Report of the

National Task Force on Medical Staffing

June 2003

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Minister for Health and Children's Foreword

I am very pleased to publish the Report of the National Task Force on Medical Staffing. I would like to thank David Hanly and his fellow Task Force members for their hard work. I would also like to express my appreciation to those organisations and individuals who contributed to the development of the report through the Task Force's extensive consultative process.

Many of our hospitals are heavily dependent on non-consultant hospital doctors who work for lengthy periods without sufficient rest. This is not satisfactory either for patients or for the doctors themselves. The *European Working Time Directive* will bring important changes to the working patterns of NCHDs from 1 August 2004.

The Task Force has produced a set of wide-ranging proposals that take account of the need for shorter working hours for NCHDs. Importantly, the Task Force has also concluded that a consultant-provided service is the only viable means of providing safe high quality patient care while reducing the working hours of NCHDs and reorganising medical education and training appropriately.

The report raises another very important issue: the reduction in the working hours of NCHDs, together with the case for a consultant-provided service and the need for changes to medical education and training, has significant consequences for the organisation of acute hospital services. It points out that capacity, workload and a critical volume of patients influence where hospital services can be safely provided, and concludes that hospital services must be organised to maximise the strengths of both large and smaller hospitals.

This report offers a blueprint for addressing key challenges facing the Irish health system. It rightly raises a series of challenging issues for us all and argues that change is not only possible, but vital. I look forward to its implementation.

Micheál Martin

Micheál Martin, T.D.
Minister for Health and Children

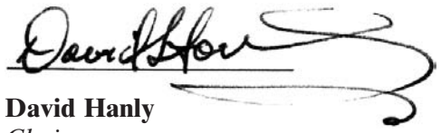
Chairperson's Foreword

Under EU legislation we must introduce a 48-hour working week for non-consultant hospital doctors by 2009. This requirement is the starting point for our report. We also deal with important related requirements: a consultant-provided service, developments in medical education and training, and reorganisation of acute hospital services.

Above all, our concern has been to propose solutions that will be in the best interests of patients, and which will offer a high quality service to all.

The Task Force had a very wide membership, drawn from all of the key parties with an interest in healthcare. As chairperson, I would like to acknowledge with thanks the considerable time and effort invested by all members of the Task Force. In particular, I would like to thank the 'working group' for the enormous amount of time, energy and expertise they contributed. Also a special thanks to the excellent secretariat led by Fergal Lynch of the Department of Health and Children for all their hard work.

Inevitably, a report of this kind involves difficult choices, a need for objectivity and a willingness to put individual agendas to one side. I am grateful to the Task Force members for approaching the work in this spirit.



David Hanly
Chairperson

Section 1: Summary and Key Messages

1.1 Introduction

Patients deserve the best possible care that the Irish health services can deliver. At present, most frontline medical care in hospitals is delivered by non-consultant hospital doctors (NCHDs), the majority of whom work excessively long hours. Patients have limited access to consultant care. NCHDs will soon be required by law to work fewer hours. This will have significant benefits for both doctors and patients.

The National Task Force on Medical Staffing was established in February 2002 by the Minister for Health and Children. Its purpose was to devise an implementation plan for reducing substantially the average working hours of NCHDs to meet the requirements of the *European Working Time Directive* (EWTD), to plan for the implementation of a consultant-provided service, and to address the medical education and training needs associated with the EWTD and the move to a consultant-provided service. The Task Force's terms of reference charged it with "devising, costing and promoting implementation of a new model of hospital service delivery based on appropriately trained doctors providing patients with the highest quality service, using available resources as equitably, efficiently and effectively as possible" **(Appendix 1)**.

1.2 European Working Time Directive

The EWTD requires that, by 1 August 2004, NCHDs must no longer work for more than an average of 58 hours per week on the hospital site. By this date they cannot be required to work for more than 13 hours per day on-site, and certain other rules regarding minimum rest and break periods must also be put in place. By 1 August 2007, NCHDs cannot be required to work more than an average of 56 hours per week on-site. This limit must reduce to an average of 48 hours by 1 August 2009.

At present, there are over 3,900 NCHDs in Ireland, delivering frontline services in more than 40 public acute hospitals and numerous other health agencies. They work an average of 75 hours per week on-site, often for continuous periods of more than 30 hours, with minimal rest. From 1 August 2004, these working arrangements will no longer be legally permissible. As the phased working limits of 58, 56 and 48 hours take effect, the ability of NCHDs to provide medical cover for long periods of time will diminish significantly.

In January 2003 there were 1,731 hospital approved consultant posts in public hospitals. Since consultants are legally responsible for the patients under their care, NCHDs must be able to call on them as necessary. Consultants are already covered by the EWTD and cannot therefore work for more than an average of 48 hours per week. Even if it were safe or desirable to do so, consultants cannot make up all of the shortfall as NCHDs' working time reduces.

Implementation of the EWTD will require significant change in medical staffing. It will also influence how and where we deliver acute hospital care, and how we provide medical education and training.

1.3 Implementing the European Working Time Directive

This report sets out the changes needed to ensure that we comply with the EWTD while providing high quality hospital care to patients and ensuring that all NCHDs are trained to the required standards. The EWTD is but one of a number of drivers of change. Others include the Health Strategy *Quality and Fairness: A Health System for You*, enforcement of medical education and training standards by the Medical Council and training bodies and the increasing influence of clinical risk management on hospital services.

We could react to the requirements of the EWTD in a number of ways. *Firstly, we could do nothing.* NCHDs would continue to deliver most hospital medical care. Patients would continue to have limited access to consultants. Many NCHDs would not be in recognised training programmes. NCHDs would be the only group of workers in the country who remain outside the health and safety requirements of the EWTD. Violation of the EWTD could also result in sanctions from the EU.

Secondly, we could recruit enough NCHDs to ensure that all worked within the time limits set by the EWTD. The Task Force estimates that an additional 2,500 NCHDs would be needed to achieve this. *A third option would be to create a permanent 'career' or NCHD grade.* However, under the second or third options, NCHDs would continue to deliver most hospital medical care. The majority of them would not be in training programmes, with consequent poor career prospects. It would be extremely difficult to recruit the estimated extra 2,500 NCHDs to work under these conditions.

1.4 Consultant-provided service

A fourth option is to employ a much larger number of consultants, working in teams, with revised working patterns, and a significantly reduced number of NCHDs. Important clinical decisions would be made faster and at a higher level and the ratio of consultants to NCHDs would be balanced. Acute hospital medical services would be *consultant-provided*, rather than consultant-led. This is in line with the recommendations of a number of reports on hospital medical staffing over the past two decades. It is also the only solution that simultaneously addresses the need to improve patient care, reform medical education and training and support the continued provision of safe, high quality acute hospital care 24 hours a day, 7 days a week. It contrasts with the present reliance on large numbers of NCHDs who work excessively long hours and have limited access to formal training.

The implications of a maximum 48 hour working week (including a maximum 13 hour day on-site) by 1 August 2009, together with annual leave entitlements and other EWTD requirements, are that at least five doctors must be employed to allow one to be present on the hospital site, 24 hours a day, 7 days a week. This, however, represents the absolute

minimum level of emergency cover. Doctors must also provide cover for routine, elective and outpatient services, as well as teaching, research and participation in continuing medical education and quality assurance. In order to do this and provide emergency cover, a minimum of seven doctors will be required.

Hospitals without sufficient volumes of patients and activity cannot sustain large numbers of consultants. Without sufficient consultants, hospitals will not be able to provide quality care, nor will they be able to train NCHDs. Sufficient critical mass will be required to achieve expertise across a range of specialties[1] and to provide satisfactory medical education and training.

All hospitals providing emergency care must have acute medicine, surgery and anaesthesia on-site. *This means that an irreducible minimum of 21 doctors — 7 doctors in each of medicine, surgery and anaesthesia — will be needed to provide basic on-site medical cover within a 48-hour working week.* This is an absolute minimum for modelling purposes. In practice, many more specialties would be needed to provide comprehensive acute care, requiring a minimum of some 45 to 50 consultants.

1.5 Acute hospital care

The Task Force was aware that, in order to make detailed recommendations on medical staffing, it would have to examine carefully the configuration of acute hospital services. Furthermore, it is not possible to specify the number and distribution of medical staffing that will be required to meet the requirements of the EWTD without understanding the volume and type of services that each hospital would provide. The Task Force examined two regions in detail for this purpose: those served by the East Coast Area Health Board and the Mid-Western Health Board.

The concerns outlined above regarding volumes of patients and activity are not driven solely by the EWTD. *There is convincing evidence*[2] *that the best results in treatment are achieved when patients are treated by staff working as part of a multi-disciplinary specialist team,* and that better clinical outcomes are achieved in units which have the required numbers of specialist staff, high volumes of activity and access to appropriate diagnostic and treatment facilities.

Studies have shown a statistically significant link between 'high volume' surgeons in 'high volume' hospitals and lower death rates in hospital, and vice versa. Much of the research also highlights a relationship between the volume of procedures performed by individual hospitals or specialists and the outcome of that treatment for the patient. Hospitals or specialists without a sufficient level of activity find it difficult to provide safe, high quality care. *Without sufficient numbers of patients and volume of procedures, specialist staff can miss audit and competence assurance targets and risk becoming de-skilled.*

[1] The exception is single specialty hospitals, which by definition provide services in one specialty only.
[2] Key examples include Batista et al. (2002), Chassin et al. (2000) and Nuffield Institute for Health (1996). A more extensive list is contained in the bibliography.

The cost of sustaining large numbers of consultants is considerable. This is an important consideration in planning the deployment of acute hospital services: the expected workloads must justify the costs. The cost of providing a full spectrum of services throughout the current acute hospital system would be unsustainable in terms of maintaining adequate standards of medical practice and fiscal prudence.

All of these considerations, whether directly linked to the practicalities of the EWTD or concerned with quality and safety for patients, have implications for the organisation of acute hospital services. These factors influenced the Task Force in its recommendations.

1.6 Medical education and training

Compliance with the EWTD and the move to a consultant-provided service will require major changes in medical education and training. In particular it will require phasing out all non-training NCHD posts, safeguarding training time (protected time) for NCHDs and their trainers and ensuring that additional posts are not created purely to meet service needs. The Task Force proposes the establishment of an independent statutory central training authority with key functions including a role in controlling training numbers through the approval of each NCHD post and lead responsibility for co-ordinating the strategic development of medical education and training in Ireland.

Medical training is intertwined with service provision. In order to achieve integrated planning of training and workforce numbers, consultation will be needed to ensure that service deficits are avoided and that training numbers are aligned to future service requirements.

Other key medical education and training issues addressed in this report include training to accommodate the changing role of specialist doctors, flexible training, concerns of overseas doctors and international co-operation on training.

1.7 Task Force proposals

The Task Force's recommendations are centred on three key elements:

- Reducing NCHD hours in line with the *European Working Time Directive*;
- Introducing a consultant-provided service;
- Reforming medical education and training structures.

The structural and organisational consequences of meeting these will inevitably require radical reform of the organisation of acute hospital services.

The Task Force has devised detailed proposals for the staffing and organisation of hospitals in the two pilot areas which it studied, i.e. the East Coast Area Health Board and Mid-Western Health Board regions, and a set of key recommendations that it considers applicable to the country as a whole. These proposals are based on a population

of about 350,000 and the principle that all appropriate specialist services should be provided as much as possible within that region. For reasons of volume, safety and quality, some services will continue to be provided at a supra-regional or national level.

A number of critical national recommendations, including measures to reduce NCHD working hours, should be implemented immediately throughout the country, with appropriate negotiation and consultation. Others, such as the proposals for reorganising hospital services, should be applied to the two pilot regions in the first instance. The Task Force believes that a radical reorganisation of acute hospital services will be required nationally in order to implement the EWTD in full and to ensure a high quality service for patients. The Task Force proposes that in Phase II of its work it should prepare a second report as soon as possible on the organisation of hospital services outside the pilot regions.

Implementation of the reforms in medical education and training necessary for compliance with the EWTD and development of a consultant-provided service should proceed as a matter of urgency.

In this first report, the Task Force sets out its recommendations for hospital medical staffing in the two pilot regions and its estimates for the country overall. The national medical staffing figures will be reviewed further in the second report, and should be kept under review in subsequent years as implementation of the Task Force's recommendations proceeds.

1.8 Key messages

The key messages of the Task Force's work to date are summarised below.

1. **The priority must be to provide a safe, high quality service to all patients at all times.** The current organisation, structure and staffing of the hospital system is failing to deliver the care, that at its best, the Irish system is capable of giving.

2. **NCHD working hours must be reduced in line with the *European Working Time Directive.*** Appropriately implemented, this will help improve patient care and introduce safer working conditions for doctors.

3. **Health agencies should not attempt to meet the terms of the EWTD by recruiting more NCHDs.** This would actually worsen the situation for both patients and doctors.

4. **Substantially more consultants should be appointed as part of a move to a team-based *consultant-provided* service.** This would give patients improved access to senior clinical decision-makers.

5. **Considerations about capacity, workload and a critical mass of patients must influence where hospital services can be safely provided.** Patients have better outcomes when treated in units with appropriate numbers of specialist staff, high volumes of activity and access to the right diagnostic and treatment facilities.

6. **In the pilot regions studied, acute hospital services should be delivered by an integrated network of hospitals, currently serving populations of about 350,000.** A small number of more specialist services should continue to be provided on a supra-regional or national basis.

7. **Primary care services, including community care, should be an integral part of this network.**

8. **The organisation and staffing of acute hospitals must be restructured to allow for the safe provision of emergency and elective care.** The safe provision of specialist services, reductions in NCHD hours and the appointment of additional consultants will require significant changes to service provision. It is also important to ensure that all patients, whether public or private, have equal access to services based on clinical need.

9. **Health professionals should work as part of a multi-disciplinary team, centred on delivering quality patient care over the full 24-hour period within an integrated network of hospitals.** This will entail revised working arrangements for consultants and NCHDs. It will also have implications for other health professionals and will involve the appointment of some new grades of staff.

10. **The management structure of acute hospitals should be strengthened to establish clear lines of accountability and ensure appropriate availability in the context of a 24-hour service.** In the pilot regions, an integrated network of hospitals should be managed by a chief executive. There should be a single national hospitals authority to which the network chief executives should report. However, service integration must be ensured, in particular with primary care, community care and long term/continuing care services.

11. **Medical education and training systems must attract and train doctors to provide high quality patient care.** NCHD training can only be delivered in recognised, accredited institutions with appropriate staff and facilities. All non-training NCHD posts must be phased out.

12. **The number of hospital doctors should be regulated nationally through a single agency. Each NCHD post should also be subject to approval by a central training authority.** While the number of consultant, specialist registrar and intern posts are regulated at present, uncontrolled growth in the number of registrars and senior house officers is very undesirable. It can have implications for the quality of service to patients, and has affected the ability of individual doctors to access further training and achieve specialist registration. It has also hampered the efficient deployment of finite resources.

13. **Reductions in NCHD hours, the appointment of more consultants working in teams, reorganisation of the acute hospital system and the provision of high quality medical education and training are all part of the implementation process.** Compliance with the EWTD and the provision of a sustainable acute hospital service are possible only if measures are taken to meet each of these goals.

14. **All of the measures proposed above should be done in a way that maximises value for money.** There must be no unnecessary duplication of services.

15. **It is vital to start implementing the Task Force's proposals immediately.** To do this a national implementation group, and a project group in both of the pilot regions studied by the Task Force, should be established now. The reforms proposed will require the commitment of all stakeholders. Consultation and negotiation will be essential to achieving these changes.

1.9 Conclusion

The Task Force believes that now is a unique opportunity to make radical and lasting changes in the way we deliver our health service. The changes proposed are in the best interest of patients and staff, in terms of safety, best practice and quality. Change is both necessary and possible.

The Task Force believes that change will happen provided there is a genuine willingness by all stakeholders to work together towards achieving it. While the proposed changes will, over time, have resource implications, some progress can be made in the immediate term within existing resources. The Task Force also believes that implementation of these proposals offers an opportunity to improve significantly the value for money of health care expenditure.

Section 2: Introduction and Methodology

2.1 Introduction

The Minister for Health and Children, Mr. Micheál Martin, T.D. appointed the National Task Force on Medical Staffing on 21 February 2002. The key work of the Task Force has been to:

- devise a strategy for reducing the average working hours of non-consultant hospital doctors (NCHDs) so as to achieve the requirements of the *European Working Time Directive* (EWTD);
- address the consequent medical staffing needs of Irish hospitals;
- analyse the practical implications of moving to a consultant-provided hospital system; and
- consider the requirements for medical education and training arising from any changes to the current model of delivering services.

The Task Force's full terms of reference and membership are at **Appendix 1.**

The Task Force was divided into three elements: an overall Steering Group which co-ordinated the work, a Project Group on NCHD Working Hours and a Project Group on Medical Education and Training (MET). The Steering Group in turn established a small working group to carry out detailed analysis, consult widely and prepare proposals on key items for the consideration of the Steering Group. The two Project Groups also set up smaller groups to advance specific issues. Details of these groups are also contained in **Appendix 1**.

It should be noted that the members of the two Project Groups provided input to the Steering Group on their respective subject areas, and were invited to offer comments on the report as a whole. The members of the Steering Group alone are signatories to this report.

2.2 Context

2.2.1 European Working Time Directive

The *European Working Time Directive* provides that by 1 August 2009, doctors in training, i.e. NCHDs, cannot be required to work an average of more than 48 hours per week, measured over a standard reference period of 17 weeks. At present, NCHDs work an average of 75 hours per week[3]. The reductions are phased so that average working hours should not exceed 58 hours by 1 August 2004 and 56 hours by 1 August 2007. A summary of the main provisions of the Directive as they affect doctors in training is included in **Appendix 2.**

[3] This rises to an average of 77 hours if on-call, off-site hours are included.

2.2.2 Consultant-provided service

A succession of earlier reports[4] have argued for a revised structure of hospital medical staffing, based on a much greater proportion of appropriately trained doctors, and a lower proportion of doctors in training. This would enable the establishment of a *consultant-provided* rather than a *consultant-led* hospital medical service, to the greater benefit of patients. For the purposes of this report, a consultant-provided service is defined as:

> *a service delivered by teams of consultants, where the consultants have a substantial and direct involvement in the diagnosis, delivery of care and overall management of patients.*

This contrasts with a *consultant-led* service, defined in the Health Strategy (2001) as

> *a service supervised by consultants who lead and advise teams of doctors in training and other staff in the delivery of care to their patients.*

It is acknowledged that certain specialties already operate a consultant-provided service.

2.2.3 Better service for patients

In approaching its work, the Task Force sought the best means of providing a high quality service to patients[5], in the most appropriate location. The needs of patients and their families are to the forefront in the recommendations which follow.

2.3 Methodology

2.3.1 Basic considerations: setting aside IR and politics

The Task Force explicitly set aside two forces that inevitably influence the shape of health services: industrial relations issues and political considerations. From the outset, the Task Force made it clear that it would not be a forum for industrial relations. It acknowledged that its proposals were likely to have IR implications, which should be addressed in an appropriate forum.

The Task Force was determined to recommend solutions designed to provide the best possible health service for patients and staff, without regard to the potential political implications of its proposals. To do otherwise would have been to ignore some approaches, solely because they might prove unpopular among some, or be difficult to implement.

Finally, the Task Force initially set aside cost implications, in order to encourage the development of as wide a set of approaches as possible, but then brought them back into

[4] *Report of the Medical Manpower Forum* ('Forum Report' 2001); *Report of the National Joint Steering Group on the Working Hours of Non Consultant Hospital Doctors ('Hanly Report'* 2001); and *Discussion Document on Medical Manpower in Acute Hospitals* (*Tierney Report*, 1993).

[5] For brevity, the term 'patients' is used in this report to refer to all users of the health system. The Task Force recognises that many of those using a wide range of personal social services are more properly described as 'clients'.

play as actual proposals were developed. The proposals in the Task Force's report were costed before finalisation on the basis of the assumptions set out in section 5.4.

2.3.2 Pilot regions

In line with its terms of reference, the Task Force selected two pilot regions in which to develop and test its proposals in detail. The purpose of utilising pilot regions was:

- to understand the present system fully
- to explore alternative models of delivery, with particular emphasis on the work patterns of medical and other staff and
- to estimate the likely cost of adopting a specific model.

It was important to examine services in a regional context rather than considering individual hospitals in isolation. The links between hospital and other health services in the region, particularly primary care, community psychiatry and extended care/continuing care services, would be of particular importance.

The main criteria for selecting pilot regions were:

- one region should have hospitals that are primarily under health board management while the other would have at least one major voluntary hospital in its area;
- the regions would serve a population of between 300,000 and 350,000, bearing in mind the need for the study to be carried out reasonably quickly;
- no individual hospital in the selected regions would have more than 500-600 beds, for the purposes of a detailed study within the timeframe of the Task Force;
- the hospitals involved would have shared governance or other close working relationships with the smaller hospitals in their catchment area; and
- the hospitals would have a number of joint departments in their catchment area.

A number of health board regions met these criteria, and the Task Force welcomed the widespread interest expressed by many health boards in becoming a pilot region. After detailed consideration, the Task Force decided to invite the East Coast Area Health Board and the Mid-Western Health Board to act as pilot regions for its work.

Both regions participated fully and enthusiastically in all aspects of the pilot, from the introductory meetings phase, through a series of detailed meetings with staff, to the development of proposals for both regions.

2.3.3 Ideal and actual models

In conjunction with groups in the two pilot regions, the Task Force's Working Group began with a 'green field approach' by considering the 'ideal' or 'perfect' model of services and then considered how close it would be possible to move towards that situation. This was concerned with identifying the best possible way to provide services, irrespective of

what services were currently in place, or of where they happened to be located at present. From this, the groups developed a picture of the best possible location, level and type of services.

This exercise proved useful in identifying how the ideal service would operate if one were planning afresh. It was then possible to analyse how far the pilot regions were from the ideal 'green field' situation and what would be required to move them towards this position in the future.

2.3.4 Rostering study

The Task Force commissioned an independent expert to assist it in estimating medical staffing requirements and in devising indicative rosters. This work greatly informed the Task Force's deliberations, particularly when reaching conclusions about the number and type of medical personnel that may be required in the future.

2.3.5 Nursing and midwifery implications

The Chief Nursing Officer of the Department of Health and Children chaired a group to oversee examination of the implications of the Task Force's recommendations for nursing and midwifery. A nurse manager, seconded to the Department on a temporary basis, is carrying out the detailed work in this area.

2.3.6 Estimates of costs

An analysis of the cost of the Task Force's proposals was carried out as its work progressed. The work was done both by the Task Force's secretariat and by an external economist.

2.3.7 Literature review and previous reports

The Task Force was very conscious of the substantial amount of work that had already been done on many aspects of its work by previous reports. This was taken fully into account. The fact that the Task Force's recommendations are closely in keeping with the conclusions of the earlier work underlines in many instances the consistent messages emerging from so many groups which have considered the issues in detail. There is in addition substantial international literature on many of the issues addressed by the Task Force, which was also taken into account during its deliberations. A bibliography is included at the back of this report.

2.4 Approach to work

2.4.1 Meetings held

The Steering Group held a total of fourteen meetings between February 2002 and May 2003. The Project Group on Medical Education and Training met on ten occasions and its subgroups on numerous occasions as required. Its main recommendations to date are

contained in section 3.4. It prepared an interim report for the Steering Group in August 2002. The Project Group on NCHD Working Hours met on four occasions and a subgroup of it on two occasions. As the Steering Group decided to subsume much of its work, it did not produce a separate report.

2.4.2 Pilot regions and consultation process

The Working Group engaged in an extensive consultation process in two pilot regions, holding over 300 meetings with over 600 individuals including consultants, NCHDs, nurses, health and social care professionals, other staff delivering health care and managers. The Working Group also took into account the views of the public as expressed[6] in the consultation process during preparation the Health Strategy (2001).

2.4.3 Written submissions and information

The Working Group appointed by the Steering Group sought and received extensive written information, by specialty and subspecialty, from hospitals in the pilot regions. It also received some 116 other written submissions, as included in **Appendix 10**.

2.4.4 Acknowledgements

The work of the Task Force placed heavy demands on many people working in the pilot regions. The Task Force would like to acknowledge the considerable assistance and enthusiasm of staff in the East Coast Area Health Board region and Mid-Western Health Board region, particularly in the acute hospitals there. This report would not have been possible without their continued support throughout the process.

