in the number of academic clinicians. These posts represent a vital, high level mechanism in driving health research, in particular translational research. Also, the provision of opportunities for medical students to undertake research modules on HSE sites represents another avenue to foster research awareness and skills in future doctors.

The **Buttimer Report** devotes a chapter to research and makes recommendations for the development of a strong research environment. A research culture throughout the health service is vital not only in retaining graduates but also in attracting high-calibre clinicians and allied health professionals to Ireland, to undertake research to the ultimate benefit of the health service, the population and the economy.

The need to develop meaningful research pathways for research clinicians is evidenced by the frustration of doctors-in-training at the limited research opportunities in Ireland. The Buttimer Report outlined the development of funded research posts for doctors, through the establishment of schemes for research scholarships and PhD fellowships. Indeed, the Committee has commenced the implementation of the Buttimer recommendations in this regard, in close cooperation with the HRB. Further development of the initiative will take place in line with the Buttimer recommendations and the associated funding streams emanating from the DoHC.

Research and medical education and training are crucially interlinked. It should be borne in mind that, in addition to training the specialist doctors of the future, postgraduate medical training must cater for a cohort of high level trainees who aspire to positions as academic clinicians. Similarly, the current development of research pathways for medical graduates must be matched by an undertaking to create a sufficient number of appropriate senior positions in the health service to ensure the retention of such top-level doctors with strong health research ambitions.

5.0 Recommendations

The recommendations set out in this chapter are founded on the following three major guiding imperatives

- (1) the need to urgently create a Medical Education, Training and Research (METR) structure within the HSE,
- (2) the need to configure a METR structure and function that can immediately begin to deliver on the huge METR responsibilities newly assigned to the HSE in the Fottrell and Buttimer Reports and the new Medical Practitioners Act and
- (3) the need to ensure that the METR unit would be fully compatible with and not detract from the HSE Board Education, Training and Research Committee policy objective to aim for a single multidisciplinary ETR structure within the organisation to cover medical, dental, nursing, health and social care professionals and management, to achieve an integrated approach to all education, training and research within the HSE.

Given the requirement for the development of structures in the HSE for medical education and training for the reasons outlined above, it is recommended that METR structures should be developed in the short to medium term as outlined in this chapter. In this context, it is envisaged that the amalgamation of all education and training functions in the HSE could take place within the next few years.

5.1 HSE-METR Structures

In considering the appropriate structure for Medical Education, Training and Research (METR) within the HSE, the Committee felt it was very important that the envisaged role and remit of this structure would be clearly defined. The Committee recommends that robust functions for medical education, training and research, which are closely interlinked, should be established in the HSE in order to deliver on the current formidable agenda assigned to it in education and clinical research. In this context, the Committee recommends that the key functions and roles of HSE METR would include the following:

- **Key executive management role** in relation to promoting and developing medical education, training and research within the HSE.
- Executive responsibility and accountability for capital and revenue funding assigned to medical education, training and research.
- Executive responsibility for ensuring that external agencies funded directly by the HSE for medical education, training and research activities are accountable for delivering agreed educational or research outcomes and value for money and are subject to audit, evaluation and conformity with best practice.

- The development of clear governance arrangements between the HSE and collaborating research partners e.g. universities, clinical sites, relevant departments (Health and Children, Enterprise, Trade and Employment, Education and Science) and relevant state bodies including HRB, SFI, Science Advisory Council, etc. to enable all stakeholders to work to a similar agenda and strategic direction.
- Lead executive role in the implementation of the recommendations of the
 Fottrell and Buttimer Reports and the relevant sections of the Medical Practitioners Act 2007.
- Lead advocacy role on a national basis in ensuring that the medical education and training system reflects the changing need of the health service.
- Lead role throughout the HSE in ensuring a national cohesive approach to METR.
- Development of a modus operandi for the structured engagement of stakeholders and the on-going management of relationships with key internal and external stakeholders and partners at national level.
- Facilitation of basic and applied research through working collaboratively with other organisations with a proven track record and expertise in the peer review of bids for research funding, both for external funds and any commissioned internal HSE project funds.
- Prioritise and commission research programmes and projects of vital interest to the HSE, in association with internal and external partners.
- Preparation and submission of Estimates for Medical Education, Training and Research for the HSE.
- Preparation and reporting on the METR section of the HSE Service Plan.
- Central advisory resource for HSE in relation to issues pertaining to medical education, training and research in terms of contract negotiations, workforce planning, capital developments on clinical sites etc.
- Central support resource with appropriate expertise in epidemiology, statistics, study design and planning etc.
- Facilitating the implementation and completion of cross directorate HSE METR
 projects, including interdisciplinary research networks.
- Promoting and supporting an interdisciplinary approach to education, training and research across all staff disciplines and services in the HSE.
- Ensuring that research and training in research methodologies are encouraged throughout undergraduate and postgraduate medical education and training. In addition, all staff in senior positions, both clinical and management, should be encouraged to critically analyse all health service activities through the application of analytical skills developed through continuing professional development programmes.