The Task Force would like to thank the Chief Executive Officers and staff of the two health boards involved for their assistance, which was always prompt and helpful. The Task Force would also like to acknowledge the substantial assistance given by the management and staff of St. Vincent's University Hospital, Dublin, St. Michael's Hospital, Dun Laoghaire, and St. John's Hospital, Limerick. The co-operation and responsiveness of the Medical Council and all the bodies concerned with education and training is also greatly appreciated.

[6] Health Strategy consultation document: *Your views about health* 2001.

Section 3: Meeting Essential Requirements

3.1 Key elements

Many of the changes addressed in this report arise directly from the requirements of the *European Working Time Directive*, while others are desirable in any event. Irrespective of the sources of change, the Task Force's starting point is that they must be implemented with the needs of patients as the first priority.

The Task Force has addressed its work to fulfil three key requirements:

- the need to reduce NCHD working hours in line with the EWTD;
- the strong case for a consultant-provided service; and
- the importance of ensuring high standards in medical education and training as substantial changes to the health system are implemented in the coming years.

The Task Force has concluded that achieving these requirements will have significant implications for the structure and organisation of acute hospitals in Ireland. Consequently, this informs a fourth key element of the report:

- the need for a substantial reorganisation of acute hospitals services.

These four areas are addressed in this section of the report.

3.2 Reducing NCHD working hours

3.2.1 Excessive working hours: a concern for patients and doctors

Non-consultant hospital doctors have played a key role in service delivery in the Irish hospital system for many years. *They have made an enormous contribution to health care, working an average of 75 hours a week on-site and for extended periods without rest.* In some specialties NCHDs work for considerably longer than 75 hours per week.

Working long hours seriously affects the health and well-being of doctors and, in turn, the quality of medical care offered to their patients. Daugherty et al reported that the most common cause of impaired decision-making was lack of sleep, and another US study found that over 40 per cent of NCHDs cited fatigue as a cause of their most serious mistake.

> 'There is a large body of laboratory data showing beyond a doubt that fatigue impairs human performance. In fact, the effect of sleep deprivation on a task that involves tracking has been shown to be equivalent to the effect of alcohol intoxication; in one study, performance of such a task after 24 hours of sustained wakefulness was equivalent to the performance with a blood alcohol concentration of 0.10%. Studies of simulated driving have had similar results.'
>
> — *Fatigue among clinicians and the safety of patients*. (New England Journal of Medicine, Vol 347, No 16, October 17, 2002.)

Multiple research studies have also connected long working hours for doctors in training in the United States to harm in three specific areas: increased risk of car accidents, depression and negative mood, and complications in pregnancy.

This current average working hours of NCHDs are unacceptable for doctors and patients. They would have to be addressed irrespective of the EWTD.

3.2.2 European Working Time Directive

The application of the *European Working Time Directive* to NCHDs is designed to address this serious problem. 'Doctors in training' (those preparing for a recognised higher medical qualification following completion of undergraduate training) were initially excluded from the EWTD, but will be brought under its terms from 1 August 2004. The main elements of the EWTD as they affect doctors are summarised in **Appendix 2**.

The EWTD requires a reduction in the average on-site weekly working hours of NCHDs to 58 by 1 August 2004, 56 by 1 August 2007 and 48 by 1 August 2009. Provisions relating to rest and break requirements are also applicable from 1 August 2004. In summary the following provisions will come into force on 1 August 2004:

- Doctors cannot be required to work more than 58 hours a week on the hospital site, averaged over a 17-week period.
- Doctors working more than 4.5 hours a day are entitled to a rest break of 15 minutes. Doctors working more than 6 hours are entitled to a break of 30 minutes.
- Doctors are entitled to a rest period of 11 consecutive hours within each 24-hour period.
- Doctors are entitled to a rest period of 24 hours every 7 days. The 24-hour rest period must follow an 11-hour rest period for a total of 35 hours of consecutive rest. Alternatively, doctors may have two periods of 35 hours, or one period of 59 hours of consecutive rest every 14 days.
- Doctors may be exempted from the requirements regarding daily and weekly rest only if they are working shift and are afforded equal periods of compensatory rest within the 17-week reference period for average weekly working time.

It is possible, after a collective agreement between employers and unions, to derogate from certain parts of the Directive relating to rest periods, break requirements and the period over which working time is averaged[7]. The limits on working hours cannot be varied. *There are no such collective agreements in existence in Ireland at present, and the Task Force would not favour their introduction.*

[7] The *Organisation of Working Time Act 1997*, which implemented the EWTD for other Irish workers, has already derogated from the EWTD in this respect.

3.2.3 'Hanly' report

Repeated attempts have been made over the last twenty years to reduce the working hours of NCHDs[8]. As part of the preparation for implementing the EWTD, a National Joint Steering Group on the Working Hours of NCHDs was established in June 1999 and reported in January 2001. Known as the *Hanly* report, it recommended that:

- fundamental changes should be introduced in the working conditions and training of all hospital doctors for the benefit of patients and improvement of services;
- appropriate consultants should be on duty to provide a better quality service with greater continuity in patient care delivery 24 hours a day. They should be supported by rostered NCHD staff working appropriate shift patterns;
- flexible working arrangements and more family-friendly policies should be introduced;
- a re-designation or reconfiguration of services may have to be considered in some hospitals because of the reduced working hours commitment by NCHDs; and
- more structured and flexible training should be provided.

3.2.4 Current work patterns

Some 96 per cent of doctors in training are currently rostered to provide on-site cover on a 24-hour a day, 7-day a week basis. *Hanly* noted that 91 per cent of doctors were working on-call rotas[9]. The report noted that a further 5 per cent of doctors were working full shifts[10].

Currently, the standard working week for NCHDs is 39 hours plus overtime and on-call duties. In theory, the average working week is up to a maximum of 65 hours. However, in practice many NCHDs work in excess of 65 hours and in some cases up to 129 working hours per week. Work practices feature a lack of defined *rest breaks* within a duty period and a lack of defined *rest periods* between shifts/duty periods and after on-call duty. Overtime and on-site on-call duty cannot be meaningfully differentiated.

3.2.5 Current working hours

The Task Force was able to collate limited data on NCHD working hours in eight of the ten health boards and two voluntary hospitals outside the ERHA. Average hours were consistent with the findings of *Hanly*, which carried out a major study of NCHD working hours in a representative group of hospitals in early 2000. This study included all rostered on-call hours, whether working or resting, on-site or at home. **Table 3.1** summarises average weekly working hours by grade and specialty as reported by *Hanly*.

[8] These include the negotiation of a '140 hours fortnight' in 1980, a '65-hour week' in 1988, a mechanism to address persistent un-rostered hours in some hospitals in 1995, a revised contract in 1997, a Labour Court recommendation in 1998 and a revised contract in 2000 which included agreements on overtime, an annual training fund and the introduction of medical manpower managers to help reach local agreement on a phased reduction of working hours.

[9] '*On-call rotas* — doctors generally work from 9am to 5pm Monday to Friday, and take it in turns to cover the night (5pm until 9am) and weekends'. (*Hanly, Section 3.2, page 45*)

[10] '*Full shifts* — doctors work a range of shifts during normal hours and out-of-hours which ensure that a constant level of cover is maintained throughout the day and night.' (*Hanly, Section 3.2, page 45*)

Table 3.1: Average Weekly Hours worked in eight study hospitals 2000

Specialty	Interns	SHOs	Registrars	Senior/SPRs	All grades
Emergency Medicine	—	52	52	52	**52**
Anaesthesia	—	76	88	89	**84**
Medicine	73	73	66	87	**75**
Obstetrics and Gynaecology	—	84	83	81	**83**
Paediatrics	—	73	68	71	**71**
Pathology	—	75	84	80	**80**
Psychiatry	—	68	66	39	**58**
Radiology	—	75	84	80	**80**
Surgery	79	87	96	91	**88**
Average by grade	**74**	**76**	**79**	**86**	**77**

Note: Includes hours on-call off-site. Average on-site hours were 75.

Source: Report of the National Joint Steering Group on the working hours of non consultant Hospital Doctors (2001).

3.2.6 Working hours in pilot sites

The Task Force received regular information from the pilot regions on the working hours of doctors in training. While this data indicates how many hours doctors were paid for, it does not indicate whether those hours were worked on-site, on-call on-site or on-call off-site. Under the *SIMAP judgement* (see **Appendix 2**), hours spent on-call off the hospital site are not counted as work. Data was not available on the working hours of doctors in training in psychiatric agencies or hospitals.

In the East Coast Area Health Board, average working hours were calculated using data from material supplied by St Vincent's to the ERHA and anonymised pay data. Data was also generated in respect of St. Columcille's Hospital, Loughlinstown.

Table 3.2: St Vincent's University Hospital and St Michael's Hospital Average weekly hours worked by NCHDs				
Specialty	**Interns**	**SHOs**	**Registrars**	**Senior/SPRs**
Emergency Medicine	—	56	50	—
Anaesthesia	—	69	65	84
Medicine	67	72	85	68
Obstetrics & Gynaecology	80	—	88	—
Pathology	—	75	45	—
Psychiatry	—	81	63	61
Radiology	—	—	—	57
Surgery	70	63	99	77

Table 3.3: St Columcille's Hospital Average weekly hours worked by NCHDs				
Specialty	**Interns**	**SHOs**	**Registrars**	**Senior/SPRs**
Emergency Medicine	—	60	45	—
Anaesthesia	—	90	88	—
Medicine	50	55	55	87
Radiology	—	—	—	—
Surgery	55	63	78	—

In the Mid-Western Health Board, data was extrapolated from NCHD timesheets analysed over a 3-month period in 2002 and data relating to overtime worked between January and June 2001. The Department of Emergency Medicine (A&E) was the only area in which NCHDs met the criteria of the EWTD. It is also the only area in which NCHDs work a shift pattern.

Table 3.4: Mid-Western Regional Hospital, Limerick Average weekly hours worked by NCHDs				
Department of Medicine	Average weekly hrs worked (highest hrs worked in brackets)	Average weekly hrs worked (highest hrs worked in brackets)	Average weekly hrs worked (highest hrs worked in brackets)	Average weekly hrs worked (highest hrs worked in brackets)
Grade	**Intern**	**SHO**	**Reg**	**SpR**
Respiratory Medicine	77 (101)	65 (111)	N/A	79 (112)
Gastroenterology	74.5 (97.5)	60 (97)	74.5 (120)	N/A
Endocrinology / Diabetology	75 (107)	60 (86)	N/A	69 (113)
Cardiology	77 (114)	69.5 (122)	87 (120)	65.5 (99)
Renal Medicine	N/A	N/A	68 (120)	N/A
Haematology	N/A	67 (115)	80 (135)	N/A
Oncology	N/A	68 (81)	82 (121)	N/A
Medicine for the Elderly	86 (122)	69.5 (113)	N/A	63 (80)
Paediatrics	N/A	72.5 (103)	70 (70)	68 (112)
E.N.T	N/A	70 (101)	70 (108)	N/A
General Surgery	75 (118)	69.5 (72.5)	81.5 (113)	91 (126)
Ophthalmology	N/A	69 (106)	68 (120)	N/A
Orthopaedics	N/A	68 (106)	72 (110)	74 (129)
Oral & Maxillo-facial Surgery	N/A	95.5 (128)	92.5 (140)	N/A
Urology	74.5 (107)	79 (84)	69 (78)	N/A
A&E	N/A	58 (64)	73 (102)	N/A

Table 3.5: Ennis and Nenagh General Hospitals Average weekly hours worked by NCHDs			
Specialty	**Interns**	**SHOs**	**Registrars**
Medicine	—	71 (90)	75.5 (103)
Psychiatry	—	68	—
Surgery	79	76 (110)	70 (85)

Details of salary costs of NCHDs and consultants are contained in **Appendix 7.**

3.2.7 Reducing hours: international experience

The Task Force reviewed the implementation of the EWTD and other working time legislation in EU member states. Details are contained in **Appendix 8**. In the majority of EU member states, the EWTD has been implemented through a number of different legislative and/or administrative acts and/or collective agreements. Material supplied to the Task Force indicates that, of the fifteen EU Member States, ten appear to be compliant to date: Austria, Denmark, Finland, Greece, Italy, Luxembourg, the Netherlands, Portugal, Spain and Sweden. The information available regarding Belgium, France, Germany and the UK indicates that they have varying measures to undertake before achieving full compliance in respect of doctors. Details of the literature regarding working time for hospital doctors in Australia and the United States are also contained in **Appendix 8**.

Some members of the Task Force made a short study visit to Finland, a state that has already implemented legislation similar to the EWTD, has a well-developed medical education and training system and a better ratio of specialists to trainees than in Ireland. Along with information from other EU states, the study demonstrated that it is possible to provide high quality care to patients in a 48-hour working environment. Details of its findings are contained in **Appendix 9**.

3.2.8 NCHD numbers

There has been a substantial increase in the number of NCHDs in recent years — some 20 per cent since 2000 alone — largely for *ad hoc* service reasons and without consideration of training or projected workforce needs. Later the Task Force recommends a significant increase in the number of consultants, working in teams. In line with this and with the role proposed here for junior doctors, **the Task Force believes there should be a significant reduction in the number of NCHDs as the number of consultants increases.** The objective must be, in line with the *Tierney*, *Forum* and *Hanly* reports, to reverse the current ratio of more than two NCHDs for every one consultant.

There are some important reasons for this approach. Firstly, it will not be possible to recruit sufficient extra NCHDs to cover existing rostering arrangements under the EWTD, particularly in smaller hospitals where there are already serious problems in maintaining the current numbers of NCHDs. Secondly, there will be serious implications for the provision of quality patient care and clinical decision-making if doctors are recruited to posts which are not considered suitable for training by the relevant authorities.

3.2.9 Reducing hours: specific measures

The Task Force believes that a series of important measures can and should be taken as soon as possible in all hospitals throughout the country so as to reduce the working hours of NCHDs in line with the requirements of the EU Directive.

Specific national measures for reducing the average working hours of NCHDs are proposed below. These comprise:

- removal of layered or tiered on-call;
- introduction of cross-cover arrangements;
- the introduction of new working patterns for NCHDs; and
- a defined set of measures aimed at reducing NCHD workload, with special emphasis on areas in which other staff are better placed to deliver a quality service.

The Task Force considers it essential that these measures be implemented as soon as possible for the benefit of both patients and doctors.

A: Reduction of tiered on-call

At present, interns, senior house officers, registrars and senior or specialist registrars and consultants participate in a tiered on-call system. If the appropriate clinical decision cannot be made by the first doctor on-call, the patient is referred to the next most senior doctor and the process continues until the appropriate diagnostic and treatment decisions are made. **The Task Force recommends that the first tier of on-call should be appropriate to patient needs. This necessitates patient referral to, and in many cases on-site availability of, senior clinical decision makers.** Consultants should be much more immediately accessible for clinical decision-making and treatment. This would require them to be second or, in certain defined circumstances and specialties, even first on-call as part of a consultant-provided service.

B: Cross-cover

The Task Force has concluded that there is scope within each specialty for the introduction of cross-cover arrangements at senior house officer and registrar levels. It is vital, however, that cross-cover arrangements ensure that the doctors involved are competent to provide cover and that the safety and management of patients is of the appropriate standard. The provision of cross-cover should be a clinical decision.

While roles and work patterns will vary across different specialties and services, there are opportunities to construct cover arrangements which combine junior SHO with specialist nursing cover or consultant with specialist registrar cover. At a minimum, off-site consultant cover must continue to be available at all times.

C: NCHD working patterns

Experience in other EU states indicates that the number of hours worked is not directly proportional to the quality of training and that it is possible to deliver training effectively in shorter working hours and with different types of working patterns[11]. In a shorter working week, one of the best means of ensuring sufficient experience is to expose trainees to sufficient workload with appropriate mentoring by senior clinicians, rather than requiring them to spend large amounts of time on the hospital site.

[11] As set out in Appendix 8 and the *Hanly Report,* doctors in training in Denmark, Finland and the Netherlands, for example, work an average of between 37 and 46 hours per week.

The retention of current on-call rotas will not reduce working hours. Implementation of the EWTD will require significant change in NCHD work patterns. The European Court of Justice has already defined on-call rotas as a form of shift work (see **Appendix 8**). This means that the vast majority of NCHDs in Ireland already work a form of shift. However, some of these shifts are up to 24 hours in duration. Clearly, periods on duty will have to be of much shorter duration in the future.

Future working patterns must enable NCHDs to participate in the full spectrum of service provision and be provided with learning and training opportunities equal to their peers. This means that in busy specialties, *NCHDs will need to work defined periods on a duty roster, rotating at regular intervals through early, day, and night duties.* Such rosters will cover a multitude of different working patterns. These may include work at weekends, a week of early duties, a half-week, or work for a number of nights in succession. *Compliance with the EWTD is not optional for NCHDs, consultants or hospitals management.*

D: Rostering of hospital medical staff

During its consultation process the Task Force examined ways in which the requirements of the EWTD could be reflected in the organisation of duty rosters for hospital medical staff. It also reviewed current hospital medical staffing rosters and cover arrangements and examined rostering arrangements in other EU states. Some states experienced difficulty in constructing EWTD compliant rosters that meet the needs of both patients and hospital medical staff, but many have now formulated safe, effective rostering arrangements.

All rosters must provide for a safe level of medical cover, allow for sufficient handover time, ensure that training can be delivered satisfactorily, and meet service needs and EWTD requirements while allowing NCHDs, consultants and other staff a satisfactory quality of life. *Each roster must take account of training needs, service needs, resources, tiers of cover, type and level of cover, distribution of workload amongst different grades or teams of staff, rest and break periods, frequency of duty, leave and compliance with EWTD requirements.*

The Task Force believes the following are vital requirements for implementation:

- Health employers, consultants, NCHDs, nurses and other healthcare professionals must all co-operate in developing EWTD compliant rosters.
- The current practice, in some cases, of NCHDs developing rosters with consultant approval is not satisfactory. The construction of rosters and monitoring of hours worked should be carried out as a management function by dedicated administrative staff who should be available at appropriate times to ensure that rosters can be managed as required. Rosters should be developed in partnership with relevant clinical directors, consultants and NCHDs. Appropriate rosters can only be achieved by accurate, centralised control systems, supported by the required IT systems.
- Hours, rest limits, break periods, service requirements, training requirements and other features of EWTD compliant rosters should be detailed in NCHD contracts.

- There should be a written obligation on health employers, consultants and NCHDs to comply with EWTD requirements.

E: Sample rosters

Set out below are a number of indicative NCHD rosters, which illustrate how hospitals and health agencies could meet the needs of the EWTD. These rosters form part of a broader rostering exercise covering both NCHDs and consultants undertaken by the Task Force over the course of its work. ***These rosters serve as examples and are intended only to illustrate potential staffing models. They are not to be taken as in any way prescriptive.***

These rosters[12] are designed so that a doctor can then easily transfer to a different roster type. The first sample roster below is for a 24-hour on-site service, while the second relates to an extended day with on-call. A doctor on the Sample A roster could rotate between different rosters. This could include, for example, transferring after a period from Sample A to a Sample B roster. Rosters are constructed taking account of current contractual arrangements regarding leave and are compliant with the EWTD requirements regarding weekly and total duty hours and rest time.

Sample A: 24-Hour on-site service provision — an average of 52 hours per week

This roster provides an example of how a 24-hour on-site on-call service could be staffed:

ID	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Hours
1	—	C	A	A	A	—	—	47.0
2	P	P	P	P	→	—	—	52.0
3	A	A	—	—	P	P	P	56.0
4	→	—	—	—	C	A	A	45.0
5	—	A	C	—	A	A	A	60.0
6th Doctor in training, research or other related activitys								
7th Doctor on holiday or other leave								

Total hours in 4 week cycle = 258 Average hours per week = 52 12 days off in 5 week cycle + 2 recovery days following night duty 2 weekends off in 5	A = Extended day duty 0800 — 2100 P = Extended night duty 2000 — 0900 C = Team meetings/Conferences 0900 — 1700 → = Recovery time post night duty — = Day off

[12] Each of the rosters operate on a rolling basis. Each line equates to one week. In the example above, a doctor who starts on line 1 proceeds through each line of the roster on a weekly basis and can then revert to line 1. Each duty indicates a starting and finishing time. The number of hours per week is shown at the end of each line.

Sample B: Extended day and on-call — an average of 45 hours per week
This roster provides an example of how a service could be staffed on-site over the course of an extended working day and how on-call arrangements could be structured:

ID	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Hours
1	M	M	M	L (OC)	L (OC)	—	—	50.0
2	L (OC)	L (OC)	L (OC)	—	—	W (OC)	OC	42.0
3	—	C	C	M	M	—	—	36.0
4	E	E	E	E	E	—	—	50.0

Average length of duty = 10 hours Total hours in 4 week cycle = 178.0 Average hours per week = 44.5 9 days off in 4 week cycle 3 weekends off in 4	OC = On-Call M = Middle Day 0900 — 1900 L = Late Duty 1200 — 2200 E = Early Duty 0700 — 1700 C = Team Meetings / Conferences 0900 — 1700 W = Weekend Extended Day 0800 — 2000

F: Changes in skill-mix and practice
The Task Force has sought to identify areas of work that need not be delivered by NCHDs, particularly during long periods on-call or in the absence of more appropriately trained and qualified staff. The Task Force believes that patients will benefit when the delivery of these tasks is led by staff who, working within clear protocols and the scope of their professional practice, have demonstrable expertise, training and ongoing responsibility for such work.

It is not a question of merely transferring tasks to other professionals. It is important that NCHDs develop and maintain skills in those procedures that they may be required to undertake.

The major areas of recommended change are as follows:

Radiology

- Increased use of emerging and developed IT systems such as Picture Archiving and Communications Systems[13] (PACS) to create 'filmless hospitals' should improve efficiency;
- Use of IT to order or review test results remotely from terminals on hospital wards;
- The introduction of clinical protocols in radiology to help inform the appropriate use and delivery of diagnostic procedures;
- Dedicated radiology facilities in emergency departments; and
- An extended working day for the radiology department.

[13] PACS allows transmission, review and storage of digital images over a computer network.

Phlebotomy

- Dedicated phlebotomy staff should perform venepuncture rounds on a consistent basis over the course of the 24-hour day. They could also take blood cultures and possibly perform cannulation; and
- Measures to ensure that developing dedicated phlebotomy services do not lead to inappropriate referrals for laboratory tests.

Pathology

- The electronic management of requests for laboratory tests, including test ordering capability and reporting of results; and
- Availability of routine diagnostic services for extended hours rather than the current narrow 9 am to 5 pm arrangement with a very limited repertoire of tests available out of hours.

Pharmacy

- Pharmacists can play a key advisory and consultative role in emergency departments, medical assessment units and other areas of the hospital where initial assessment and treatment of patients is taking place; and
- Pharmacists should assist, in partnership with lead consultants, in the development of medication protocols for common conditions, particularly those presenting in the emergency department.

Surgery

- The employment of, for example, operating department assistants, as discussed in **section 4.2**, will ensure that tasks previously performed by NCHDs in the early stages of their training can safely be delivered by other personnel.

Expanded decision-making and enhanced role for nursing staff

- This issue is discussed in **section 4.2.2**.

Dedicated frontline clerical/administrative staff

- The employment of frontline clerical/administrative staff attached to clinical teams/directorates, including dedicated ward administration, would allow appropriately trained, qualified and experienced staff to play a key role in record maintenance, ward administration and management over the 24-hour period.

Use of bleep policies

- A bleep policy should seek to consolidate existing good practice in the area of communication between nursing, medical staff and clerical/administrative. Bleep policies can be extremely effective when used properly (see example in *Hanly, Appendix M*).

3.2.10 Implementing the EWTD in full by 2009

The most immediate concern is to reduce average on-site working hours for NCHDs to 58 by 1 August 2004. However, it is important that this be done as the first step of a national plan to reduce hours to 48 by 1 August 2009. While the reduction of NCHD working hours presents significant challenges to health employers, NCHDs, consultants, and other healthcare professionals, *the Task Force believes that if all groups are committed to and involved in the implementation process, the EWTD can be implemented within the required timescale.*

3.2.11 Reducing NCHD hours by August 2004

A number of those consulted by the Task Force expressed concern about the service shortfalls that could result from a reduction of NCHDs' average working hours to 58 by August 2004. The Task Force is aware of this concern and accepts that there is no simple way of achieving the reductions required. However, *it believes that a number of initiatives, speedily introduced on a national basis, combined with appropriate local discussions, have the capacity to deliver on the requirements of the EWTD.* These initiatives include review of a range of work patterns, accurate recording of information, centralised rostering and regulation by a single agency of all medical posts. These issues are further discussed in sections 5.2.1 and 3.4.

It must be emphasised that compliance with the EWTD is not optional. There is an obligation on all involved — management, consultants and NCHDs — to adopt and drive the necessary changes. The Task Force reiterates its strong view that employing extra NCHDs is not a viable option. Any attempt to use this measure as a short-term solution will undermine longer-term efforts to reduce NCHD working hours permanently.

3.2.12 Monitoring of working hours

Effective monitoring of NCHD working hours is necessary if compliance with the EWTD is to be achieved. *The Task Force has identified an urgent need for comprehensive, comparable and accurate data regarding NCHD working hours in each health agency*. Outside of the pilot sites, health agencies have highlighted problems with collecting data on type of time worked, location of individual doctors on pay scales and rostering arrangements. Each health agency emphasised the need for common standards for the collation of data.

The Task Force recommends that employers should record data under the following headings: grade of NCHD; point on pay scale; specialty and sub-specialty; hours worked on-site including the first 39 hours, overtime, those hours when the NCHD is (i) rostered for duty and (ii) rostered on-call; hours worked off-site on-call; hours spent in training (on-site and off-site); study leave; flexible training requirements, annual leave and other leave.

3.2.13 Developing the role of NCHDs

The Task Force believes that a number of other initiatives will be required to enhance the role of NCHDs and to equip them for their continuing stages of development. These relate to appointment, service and training. **The Task Force recommends that in the pilot regions, NCHDs should be appointed to work in a regional network as a whole (as discussed in section 3.5).**

Finally, it is important to emphasise that NCHDs will continue to play a vital role in acute hospitals, and that it will continue to be entirely appropriate for an NCHD, under the supervision of a consultant team, to see and treat patients.

3.3 Developing a consultant-provided service

3.3.1 Consultant/NCHD ratio and its implications

A constant message from previous reports is the imbalance between the number of consultants and non-consultant hospital doctors in the Irish health system. **Table 3.6** illustrates the growth in the number of consultants and NCHDs employed in the public hospital system since 1990 and the changing ratio between the two groups.

In 1993 the *Tierney Report* envisaged moving from a ratio of 1:2 between consultants and NCHDs to 1:1 over a ten-year period, but by 2003 the ratio had actually further deteriorated to 1:2.27. Consultant numbers have increased by over 46 per cent since *Tierney* (1 January 1994 in **Table 3.6** below) but the number of NCHDs has risen by 60 per cent in the same period.

Table 3.6

Approved Consultant and NCHD Numbers 1990 — 2003

	1990	**1992**	**1994**	**1996**	**1998**	**2000**	**2003**
Interns	344	350	353	357	367	401	462
House Officer	1,120	1,183	1,251	1,285	1,306	1,447	1,683
Registrar	650	700	752	836	903	966	1,194
Sen/Sp Reg	80	88	96	105	199	424	594
Total NCHDs	**2,193**	**2,320**	**2,451**	**2,582**	**2,775**	**3,238**	**3,932**
Consultants	1,122	1,158	1,186	1,270	1,327	1,440	1,731
Consultant:NCHD	*1:1.95*	*1:2.00*	*1:2.07*	*1:2.03*	*1:2.09*	*1:2.25*	*1:2.27*

Sources: Postgraduate Medical and Dental Board (NCHDs); Comhairle na nOspidéal (consultants). Information under the year 2003 is based on published data i.e. 1 October 2002 for NCHDs and 1 January 2003 for consultants.

As far back as 1982, Comhairle na nOspidéal argued for an improvement in the balance between medical training and career posts. From 1993 onwards, *Tierney,* the *Forum* and *Hanly* all recommended addressing the unbalanced distribution of staff. They pointed to a range of problems to which the current ratio gives rise: too many medical trainees, too few fully trained staff with consequent limited availability of senior clinical decision-making, shortages in particular specialties, bottlenecks in career structure, problems with out of hours cover and difficulties with the level of medical cover.

3.3.2 Options for providing medical care

The Task Force has examined a number of options for the delivery of medical services by consultants and NCHDs.

Option 1: Take no action

A passive response to the challenges ahead, (which fails to meet the requirements of the EWTD), would be to do nothing. NCHDs would continue to deliver most medical care, and their numbers would continue to rise without any clear plan for future workforce requirements. Services would have to cope as best they could, relying on stopgap measures at local level. Patients would have limited access to consultants. Speedy access to senior clinical decision-making would become increasingly difficult. Most NCHDs would not be in recognised training programmes and their work would be dominated by service requirements with little regard to longer-term career development.

Adopting option 1 would mean that the terms of the EWTD would be breached by 1 August 2004, leaving Ireland open to sanctions from the EU. NCHDs would be the only group of workers left outside the EWTD with consequent implications for patient care and the welfare of doctors. In addition, the Task Force estimates that this option would be extremely expensive. This option was rejected by the Task Force.

Option 2: Employ sufficient NCHDs to meet the Directive

In theory, it would be possible to employ a sufficient number of NCHDs to ensure that no individual had to work for longer than the average working hours required by the EWTD. The Task Force calculated that nationally, an additional 2,500 NCHDs, over and above the 2002 complement, would be required to achieve this objective. This option did not find favour with the Task Force for a number of reasons:

- treatment of patients would increasingly be delivered by doctors not yet sufficiently qualified or experienced in their work. This would raise serious concerns about quality and safety and could compromise patient care;
- increasing NCHD numbers would not, on its own, address the range of structural, service and other difficulties currently facing the hospital system;
- none of the additional NCHDs would necessarily be in formal training programmes;
- the ratio of consultants to NCHDs would decline further to 1:4 or even 1:5;

- it would be highly impractical to envisage recruiting and training such an additional number of NCHDs within the timescale available; and
- the approach would run entirely counter to the recommendations of every expert report that has addressed the issue (*Tierney, Forum, Hanly*).

The costs of this option would also be unacceptable. Consequently, this option was rejected by the Task Force.

Option 3: Non consultant 'career grade' doctors

Some health professionals advocate the formal introduction of what is traditionally termed a 'middle-grade' or 'career grade' doctor. These might more accurately be described as *long standing, non permanent grade doctors* who, though committed to hospital medicine, have been unable to complete their higher medical training or, having done so, are unable or chose not to secure a consultant appointment. These doctors could be available for out of hours and weekend service provision, or for filling gaps when doctors in training are not available.

The Task Force does not consider that a non-consultant 'career grade' post should form the basis for, or even a significant element of, medical staffing in a reorganised hospital system. Firstly, the Task Force has concerns about ensuring quality and safety of service for patients and about the work and educational opportunities for doctors in this position. In the UK various expert reports[14] have expressed concerns about a grade of this kind. They point to poor career advice before entry; variable work content, sometimes at an inappropriately high or low level; variable supervision; poor educational opportunities; no external checks on competence; and limited or non-existent career progression.

Secondly, the Task Force believes that such a grade is an inappropriate step between the positions of doctor in training and consultant. Thirdly, both the *Tierney* and *Forum* reports rejected the concept. Finally, those who advocated it in discussions with the Task Force tended to confine it to a limited number of specialties, mainly emergency medicine and paediatrics, and then only as part of a wider solution to the challenges facing the hospital system overall.

Option 4: Develop a consultant-provided service

Consideration of the implications of a consultant-provided service was a key term of reference for the Task Force[15]. **The Task Force has concluded that a team-based consultant-provided service is the only way to ensure high quality safe patient care and achieve compliance with the EWTD.** This entails a significant increase in the number of consultants, working in teams and with revised working arrangements, and a substantial decrease in the number of NCHDs.

A consultant-provided service is also the central means of addressing the consistent criticisms of *Tierney*, the *Forum* and *Hanly*: that service provision in the Irish hospital

[14] Royal College of Physicians (1996 and 2001) and the Standing Committee on Postgraduate Medical and Dental Education (1994).

[15] Steering Group terms of reference, **Appendix 1**. See also Health Strategy (2001) which indicated that the Task Force would be asked to quantify the resource implications and costs that would arise if a consultant-provided service were put in place (Action 101, page 117).

system is overly dependent on doctors in training and that patients currently have limited access to appropriate levels of senior clinical decision making, with serious implications for both treatment and diagnosis.

In its extensive deliberations, the Task Force identified no realistic alternative which safeguards patient care and addresses the many difficulties identified with the present acute hospital system. It is vital that the patient is diagnosed by a doctor who has the skills, training and experience to diagnose, treat and plan the overall and ongoing management of the patient, either personally or by delegation to a colleague, as appropriate. *The Task Force considers that only a consultant-provided service can meet these requirements. The proposals below on the role and work practices of consultants are presented on this basis.*

3.3.3 Consultants: a new approach

The Task Force has defined a consultant-provided service as:

> *a service delivered by teams of consultants, where the consultants have a substantial and direct involvement in the diagnosis, delivery of care and overall management of patients.*

Under this approach the following key elements would apply:

- consultants act as an integral part of a multi-disciplinary team, sharing responsibility for patients with consultant colleagues and working alongside other health professionals including NCHDs, nurses and health and social care professionals. A critical concern in teamworking is that a consultant would take important decisions regarding patient care, including treatment and discharge, during the absence of a consultant colleague. Further details of how consultant teamworking would operate in practice have been dealt with in previous reports[16];
- consultants are appointed to work in a network of hospitals based in a region, as discussed in **section 3.5**, with defined and agreed commitments to emergency, elective and OPD/day work;
- in line with the *Forum's* previous recommendations, consultants would participate in rostered work, night work and extended cover as required. In some instances, where clinical needs and caseload require it, this may involve an on-site consultant presence on a 24-hour basis. This would be tested in the pilot regions;
- consultant staffing would be organised by reference to the requirements of each specialty. As proposed in **section 4.1**, this involves providing hospital care in line with three levels of staffing need, depending on the volume and nature of caseload. These comprise 24-hour on-site availability, frequent on-call and infrequent on-call;

[16] See the *Forum* report; the RCSI's document *Consultant Surgeons: Team Working in Surgical Practice*; and in the RCPCH's document *The Next 10 Years, Educating Paediatricians for New Roles in the 21st Century*.

- the working patterns and roles of individual consultants could be structured to take account of seniority and clinical experience. It might be expected, for example, that consultants would have fewer night time duties (work or on-call) as they become more senior, and that they could focus increasingly on such areas as management, training, continuing medical education and continuing professional development; and
- as described below, there would be appropriate provision for specific aspects of consultants' work including safeguarded training time, continuing professional development and management responsibilities.

Taking account of these key elements, the Task Force believes that it is important to define the future role of consultants in a manner which:

- is based on the concept of consultants working in teams;
- emphasises the need for consultants to have a substantial and direct involvement in all aspects of patient care;
- outlines the proportion of a consultant's time that would be spent delivering a clinical commitment, which can include in-patient workload, out-patient workload and inter-specialty consultations;
- offers scope for more flexible work practices, including rostering and cover arrangements;
- ensures participation in processes such as competence assurance, audit and revalidation;
- promotes an increasing level of clinical involvement in management programmes;
- provides safeguarded time for education and training of other staff, both medical and non-medical;
- provides for participation in continuing medical education and research;
- further develops and clarifies the accountability and responsibility of consultants for the different facets of their work to patients, their peers and management; and
- ensures that consultants are properly supported in their work with sufficient facilities (e.g. secretarial support and office space) and time for each aspect of their agreed workload.

The Task Force recognises that these recommendations will have implications for role and work practices of consultants which will have to be the subject of negotiation. Any implications that may arise for such areas as clinical autonomy in the context of teamworking will also require careful examination. Some consultants already work in teams and the practice is already well established in other areas of medicine including general practice.

*As described in detail in **section 4.1**, this approach will involve a substantial increase in the number of consultants and a significant reduction in the number of NCHDs, all in the changed working environment outlined above.*

3.3.4 Other issues

A number of other issues relating to the provision of consultant services were considered by the Task Force, and are discussed in this section.

A. Hospitalists and generalists

During its consultation process, the Task Force was presented with a number of arguments in favour of *hospitalists* and *generalists* who could provide a considerable level of frontline clinical service in hospitals before referring patients to the appropriate specialist. It was argued that these doctors would lead to a more efficient use of resources since they could deal immediately with a high proportion of cases not requiring specialist treatment. This would reduce pressure on consultants in other specialties.

Hospitalists can be described as physicians whose primary professional focus is on the general medical care of hospitalised patients. This specialty has evolved primarily in the USA. Hospitalists differ from similarly qualified doctors in the Irish, UK, Canadian, Australian and other hospital systems in that they do not see outpatients. Their activities include patient care, teaching, research and leadership related to hospital care, but primarily the management of patients presenting acutely.

The Task Force received comprehensive documentation in favour of the widespread use of hospitalists. Some argued to the Task Force that hospitalists bring efficiencies to hospitals, deliver a good service to patients and reduce pressure on other medical specialists.

The Task Force also received substantial documentation and heard arguments in favour of large increases in the number of generalists or consultants in general internal medicine. These consultants would concentrate on dealing with the acute general medical take and have a limited sub-specialty commitment interest of perhaps two or three periods of work per week. Generalists would be qualified in the specialty of general internal medicine and would be competent to deal with the majority of patients who present with a range of medical problems which required further diagnosis and investigation. Following such interventions, patients could then be referred to the relevant specialist as appropriate.

There were mixed views about the desirability of utilising hospitalists or generalists extensively in the Irish hospital system. Some argued that the advantages of efficiency and reduction in the workload of specialists made them prime candidates for use in Ireland. Others argued, however, that:

- it would be difficult to recruit doctors as generalists or hospitalists because of the breadth of caseload;
- it would take many years to train consultants in general internal medicine, or as hospitalists and make them available in the Irish system; and

- specialists could become deskilled if all the 'general' work was delivered by a limited number of consultants to the exclusion of sub-specialty participation in acute general take or on-call duties.

The Federation of Royal Colleges in the UK has argued that it is imperative to train a considerable body of physicians in both a specialty and general internal medicine so as to protect the quality of acute medicine. The Federation warns that:

> 'the appointment of physicians solely to provide acute care without links to a specialty or adequate infrastructure should be actively discouraged ... There should be recognition of the possible negative effect such appointments could have on the overall provision of medical care as a result of the deskilling of other physicians and the lack of appropriate career pathways for such individuals. Colleges should not normally recognise training programmes which are constructed without dual certification.'
>
> — *Acute Medicine, The Physician's Role, June 2000.*

The Task Force has concluded that it would not be desirable to develop the *hospitalist* or *generalist* role extensively in Ireland. It shares the concerns expressed by the Federation of Royal Colleges in the UK and by a number of those who discussed the matter during the consultation process.

However, **the Task Force believes that it would be valuable to have a number of consultants concentrating mainly on general internal medicine but with an interest in another medical specialty. Such consultants would have an 80/20 or 70/30 commitment to general internal medicine and a subspecialty and share on-call rotas with consultants in the sub-specialties of general internal medicine.** This approach would combine some of the efficiencies offered by a generalist model with the important benefits of sufficient links with specialist work.

B. Part-time consultant appointments

The Task Force notes that both the *Forum* and Comhairle na nOspidéal have expressed support for part-time consultant posts. These posts still constitute less than 2 per cent of the consultant establishment. While increased numbers of part-time posts will not of themselves resolve staffing difficulties, they would facilitate greater flexibility in service provision and may broaden the field of candidates for new posts. The introduction of consultant rosters should facilitate an increase in the number of part-time posts. An increased use of part-time consultant posts could usefully be tested in the pilot regions to help identify and resolve any challenges arising.

C. Non consultant 'career grade' doctors

The Task Force has recommended against the introduction of a 'career grade' or 'long standing non permanent grade' doctor in the Irish health service. It is conscious, however, that a number of these posts are, in effect if not in name, already in existence in Ireland. This is not satisfactory. Steps must be taken to regularise the current situation.

As a first step, the position of doctors currently in long-term registrar or other long term posts within the hospital system should be reviewed regarding current contractual status,

permanency, qualifications and training, and extent of participation in CME/CPD. This issue is of relevance to the discussion of facilitated entry schemes in **section 3.4.2** below.

D. Skill mix

The number and configuration of consultants and NCHDs is influenced by a range of developments in the skill mix of other staff. This includes the appropriate functions to be carried out by various health professionals and the scope for introducing new grades or further enhancing the role grades of staff. These issues are addressed in **section 4.2**.

3.4 Ensuring high standards in medical education and training

3.4.1 Introduction

In February 2002, a Medical Education and Training (MET) Project Group of the Task Force was established to deal with the implications for medical education and training arising from the requirements of the EWTD and the proposal for a consultant-provided service. The overall remit of the MET Group is to prepare an implementation plan arising from the medical education and training recommendations in the *Forum* and *Hanly* reports.

As an initial step the Group prepared an Interim Report *Postgraduate Training for Non Consultant Hospital Doctors* (August 2002) for the Task Force Steering Group. Following agreement by the Steering Group it was submitted to the Minister for Health and Children. It was then circulated as a consultation document to the Medical Council, the training bodies, the Postgraduate Medical and Dental Board, Comhairle na nOspidéal and the Deans of the five undergraduate medical schools. In addition a survey of training bodies was undertaken which has been very useful in the Group's deliberations.

The work of the MET Project Group is taking place in the context of the following goal:

> *The vision is that the postgraduate education and training environment will be attractive to all medical graduates, and deliver high quality schemes that will result in a sufficient number of fully trained, competent doctors to deliver a patient-centred health service in this country.*

This section summarises progress to date by the MET Project Group of the Task Force. It comprises the recommendations agreed to date, as set out originally in the Interim Report, the critical outstanding issues which will be addressed in the final report of the MET Group later in the year, and a description of a model to align the numbers of doctors in training to the Task Force's projected consultant requirements.

3.4.2 Existing recommendations on medical education and training

Through the MET Group's Interim Report, the Task Force adopted a series of proposals on a range of issues. These are set out, and in a number of cases further developed, below.

A. Central training authority

The proposed new model of hospital service delivery will require major changes in postgraduate education and training. While acknowledging the positive developments that have already taken place in recent years, the Task Force believes that there are deficits in the present system of postgraduate medical training:

- the distribution across many different agencies of various and overlapping functions and responsibilities in relation to the organisation of postgraduate medical training. **Figure 3.1** below highlights the complexity in the present postgraduate medical education and training system and the number of different bodies involved, with various and overlapping functions and responsibilities, reflecting the piecemeal development of the system over the last 50 years or so;
- the lack of regulation of the numbers of training posts in the senior house officer (SHO) and registrar grades and the accompanying rapid and uncontrolled expansion of NCHD numbers (**Figure 3.2**) below;
- the lack of alignment of the numbers in training to future vacancies and the estimated staffing needs of the health service;
- the predominance of service requirements over training needs;
- the lack of a single authoritative advocate for postgraduate training;
- the lack of co-ordination of data collection in relation to medical education and training; and
- the absence of any formal involvement of medical schools in the delivery of postgraduate medical education in Ireland.

A more streamlined system will facilitate better value for money and efficiency. Strong strategic management will be required to drive the change implementation process throughout the postgraduate medical education and training system.

Figure 3.1
Map of current postgraduate medical education and training framework

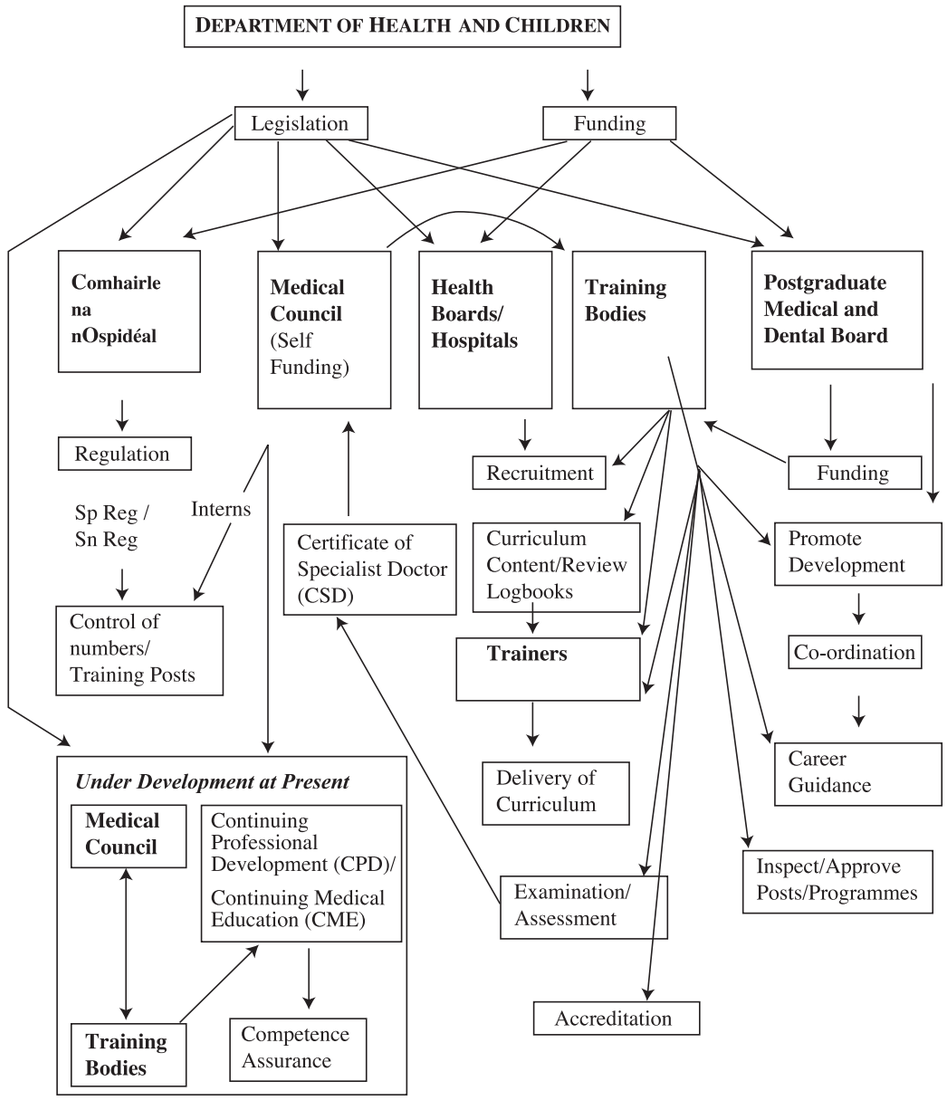
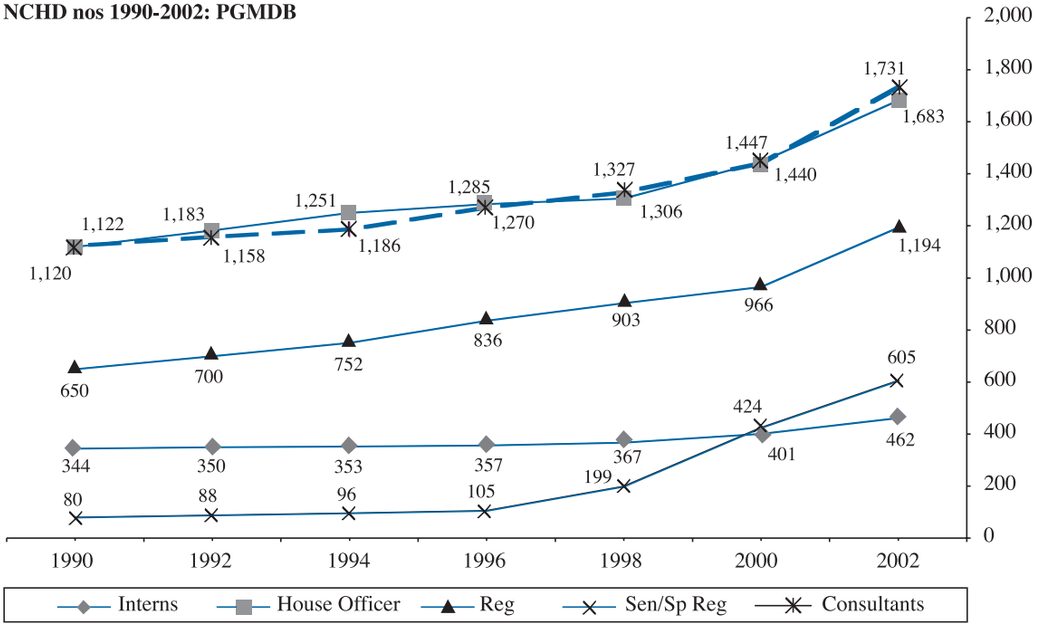


Figure 3.2

NCHD & consultant numbers 1990 - 2002

Sources:
Consultant nos: Comhairle na nOspidéal
NCHD nos 1990-2002: PGMDB



The Task Force recommends that the current fragmentation in the coordination, management, regulation, inspection, control and funding of postgraduate medical training should be addressed by vesting in a central, independent, statutory postgraduate training authority a wide range of specified executive powers which would include:

- a role in controlling all NCHD posts[17] through a requirement for explicit approval by the training authority, based on training criteria, to be provided for a specified time, e.g. 3 or 5 years, as a condition for the creation or replacement of those posts and for the release of funding to the employing authorities for those posts;
- aligning the number of medical training programmes and the number of trainees to, at a minimum, meet estimated specialist[18] staffing needs of the health service on an on-going basis;
- co-ordinating, in collaboration with the postgraduate training bodies and the Medical Council, the provision and accreditation of specialty training programmes and training posts;
- collaborating with the postgraduate training bodies and other MET agencies, to achieve agreed efficiencies and value for money improvements through greater standardisation and co-ordination in areas such as recruitment processes, hospital

[17] Reference to NCHD posts in this section is in the context that all NCHD posts will be training posts.
[18] The term specialists which is used in this section includes hospital consultants, general practitioners, and the specialties of public health medicine and occupational medicine.

inspections, processes of assessment, shared information systems, data collection and publications (e.g. common procedures, entry requirements and guidelines);

- responsibility and accountability for strategic development of medical education in Ireland, including the flexible training strategy discussed in this report;
- independent evaluation and supervision of all aspects of medical education and training, including undertaking or commissioning appropriate studies;
- ensuring that there is a systematic mentoring system for all doctors in training at every level of training;
- ensuring and commissioning, if necessary, a continuing programme of research and development of the educational methods employed;
- ensuring that all doctors in training are exposed to research principles and methodologies;
- ensuring that opportunities exist for those undertaking approved academic research to compete for appropriately funded and supported educational contracts/agreements, which should continue to include proper provision for insurance liability;
- in consultation with the Medical Council and training bodies, to facilitate the policy and strategy in relation to Continuing Professional Development (CPD), including Continuing Medical Education (CME) and Competence Assurance (CA);
- ensuring that non-statutory funding, from whatever source, complies with the highest ethical and quality standards in postgraduate medical education and training; and
- setting minimum entry criteria for training posts on the advice of the training bodies.