- Lead role in the development, interpretation and dissemination of policies regarding medical education, training and research within HSE, including clinical trials, research ethics, intellectual property, data protection etc.
- External audit of the work of the METR Unit, its functions and its relationships with stakeholders and partners.
- The implementation of a systematic audit throughout the HSE in relation to research activities including high level national and international peer review.
- Review and develop infrastructural requirements for the support of health research.
- Undertake, with research partners and Government agencies, a needs analysis for clinical research sites, such as clinical research centres (CRCs) on the sites of major teaching hospitals and elsewhere, as appropriate, to bring research closer to the patient. Based on this needs analysis, prepare detailed costings, staffing requirements etc.
- Coordination of all research activities throughout the HSE through central notification of research and the maintenance of a central database of research undertaken by HSE staff, commissioned by the HSE and in which the HSE is collaborating.
- Facilitate a competitive and peer-reviewed system for award of research funding in conjunction with research bodies (e.g. HRB) for all health research commissioned internally and externally.

In defining the above, it is recognised by the Committee that the specific educational expertise and the responsibility for standard-setting for medical education and training, lies ultimately between the Medical Council, its accredited medical schools and recognised postgraduate training bodies. In this context, their roles and responsibilities in delivering and managing medical education, in conjunction and collaboration with the HSE, will remain central to delivering the reform programme and will continually inform the work programme and direction of the HSE in this area. In parallel to this, **METR advocacy for the flexible manpower needs** of the health service will ensure that the educational partners respond by setting standards for newer, more versatile manpower models dictated by changing patient need or care delivery patterns.

It is recognised that the day-to-day management and co-ordination of clinical placements, employment of NCHDs and the delivery of postgraduate education and Continued Professional Development will remain the responsibility of the service delivery domain, in collaboration with the educational partners.

The specific expertise and responsibilities of organisations involved in research and the collaboration of HSE-METR with such organisations will be crucial to developing the HSE's role in health research.

In considering the foregoing roles and responsibilities to be assigned to the METR function and in recognition that the management and delivery of medical education, training and research has a direct impact on a number of directorates (NHO, PCCC, Population Health, HR) the Committee recommends that the management of the METR function is at the centre of the organisation and would be managed as a *programme type function* which would span a number of directorates. This central location would also ensure the independence of the HSE in this area when entering into discussions and negotiations with its partners. The feedback from the consultation process engaged in by the METR Committee clearly signalled that this independent role is vital to success.

In developing this **cross directorate approach**, the following specific recommendations are made by the Committee:

- A robust central unit for the management of medical education, training and research is needed within the HSE.
- The Committee has given due consideration to the appropriate location of the METR function in the HSE. The following were the main considerations taken into account by the Committee in reaching its recommendation on the location of METR:
 - a) The strong legislative basis for education, training and research, and, in particular, medical education, training and research.
 - b) The urgent attention required to develop METR arising from Government policy, most notably the Fottrell and Buttimer Reports.
 - c) The importance of the METR function maintaining independence from service pressures, as specifically set out in the Buttimer Report.
 - d) The linking of research with medical education and training, and acknowledging the broad span of research across the spectrum of health services.
 - e) The importance of high-level engagement with both internal and external partners.
 - f) The importance of a cross-Directorate approach within the HSE.

For the reasons listed above, the Committee recommends that the METR function be **located** centrally within the HSE, initially in the Office of the CEO, pending the development of a unified education, training and research structure within the HSE.