The Task Force further recommends that:

- the authority should have its own budget and be sufficiently staffed and resourced for the development and implementation of medical education and training;
- the authority should be the recognised funding agency for medical education and training;
- the authority should be representative of the public interest and the key stakeholders involved in medical education and training;
- the authority should not be involved in the day-to-day delivery of medical education and training; and
- further consideration should be given to the authority in the context of the independent review of the structures and functions of health agencies.

B. Career guidance/mentoring

Significant obstacles to advancement for some NCHDs include poor career planning and poor awareness of key selection criteria for training posts.

The Task Force recommends that graduate retention and the career advancement of all doctors should be improved through systematic provision of ongoing counselling/

mentoring at each stage of training, on a formal basis, to assist doctors in training to choose and progress within a suitable career path.

C. Safeguarded training time

As was recognised in the *Forum* and *Hanly* reports, it is essential to safeguard training time for trainers and doctors in training in order to ensure that doctors receive top-quality training and that consultant trainers have adequate time to provide that training. This will be of particular importance in the context of a 48-hour week and should be factored into the new rostering arrangements to be put in place in the pilot regions for consultants and NCHDs: it will be essential to monitor and evaluate these provisions as part of the pilot studies. Each trainee should have a designated trainer but not all consultants on a team need be trainers.

D. Training to accommodate changing role of specialist doctors

The implementation of key changes already in train (e.g. clinicians in management initiative, multi-disciplinary team work) and those recommended in the *Forum* and *Hanly* reports (e.g. shift to consultant-provided service based on consultants working in teams) will depend to a large extent on the training/education response.

The Task Force recommends that all programmes from undergraduate level onwards should include modules on key skills complementary to clinical practice. These include clinical governance, management, multi-disciplinary skills, team-working, communication skills and information technology. Programmes should be seamless i.e. embracing undergraduate, postgraduate and continuing medical education. In addition, existing specialists should be given opportunities to upskill.

E. North/South and EU cooperation

Recommendation 36 of the report on *Obstacles to Mobility* published in November 2001 by the North/South Ministerial Council deals with the recognition of qualifications in the medical profession. The Council recommended that the North/South training rotations such as those developed in neurosurgery and paediatric surgery should be fostered and developed by the relevant training and other bodies and that the barriers to mutual recognition of qualifications be removed[19].

The Task Force recommends that the relevant authorities, North and South, should discuss the further development of training programmes which would accommodate rotation between the two jurisdictions. The Task Force also considers that similar initiatives could be undertaken in other EU member states and recommends that the scope for doing this should be pursued further.

F. Initial specialist training

The Task Force recommends that all NCHD posts be training posts. In the meantime, the Task Force has discussed the widespread perception that there is frequently a lack of transparency as to which posts are 'genuine' training posts and which are not. It is essential

[19] Some difficulties persist. See Postgraduate Medical and Dental Board Fourth Report, page 108, for a more detailed discussion.

that doctors in training be made aware of the training status of each post prior to being assigned.

The Task Force recommends that, in the transition period, all advertisements for posts placed by employing authorities/colleges should clearly state whether or not the post is approved for training. This should be a formal requirement. All posts should carry a training number.

G. Flexible training strategy

Given the increasing emphasis on work-life balance and the rising trend in female medical graduates, it is essential that policies and plans are in place in order to retain medical graduates in the system and optimise their career potential. While acknowledging that full-time training/work will remain the choice of the majority of doctors, some will want or need to train and work in a more flexible environment. Prior to the introduction of the Postgraduate Medical and Dental Board (PgMDB) Flexible Training Scheme, the options for flexible training in Ireland were practically non-existent, except in Public Health medicine. **The Task Force endorses the PgMDB's approach in having identical entry criteria for full-time and flexible training programmes.**

A strategy for developing further a more flexible training and working environment has been produced by the MET Group, a summary of which is included in **Appendix 6**. The objective of the strategy is to make part-time, flexible training, job-sharing and other family friendly practices a legitimate and accessible option for all doctors. It identifies the key issues which need to be addressed by the stakeholders and highlights the major cultural shift required to implement the strategy.

The Task Force recommends that the Flexible Training Strategy be adopted and adequately resourced, and be implemented by all stakeholders. An adequate number of flexible training/work posts should be developed to facilitate doctors in training who have a requirement for part-time training/work, taking account of service needs. The Task Force also recommends that a retraining/re-entry system be developed. The Flexible Training Strategy should be phased in and, together with the implications for services and the introduction of a 48-hour week, should be closely monitored.

H. Concerns of Non-EU doctors

The Task Force acknowledges that non-EU doctors make a significant and continuing contribution to Ireland's health services. However, there are some perceived barriers in relation to their access to the training schemes and subsequently to consultant posts.

The Task Force is satisfied that the *Medical Practitioners (Amendment) Act, 2002* addresses the requirements for permanent registration satisfactorily. However, the regulations to give these effect are awaited. The Task Force, subject to seeing details of the regulations, has provisionally agreed this point. In addition the fast track work visa system recently introduced is effective in regard to the residency issue.

The Task Force recommends that:

- **There should be systematic career counselling/mentoring for all doctors at all stages of their career.**
- **There should not be different training schemes for EU and non-EU doctors[20]. Any scheme based on nationality criteria should be discontinued.**
- **Innovative schemes to assess training should be considered to facilitate entry to the specialist register for doctors in long-term registrar, locum consultant or private consultant posts. These schemes should be available for a specified time period only.**
- **Certification after completion of training should be the same for all trainees. Doctors should know at the start of the training programme the type of training they will receive, the duration of the training and the qualification that they will have at the end of the programme. Training bodies should be asked to publish a criterion that states explicitly the requirements and outcome of the programmes.**

3.4.3 Issues for further examination

In its interim report *Postgraduate Training for NCHDs,* the MET Group identified a number of critical outstanding issues. Considerable progress has been made on these, and the MET Group's final report will include detailed proposals under the following headings:

A. Implications of the proposed reduction in NCHD hours for training programmes
The phased reduction in the average weekly working hours of doctors in training to 48 hours will have a significant impact on the organisation and delivery of postgraduate medical education and training and will need to be monitored. The MET group is in the process of consulting with the training bodies on this issue and will examine how medical education and training can be enhanced in the new model of health service delivery.

B. Training posts for all NCHDs
The Task Force recommends that all NCHDs should be in structured training posts and designated as 'doctors in training'. It acknowledges that training cannot be separated from patient care; the process of apprenticeship learning will continue to depend on immersion in practice and requires effective management of training and service so as to meet both objectives. Measures may be required to facilitate a number of doctors in addressing skills deficits which at present inhibit their ability to get onto the Specialist Register.

C. Safeguarding service delivery and training during transition to the new model
The transition to a consultant-provided service will need to be closely monitored, especially in view of the present reliance on NCHDs for a significant proportion of hospital service delivery. During the transition, when NCHD numbers and working hours will fall in tandem with rising consultant numbers, careful planning will be required to avoid service or training deficits.

[20] In the past some training bodies operated separate postgraduate training schemes, one leading to certification of specialist training, the other to a different qualification.

D. Specialist training

Postgraduate training should be a continuum from initial specialist training through to specialist registration with clearly defined start and end points. Competence benchmarks and/or expected duration of training should be clearly defined. Information systems required to maintain data should be put in place.

E. Intern year

The Task Force has consulted the deans of the undergraduate medical schools and the Medical Council on whether internship should be addressed within postgraduate rather than undergraduate medical education structures. The deans have submitted their views which will be considered further by the MET Group.

F. Role of medical schools in postgraduate training

The Task Force considers that the medical schools have a potentially important role in research and in the development of education programmes for all doctors in training in key non-clinical skills areas. A consultation process on this issue is underway with the deans of the medical schools.

G. Relevant undergraduate education issues

The undergraduate issues to be addressed in the next phase of work by the MET Project Group include:

- the impact on the work of the Task Force arising from the recent Medical Council *Review of Medical Schools in Ireland 2002*;
- whether there is a need to review the undergraduate quotas for medical school places;
- the numbers and resource implications for undergraduate education of the expected changes to the numbers of postgraduate training places; and
- the wider implications for undergraduate education of the envisaged changes arising from the *Forum* and *Hanly* reports.

H. Academic research environment

Recent reports[21] have addressed the need to improve our academic health research environment, including consideration of the appointment of more consultant/educators and consultant/academic scientists to our medical schools and their affiliated university teaching hospitals.

Research should be an integral aspect of medical education and training, and obstacles to the conduct of research by doctors in training should be addressed, in consultation with the Medical Council, the Health Research Board, the training bodies and the deans of medical schools.

[21] These include Making Knowledge Work for Health: A Strategy for Health Research (2001); Health Strategy: Quality and Fairness: A Health System for you (2001) and Comhairle na nOspidéal's Report on the Academic/Clinical Research Consultant (2002).

I. Relevant aspects of the revision of the Medical Practitioners Act
This Act is currently under review. The Task Force is satisfied that from the legislative perspective the issues relating to temporary registration identified in the *Forum* and *Hanly* reports are satisfactorily dealt with through the *Medical Practitioners (Amendment) Act, 2002*. The Task Force will shortly be submitting its views to the Department of Health and Children on the changes required in the Medical Practitioners Bill relevant to education and training.

J. Implications of increasing international mobility
The implications for medical education and training of changes in relevant EU Directives, including draft Directive (COM 119 final (2002)), and of EU enlargement need to be identified and considered.

K. General Practice training and Primary Care Task Force
The National Task Force on Medical Staffing should maintain links with the Primary Care Task Force in order to ensure that the educational and training needs of General Practice are taken into account. Progress in this area is contingent on parallel progress by the Primary Care Task Force.

L. Graduate retention measures
A number of issues will need further consideration, including the lack of suitable training opportunities in Ireland, the potential for active marketing of Irish medical education and training and internships for all graduates of Irish medical schools. The Task Force is also undertaking a tracking study, involving two cohorts of graduates: 1990 and 1997, with the aim of establishing a clear understanding of the issues surrounding career choice, perceived barriers, attrition factors and medical training and current workforce flexibility from the doctors perspective.

M. Learning contracts
All doctors in training should have a contract and a precise learning description in which there is a clear statement of education and training obligations of both employer and employee. This should be part of the standard contract for all doctors in training.

N. International training opportunities
SpRs could be interviewed from their second or third last year for consultant positions and seconded to another country, e.g. USA, Canada or Australia for sub-specialty training. The doctor in training and the Irish system would benefit from this training.

3.4.4 Projection of training numbers

This section makes projections of the number of doctors that should be trained in the coming years, taking account of the Task Force's recommendations for increased numbers of consultants. **Section 4.1** below sets out the Task Force's specific recommendations on future consultant staffing requirements.

A. Training numbers
International experience suggests that medical manpower planning is by its nature imprecise due to the many unpredictable variables and the need to make assumptions

based more on best estimates than on empirical data. Nevertheless, it is essential that every effort is made to align medical training numbers with future staffing requirements.

B. Limitations of projection model

The successful application of the model outlined below will rely on the delivery of high quality training schemes and availability of specialist posts that are attractive to graduates. It will need to be reviewed annually and updated in light of experience, technological developments, changing health needs, changing gender profile and emerging clarity in assumptions and international trends.

While significant work has been undertaken to develop a training numbers projection model based on the estimated consultant requirements, some caveats must be noted:

- The model applies to a new and as yet unfamiliar hospital staffing model. Therefore, variables including future attrition rates, expected uptake of flexible working/training and 'gap years' in the new system can only be, at best, reasonable estimates. These estimates are likely to change in light of experience gained during the rollout of the new model to the pilot sites and nationally.
- *The projections set out below, therefore, are indicative figures only.*
- The model describes a 'steady state' system, based on average consultant vacancies at the end of the rollout of the new staffing system, rather than data for specific years.
- While flexible working and training estimates have been factored in, these may need to be reviewed in light of actual trends in relation to factors such as family-friendly working patterns and gender balance.
- Changes may be made by training bodies in relation to the duration of training. Any such changes could have a significant effect on required training numbers. However, the model does take account of certain known expected changes. These include the anticipated restructuring of the intern year as a 2-year cycle incorporating year 1 of initial specialist training, the envisaged move to a 5-year undergraduate degree, and the expected restructuring of general practice specialist training within a 5-year cycle (2-year hospital plus 3-year in a general practice environment).
- It is not possible to make firm predictions on immigration/emigration patterns as they will apply to the new model of medical staffing. While the model is 'nationality-neutral', it is based on an underlying principle of aiming, at a minimum, for self-sufficiency by aligning the numbers of doctors in training to future specialist requirements in Ireland. As data become available, the actual proportions of Irish trainees to those from other countries, at every level, will be very important factors in reviewing the model.

Issues which will also need further consideration include the capacity of the training programmes to train additional numbers, the 'lead-in time' between the commencement of the programme and accreditation, the impact of the changing age profile of the workforce and the need to avoid service deficits during the transition from the present system to the new model.

In the course of developing the model, the Task Force consulted a number of training bodies, whose input was very helpful. As the model is further developed and regularly

reviewed, there will be further consultation with the training bodies. It is intended that external expertise will be sought to validate the approach adopted.

C. Methodology for projecting training numbers

A detailed description of the methodology used in this model is set out in **Appendix 5**. The national consultant targets used in the medical training numbers projection model are those outlined in **section 4.1**. These targets will be revisited as the pilot projects are evaluated and as more detailed analyses are carried out in the other health board areas.

The methodology is based on projecting from consultant targets to higher specialist training (HST) numbers; from higher specialist training targets to initial/basic specialist training (IST) numbers; from total medical practitioner targets[22] to intern numbers; and from intern targets to undergraduate numbers, as follows:

1. **Calculate *minimum* replacement numbers** required to fill average annual projected vacancies for a given target at any stage of training
   i.e. target number for stage of training
   multiplied by
   number of training years prior to that stage ***divided by*** number of expected years in the target stage.

2. **Multiply** this figure **to allow for two 'inflation' factors**: attrition, flexible working/training.

Assumptions made in drawing up this model include the following:

- the appropriate approach is based on the following principles:
  - aim, at a minimum, for self-sufficiency — enough doctors in training in Ireland to meet the future needs of the Irish health service
  - avoid undersupply, i.e. err on the side of slight oversupply.
- projections in relation to appropriate attrition and flexible working/training rates can at best be reasonable estimates;
- all NCHD posts will, eventually, be training posts;
- trainee projections are numbers/bodies required (i.e. the flexible working/training factor adds part-WTEs to whole WTEs);
- there should be competition for consultant posts and specialist training posts. This is allowed for in the context of the attrition rates used;
- allowance has been made for significant expansion of GP numbers, in light of suggestions that GP numbers in Ireland are likely to increase substantially. Pending recommendations from the Primary Care Task Force, however, a 'dummy' figure of an additional 50% of GPs has been included *purely for estimating purposes to avoid significant undersupply* in the present exercise. From the perspective of hospital staffing, an expansion in the overall number of GPs,

[22] While the basic methodology outlined above applies in principle to calculating intern numbers, internship is general rather than specialist in nature. Therefore the intake at internship level is generated from the entire corpus of projected specialist medical practitioner numbers, rather than from public hospital Initial Specialist Training targets.

together with the envisaged restructuring of GP specialist training to incorporate two hospital-based IST years and three general practice-based HST years, would require an increase in intern and IST numbers;

- other than for GP numbers, no further allowance has been made for expansion of services other than those proposed by the Task Force; and
- competition for posts means that there will be some gaps in time between completing stages of training and achieving 'promotion' to the next stage or to a consultant appointment.

Detailed output from the projection model is set out at **Appendix 5**. The summary table below outlines current and projected consultant and NCHD numbers. **The projections suggest a requirement for a complement of some 2,200 doctors in training in public hospitals in a future public hospital consultant establishment of about 3,600 public hospital consultants, as recommended in section 4.1.** This represents a reduction of around 1,700 NCHDs from the 2003 figure. It would bring a dramatic change in the consultant: NCHD ratios, from 2.3 NCHDs per consultant at present to approximately 1.6 consultants per NCHD in the new model.

Table 3.7: Summary:
Aligning numbers of doctors in training to consultant numbers

	Current	Projections *(see Appendix 5)*	Increase/Decrease (%)
Consultants	1,731	3,600	*+108%*
NCHDs	3,944	2,200	*–44%*
TOTAL	**5,675**	**5,800**	***+2%***
RATIOS: *Consultants per NCHD*	*0.44*	*1.64*	
NCHDs per consultant	*2.28*	*0.61*	

Finally, the numbers summary table in **Appendix 5** projects, for each major specialty, the required numbers of higher specialist trainees (HSTs), initial specialist trainees (ISTs), interns and undergraduates based on the methodology summarised above.

3.5 Reforming the organisation of hospital services

3.5.1 Introduction

To date, this report has dealt with three major requirements:

- the need to reduce the *average working hours of NCHDs* in line with the EWTD;
- the case for *a consultant-provided service* as the only viable way to provide a safe, quality service to patients; and

- the need to provide high quality *medical education and training* in line with the changes in service delivery.

The Task Force believes that these three requirements have significant consequences for acute hospitals. Furthermore, in order to make recommendations on the appropriate number and type of medical staffing needed in a new environment, it is necessary to examine the configuration of hospital services.

In this report, the Task Force makes specific recommendations regarding the organisation of hospital services in the two pilot regions which it studied. The Task Force considers that a radical reorganisation of acute hospital services will also be required in the rest of the country. It proposes that in phase two, a second report on the organisation of hospital services outside the pilot regions should be prepared. This will result in a national plan for the delivery of hospital services. The principles in this first report should help inform the detailed recommendations to be made in respect of the rest of the country.

3.5.2 Context

Acute hospitals in Ireland have evolved without a national plan. Often, they were developed in response to local needs, or owe their origins to history, rather than to clear national or regional priorities. This has resulted in inefficiencies, duplication and a system that is often designed around institutional, political and administrative concerns rather than those of patients.

In some health boards, specialties appropriate for regional provision such as neurology, plastic surgery and rheumatology are available only by referral to consultants who are primarily employed in other health boards.

However, there has been some reorganisation of hospital services in Dublin, where several small hospitals clustered close to each other have been amalgamated to form a single institution. Hospital groups and joint departments have been created in other parts of the country. Other improvements are being made: there have been valuable developments in areas such as clinical directorates, clinical pathways, evidence-based medicine, benchmarking and quality improvement.

3.5.3 Messages from the consultation process

The Task Force consulted extensively within the two selected pilot regions and also met a number of health professionals with a national remit. Many of the messages mirror those from the consultation process undertaken during preparation of the Health Strategy. In particular, the Task Force's consultations highlighted problems of inadequate bed capacity, poor integration of services, barriers to efficient patient management, lengthy waiting times and frequent cancellation of non-emergency treatment. Common themes included:

- problems with equity of access to public hospital care for public patients, with poor linkages between hospitals, general practitioners and community health services;

- inadequate data and information systems;
- intra-professional obstacles and a lack of multi-disciplinary team-working;
- claims that some specialties are not adequately equipped to provide the full range of tests and support they need;
- while staff working in some settings encounter a wide variety of illness, a low volume of patients in some of these areas makes it difficult for them to keep the required range of skills up to date;
- problems in the choice of location for delivery of care to trauma and emergency patients;
- significant inappropriate or avoidable use of acute hospital beds;
- shortages of service alternatives to acute hospital care;
- lack of integration in the management of hospitals within a region and, in some instances, problems with the capacity of management to plan effectively and deal with current service issues; and
- consistent criticism of local pressure which is focused on 'safeguarding' local facilities without regard to the best way for providing safe and effective care. A failure to deal with difficult decisions affecting the location of services was also cited.

These problems can and must be addressed. Implementation of the EWTD and the introduction of a consultant-provided service is, effectively, a driver for a significant change in the hospital system.

3.5.4 Learning from previous reviews

The Task Force had regard to the substantial analysis carried out over many years on the provision and organisation of acute hospital services in Ireland. Most recently, the *Value for Money Audit of the Irish Health System* (VFM) (Deloitte and Touche, 2001) and the Health Strategy *Quality and Fairness: A Health System for You* (2001) set out the context for re-organisation of acute hospital services. Following the Bed Capacity Review (2002) the Health Strategy announced the provision of an additional 3,000 beds by 2011 and the VFM audit argued for hospital networks, noting that current lack of integration poses difficulties for the provision of an effective service.

A consistent message from previous analyses has been the need for clarity of hospital roles, genuine integration of services and the provision of high quality care. The record in implementing a number of previous reports has been disappointing, but this should not take from their central messages, many of which are strongly reflected in the Task Force's recommendations.

3.5.5 Better outcomes for patients

One of the key aims of the Task Force is to put in place high quality services which are responsive to patients' needs and wishes. The Task Force has already recommended that a consultant-provided service is the only realistic means of achieving such high quality services, as well as meeting the EWTD requirements regarding working hours. The report

now considers the implications of a consultant-provided service and the need for high quality care for patients for the organisation of hospital care, with particular reference in **sections 3.6 – 3.8** below to the pilot regions.

Specialisation is a vital element in providing the best possible outcomes for patients. No one individual practitioner has the specialist knowledge and experience of all aspects of medicine to enable them to provide this level of care for every patient. Medical staff therefore train to become specialists in a specific clinical specialty in order to provide patients with the best and most appropriate professional care and treatment.

There is convincing evidence that the best results in treatment are achieved when patients are treated by staff working as part of a multi-disciplinary specialist team and that better clinical outcomes are achieved in units with appropriate numbers of specialist staff with relevant skills and experience, high volumes of activity and access to appropriate diagnostic and treatment facilities.

The evidence is set out in a large body of literature[23]. Much of the research highlights a relationship between the volume of procedures performed by individual hospitals or specialists and the outcome of that treatment for the patient. For example, studies in the United States have shown a statistically significant association between 'high volume' surgeons in 'high volume' hospitals and lower death rates in hospital, and vice versa.

Those hospitals or specialists without a sufficient level of activity will find it difficult to provide safe, high quality care. In fact, without sufficient numbers of patients and volume of procedures, specialist staff may miss accreditation, audit or competence assurance targets and risk becoming de-skilled.

The volume of patients or procedures required to maintain skill and safe consultant practice are set out in guidelines from the Royal Colleges, training bodies, expert groups and in national and international literature. These figures have significant implications for the organisation and staffing of acute hospitals, as discussed below.

3.5.6 Hospital medical staffing requirements

Compliance with the EWTD means that *it will be increasingly difficult to maintain the current configuration of services as the limits of 58, 56 and 48 hours working hours per week take effect, since NCHDs will no longer be able to provide medical cover for long periods of time.*

By August 2009, a maximum 48 hour working week (including a maximum 13 hour day on-site), annual leave and other EWTD requirements mean that at least five doctors must be employed to allow one to be present on the hospital site, 24 hours a day, 7 days a week in the specialties where this cover is required. This, however, represents the lowest possible level of emergency cover; doctors must also provide cover for routine, elective

[23] Key examples include Batista et al. (2002), Chassin et al. (2000) and Nuffield Institute for Health (1996). A more extensive list is contained in the bibliography.

and outpatient services and for training. In order to do this and provide emergency cover, a minimum of seven doctors will be required in the relevant specialties.

All hospitals providing emergency care must have acute medicine, surgery and anaesthesia on-site. *This means that an irreducible minimum of 21 doctors — 7 doctors in each of medicine, surgery and anaesthesia — will be needed to provide basic on-site medical cover within a 48-hour working week.* This is an absolute minimum for modelling purposes. In practice, many more specialties would be needed to provide comprehensive acute care.

3.5.7 The safe provision of acute hospital services

Hospitals without sufficient volumes of patients and activity cannot sustain large numbers of consultants. Without sufficient consultants, hospitals will not be able to provide quality care, nor will they be able to train NCHDs. Sufficient critical mass will be required to achieve expertise across a range of specialties and to provide satisfactory medical education and training.

In order to provide a minimum level of service within a 48-hour working week, each hospital[24] providing a full range of acute services must have all of the following:

(i) the workload and volume of patients required to support each consultant appointment;

(ii) a minimum of seven consultant staff in each 24-hour 7-day speciality to supervise closely the management of patients and ensure high quality NCHD training; and

(iii) sufficient numbers of consultants and NCHDs to provide appropriate on-site medical, surgical and anaesthetic cover over the 24-hour period.

This represents the absolute minimum. Depending on the range of services being provided at a hospital, appropriate numbers of consultants in radiology, pathology, paediatrics, emergency medicine, obstetrics and gynaecology, trauma and orthopaedic surgery and psychiatry would also be needed to allow the hospital to provide a reasonable spectrum of acute care. This would equate to a minimum of some 45 to 50 consultants.

3.5.8 Minimum requirements for acute service provision

Taking account of the volume considerations set out above, the requirements of the EWTD, the shift to a consultant-provided service, and geographical and demographic factors, the Task Force considers that hospitals will require a certain minimum catchment population in order to provide the spectrum of acute care needed to deal with emergency and acute patients. Physical distance and actual travelling time will be important factors. The defined catchment population must generate sufficient workload to maintain safe services and support staff while meeting the requirements of the ETWD.

[24] The Task Force recognises the position of single specialty hospitals and deals further with their long term role in **section 3.7.7**.

International literature[25] indicates that populations of 200,000 – 250,000 are needed to support a hospital with **the minimum range of acute services** required to deal with emergency and acute patients. The literature indicates that hospitals providing the **full range of regional services** require even larger catchment populations (350,000 – 500,000) to ensure safe and effective patient care, support training and allow staff maintain expertise. Clearly, hospitals will serve catchment populations of different sizes. In some circumstances it may be appropriate to have a hospital providing an agreed range of services for a catchment population of 200,000 to 250,000. However, international evidence indicates that ideally hospitals providing the full range of regional services should have a catchment population of 350,000 to 500,000. This matter will be further examined in Phase II of the Task Force's work, taking account of the most appropriate catchment populations and distribution of hospitals.

3.5.9 Criteria for identifying the role of each hospital

The Task Force believes that it is important to examine the appropriate role of hospitals according to their ability to manage acute health needs. The Task Force used the following criteria when considering the appropriate role of each hospital in the two pilot regions, and considers that these criteria will apply when examining hospitals elsewhere:

- the health needs of the catchment population and the evidence base for these needs;
- the extent and complexity of workload, as indicated by a range of data, including the Hospital In Patient Enquiry (HIPE), casemix measurement (using Diagnosis Related Groups), outpatient activity and A&E attendances;
- the availability of primary care supports;
- the ability of the hospital to provide safe, quality, accessible patient care, taking account of geographic location within the region;
- the availability of medical and nursing and other specialist staff, trained to the standards required for the treatment and care being provided;
- the availability of other resources including specialist staff, diagnostic facilities and theatres;
- the existing role of the hospital;
- the ability of the hospital to provide effective and appropriate education and training;
- the scope for staff to maintain and update clinical competence; and
- the ability of the hospital, in a national context, to provide services on the basis of value for money.

[25] Royal College of Surgeons (2001), Royal College of Physicians (2002), The Scottish Office (1998), Ministry of Health, New Zealand (1998), British Medical Association et al (1998), Irish Institute of Orthopaedic Surgery (1989), Irish Association for Emergency Medicine (2001), Audit Office of New South Wales, Australia (1998). Further material from the UK, and other EU member states, Australia, New Zealand, Canada and the United States is included in the bibliography.

3.5.10 Organising hospital care: key principles

The Task Force gave considerable thought to the key principles that should underpin hospital care. There was a significant consensus among those consulted about what these principles should be. The main elements are as follows:

- each hospital should have a clearly designated role within a co-ordinated, integrated regional network of hospitals which also takes account of any supra-regional and/or national responsibilities;
- each network of hospitals should provide a service which is, as much as possible, located close to patients' homes, subject to evidence-based practice, safety and quality of care;
- patients should be treated in the hospital most capable of providing them with the type of care they require;
- each patient should have a distinct care pathway which enables them to move to the appropriate point of care as rapidly as possible;
- hospital care should be provided within agreed protocols developed as appropriate at local, regional, supra-regional or national level;
- patient care should be provided by teams of consultants, with trainees and other staff, where the consultants have a substantial and direct involvement in diagnosis, delivery of care and overall management of patients, i.e. a consultant-provided service;
- hospitals should have systems in place for continuously improving the quality of their services and safeguarding high standards of care; and
- acute hospital bed numbers should be planned on the basis of an average of *no more than the 85% occupancy level* identified by *Acute Hospital Bed Capacity — A National Review* published by the Department of Health and Children (Bed Capacity Report (2002)).

3.6 Configuration of services in the pilot regions

3.6.1 A continuum of care

The Task Force developed a model of hospital care to serve the two pilot regions, both of which have a population of about 350,000, and has set out how it would operate there.

The model is based on a continuum, running from a wide range of non-hospital services including primary care, through to well developed *Local Hospitals* providing services to those who require routine/planned assessment and care as detailed in **section 3.7.2**, to more specialised *Major Hospitals* providing emergency and specialist care, and ultimately to supra-regional and national services for treatments which cannot be provided within a regional network. It also envisages the provision of continuing care services, including rehabilitation and long-stay facilities.

The Task Force makes no specific recommendations about the application of this model to the rest of the country, but proposes that the organisation of hospitals services there should

be the subject of a second report, to be prepared as quickly as possible. The proposals set out here should be used to help inform the development of proposals nationally.

The Task Force recommends that, in the pilot regions, acute hospital services should be organised into regional networks which are as self-sufficient as possible for a defined population, subject to best practice regarding volume and quality of care. Each hospital in the network should form part of a closely integrated system of regional and national care for patients, in which primary care, other community care services and continuing care are fully linked. All hospital care should be provided within regional, supra-regional and national protocols for the delivery of safe, quality, accessible care to patients.

3.6.2 Pilot region links with primary care

The Task Force believes that the planning provision of acute hospital care cannot take place in isolation from the range of health services provided outside the hospital setting and that a very high proportion of patients' needs can and should be met within a further developed system of primary care. Acute hospitals must work in close partnership with the primary care sector. **The goal should be to establish close links between hospital services, particularly those at local level, and primary care teams**, so that the right balance can be achieved between services provided in the community and in hospitals.

As noted in *Primary Care: A New Direction* (2001), primary care has the potential to meet 90 to 95 per cent of all health care needs provided it is properly structured and resourced. Primary care teams, comprising a range of health professionals including general practitioners, nurses, midwives, health care assistants, home helps, physiotherapists, occupational therapists, speech and language therapists, social workers and others offer considerable scope for supporting patients outside hospital, reducing referral and admission rates, providing an alternative location for treatment, facilitating earlier discharge and, as a consequence, reducing length of stay.

The Task Force recognises the important contribution that primary care and general practice can make to the provision of quality patient care and to reducing inappropriate demand on the hospital sector. **The Task Force recommends that the implications of its proposals for the configuration of primary care services and the general practice workforce should be addressed immediately. Close linkages should be developed between the implementation projects proposed under the Primary Care Strategy, general practitioners and health board community services in the Task Force's two pilot regions.**

3.6.3 Regional services

In line with the existing policy of regional self sufficiency, a substantial range of services can safely be provided as *regional specialties* by a largely self-sufficient network of Regional and Local Hospitals to a defined population. Specialties provided within a region, and which could be provided as appropriate by Major Hospitals or Local Hospitals, include anaesthesia, emergency medicine, obstetrics and gynaecology, medicine, paediatrics, pathology, psychiatry, radiology, surgery and a wide range of sub-specialties. As discussed below, emergency services are best provided in the major hospitals, while it

is safe to provide a significant proportion of elective and ambulatory care in smaller local hospitals.

3.6.4 National and supra-regional services

National specialties comprise services best provided on a single site, such as liver transplant surgery. *Supra-regional specialties* are those which are most appropriately confined to a limited number of centres. Such services will often be based in hospitals which are also Major Hospitals. Examples include neurosurgery, oral and maxillo-facial surgery and radiation oncology. Since the supra-regional specialties would be staffed by a multi-disciplinary team and would require a significant volume of cases in line with best international evidence, they would only be appropriate to a small number of centres.

3.7 Organisation of hospitals in pilot regions

The Task Force proposes that, in the two pilot regions, acute hospital services should be organised around a *Major Hospital* and a number of *Local Hospitals*, working together in a closely integrated network. The concept and functions of Local Hospitals and Major Hospitals in the pilot regions are discussed in this section. The specific roles of hospitals in the two pilot regions are proposed in **section 3.8** below.

3.7.1 The hospital network in pilot regions: local hospitals

Local Hospitals should be a key part of an integrated hospital service for the region, providing as wide a range of services as close as possible to the local community. They would meet most of the local population's need for hospital care, safely providing a wider range of services closer to the community. Each Local Hospital would form the cornerstone of a locally based service, with strong links to other parts of the health and social services in its area. The emphasis would be on safe, locally accessible services, provided efficiently to meet the needs of patients. The Local Hospital would have specialist diagnostic equipment and the staff necessary to provide a full range of outpatient clinics and day surgery. These operations would be provided locally unless there were good clinical reasons to do otherwise.

Services in Local Hospitals would be provided by a wide-ranging group of health professionals including consultants, NCHDs, general practitioners, specialist and staff nurses, radiographers, physiotherapists, occupational therapists, speech and language therapists, psychologists and others, many of whom would divide their time on a planned basis between Local Hospitals and the Major Hospital. They would provide:

- appropriate diagnostic and treatment facilities;
- a greatly expanded proportion of elective day surgery and elective medical procedures for the region. This would involve an increasing volume of elective procedures that are often currently performed in the larger hospitals;
- a strong focus for locally accessible multi-specialist day and out patient (OPD) care;

- a point of access for general practitioners to services and diagnostic facilities; and
- rehabilitation and long-stay care.

Local Hospitals could also offer valuable short-term respite care, some palliative care support, and allow patients to recover following surgery or illness. Local general practitioners could, if they wished, retain responsibility for the care of their patient in the Local Hospital. The minor injury and illness unit in each Local Hospital would be able to meet most local needs with links to the Major Hospital.

The designation of clear roles for Local Hospitals mean that consultants and NCHDs who are based at the Major Hospital could provide services to the network of Local Hospitals. They would rotate on a planned basis between the Major Hospital and the Local Hospitals, carrying out elective work, consultations and OPD clinics at scheduled times, and would be supported by skilled nurse practitioners.

Patients in Local Hospitals would be treated under agreed protocols. Many would be discharged the same day, as in the case of elective medical and surgical procedures. **Ultimately, there should not be a requirement for on-site medical presence overnight or at weekends, but the logistics of this will clearly take some time to implement.** This does not preclude agreed planned elective activity being undertaken at weekends. As a transitional phase, medical cover overnight could be provided either by:

- on-site call cover by doctors in training as part of their regional rotation, subject to medical education and training requirements;
- general practitioners, contracted to the hospital through a GP co-op or primary care team;
- a joint rota involving doctors in training, existing medical officers and general practitioners; and
- availability of senior clinicians in the major hospital providing telephone consultations as required.

Full nursing cover would be provided in Local Hospitals overnight. In the rare instances where patients deteriorated unexpectedly, they would be transferred if necessary to the Major Hospital.

3.7.2 Services in local hospitals

Services to be provided in a Local Hospital should include:

- **elective surgery** primarily on a day basis in such specialties as general surgery, urology, otolaryngology (ENT), ophthalmology and plastic surgery. Up to 80 per cent of ENT and plastic surgery can be performed safely and efficiently on a day case basis;
- **elective medicine** provided by teams of consultants and other staff running out-patient clinics, consultation services (e.g. at the request of general practitioners) and day-care procedures in such areas as gastroenterology, respiratory medicine,

cardiology, geriatric and general medicine. Services could also be provided by general practitioners responsible for managing and treating their in-patients admitted to medical beds;

- strengthened **outpatient services**. There should be no need for patients to travel to the Major Hospital for a very high proportion of OPD services, these should be available in the Local Hospital. OPD and a number of other areas of the hospital should have a longer normal working day, such as 8 a.m. to 8 p.m, depending on workload;
- **obstetrics/gynaecology and paediatric day services** should be provided in the form of antenatal care, paediatric out-patient services and a community child health service in partnership with primary care;
- **psychiatric service provision** could encompass day hospital and outpatient services in general adult and child and adolescent and old age psychiatry. Provision could also be made for rehabilitation and learning disability psychiatry. For example, services could include a multidisciplinary rehabilitation team with a community-based rehabilitation unit or hostel;
- **services for older people** should be provided including separate units, rehabilitation beds/facilities, day hospital places and/or extended care/community nursing unit places. Other accessible services could include chiropody/podiatry, physiotherapy, speech and language therapy, occupational therapy and social work;
- nurse-led **minor injury units** for an extended day (e.g. 8 am to 8 pm, depending on the volume of cases). Patients should be triaged either to treatment on-site for minor injury, treatment by a general practitioner, or transferred to a Major Hospital as required. All major traumas and medical emergencies should go directly to the Major Hospital;
- **diagnostic services** will be critical to the effective operation of busy Local Hospitals. Local hospitals will, over the course of an extended working day, have appropriate imaging modalities such as CT and ultrasound, general radiology, limited haematological, biochemistry, and other diagnostic services to support the medical and surgical facilities on-site. Local Hospitals could also act as a particular resource for primary care.

3.7.3 Caseload of local hospitals in pilot regions

There is a significant range of elective day work that could be carried out in Local Hospitals, and this range can increase as additional consultants are appointed. No such list of treatments can be exhaustive, and should always take account of international evidence regarding clinical caseload at institutional level and outcomes for patients receiving services at that level. Depending on age and clinical characteristics, for example, some procedures may not be done on a day basis.

The Task Force recommends that there should be a process involving relevant management, medical and other professionals to determine the appropriate allocation of surgical day services between Local Hospitals and Major Hospitals. This would enable a

comprehensive list to be drawn up in light of medical evidence and local availability of hospital services. Such a list should be continuously updated and amended as appropriate.

The Task Force's proposals would require additional investment in Local Hospitals to make them ready for expanded elective surgical and medical work and extended hours of OPD and diagnostic facilities. The exact requirements of Local Hospitals should be examined in detail as implementation of the Task Force's recommendations in the pilot regions proceeds.

3.7.4 The hospital network in pilot regions: major hospitals

In the pilot regions, a single Major Hospital should then provide services not appropriate to the Local Hospitals. It should meet the full range of acute hospital services for people in that region, other than services which must be provided on a supra-regional or national basis.

The Major Hospital should be part of the integrated network of hospitals discussed above and would be largely self-sufficient for its catchment population, providing the full range of services that can be provided on a regional basis. The centre would function as the major trauma-receiving hospital for the region, providing

- a referral service to Local Hospitals;
- advice and stabilisation for complex cases referred from other hospitals;
- regional emergency services; and
- coordination of the regional emergency transport service.

A number of specialties, or individual sub-specialties within them, should be available on a 24-hour, 7-day basis. Others would require cover over an extended period, such as 8am to 8pm with limited on-call arrangements while others would have an extended working day as required but with infrequent on-call duties. **Section 4.1** sets out the Task Force's recommendations for availability of sub-specialties by time period.

3.7.5 Major hospitals and emergency care

The conclusion that the full range of emergency services can only be provided in Major Hospitals may raise concerns about the access of patients to treatment in life-threatening situations. It should be noted, however, that many of the main life-saving measures in emergencies are not affected by the immediate proximity of a hospital. The critical concerns are early resuscitation and early access to skilled diagnostic, medical, surgical and anaesthetic care. This can best be provided in a consultant-staffed Major Hospital, supported by appropriately trained ambulance personnel.

3.7.6 Ambulance services

Ambulance services play a key role in the initial care, transport and treatment of emergency patients. The Task Force's recommendations underline the importance of having a well organised ambulance service capable of meeting the needs of emergency

patients rapidly. A number of reports[26] deal with this issue, in particular the need to crew ambulances with emergency medical technicians (EMTs), to upgrade ambulance fleets and to provide advanced EMT training (EMT-A) for ambulance staff. It is noted that the Pre-Hospital Emergency Care Council (PHECC) plans to commence training programmes in this regard. The Task Force recommends that ambulance staff in the pilot regions should be facilitated in accessing this training as soon as possible.

3.7.7 Single specialty hospitals

At present, some regions throughout the country, including the pilot regions, have single-specialty hospitals which focus on providing services related to a single specialty or cluster of specialties such as orthopaedic surgery, obstetrics and gynaecology or acute psychiatry. Most of these hospitals provide acute services. The Task Force believes that, *in an ideal situation*, the acute inpatient services currently being delivered in single-specialty hospitals would best be delivered, in conjunction with other specialist services, on the site of a Major Hospital. This would enable more speedy access to on-site specialist support, increase efficiencies in staffing cover and reduce the duplication of staff and support services. The existing single specialty hospitals could then be used, for example, for elective day and out patient work.

The Task Force acknowledges that, given the financial and logistical implications involved, the transfer of such services must be a longer-term aim and should be considered as part of an overall national plan which would take some considerable time to achieve. A significant advantage currently offered by single-specialty hospitals — that of protecting elective activity from emergency work — must not be lost in any such move.

3.8 Hospitals and staffing in pilot regions: recommendations

In this section the Task Force sets out its recommendations for the organisation of hospital services and for hospital medical staffing in the two pilot regions.

3.8.1 East Coast Area Health Board region: current service provision

Acute hospital services in the East Coast Area Health Board region are provided in three acute general hospitals: St Vincent's University Hospital, St Michael's Hospital, Dun Laoghaire and St Columcille's Hospital, Loughlinstown. St Vincent's and St Michael's are managed as a single entity. St Columcille's is managed by the East Coast Area Health Board. St Vincent's University Hospital also has a supra-regional and national remit for some specialist services.

Within or immediately adjacent to the ECAHB, there are a number of specialist hospitals which provide acute services to the population of the region and a wider catchment area. These include the National Maternity Hospital, Holles Street, Temple Street Hospital, the National Children's Hospital, Tallaght, Our Lady's Hospital for Sick Children, Crumlin,

[26] *Report of the Review Group on the Ambulance Services (1993)*, the Comptroller and Auditor General's Report on the Emergency Ambulance Services (1997) the *Report of the Joint HSEA/SIPTU Working Group on Ambulance Services (2001)* and the *Strategic Review of the Ambulance Service (HeBE 2001)*.

Our Lady's Hospice, Harold's Cross, St Joseph's, Harold's Cross, the Royal Victoria Eye and Ear Hospital, St Luke's and St Anne's Hospital, Rathgar and the City of Dublin Skin and Cancer Hospital, Hume Street.

There are three psychiatric catchment areas within the ECAHB region. St Vincent's hospital psychiatric service, centred on the St Camillus psychiatric unit, does not currently have a catchment area. In the near future an enlarged acute psychiatric unit will open on the St Vincent's site. This unit will replace both the St Camillus Unit and the acute psychiatric unit in Vergemount. Learning disability services are provided by the St John of God Order in a number of locations throughout the region. Child psychiatry services for the East Coast Area is provided by the Lucena Clinic at Orwell Road, Dun Laoghaire, Bray, Wicklow and Arklow. The St. John of God Brothers are providing services under the aegis of a service agreement with the South Western Area Health Board for the entire ERHA. Forensic psychiatry and substance misuse psychiatry, while within or close to the ECAHB area, are national services.

3.8.2 East Coast Area Health Board region: proposed organisation of hospital services

The Task Force recommends that:

- Each hospital and acute unit in the ECAHB should function as part of a single, integrated network.
- St Vincent's University Hospital should function as the Major Hospital for the ECAHB.
- St Columcille's Hospital and St Michael's Hospital should function as Local Hospitals.
- Dermatology services for the ECAHB area should be provided in a designated facility on the St Vincent's site.[27]
- Currently, ophthalmic surgery is provided in both St Vincent's University Hospital and the Royal Victoria Eye and Ear Hospital. The Task Force recommends that agreed protocols should be developed and implemented to determine those patients appropriate for treatment in the Royal Victoria Eye and Ear and other patients whose clinical conditions would indicate that treatment should be provided in St. Vincent's University Hospital. It is recommended that this be addressed within the pilot implementation for the ECAHB region.

Ideally and in the long term, a number of specialties currently provided in single specialty hospitals should ultimately be provided on the St Vincent's site. These include acute psychiatric care, acute obstetric and gynaecological care, protected facilities for regional workload in elective ophthalmic surgery and the regional workload in elective orthopaedics.

[27] The Comhairle na nOspidéal report on Dermatology Services, 1988, refers.

3.8.3 Mid-Western Health Board region: current service provision

Acute hospital services in the MWHB area are provided on six sites: the Mid-Western Regional Hospital, Limerick, St Nessan's Regional Orthopaedic Hospital, Croom, St Munchin's Regional Maternity Hospital, Ennis General Hospital, St Joseph's Hospital, Nenagh and St John's Hospital, Limerick.

The Mid-Western Regional Hospital is the designated regional and trauma centre for the MWHB. St Nessan's is a single specialty orthopaedic hospital, which provides elective orthopaedic services to the MWHB region. Emergency trauma and orthopaedic services are centred in the Regional Hospital. St Munchin's provides obstetric and gynaecological services together with gynaecological neonatology and neo-natal intensive care to the MWHB region.

Each of the hospitals, with the exception of St John's, is managed by the MWHB. St John's is an independent voluntary hospital with close links to the MWHB.

Within the MWHB region, acute inpatient psychiatric services are provided at a 55 bedded acute psychiatric unit attached to the Regional Hospital and a 40 bed acute psychiatric unit attached to Ennis General Hospital. Learning disability services are located in St Joseph's, Lisnagry, while child and adolescent psychiatry services are based in Limerick city.

Psychiatric service provision in Tipperary North Riding is part of the remit of the Tipperary Mental Health Service, which is part of the South Eastern Health Board.

3.8.4 Mid-Western Health Board region: proposed organisation of hospital services

The Task Force recommends that:

- Each hospital and acute unit in the MWHB should function as part of a single, integrated network.
- The Mid-Western Regional Hospital, Limerick should function as the Major Hospital for the MWHB.
- Ennis General Hospital, St Joseph's Hospital, Nenagh and St John's Hospital should function as Local Hospitals.
- *Ideally and in the long term*, a number of specialties currently provided in single specialty hospitals should ultimately be provided on the site of the Mid-Western Regional Hospital, Limerick. These include acute psychiatric care, acute obstetric and gynaecological care and protected facilities for regional workload in elective orthopaedics.
- Consideration should be given to the long-term transfer of St John's Hospital to a protected elective facility on the Regional Hospital campus.