- This central Unit should have executive responsibility for the functions as outlined in the previous section, which will be managed and delivered by its own staff and funded from its own dedicated budget.
- The Unit will be staffed so as to have the appropriate skill mix of staff needed to deliver on its functions, including high-level medical education, training and research expertise, business management, finance and administrative skills as well as appropriate resources reflective of the HSE's role in research such as statistics, epidemiology, study design, etc.
- The Unit will initially require three senior dedicated posts, encompassing: (i) senior management expertise, (ii) medical educationalist leadership expertise and (iii) research leadership expertise. All three posts will be appointed to the Unit for an initial period of three years. The latter two post holders would be appointed/seconded to the Unit on a minimum half time to full time basis.

The senior management post holder will have a strong background in management, policy development, service-planning and stakeholder engagement. This person will act as the executive Head of the METR Unit and will be accountable to the National Director, Office of the CEO, for the on-going delivery of the Unit's service plan and work programmes.

The medical educationalist post holder will be an individual with a proven, high level track record as a professional, practising clinician and educational expert across the continuum of undergraduate and postgraduate medical education and training.

The research post holder will have a proven track record of excellence and productivity in research, with a strong background in research policy development and will act as a champion for research in the HSE.

Both the medical educationalist post and research post will be developed at the equivalent level of a senior academic clinician. It is envisaged that these posts would be filled, following open competition, by individuals either already working at a senior level within the academic/clinical setting in Ireland or with first-hand knowledge of similar systems. It is expected that these two individuals would contribute in a substantial manner to the development, on-going work and operationalisation of the Unit. They would also act as senior HSE-METR representatives in brokering and managing relationships with internal and external stakeholders and serve as drivers of the HSE's agenda in respect of medical education, training and research, in line with national policy and priorities. These post

holders will work as an integral part of the Unit's team. Additional specific expertise for particular projects may be engaged on a time-limited basis, as required.

Funding has already been provided to the HSE by the DoHC under the METR allocation to facilitate these appointments.

5.2 Integration of Education, Training and Research within the HSE

It is important that the development of the recommended METR Unit is fully compatible with the HSE Board Education, Training and Research Committee's policy objective for a single multidisciplinary ETR structure within the HSE to cover medical, dental, nursing, health and social care professionals and management.

While not strictly within the terms of reference of the METR-Committee, pending the development and implementation of this unified ETR structure within the HSE, the METR Committee has identified a need for a mechanism to be developed which would in the short term aim to promote, co-ordinate and support all current education, training and research functions within the HSE including those of the METR Unit, with a view to achieving an initial integrated approach and commonality.

In this context, the HSE-METR Committee recommends that a Education, Training & Research (ETR) Management Sub-Committee should be established by the CEO which would be representative of the spectrum of healthcare professions (doctors, nurses and therapists) and HSE executive management (e.g. METR, NHO, PCCC, Population Health, HR and Finance). The membership of this Sub-Committee would be balanced between individuals with an interest in education and training and individuals with an interest in research including external experts in both domains, as required.

The role of the ETR Management Sub-Committee would be the co-ordination and alignment of all education and training and research functions throughout the organisation, with the Sub-Committee being the over-arching vehicle within the HSE where such functions and their delivery, development and funding could be presented, discussed, aligned and integrated as appropriate. This Sub-Committee would also be a key communication vehicle, with all members being regularly updated regarding key ETR developments across all sectors, thereby enhancing opportunities for collaboration and learning.

The ETR Management Sub-Committee shall in particular ensure that the Service Plans and Business plans of these functions of the HSE, in so far as they relate to education, training,

development and research, are coordinated and supportive of the HSE interdisciplinary policy approach and are reflective of the HSE's Transformation Programme and Corporate Plan.

It is recommended that the ETR Management Sub-Committee should meet on a regular basis and that the relevant functions and units in existence including the METR Unit would develop a close and strong working relationship with the Sub-Committee.

It is envisaged by the HSE-METR Committee that the future development of a unified ETR structure within the HSE as endorsed by the HSE Board, will benefit greatly from the learning gained from the establishment and development of the METR Unit and the work to be undertaken by the ETR Management Sub-Committee.