3.8.5 Consultant staffing of hospital services: pilot regions

The Task Force's detailed recommendations on consultant staffing in the East Coast and Mid-Western Health Board regions are set out in **Appendix 4**. In summary, the Task Force's proposals involve an additional 80 consultants in the East Coast Area Health Board by 2009, rising to an extra 129 by 2013. In the Mid-Western region there would be an additional 146 consultants by 2009, rising to an extra 195 consultants by 2013.

	Consultant staffing at 1 January 2003	Proposed 2009	Proposed 2013
ECAHB region	178	258 *(+45%)*	307 *(+72%)*
MWHB region	109	255 *(+134%)*	304 *(+178%)*

3.9 Organisation of hospital services: national issues

3.9.1 National reorganisation of hospital services

The Task Force has not examined the configuration of hospital services in detail outside the two pilot regions, and therefore does not make recommendations in this regard. However, on the basis of the evidence available, **the Task Force believes that it will be necessary to engage in significant reorganisation of the hospital system on a national basis. Substantial change will be required throughout the country to comply with the EWTD, introduce a consultant-provided service and thereby provide safe patient care.**

This conclusion is consistent with a recurring theme in the many reports published on the health services: that hospitals services should be structured rationally, on the basis of an objectively established national plan. The detailed model proposed by the Task Force in the pilot regions, and the set of principles which the Task Force believes should inform decisions about the rest of the country, is the first step towards a national plan for the organisation of acute hospital services in Ireland.

Later the Task Force recommends the establishment of a project group in both pilot regions to drive all aspects of the implementation process that can be pursued at local level. In addition, **the Task Force recommends that in Phase II of its work it should prepare detailed recommendations regarding the future organisation of acute hospital services in the rest of the country. The report should recommend specific roles for all acute hospitals nationally, taking full account of the principles set out by the Task Force in this report, and the approach recommended in respect of the two pilot regions. Given the restrictive timetable imposed by the EWTD, this work should commence as quickly as possible.**

3.9.2 Geographic considerations in the organisation of hospital care

Irrespective of the exact configuration of hospital services outside the pilot regions, some important questions arise when considering their overall organisation. Chief among these

is how best to meet the needs of populations who, for reasons of geography or distance, cannot easily access services. This would be particularly important in the case of trauma or other emergency care. While the Task Force has not recommended a model of hospital organisation for the country as a whole, it believes that in an integrated regional network, there could be a case for a hospital which meets the minimum standards for acute service provision, but which would not be a Major Hospital.

A 'General Hospital' could be provided in areas where, for geographic or demographic reasons, access to a Major Hospital for emergency care is problematic. Acting as part of an integrated network, General Hospitals could provide an agreed range of specialties, including 24-hour emergency surgery, medicine, anaesthesia, radiology and full anaesthetic and laboratory services and be equipped to deliver high-quality specialist in-patient care. They could also offer around-the-clock emergency surgery. They would not provide the same comprehensive range of specialist services as a Major Hospital on a 24-hour, 7-day basis.

The structure of hospital services would have to be considered in a national context in order to determine the cases in which such hospitals would be justified. The Task Force does not recommend the provision of a General Hospital in either of the pilot regions. The case for such a hospital elsewhere should be examined as part of the report dealing with organisation of acute hospitals in the rest of the country.

3.9.3 Organisation of hospital care: parallel streams

The Task Force believes that the integrated network of acute hospitals proposed above should be organised into three parallel streams of care, as recommended by the *Report of the Committee on Accident and Emergency Services* (Comhairle na nOspidéal, 2002). This involves a division of acute hospital services into emergency, elective and OPD/day care. The essential advantage of this approach is that it enables health professionals, particularly medical staff, to focus exclusively for a designated period on emergency, elective or OPD/day work so that each component enjoys the undivided attention of staff. The operation of the parallel streams is set out below:

Stream 1: Emergency care

At present many hospitals, including some smaller facilities, try to provide a large range of emergency, often complex, services. *The current situation is not sustainable, either from the viewpoint of patient safety or staffing.*

Consistent expert advice, both national and international, is clear. While patients who present without serious or life-threatening conditions can be dealt with in minor injury and illness units, *emergency care is best provided in a fully equipped Accident and Emergency Department, supported on-site by a full range of medical and surgical services and by well trained ambulance staff.* The Royal College of Surgeons (London) offer a concise description of the requirements for an efficient, high quality emergency service:

- 'An Accident and Emergency Department led by an A&E specialist;
- Enough consultants in trauma and orthopaedics, general surgery, anaesthetics and radiology to provide a dedicated emergency service;
- Around-the-clock availability of high technology equipment such as CT scanners;
- Emergency operating theatres for general surgery and trauma surgery;
- A full range of specialist surgical, medical, paediatric, pathology and radiology services;
- Intensive care; and
- Ready access to burns units, cardio-thoracic surgery, transplant surgery, neonatal surgery and neurosurgery'.

It is clear that such a wide range of services can only be provided in a fully staffed and equipped Major Hospital. In summary, therefore, the emergency care stream should have the following characteristics:

- It should be focused on the Major Hospital, with central co-ordination of emergency services, including ambulance services;
- There should be rapid access to emergency services via 999/112 calls, emergency medical technicians and primary care;
- Seriously ill or injured patients should be brought directly to the accident and emergency unit of a Major Hospital;
- All ambulance personnel should be trained to EMT-A level and be capable of decisions about what level of service the patient requires. 'Nearest hospital' protocols should then be set aside, with patients triaged to the appropriate service immediately.

Stream 2: Elective care

Elective care should be provided in both Major Hospitals and Local Hospitals. While Major Hospitals must take the lead in relation to emergency care, the Task Force believes that an increasing proportion of elective work, primarily in the area of surgical and medical day procedures, should be carried out in Local Hospitals. These would be provided within agreed protocols and would be supported by the necessary diagnostic and treatment facilities. There would be scope for an enhanced role for Local Hospitals in performing this key role by delivering day services to an extended geographic area beyond its immediate local catchment area.

Elective care should be co-ordinated between all acute hospitals in the region, with consultant teams, including NCHDs and certain nursing staff, rotating on a planned basis between the Major Hospital and Local Hospitals to provide the service.

Elective work should be provided on the basis of an extended day, in which theatres, OPD, diagnostics and support services would be run for a twelve or thirteen-hour day, perhaps from 7 am to 8 pm for up to six days a week, depending on volume. This would help reduce waiting lists, and ensure the most efficient use of capital, including expensive

theatres and equipment, in line with need and resources. It would also offer patients greater flexibility in choosing the most convenient time for receiving services.

Stream 3: Out-patient and day care

Out-patient services should be delivered under clear regional protocols designed to facilitate the safe and effective throughput of patients through the hospital, primary and community care systems. Out-patient services should function as an interface between hospital, primary and community care and allow both consultants and general practitioners to share patient care, for example, in the management of diabetes or certain cardiovascular conditions. These systems should preclude inappropriate retention of chronic patients for long periods of time.

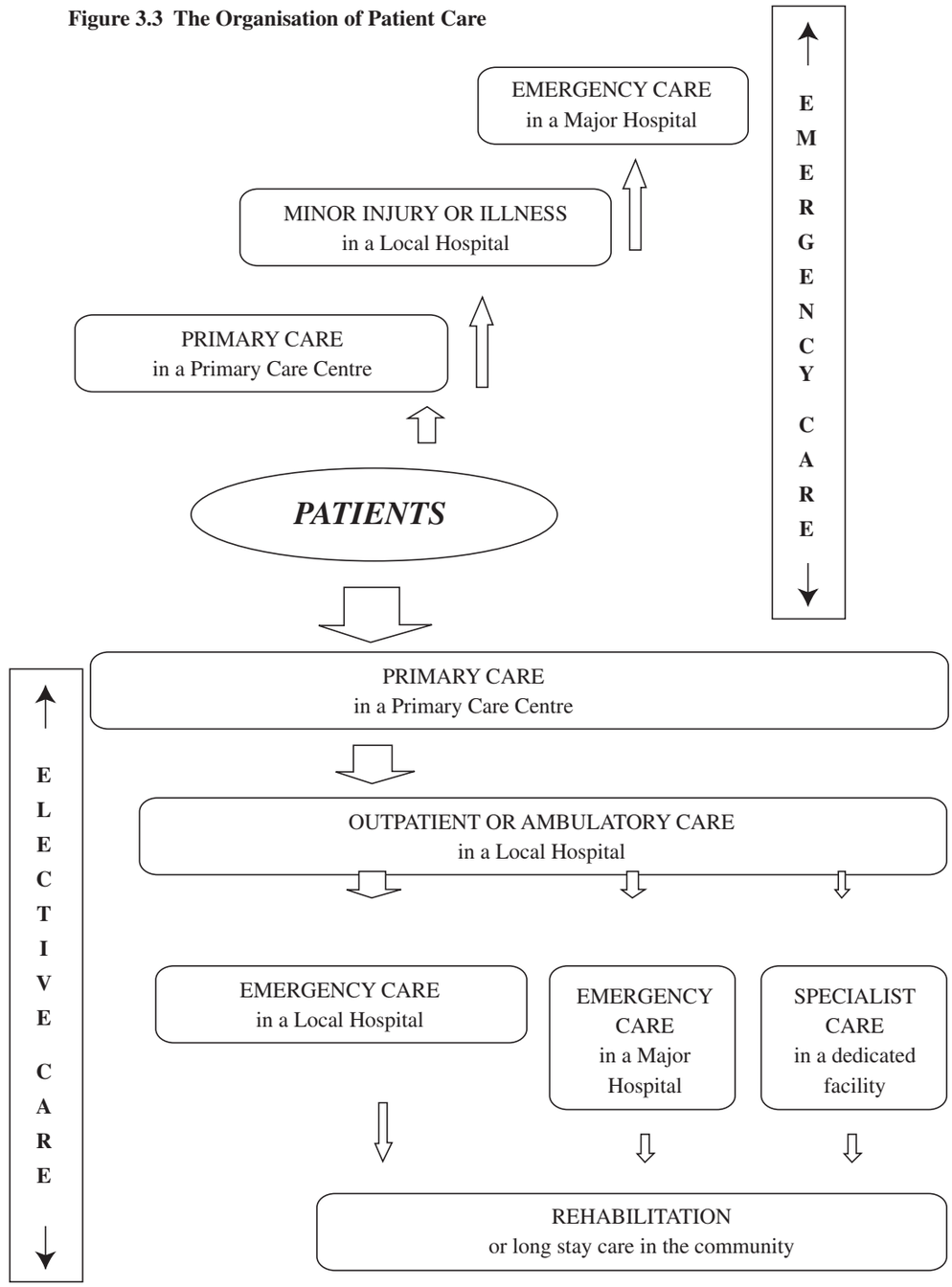
Day care can be described as hospital-based care delivered within the 24-hour period, after which the patient is no longer in need of acute hospital care. Increasingly, large numbers of surgical and medical procedures and investigations are carried out on a 'day' basis. Often, the patient will not require an overnight stay.

Both outpatient and day care should be:

- delivered locally on the basis of agreed protocols in Local Hospitals and Major Hospitals;
- provided by consultant teams, including NCHDs and certain nursing staff, rotating on a planned basis between the Major Hospital and Local Hospitals;
- co-ordinated within the integrated network of acute hospitals for the region;
- available on an extended-hours basis, as in the case of elective care; and
- supported by diagnostic, treatment and other facilities.

Figure 3.3 below illustrates the proposed organisation of patient care in the pilot regions under discussion.

Figure 3.3 The Organisation of Patient Care



3.9.4 Extended working day

As outlined earlier, there should be a significant expansion to the normal working hours of a number of key diagnostic, treatment and support elements of the hospital system. The Task Force is conscious that medical emergencies occur on a 24-hour 7-day basis. It believes that elective and planned activity should proceed during an extended working day. All necessary services within the hospital setting — be they medical, nursing, health and social care, management or support — should be provided on an extended basis as appropriate to the caseload.

It is inefficient to leave expensive plant and equipment such as theatres, laboratories, CT and MRI equipment idle for a sizeable proportion of each 24-hour period. These facilities should be made operational as a matter of standard practice (rather than just for emergencies) on an extended basis. The exact timing of operation should be determined at local level by reference to workload, availability of staff, minimum waiting times for services and, in the case of OPD, willingness of patients to attend early or late appointments.

3.9.5 Improving the management of emergency patients

The Task Force agrees with the recommendations of the Comhairle na nOspidéal Report on Accident and Emergency Services (2002) which proposes the use of common triage processes, the provision of minor injury units, improved access to diagnostics, the use of admission avoidance schemes and protocol-based care pathways for GP referrals that bypass A&E; better bed management, the provision of 24-hour diagnostics for emergency departments, appointment of additional consultants and the organisation of emergency services on a regional basis.

3.9.6 Improving the management of acute medical patients

The *Acute Hospital Bed Capacity Report* (2000) notes that the proportion of medical inpatients has increased steadily, while the proportion of surgical inpatients has decreased. The report concludes that this situation 'is out of step with current bed designations, resulting in encroachment by medical patients on surgical beds and cancellation of surgical procedures'.

The Task Force believes that Medical Assessment Units and Medical Admission Units can play a key role in the effective management of emergency department attendees with medical problems. Such units can be defined as follows:

> *Medical Assessment Units* provide a short stay area for assessing medical patients who are triaged as needing further investigation before a decision on admission can be made. Patients would be monitored for a number of hours, and either discharged or, if necessary, admitted into hospital. Each Medical Assessment Unit would be led by a consultant general physician who would develop protocols for management of patients, care pathways and links with the hospital emergency department, diagnostic and laboratory services and with GPs. Other consultant physicians would participate in the staffing of the unit on a rostered basis.

Medical Admission Units provide rapid assessment, diagnosis, observation and early treatment to patients with medical problems who are referred for admission to hospital. Patients could be referred to the Medical Admissions Unit by the hospital emergency department, directly from GPs or from outpatient clinics. Medical Admissions Units would be staffed by a number of consultant general physicians, many of whom would rotate through the unit and sub-specialties of general medicine. Such units would require a number of protected beds, located together, in a coherent manner and managed as a single unit.

3.9.7 Improving the management of acute surgical patients

The Task Force recommends that hospitals explore the following measures:

- establishment of an acute surgical assessment unit where senior in-house staff (consultant general surgeons or specialist registrars) can assess and diagnose patients referred from the emergency department;
- establishment of a joint anaesthetic and surgical pre-admissions unit: such units would prepare elective surgical patients for their procedures by conducting tests or diagnostic assessments on an outpatient/ambulatory basis prior to day of surgery; and
- day of surgery admission, involving admitting elective surgical patients into the hospital on the day of surgery, either to a surgical ward or to a day surgery centre.

3.9.8 Generalisation versus specialisation

The current trend towards specialisation is reflected in the staffing profile of the large teaching hospitals and is spreading to regional and middle-sized hospitals throughout the country. As the holders of posts of general physician and general surgeon retire, they are replaced by general physicians and general surgeons with a special interest.

The Task Force believes that skill maintenance in both medicine and surgery is dependent on continuing participation by a defined number of medical and surgical sub-specialties in the provision of general on-call.

3.9.9 Protected facilities

In order to operate effectively, elective and OPD/day work must be protected from the more immediate pressures imposed by emergency care. This is a key principle of the parallel streams of care outlined earlier. The Task Force believes that in order to achieve this, hospitals should structure their beds and theatres in a manner that protects each stream and ensures that all three can proceed unhampered by each other.

3.9.10 Bed management

There are many reasons for high bed occupancy. Factors include high numbers of emergency admissions, the ageing population, shortage of trained staff, limited availability of senior clinical decision-making, service delivery by staff in training, inappropriate

admissions, an acknowledged deficit in acute hospital bed capacity, and insufficient levels of non-acute/chronic-care beds.

The *Health Strategy* indicated that an additional 3,000 acute hospital beds would be provided in the ten-year period to 2011. The Department of Health and Children is currently conducting a second phase of bed capacity analysis which involves identifying appropriate distribution of additional bed capacity by region. The Task Force agrees with the recommendation of the CAPITA report that this be paralleled by a detailed regional analysis of non-acute bed capacity, which is long recognised as influencing the availability and efficiency of acute beds.

3.9.11 Conclusion

The Task Force believes that the current organisation and staffing of acute hospital care is not sustainable. In order to provide safe patient care, comply with the EWTD and introduce a consultant-provided service it will be necessary to engage in significant re-organisation of the hospital system. In summary:

- doing nothing is not an option. Without change, the Task Force believes that the situation will deteriorate further, with a consequent impact on patient care;
- the problems noted by the Task Force in this section have been comprehensively identified in a number of analyses over many years;
- these same problems, relating to structure of the hospital system, staffing, organisation and sectional influence, were reiterated by many during the Task Force's consultation process;
- the problems identified, including the major challenge of achieving a 48-hour working week for NCHDs, cannot be resolved without radical change to the hospital system; and
- there is significant consensus in the pilot regions on the need for radical change.

Section 4: Staffing and Management

4.1 Consultant staffing requirements

4.1.1 Introduction

This section sets out the Task Force's recommendations on the consultant staffing required to comply with the EWTD and introduce a consultant-provided service. Future NCHD staffing levels will depend on implementation, nationally, of the medical education and training model detailed in **section 3.4**.

The Task Force took account of a range of factors when formulating its recommendations on staffing:

- the need to maintain high standards of patient care;
- the work practice and working time restrictions imposed by the EWTD;
- the need for hospitals to have a critical mass of volume and activity;
- the staffing and resources needed to enable the hospital service to function effectively as EWTD deadlines approach;
- the provision of quality medical education and training; and
- the need for teamworking.

4.1.2 Consultant and NCHD staffing requirements

The Task Force reviewed national and international literature regarding optimal service provision and medical workforce planning for secondary and tertiary patient care. The Task Force also engaged in a detailed analysis of current staffing, workload, casemix[28] existing work patterns and resource requirements in each specialty and sub-specialty in both pilot sites. In doing so, the Task Force was aware that service needs are influenced by many factors, including the nature and frequency of disease and disorders, population demographics, available therapy, service provision and patient expectations. *As discussed in **section 3.4.4**, international experience suggests that medical workforce planning is by its nature imprecise due to the many unpredictable variables and the need to make assumptions based more on best estimates than on empirical data. However, it is essential to address the medical staffing implications of compliance with the EWTD and the introduction of a consultant-provided service.*

4.1.3 Population projections and patterns of disease

The Health Strategy notes that while life expectancy in Ireland is increasing, it is not increasing as fast as the EU average. Infant mortality rates remain above the EU average, general mortality rates are still above EU levels, and cancer rates are likely to increase in future years.

[28] Including average length of stay by DRG, data on admissions through A&E, and elective versus emergency admissions.

The Central Statistics Office (CSO) predicts[29] that the number of old persons (65 years and over) will increase in every region between 1996 and 2031 with the most marked increases being in the Mid-East (Kildare, Wicklow and Meath, +211.4%) and Dublin (+140.5%). The very old population (those aged 80 years and over) is projected to double by the year 2031. The population of the State is also projected to age on average by about 7.5 years over the course of the 35-year period 1996 to 2031.

The Task Force based its projections on population figures recorded in the CSO Census 2002. It is likely that the population, and consequently demand on acute hospital services, will increase in the years leading up to the EWTD deadline of 2009 and beyond. Increasing specialisation, a larger burden of disease and advances in medical science will impose further demands.

4.1.4 Regional distribution of specialist services

Population health is grounded in equitable access to quality health, and where appropriate, hospital services. Quality hospital services, defined by certain minimum national standards, should be available to all within an appropriate timeframe regardless of place of residence.

The organisation of the hospital system and the distribution of consultant posts shape the quality of patient care, the structure and provision of specialist services, the organisation and provision of training for NCHDs and the ratio of trained doctors to doctors in training. While there has been a 40 per cent increase in consultant and NCHD numbers over the past decade, there has been no significant change in the geographical distribution of approved consultant posts and NCHD posts between the ERHA region and the rest of the country. In 2002, 35.7 per cent of the population resided in the ERHA area (2002 census) while 47 per cent of approved permanent consultant posts and a similar percentage of NCHD posts in the public sector were located there. This has meant that a large proportion of acute hospital activity is, of necessity, delivered in the ERHA area.

4.1.5 Detailed policy advice on hospital services

Detailed policy advice on the organisation and operation of hospital services is formulated by national committees or advisory groups established by the Minister for Health and Children, Comhairle na nOspidéal, individual specialty associations and training bodies. At present, a number of specialist areas have been identified for review:

- The Health Strategy identifies a need for national reviews of maternity services, paediatrics and nephrology, further implementation of the National Cardiovascular strategy, a review of *Planning for the Future* and a revision of the National Cancer Strategy.

[29] Regional Population Projections 2001 – 2031, CSO 2001.

- As part of its statutory function to advise the Minister for Health and Children on the structure and operation of hospital services, Comhairle na nOspidéal is currently reviewing several aspects of acute hospital services.[30]

It is anticipated that many of these reports will be completed in the coming months. The Task Force envisages that its own report will influence their recommendations and that its own further considerations will be informed by the deliberations of Comhairle. The Task Force has therefore summarised, rather than set out in detail, key issues in certain specialties in **Appendix 3.**

4.1.6 Safe delivery of specialist services

In **section 3.5.8** the Task Force referred to the need for populations of 200,000 – 250,000 to support hospitals with **the minimum range of acute services** required to deal with emergency and acute patients. The international literature indicates that hospitals providing the **full range of regional services** require even larger catchment populations (350,000 – 500,000) to ensure safe and effective patient care, support training and allow staff maintain expertise. Taking account of these factors, and in order to improve equity of access for all areas consistent with best medical practice, the Task Force believes that specialties can be described within the following structure:

- Regional specialties: those specialty services that can be provided safely and effectively in a region of 350,000 – 500,000 catchment population.
- Supra-regional specialties: those specialty services that, taking account of catchment population, workload and casemix, can only be provided in a limited number of locations, each of which serves a catchment population of 750,000 – 1,000,000.
- National specialties: tertiary care services, which for reasons of caseload, quality and cost-effectiveness, are only provided at single, individually recognised sites which meet the national requirement for the diagnosis or treatment of all patients with a particularly complex or rare condition.

4.1.7 Frequency of service provision

The requirement to participate in on-call or to deliver on-call services within individual specialties or sub-specialities has a significant influence on workload and staffing requirements. The Task Force has identified three levels of staffing need:

- *24-hour on-site availability:* there is consultant availability on-site throughout the 24-hour period.
- *Frequent on-call:* consultants are called into the hospital on a frequent basis, often twice, three or more times per week outside their scheduled commitment, to meet patient needs.

[30] Including dermatology, otolaryngology, oral and maxillofacial surgery, neurology and neurophysiology, neurosurgery, psychiatry, pathology, plastic surgery, urology, the role of medical admission and assessment units and experiences with joint consultant appointments. Committees have also been established to progress the implementation of reports on respiratory medicine and tuberculosis and paediatric surgery.

- *Infrequent on-call:* consultants are called into the hospital to deal with patient need infrequently. The vast majority of consultation is done by telephone.

The consultant staffing and on-call requirements of each specialty are summarised in **Table 4.1** below.

4.1.8 Reduced hospital medical hours

Over the course of the Task Force's work, a number of those consulted expressed concern that the Task Force's recommendations would result in a decrease in the total number of hours actually worked by hospital doctors. For example, ten NCHDs working an average of 70 hours a week work 700 hours in total. Replacing five of these NCHDs with consultants and reducing the hours of the remainder would result in a reduced total number of hours worked. This, it was argued, would result in gaps in service provision.

While it is correct that implementation of the Task Force's recommendations will result in a reduction in total medical hours worked, implementation of the Task Force's wider recommendations on reorganisation of hospital services will support the maintenance and indeed, improvement in the quality of hospital services. The Task Force makes a series of wider recommendations including:

- a reduction in the number of hospitals providing 24-hour 7-day services. This will lead to a reduction in the number of on-call rotas;
- removal of tiered on-call, leading to a reduction in the number of doctors on-call at any one time in the context of maintaining adequate on-site medical cover;
- increase in the availability of senior clinical decision making through the appointment of additional consultants, improving, in many instances, the quality and efficiency of the decision making process; and
- the performance by other health care professionals of some work that was previously performed by NCHDs.

4.1.9 Consultant staffing projection for a region of 350,000 population

Taking account of the factors above, the Task Force developed a consultant staffing projection for a region of 350,000 people that incorporated:

- minimum staffing levels required to address service need;
- the proportion of consultants in each specialty at 1 January 2003 and the extent to which this reflects understaffing in certain specialties or sub-specialties;
- the proportion of consultants in each specialty and sub-specialty in relation to broader specialty workload and casemix;
- the need to develop those specialties which manage significant proportions of acute workload;
- recommendations from national and international literature on consultant staffing;

- the need for phased increases in consultant numbers and phased decreases in NCHD numbers, in line with the medical education and training model developed by the Task Force; and
- the need to align NCHD numbers with training opportunities.

In **section 3.8** and **Appendix 4**, the Task Force applies this projection to the two pilot regions — the East Coast Area Health Board and the Mid-Western Health Board. **In Appendix 3**, the Task Force extrapolates this projection nationally and includes supra-regional and national specialties. More exact national figures will depend on the ultimate configuration of hospital services in each region.

The Task Force's recommendations are set out in terms of consultants per head of population on the basis of current best international practice (see note at **Table 4.1**). An example of the Task Force's approach to projecting medical staffing requirements is set out in **Appendix 3**.

4.1.10 Consultant staffing requirements

Following a detailed analysis, the Task Force has made recommendations regarding the numbers required to implement the EWTD, achieve a consultant-provided service and ensure high standards of medical education and training. The national recommendations are set out below, and full details are contained in **Appendix 3**. **Table 4.1** projects the consultant medical staffing requirements for a population of 350,000.

A. Existing medical staffing

As of 1 January 2003, there were 1,731 approved permanent consultant posts and 3,943 NCHD posts in the public hospital system, a ratio of 1 consultant post to every 2.3 NCHD posts. Of the 1,731 consultant posts, there were 265 in anaesthesia, 31 in emergency medicine, 1 in intensive care, 316 in medicine, 93 in obstetrics and gynaecology, 96 in paediatrics, 159 in pathology, 276 in psychiatry, 163 in radiology and 331 in surgery.

B. Implementing the EWTD by 2009

The Task Force estimates that, in order to meet the hospital medical staffing requirements arising from implementation of the EWTD, approximately 3,100 consultants should be employed by 1 August 2009 (detailed figures are set in Appendix 3). These figures are based on an extrapolation of the Task Force's conclusions regarding the consultant staffing required for a region of 350,000 population, and the impact of the EWTD on supra-regional and national specialties. They set out the need for an increase of over 1,300 on the number of consultant posts at 1 January 2003, i.e. an increase of 77 per cent over six years.

C. Achieving a consultant-provided service

In order to achieve a fully operational consultant-provided service by 2013, the Task Force estimates that some 3,600 consultants will be needed, representing an increase of some 1,870 posts (+108%) over the figure for 2003. These figures are based on an extrapolation of the Task Force's conclusions regarding the consultant staffing required to put in place a consultant-provided service in a region of 350,000 population, plus supra-regional and

national specialties. The year 2013 is recommended as a target for achieving this, although this could be adjusted in the light of experience if necessary.

D. Ensuring high standards in medical education and training

As noted earlier, the Task Force has concluded that NCHD numbers should be reduced in line with the medical education and training model set out in **section 3.4** and **Appendix 5**. This should happen as the EWTD is implemented and a consultant-provided service is put in place. Implementation of the medical education and training model would result in approximately 2,200 NCHDs by 2013, a reduction of some 1,700 (–44%) on the figure for 2003.

E. Further analyses will inform detailed recommendations

The recommendations above set out the level of consultant staffing needed to meet the requirements of the EWTD, achieve a consultant-provided service and ensure high standards in medical education and training. Phase II of the Task Force's work will involve detailed analyses of the individual staffing needs of each region. **In sections 3.4.4 and 4.1.2, the Task Force highlighted the difficulty in developing precise estimates of future medical staffing needs. Some adjustments may be required in the detail of the Task Force's estimates for individual sub-specialties during Phase II of its work.**

Table 4.1: Consultant staffing for a region of 350,000 population

Specialty	Duty Roster	2009 Implementing EWTD		2013 Consultant-provided service	
		Per head of population*	Consultants per 350,000 population	Per head of population*	Staffing per 350,000 population
ANAESTHESIA					
Anaesthesia Intensive Care Paediatric Anaesthesia Pain Management	On-site 24 hours On-site 24 hours Frequent on-call In-frequent on-call		27 7 3 1		
Total Specialty		***1 / 9,200***	***38***	*1 / 8,300*	***42***
EMERGENCY MEDICINE	On-site 24 hours	**1 / 45,000**	**8**	1 / 40,000	**9**
MEDICINE					
Cardiology	Frequent on-call	1 / 78,000	4	1 / 70,000	5
Clinical Pharmacology	Infrequent on-call	**1 / 356,000**	**1**	1 / 178,000	**2**
Dermatology *Paediatric Dermatology* ***Sub-total***	Infrequent on-call	***1 / 119,000***	***3***	1 / 87,000	***4***
General Medicine General Medicine *Cardiology* Gastroenterology *including hepatology* Endocrinology/Diabetes Mellitus Nephrology Respiratory Medicine Rheumatology ***Sub-total***	On-site 24 hours Each of these specialties participates in a 24-hour general medical on-site on-call rota	 1 / 65,000 1 / 119,000 1 / 65,000 1 / 65,000 1 / 115,000 1 / 65,000 1 / 65,000 ***1 / 10,000***	 5 3 5 5 3 5 5 ***31***	 1 / 58,000 1 / 119,000 1 / 58,000 1 / 58,000 1 / 65,000 1 / 58,000 1 / 58,000 1 / 9,200	 6 3 6 6 5 6 6 ***38***
Geriatric Medicine	Acute geriatric / general medical on-call	**1 / 50,000**	**7**	1 / 50,000	**7**
Infectious Diseases and genito-urinary medicine	Infrequent on-call	**1 / 115,000**	**3**	1 / 87,000	**4**
Medical Oncology	Frequent on-call	**1 / 87,000**	**4**	1 / 87,000	**4**
Neurology	Frequent on-call	**1 / 115,000**	**3**	1 / 115,000	**3**
Palliative Medicine	Infrequent on-call	**1 / 87,000**	**4**	1 / 87,000	**4**
Rehabilitation Medicine	Infrequent on-call	**1 / 280,000**	**1**	1 / 178,000	**2**
Total Specialty		***1 / 5,300***	***61***	1 / 4,700	***73***
OBSTETRICS & GYNAECOLOGY					
Obstetrics & Gynaecology *Gynaecological Oncology* *Fetal Medicine*	On-site 24 hours				
Total Specialty		***1 / 21,900***	***16***	*1 / 20,500*	***17***

Specialty	Duty Roster	2009 Implementing EWTD		2013 Consultant-provided service	
		Per head of population*	Consultants per 350,000 population	Per head of population*	Staffing per 350,000 population
PAEDIATRICS					
General	Joint on-site 24-hour rota with neonatology				
Community Child Health					
Other sub-specialties of general paediatrics					
Sub-total		***1 / 35,000***	***10***	*1 / 29,000*	***12***
Neonatology	Joint on-site 24-hour rota with paediatrics	**1 / 87,000**	**4**	1 / 87,000	**4**
Total Specialty		***1 / 21,300***	***14***	*1 / 18,700*	***16***
PATHTHOLOGY					
Biochemistry	Infrequent on-call	**1 / 326,000**	**1**	1 / 261,000	**1**
Chemical Pathology	Infrequent on-call				
Paediatric					
Sub-total		***1 / 326,000***	***1***	*1 / 261,000*	***1***
Haematology	Frequent on-call		3		4
Paediatric					1
Transfusion Medicine			1		
Sub-total		***1 / 87,000***	***4***	*1 / 58,000*	***6***
Histopathology	Infrequent on-call		7	1 / 44,000	8
Cytology			1	1 / 178,000	2
Sub-total		***1 / 38,000***	***8***	*1 / 31,000*	***10***
Microbiology	Infrequent on-call				
Sub-total		***1 / 115,000***	***3***	*1 / 80,000*	***4***
Total Specialty		***1 / 18,100***	***17***	*1 / 14,000*	***22***
PSYCHIATRY					
Child & Adolescent Psychiatry	Frequent on-call				
Sub-total			***7***	*1 / 32,000*	***11***
Forensic Psychiatry	Infrequent on-call	**1 / 280,000**	**1**	1 / 280,000	**1**
General Adult Psychiatry	Frequent on-call	1 / 24,000	14	1 / 16,000	22
Liaison			1	1 / 178,000	2
Rehabilitation			2	1 / 119,000	3
Substance Misuse			2	1 / 119,000	3
Sub-total		***1 / 17,000***	***19***	*1 / 11,500*	***30***
Psychiatry of Learning Disability	Infrequent on-call				
Adult			2	1 / 119,000	3
Child			1	1 / 178,000	2
Sub-total		***1 / 119,000***	***3***	*1 / 71,000*	***5***
Psychotherapy	Infrequent on-call	***1 / 356,000***	***1***	*1 / 178,000*	***2***
Psychiatry of Old Age	Participates in general psychiatric call	**1 / 119,000**	**3**	1 / 119,000	**4**
Total Specialty		***1 / 9,300***	***34***	*1 / 6,600*	**53**

Specialty	Duty Roster	2009 Implementing EWTD		2013 Consultant-provided service	
		Per head of population*	Consultants per 350,000 population	Per head of population*	Staffing per 350,000 population
RADIOLOGY					
General Radiology ***Sub-total***	Frequent on-call	***1 / 17,000***	***20***	*1 / 14,600*	***24***
Total Specialty		***1 / 14,700***	***20***	*1 / 12,700*	***24***
SURGERY					
General Surgery *Breast* *Breast Endocrine* *Gastro-intestinal* *Vascular* ***Sub-total***	On-site 24 hours Each of these specialties participates in a 24-hour general surgical on-site on-call rota	 1 / 145,000 1 / 58,000 1 / 87,000 ***1 / 21,000***	Other general surgeons 2 6 4 ***14***	 1 / 119,000 1 / 44,000 1 / 71,000 *1 / 21,000*	 3 8 5 ***16***
Ophthalmic Surgery *Medical Ophthalmology* *Neuro-ophthalmic* *Paediatric* *Vitreo-retinal* ***Sub-total***	Infrequent on-call	***1 / 78,000***	***4***	*1 / 58,000*	***6***
Oral & Maxillofacial	Infrequent on-call	**1 / 245,000**		1 / 151,000	
Trauma & Orthopaedic *Paediatric* *Spinal* ***Sub-total***	Frequent on-call	***1 / 34,000***	***10***	*1 / 25,000*	***14***
Otolaryngology *Paediatric Otolaryngology* ***Sub-total***	Frequent on-call	***1 / 71,000***	***5***	*1 / 71,000*	***5***
Plastic Surgery	Frequent on-call	**1 / 119,000**	**3**	1 / 98,000	**3**
Urology *Paediatric* ***Sub-total***	Frequent on-call	***1 / 82,000***	***4***	*1 / 80,000*	***4***
Total Specialty		***1 / 7,100***	***40***	*1 / 6,200*	***48***
Total		**1 / 1,280**	**248**	1 / 1,080	**302**

*Note: In this column, the figures per head of population per consultant reflect national ratios rather than a division of 350,000 by a certain number of consultants. This allows these ratios to be used in identifying the likely consultant staffing requirements of different populations. As indicated in the text, some adjustments may be needed for individual specialties following detailed analysis by region.

4.2 Enhancing the role of other health professionals

4.2.1 Introduction

The Task Force's terms of reference are primarily concerned with medical staff. However, it is important to examine the role of health professionals such as nurses, health and social care professionals and other personnel who form a key part of the delivery of health care. While the Task Force has not attempted to examine their work in the detail that it applied to consultants and NCHDs, the inter-relationships between medical and non-medical staff in ensuring a high quality service for patients has been emphasised throughout the Task Force's work.

The main issues to be considered are:

- the ongoing enhancement of the roles of a number of professionals;
- the inter-relationships between medical and non-medical staff in delivering services to patients; and
- the scope for specific new grades of staff which would help all health care providers to concentrate on their particular areas of training and expertise, thereby offering an efficient high quality service to patients.

4.2.2 The role of nurses and midwives

A group chaired by the Chief Nursing Officer of the Department of Health and Children considered the implications of the Task Force's work for the development of nursing and midwifery. The emphasis was on identifying ways in which developments that are already taking place in nursing and midwifery generally might be integrated with the proposals in this report. Local nursing focus groups were organised in the two pilot regions to discuss the implications that might arise from a reconfiguration of services, enabling nursing to develop to its fullest potential in tandem with evolving service needs. This work commenced in December 2002 and is continuing.

The nursing profession plays a central role in the health system. Nurses are often the first point of contact for patients. They comprise almost 40 per cent of the healthcare workforce and provide care over a 24-hour 7-day period. There is considerable potential for nurses to enhance further the development of quality patient care and positive patient outcomes.

This is a time of significant potential for nurses and midwives in Ireland. With the advent of the pre-registration nursing degree programme, the clinical nurse specialist (CNS), the advanced nurse practitioner (ANP), the scope of practice, the implications of nurse prescribing and the training of health care assistants, there is considerable scope for harnessing the potential of experienced, competent nurses to help the whole health care team concentrate on what matters: ensuring that patients receive quality care. *This potential for development is a movement along the path already set by the Commission on Nursing in enhancing the role of nurses and midwives.*

4.2.3 Code of conduct and scope of practice for nurses and midwives

Nursing and midwifery frameworks and models provide the principles, values, and goals for practice and contribute to the body of knowledge required by the nursing and midwifery profession. These principles should guide the ongoing changes in the role of the nurse and midwife. The *Code of Professional Conduct for each Nurse and Midwife* (An Bord Altranais 2000) provides 'the framework to assist the nurse to make professional decisions, to carry out his/ her responsibilities and to promote high standards of professional conduct'.

This concept is supported in the *Review of Scope of Practice for Nursing and Midwifery Final Report* (An Bord Altranais 2000). Principles are provided within the scope of practice framework which should be used to review, outline and expand the parameters of practice for nurses. The principles clearly indicate that the impetus for expansion of practices must be in the best interests of the patient and within the context of nursing as a profession.

The introduction of health care assistants has the potential to enable nurses and midwives use their competencies more effectively in the delivery of patient care. The report of the working group *Effective Utilisation of Professional Skills of Nurses and Midwives* (May 2001) envisaged that the health care assistant role would complement the nursing role.

4.2.4 Clinical Nurse Specialists and Advanced Nurse Practitioners

Developments in nursing need to occur at each level of the career pathway from staff nurse to clinical nurse specialist (CNS) to advanced nurse practitioner (ANP). The CNS has a clinical caseload which involves assessment, planning, delivery and evaluation of care. He/she has the authority to make alterations in prescribed clinical options and acts as a consultant to his/her nursing multi-disciplinary team colleagues. The CNS operates nurse-led clinics and works closely within the multi-disciplinary team. The CNS role is already well defined and is in keeping with the Task Force's concept of utilising the skills of health professionals to best effect.

The ANP is expected to exercise higher levels of judgement, discretion and decision making in the clinical area above that expected of the nurse working at primary practice level and the CNS. The ANP may conduct comprehensive health assessment and demonstrate expert skill in the diagnosis of acute or chronic illness from within a collaboratively agreed scope of practice, working alongside other healthcare professionals. The crucial factor in determining advanced nursing practice is the level of decision making and responsibility rather than the nature or difficulty of the tasks undertaken (National Council for the Professional Development of Nursing and Midwifery 2001). As in the case of the CNS, the role of the ANP is already well defined and offers a valuable contribution to the effective use of health professionals.

There is of course a lead-in time to new role expansion which include the acquisition of particular skills and qualifications (a higher diploma for the CNS and a masters degree for ANPs). These roles are already developing in the context of existing initiatives in nursing. The Task Force sees considerable benefits in their planned development.

4.2.5 Other nursing and midwifery staff

It should be emphasised that all nurses can become innovative in their practice without pursuing the CNS or ANP pathway. Again, the Commission on Nursing envisages considerable role enhancements for all nurses, which offer important benefits in light of the Task Force's recommendations.

The Task Force believes that all health care professionals should focus on the tasks which are appropriate to them, rather than on those which they have 'always' or 'traditionally' done. This applies to nursing and midwifery as much as to other professions. Dealing with roles and scope of practice with this consideration in mind helps to identify how the role of nurses and midwives can be enhanced, how some interventions currently performed by others could be done as effectively by nurses and midwives, and how certain tasks currently carried out by nurses and midwives could safely and more efficiently be undertaken by others.

It is important to develop practice by concentrating on roles rather than just individual 'tasks', but it is also useful to note in practical terms the specific areas in which roles could change in line with the thinking of Commission on Nursing. It is also vital to define who might be responsible for the delivery of care normally performed by the nursing staff. Adequate resources must be put in place by the organisation to ensure these aspects of patient care are still performed to a high standard.

A series of workshops held in the pilot regions dealt, in part, with the appropriate future role for the nurse in an evolving health system. The nurses identified a number of areas in which nurse-led clinics were already in place in individual hospitals, and which could be provided in other hospitals with the appropriate support. These include

- *minor injury clinics* run by ANPs who assess, diagnose, treat in accordance with protocols, refer and discharge. They ensure that the patient receives the correct intervention from the appropriate person at the right time;
- *pre-assessment clinics* in which ANPs have a key role in pre-assessment of patients undergoing elective day and in-patient procedures. Registered nurses also have a role in assessing patients not requiring a general anaesthetic
- *heart failure clinics* where ANPs and CNSs have a key role in the management of 'at risk' patients following discharge until stabilised.

The workshops in the pilot regions also identified a series of areas in which nurses' roles could be further enhanced. Some examples include recording and interpretation of 12-lead ECGs, defibrillation of patients following cardiac arrest, administration of first dose intravenous medications (subject to the necessary legislative change), and making direct referrals within the multi-disciplinary team to contribute to seamless quality care for the patients.

This is not intended as an exhaustive list. It simply illustrates the ways in which the nursing and midwifery role could be developed to contribute to the building of a new model of health care delivery which enhances the input of the nursing profession. The Task Force

is aware, for example, of a number of innovative nurse led clinics within the multi-disciplinary delivery of mental health services. Examples include affective disorder clinics, deliberate self-harm clinics, primary care liaison nurses and home treatment programmes.

The workshops also identified a number of areas in which some current duties of nurses and midwives could be done safely and efficiently by others. Again, this is not intended simply as a list of duties to be transferred elsewhere, but it serves to underline the scope for developing and adjusting the role of nurse and midwives in a manner that contributes to the efficiency of services overall and is in line with existing thinking on the development of the profession.

Equally, there are many aspects to the health care assistants' roles that could develop to include duties currently undertaken by nurses, with the registered nurse maintaining a supervisory role. Examples include assisting with feeding of patients and aspects of patients' personal hygiene.

The Task Force recommends that, in line with the philosophy of the Commission on Nursing, the scope for enhancing the role of nurses and midwives should be explored in detail in the two pilot regions, with a view to identifying how such enhancement could be implemented nationally in the context of the Task Force's approach. The Task Force acknowledges that enhancing the roles of nurses and midwives must be subject to appropriate education, training and protocols.

4.2.6 Health and social care professionals

Many health and social care professional grades[31] have been the subject of extensive analysis in recent years, in terms of numbers required, services to be provided, skill mix and a number of matters relating to grading and pay. The Task Force notes that many of the recommendations contained in these reports are in line with its own views on the organisation and staffing of services, particularly in the hospital setting. These include:

- the case for an agreed system of extended normal working hours in areas which are traditionally confined to a five-day 'office hours' service *(Sustaining Progress 2003)*;
- the arguments in favour of significant increases in the number of therapists in line with the *Bacon Report* (2001) and of other grades such as social workers, radiographers, chiropodists and dieticians (*Health Strategy* 2001) to meet current and growing future needs, and to cover a longer normal working day; and
- the value of exploring the introduction of assistant or support grades, such as therapy assistants, to help increase efficiency of service provision.

4.2.7 Health and social care professionals: extended working day

As indicated earlier in this report, the Task Force strongly recommends that the normal working day in a range of areas throughout the hospital should be extended, by agreement,

[31] The term 'health and social care professionals' is used here to refer to professions such as certain therapies (physiotherapy, occupational therapy, speech and language therapy) as well as a wide range of other disciplines including radiography, medical laboratory science, biochemistry, psychology, social work, child care, dietetics, audiology and chiropody/podiatry.

to cover a period such as 7 am to 9 pm. This would apply in areas such as out patient departments, laboratories and day theatres. The exact opening hours would be based on decisions about local service needs, and could be phased in over a period.

The *Expert Group Report on Various Health Professions* (2000) recommended that employers and staff at local level consider the provision of clinics in the evenings or at weekends. The Task Force endorses this principle and believes that the emphasis should be on developing an extended hours system which increases choice for patients and helps address lengthy waiting times.

The *Expert Group on Medical Laboratory Technician/Technologist Grades* recommended that national best practice protocols should be developed for managing the demand for out-of-hours services. The *Service Review Group* (2002) for the same grades proposed that pilot projects should be put in place to test the increasing demand for the provision of extended services outside traditional 'core' hours. The *Expert Group on Radiography Grades* (2001) adopted a similar approach to the question of extended hours, recommending that national best practice protocols be developed for out of hours services using the partnership process. In particular it recommended clinics outside normal hours to facilitate patients and reduce waiting lists.

The move to extended hours would have implications for the working hours of certain health and social care professionals, who would be asked to cover a longer working day. However, extending the hours of service does not mean that staff would have to work more hours than at present. Additional personnel could be required, but the exact numbers needed would depend on the extent of service required in the extended time period. The Task Force notes that *Sustaining Progress* provides for discussions between the parties on issues of this kind.

4.2.8 Additional staffing in health and social care professions

A number of recent reports have pointed to the need for a significant increase in a number of health and social care professions. The '*Bacon Report*' 2001 recommended an annual increase over a fifteen-year period of 75 extra training places for speech and language therapy and occupational therapy and of 25 extra training places for physiotherapy. These increases were endorsed by the *Health Strategy* (2001) which provides for an extra 1,330 physiotherapists, 985 speech and language therapists and 875 occupational therapists to be trained up the year 2015. Significant progress has been made in increasing the number of places required in line with *Bacon* and in other professions including psychology and social work.

The Task Force believes that there will be a need for some increases in selected areas so that the proposed lengthening of the normal working day can take place. The exact requirements will depend on local circumstances, the extent to which the working day is extended and the development of aides and assistants to a number of health and social care professionals.

4.2.9 Support grades in the health and social care professions

A number of reports have favoured the introduction of support or assistant grades to maximise the skills of trained health professionals and to offer an enhanced role for others who are willing to be trained for particular duties. The Task Force endorses the case for developing a grade of therapy assistant in the areas of physiotherapy, occupational therapy and speech and language therapy. It also believes that the scope for introducing such a grade should be supported in such areas as medical laboratory science (pathology).

Wider skills mix initiatives also offer valuable potential, such as, for example, the suggestion by the *Expert Group on Radiography Grades* (2001) that certain tasks could be delegated by radiologists to radiographers. The same report saw a role also for radiography assistants.

4.2.10 Multi-disciplinary working in health and social care professions

The case for greater multi-disciplinary working is growing even stronger as work becomes more specialised and the needs of patients can be met in a range of different ways. The Task Force believes that multi-disciplinary working between health and social care professionals should be fostered, and that this is most likely achievable through close liaison between the universities at undergraduate level and the relevant professional bodies at postgraduate level.

4.2.11 Clerical/administrative grades

The Task Force believes that clerical and administrative grades have an important role to play in supporting the provision of quality services to patients. In particular, they play a vital role in providing frontline support to professionals in the medical, nursing and health and social care professional grades.

Some of the criticism of apparent increases in clerical/administrative grades is, in the Task Force's view, unfounded since it ignores the fact that they are providing frontline services in areas such as out patient departments, wards and clinics. This support enables health professionals to concentrate on the specialist tasks for which they have been trained, and frees them from work that could more efficiently be performed by others. The Task Force would emphasise the importance of adequate and appropriate specific training for medical secretaries and ward clerks in this regard.

The Task Force would not, however, favour any step that involves an unnecessary increase in clerical/administrative personnel. Any increases in this area must be linked explicitly to providing a quality service for patients and clients. Clerical/administrative personnel should have strengthened IT support which would help to maximise the efficiency of their service and reduce the need for increases in numbers employed. The Task Force's proposals for an extended working day could have implications for the number of administrative support staff needed at any one time. **The necessary support must be provided if the Task Force's recommendations in this regard are to be implemented**.