Appendix A Bibliography

Health Act 2004. Available www.oireachtas.ie

Medical Practitioners Bill as passed by both Houses of the Oireachtas (May 2007). Available www.oireachtas.ie

Corporate Plan 2005-2008. Health Service Executive. Available www.hse.ie/publications.

Transformation Programme 2007 – 2010. Health Service Executive. Available www.hse.ie/publications.

Medical Education in Ireland, A New Direction – Report of the Working Group on Undergraduate Medical Education and Training (Department of Health & Children / Department of Education & Science). 2006.

Preparing Ireland's Doctors to meet the Health Needs of the 21st Century – Report of the Postgraduate Medical Education and Training Group. (Department of Health & Children). 2006.

Government Strategy for Science, Technology and Innovation 2006 – 2013.

Building Ireland's Knowledge Economy: The Irish Action Plan for Promoting Investment in R&D to 2010. 2004. Available: www.entemp.ie/publications.

Towards Better Health: Achieving a Step Change in Health Research in Ireland. Forfás / Advisory Council for Science, Technology and Innovation. 2006.

Making Knowledge Work for Health - A Strategy for Health Research. Department of Health and Children. 2001

Corporate Strategy 2007-2011. Health Research Board. Available www.hrb.ie.

Modernising Medical Careers: Medically- and dentally- qualified academic staff:

Recommendations for training the researchers and educators of the future. Report of the Academic Careers Sub-Committee of Modernising Medical Careers and the UK Clinical Research Collaboration. March 2005.

Appendix B Membership of the HSE-METR Committee

Chairman: Prof. Muiris X. FitzGerald

Members: Ms. Mary-Jo Biggs, Office of the CEO Directorate

Dr. Davida de la Harpe, Health Intelligence, Population Health Directorate

Dr. Patrick Doorley, National Director, Population Health

Dr. Fenton Howell, Population Health Directorate

Mr. John Magner, Assistant National Director, Professional Education and

Development, Human Resources Directorate

Mr. Tommie Martin, National Director, Office of the CEO Directorate

Ms. Ciara Mellett, Office of the CEO Directorate

Mr. John O'Brien, National Director, National Hospitals Office

Mr. Pat O'Dowd, Assistant National Director, Primary, Community and

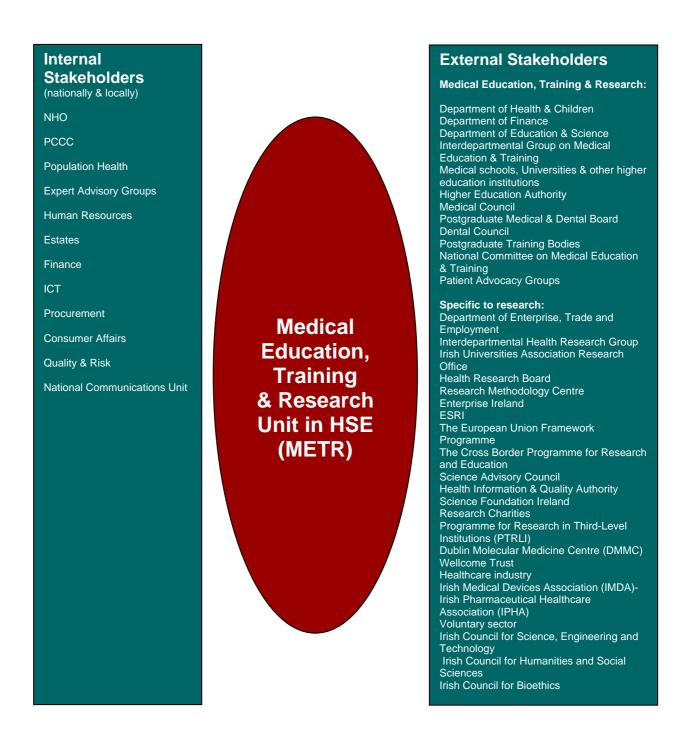
Continuing Care Directorate

Mr. Gerry O'Dwyer, Hospital Network Manager, National Hospitals Office Ms. Siobhán O'Halloran, Director of Nursing, Human Resources Directorate

The research for and initial drafting of this report was undertaken by Ms MJ Biggs and Ms C Mellett.

Appendix C METR Stakeholders

The diagram below illustrates the internal and external stakeholders associated with the HSE's METR Unit.



These lists are not exhaustive.