4.2.12 Scope for new grades of staff

The Task Force examined the scope for introducing or further developing grades of staff which would facilitate a more appropriate distribution of skills and functions. The focus was on grades that would bring genuine opportunities to deliver health care more efficiently, taking account of who should best provide the service required. There must be no question of simply creating extra grades to take on work that is not seen as attractive to existing staff. Any grades new to the Irish system should:

- be introduced on the basis of clear protocols which ensure that patient care is paramount;
- bring substantial and demonstrable opportunities for improved efficiency in the delivery of high quality services;
- be based on a system of structured education and training leading to a recognised qualification; and
- work as part of a team within the consultant-provided system proposed in this report.

There are many examples internationally of a range of health care professionals not formally recognised in the Irish system who provide patient care and skilled support to medical and nursing colleagues. They can come from a variety of backgrounds, including medical, nursing and support staff, but they must obtain the relevant recognised qualification to work in a specific capacity in the hospital.

Examples include *physician assistants* who work under the supervision of a fully qualified physician and a number of categories of *operating department assistant* (ODAs) such as surgical assistants, anaesthetic assistants and similar grades of staff. Other examples include *healthcare assistants* who support nurses and midwives in providing services to patients. In examining the case for these grades, the Task Force reviewed the relevant literature[32]

A. Physician Assistants

Physician Assistants (PAs) are licensed to practice medicine with physician supervision. They are confined largely to the United States. As part of their responsibilities, PAs conduct physical examinations, diagnose and treat illnesses, order and interpret tests, advise on preventive health care, assist in surgery, and in most states of the US, can write prescriptions. Over 50 percent of all physician assistants practice in general practice, internal medicine, paediatrics and obstetrics and gynaecology.

During training, PA students typically share classes, facilities, and clinical rotations with medical students. Applicants to PA programs must complete at least two years of college courses in basic science and behavioural science as prerequisites to PA training. Following the basic science and medical science classroom work, PA students enter the clinical phase of training. This includes classroom instruction and clinical rotations in medical and

[32] This included the work of the Royal College of Surgeons of England and the American Academy of Physician Assistants. It also had extensive information regarding healthcare assistants from the NHS and the UK Department of Health and the Department of Health and Children in Ireland.

surgical specialties. PA students complete 2,000 hours of supervised clinical practice prior to graduation.

The Task Force does not see a role for physician assistants in Ireland at present. The tasks typically performed by PAs can safely be done by existing health professionals, in many cases by those in medical training. However, the case for introducing PAs at a later stage should be kept under review.

B. Operating department assistants

ODAs are primarily employed within operating theatres, although they can also work in other critical care areas such as anaesthesia, recovery suites, day surgery units, pre-assessment clinics and casting rooms/orthopaedic clinics. In the UK they have been described in terms of various roles such as *cardiac surgeon assistant, endoscopic nurses, laparoscopic nurses* and *orthopaedic surgeon assistants.*

In the area of surgical assistants, the Royal College of Surgeons of England has set out a series of principles which the Task Force would endorse as applicable to all supporting grades of staff, including ODAs:

- delegation must be achieved without exposing the patient to unnecessary risks;
- the patient must be aware of the role of the person treating them;
- work should be defined by clear protocols which have been devised and agreed between members of the team before their appointment and supervised by surgeons (anaesthetists in the case of anaesthetic ODAs);
- education and training should follow national standards and be marked by certification; and
- there should be well defined core working relationships with junior medical staff whose training is equally important.

Within the principles above, the Task Force recommends the creation of a new grade of operating department assistant (ODA) to work as part of a consultant-provided operating department team. ODAs would work in one of two defined areas: anaesthesia or surgery.

— ***Anaesthetic Operating Department Assistants***

Anaesthetic ODAs would assist the anaesthetist and play a key role in the anaesthetic or operating department team. Their duties would include the preparation of specialist equipment and drugs. They would also play a role in assessing patients in the recovery unit while the patient is still asleep, monitoring a patient's physiological parameters and providing or liaising with other staff on appropriate interventions and treatment until the patient is stable and ready for transfer to a ward. Their role needs to be linked carefully with that of nurses who already carry out some of these duties.

— ***Surgical Operating Department Assistants***

Surgical ODAs would participate in activities in theatre including application of the aseptic technique, wound management and infection control. Their work would also include preparation of the environment and the necessary

instruments, and work alongside the surgeon, providing correct surgical instruments and materials in order to ensure safe and efficient completion of surgical procedures and accounting for surgical instruments, equipment and swabs.

The Task Force recommends that the relevant colleges act as the regulatory body for surgical and anaesthetic ODAs. The Task Force recommends that the relevant college assume responsibility for both standards and care of the individuals concerned, the type and content of new programmes of education and training, continuing education programmes, and audit of career opportunities. The Task Force recommends that anaesthetic and surgical ODAs must have:

- undergone a structured programme of education and training, which includes a focus on the needs of patients; and
- obtained registration with the appropriate college.

C. Healthcare Assistants

The role of the healthcare assistant (HCA) may vary depending upon the area in which the person is employed. Typical duties include washing, dressing and feeding of patients, toileting, bed making and generally assisting patients' needs.

In Ireland a national pilot programme to train HCAs was completed in May 2002, in conjunction with the Further Education Training Awards Council (FETAC). Some 275 HCAs have been trained under this programme, and the results have been evaluated externally by the University of Ulster.

The Task Force welcomes the development of the healthcare assistant grade. Carefully managed and evaluated, the grade offers significant scope to support nurses and midwives in their work and enable them to concentrate on the more specialist tasks for which they have been trained. It also enhances the roles and responsibilities of other health staff. The Task Force supports the development of this grade and believes that, subject to appropriate protocols, they should be deployed in all hospital settings where they can make a contribution.

4.3 Management of services

The proposals in this report have significant implications for the organisation and staffing of acute hospitals in Ireland.

The Task Force believes that despite some progress, a number of key problems remain in relation to the management of hospital services. Chief among these are:

- a lack of clarity about the respective roles of management, senior medical, and other staff in the planning and delivery of services;
- a tendency, in some areas, for hospitals to be managed in isolation rather than as part of a wider system;

- the existence of separate management structures for health board and voluntary hospitals; and
- difficulties in developing an overall framework for the planning of hospital services nationally.

4.3.1 Acute hospital management structures

The Task Force believes that strengthening of hospital management structures is critical to the effective operation of hospital services. Hospital services should be managed as close as possible to the 'coalface' with as few separate 'layers' of management as possible. The Task Force proposes a new structure to manage the planning, integration and delivery of acute services. This structure involves the development of clear lines of accountability.

The Task Force recommends that, in the pilot regions:

- management of hospital services should be decentralised so that decisions can be taken locally as much as possible;
- each network of acute hospitals should have a *network chief executive officer* with overall management responsibility for all acute hospital services in the network. Managers of each hospital in the network should report to the network CEO;
- the planning, management and delivery of services in each network of acute hospitals should be closely integrated with primary and community services, and with extended care/continuing care services;
- there should be considerably greater involvement of medical and other health professionals in management, decision-making and accountability. One way of achieving this is through a clinical directorate or similar model, as recommended in **section 4.3.3** below; and
- as recommended earlier, consultants, NCHDs and other staff should be appointed to the hospital network as a whole.

The Task Force recognises that these proposals will have implications for both health board and voluntary hospitals. A range of issues, including employment relationships and the traditional position of individual agencies such as voluntary hospitals, will require careful consideration in each region during the implementation process. The Task Force believes that these can be addressed in a flexible way taking account of current service configuration in each area. *It is important to emphasise that the ownership of voluntary hospitals would not be affected by these proposals.*

The Task Force's proposals regarding a network of acute hospitals have been framed on the basis of the two pilot regions. Further consideration will be required on how best to achieve integration of decision-making, planning and effective local management in other parts of the country. This should be addressed in Phase II of the Task Force's work.

In addition, the Task Force considers that there is a need for a clinical standards function at network level which would agree and monitor standards within the network. It would liaise with and provide advice to management on issues of clinical standards. There are

different possible structures for ensuring that this function operates effectively; the Task Force does not recommend any single approach. However, it is important that such a function be established at regional level and that it should be linked to those standards which are more appropriately set at national level. A system to ensure that patients receive the highest quality of patient care should be in place at local, regional and national level.

4.3.2 National management of acute hospital services

The Task Force considers that, at national level, there must be an effective management structure for acute hospitals. It should be capable of driving change, including implementation of the recommendations in this report. *Any national management structure should ensure integration between all parts of the acute hospital system, both nationally and at network level. However, it must also facilitate integration between acute hospitals and other sectors, such as primary care and continuing care.*

From the perspective of the hospital system, **the Task Force believes that there would be strong advantages in establishing a national hospitals authority with responsibility for strategic development, resource allocation, management and workforce planning for the acute hospital system. Properly structured, this body would be able to ensure the implementation of national policy on acute hospital services throughout the hospital system.** Each network chief executive officer would report directly to the CEO of the national hospitals authority, establishing a clear line of management responsibility from national to local level.

The Task Force recognises that a separate authority for hospitals could make it more difficult to achieve integration across all parts of the health services. Instead of coming under the remit of a separate body, acute hospitals could form a more integrated part of a wider health service management framework, thereby ensuring closer links to primary and continuing care.

On balance, the Task Force favours the establishment of a national hospitals authority with the power to implement national policy and the range of functions outlined above, and welcomes the recent Government decision in this regard. It would be vital for such a body to establish and maintain close links with the rest of the health services. The Task Force is conscious that its work has necessarily concentrated on acute hospital services and that a wider ranging review of the structures and functions of the health system as a whole has recently been published (Prospectus 2003). The case for a national hospitals authority should be considered in this context.

4.3.3 Developing internal management: a clinical directorate approach

The Task Force strongly supports the concept of involving health professionals, including medical, nursing and health and social care personnel, in key management decisions in acute hospitals. The *clinical directorate* model is one such example. While no single model can or should be applied uniformly to all hospitals, the Task Force favours systems which involve management, medical, nursing and other health professionals in a structured system, offering a genuine input to critical decisions of the hospital and encouraging co-operation between different specialties and disciplines. *A vital requirement is to bring the*

management of and accountability for services to the 'coalface' in a decentralised system of local decision-making.

A number of models of clinical directorate are already in place. Members of the Task Force examined the model used in St. James's Hospital, Dublin, and saw considerable advantages in the way in which it operated. The clinical directorate approach generally structures defined specialties along the lines of a small business unit. Each directorate comprises a group of specialties with responsibility and accountability for a specified cohort of patients. There is a clinical director, a nurse manager and a business manager.

The *chief executive* retains overall responsibility for the hospital, but delegates a wide range of important operational and planning functions to each clinical directorate.

The *clinical director* leads the directorate and reports in a management capacity to the hospital chief executive. He/she can be nominated by the relevant consultants and appointed by the chief executive. The clinical director acts for a defined period[33], such as three years, renewable once. He/she is selected by reference to ability and willingness to carry out the role, rather than on the basis of seniority or a rota of names. The clinical director must have the respect of colleagues and be able to work constructively with them.

The *nurse manager* is responsible for managing nursing services in the directorate and reports to the clinical director on operational matters, while remaining professionally accountable to the Director of Nursing. Nurses are assigned to a designated directorate and are not moved from day to day between directorates.

The *business manager* also reports to the clinical director on operational matters and is responsible for the operational and support elements of the directorate, including staff management, monitoring of budgets and service planning.

The Task Force sees a number of advantages in organising hospitals along the lines of clinical directorates or similar structures:

- It improves accountability and responsiveness through a stronger link between the delivery of services and the use of resources.
- Since clinical directorates operate as a unit, planning and agreeing priorities, they can frame more fully prepared and costed proposals from a wider range of staff, drawing on IT, HR and other supports as necessary.
- The management of the hospital as a whole is improved since its various internal units are operating more cohesively. This helps the hospital manage difficult immediate situations (such as staff and bed shortages) more effectively.
- The system encourages team working. Health professionals and other staff gain a genuine sense of ownership of key decisions affecting their area of the hospital. This can help staff morale generally and may lead to reduced rates of absenteeism and staff turnover.

[33] In some areas such as psychiatry, clinical directors are currently appointed on a permanent basis.

The Task Force does not favour any particular model of clinical directorate. It is important to realise that no single model will be appropriate to all hospitals. Factors such as hospital size and the type of services provided have to be taken into account. However, the Task Force recommends that models appropriate to local needs, which involve health professionals and other staff in key decisions affecting the management of hospitals, should be developed and implemented. These models should include real devolution of budgetary responsibility for a designated unit or directorate within the hospital, with the relevant personnel trained to deal with the financial implications of devolved decision making. Critical success factors will include:

- a system negotiated and agreed with all concerned;
- a willingness by all health professionals and management to participate fully in the process and use it in the way intended. Any such model fails quickly if some seek to by-pass it;
- explicit recognition of the need for reporting relationships that reflect the multi-disciplinary nature of the team, rather than along traditional professional lines;
- well developed information systems to support finance, staffing and activity requirements; and
- a carefully managed approach to implementation with all involved being prepared to give it the time required to achieve success.

4.3.4 Decision-making in the health system

A repeated concern expressed to the Task Force was the influence of politics, whether local or national, (political, medical or other) on decision-making in the health services generally, and hospital services in particular. Many of those who spoke to us, from all parts of the health system, indicated serious dissatisfaction that some of the more important decisions about the location and type of service provision appeared to be made on the basis of narrow sectional interests rather than on objective measures of service need, quality and patient safety.

The Task Force believes that decisions on health services must be made objectively by reference to best practice and a clear evidence base.

4.3.5 Development of information systems

A recurring theme in the Task Force's discussions has been the shortage of quality information systems at all levels of the health services. A resulting concern is that evidence-based decision-making is hampered and that the value for money of existing or alternative means of providing services cannot easily be assessed.

The Task Force is aware that a National Health Information Strategy is to be published shortly. The Task Force strongly endorses the commitment in the Health Strategy *Quality and Fairness: A Health System for You* to 'a sustained programme of investment in the development of health information systems' (Action 116) as well as the intention to exploit information and communications technology (Action 117) and to make the development of information systems central to the process of planning services (Action 120).

The Task Force believes that there is an urgent need to increase significantly the level of investment in health information, both in terms of capital and ongoing maintenance. There are many areas in which improved information systems would bring particular advantages to patients. These include:

- the use of IT for such areas as clinical support systems, telemedicine, multi-media decision support systems and remote monitoring of patients;
- the development and use of electronic patient records;
- connections between hospitals using Local Area Network (LAN)/Wireless Area Network (WAN);
- use of Personal Digital Assistants (PDAs) for updating patient notes using wireless networking;
- a range of e-mail and internet-based applications including
  - access for general practitioners via IT to diagnostic services and patient appointments
  - direct access systems between consultants and general practitioners for booking day surgery[34]
- labour-saving devices such as voice recognition for dictation (which frees up clerical staff for frontline duties); and
- facilitation of audit, CME and implementation of protocols.

The Task Force recommends that measures of this kind should receive immediate attention in the pilot regions and be extended nationally at the earliest opportunity.

The Task Force also welcomes the proposal in the Health Strategy to develop electronic patient records (Action 118) which would lead ultimately to the creation of a wider electronic health record (EHR) containing details of a patient's history across a range of services. The use of a unique patient identifier would be of considerable benefit in helping deliver the highest possible quality of care to patients.

4.4 Workforce planning

An integrated approach to workforce planning is required across all personnel in the health sector to ensure more accurate projection of staffing needs and the provision of a quality service. Effective workforce planning should help predict (i) the number and type of staff needed to meet a given level of service and (ii) the number of training places required to produce this number and type of staff. Workforce planning is not an exact science. The range of factors influencing the need for and availability of various health professionals is considerable[35]. It is perhaps not surprising that, internationally, many efforts at workforce planning in the health sector have proved disappointing.

[34] The Task Force noted a particularly useful system of direct access surgery in the Cavan/Monaghan Hospital Group (Cavan site) where general practitioners in the area can refer patients directly for specific types of elective surgery, based on agreed protocols and the use of IT to book appointments directly. This is more efficient, eliminating the need for pre- and post-operative appointments in the out patient department, and is more convenient to patients.

[35] The tracking study of Irish graduates which the Task Force has initiated (see **section 3.4**) may help to address some of the difficulties experienced in Ireland.

However, failure to carry out a systematic projection of future staffing needs, and to take the necessary steps to meet these needs, can lead to severe mismatches between services required and the number of trained personnel available to provide them. The Task Force has already noted a number of problematic features of medical staffing in Ireland including too many trainees, insufficient fully trained doctors, regional gaps in certain specialties, bottlenecks in career structure and an uneven distribution of staff. While these problems are not solely related to failures in workforce planning, they underline the value of developing as effective a system as possible in this area.

4.4.1 Hospital medical workforce planning and regulation

The numbers and grades of hospital doctors are among the most important determinants of the range of type of services a hospital can deliver. However, the current system of hospital medical workforce planning and regulation is not well integrated. Comhairle na nOspidéal regulates the number and qualifications of consultant and senior/ specialist registrar posts only. The Medical Council performs a similar function for interns. While the relevant colleges deal with training and qualification requirements for senior house officers and registrars, there is no single body with overall responsibility for workforce planning in these grades. The uncoordinated approach to workforce planning has contributed to the substantial increase in the number of NCHDs in recent years. *This situation cannot be permitted to continue.*

The Task Force believes that a co-ordinated approach to medical workforce planning in Ireland is urgently needed. This should ensure that:

- there are close links between the numbers of medical posts needed and the numbers of doctors in training;
- there is an appropriate relationship between the numbers of each grade of medical staff; and
- the number (and qualifications) of all grades of medical staff are centrally regulated at a national level.

The workforce planning function must be linked to decisions about the distribution of hospital resources — specialties, facilities and beds. Taken together, the workforce planning and decisions on distribution of resources should help to:

- identify where specialist care is most appropriately located to provide quality patient care which meets internationally recognised standards and
- identify what staff, and how many, are needed in these locations.

The Task Force recommends that:

- **The medical workforce requirements of hospitals should be identified in detail by the proposed national hospitals authority.**
- **A unit should be established within the national hospitals authority to regulate the total hospital medical workforce and engage in detailed hospital medical workforce planning.**

In **section 3.4**, the Task Force recommends that the numbers and qualifications of all NCHD posts must have the explicit approval of the proposed central training authority. This will entail close liaison between the national hospitals agency and the central training authority. The hospital medical workforce unit identified above must work in partnership with the training authority and those agencies involved in medical workforce planning for community or primary care.

4.4.2 Integrated workforce planning

Although the Task Force is primarily concerned with medical workforce planning, *there is also a need to achieve more integrated workforce planning throughout the health system*. This means that the hospital medical workforce planning function should take account of the requirements for (i) doctors outside the hospital system, such as general practitioners and public health doctors and (ii) other health professionals. This is particularly relevant given the emphasis placed by the Task Force on skill mix, which aims to maximise the potential of all staff and enable them to concentrate as much as possible on the work for which they are best trained.

The Task Force notes that the Health Strategy (2001) indicates that integrated workforce planning will be introduced on a national basis (Action 100) in a way that will

- align workforce planning with the service planning process;
- promote the use of skill mix; and
- ensure that training places match the demand for specific skills in the health sector. This will involve close co-operation between the education, training and professional bodies.

The Task Force endorses the need for integrated workforce planning across all parts of the health system, as set out in the Health Strategy. While detailed planning of requirements of each sector, including the hospital system will continue to be required, co-ordination of workforce requirements across all health sectors can best be achieved by national level workforce planning.

Section 5: Implementation and Costs

5.1 Introduction

The Task Force believes that now is a unique opportunity to make radical and lasting changes in the way we deliver our health service. The need for radical change has been a recurring theme in the many reports published on the health services for the past decade or more. The changes proposed are in the best interest of patients and staff, in terms of safety, best practice and quality. This report is framed on the conviction that change is both necessary and possible. The Task Force further believes that such change will succeed, provided that there is a genuine willingness by all stakeholders to work together towards achieving it.

While the full implementation of the Task Force's recommendations has resource implications (see **section 5.4** below), important elements can be accommodated within existing resources. The inevitable constraints on public funds for the coming years need not delay implementation of many important changes. Priority must be attached to safety, quality, efficiency and effectiveness in delivery of hospital services.

5.1.1 Cost effectiveness

In previous sections, the Task Force has outlined its proposals regarding the provision of a high quality, effective system of care. *The Task Force believes that implementation of these proposals offers an opportunity to improve significantly the value for money of health care expenditure.*

Value for money refers to economy, efficiency and effectiveness in the Irish health system. The *Value for Money Report*[36] notes:

> 'the real challenge in establishing value for money is to develop a quality and effective system of care with processes to measure outcomes in a systematic way.

This point was emphasised in the Health Strategy (2001 page 112):

> 'There is a clear need to ensure that all funding is allocated on the basis of implementing sound strategic plans and that funding clearly relates to service outcomes. Performance measurement and transparent, evidence-based allocations are essential elements of this'.

Throughout its work, the Task Force was aware that irrespective of the amount of funding made available to the health services, there is a need to put in place the structures and systems that lead to better management information and enable a systematic evaluation of value for money to be undertaken. These must result in better patient care, more efficient delivery of services, and measurable outcomes.

[36] Deloitte and Touche and York Health Economics Consortium, 2002.

The Task Force's proposals have the potential to yield considerable improvements in efficiency and speed of access to care. They include, in particular, an emphasis on providing a greater number of fully trained doctors, i.e. consultants, thus relying to a lesser extent on doctors who are still in training; the designation (to date in the pilot regions) of roles for each hospital; the identification of Major Hospitals as the appropriate sites for the provision of emergency care and the delivery of increased volumes of elective, diagnostic and other procedures in affiliated Local Hospitals.

5.2 Implementation of report

The Task Force wishes to emphasise the importance of putting in place effective arrangements to ensure that its recommendations can be implemented smoothly. Successful implementation will require flexibility and a willingness by all involved to embrace real change. The Task Force acknowledges that a number of its recommendations will have industrial relations implications, which must be addressed in the appropriate forums.

5.2.1 Reducing NCHD hours

The Task Force has placed particular emphasis on reducing NCHD average working hours in line with the EWTD. In **section 3.2** it has recommended a series of steps to reduce average working hours to no more than 58 by 1 August 2004. These comprise:

- immediate renegotiation of the NCHD contract to incorporate proposals set in this report, including changed work patterns;
- immediate action on introduction of 'bleep policies', cannulation teams, accurate recording of NCHD hours and other relevant information, centralised rostering and evaluation of the extent to which on-call duties can be moved off site;
- the establishment of a national industrial relations process to implement the Task Force's proposals on tiered on-call, cross cover and other relevant issues, and to monitor progress in relation to the reduction in NCHD hours;
- immediate establishment of a working group in each hospital to work with the national industrial relations group and to progress measures proposed by the Task Force for the reduction of NCHD hours at local level. These groups should include appropriate hospital managers, consultants, NCHDs, nurses and other relevant healthcare professionals; and
- regulation of all hospital medical posts, including NCHD posts, through a single agency, to commence as soon as possible.

As noted in **section 3.2**, compliance with the EWTD is not optional. There is an obligation on all involved — management, consultants and NCHDs — to adopt and drive the necessary changes. In the longer term, as the full impact of the EWTD is phased in over the period to 2009, the Task Force's wider proposals on the reorganisation of hospital services will be necessary to achieve compliance with the Directive.

5.2.2 Implementation in pilot regions

The detailed implementation of the proposals in this report should commence immediately in the two pilot regions, i.e. the East Coast Area Health Board region and the Mid-Western Health Board region. **The Task Force recommends that a project group should be established in each pilot region, with appropriate local and national input, to oversee the implementation of the changes proposed in this report. The project groups should identify the detailed local arrangements that will be required to implement the proposals across its region, and oversee their implementation in conjunction with all stakeholders, including general practitioners and community services.**

The project groups should ensure that there is full staff participation in this process. This will be particularly important where, for example, the proposals involve changes to the way in which existing services are provided.

5.2.3 National level implementation

In addition to the project groups in the two pilot regions, it is vital that the process be given a sharp focus at national level. **The Task Force recommends that a national implementation group be established to drive implementation of the Task Force's proposals. This group must be given the 'teeth' and the resources to make implementation happen. The national group should liaise with the two project groups in the pilot regions and co-ordinate their work.**

As the implementation process in the pilot regions commences, Phase II of the Task Force's work on the organisation of hospital services should proceed. This should examine and develop detailed recommendations regarding acute hospital service delivery in the rest of the country. It should recommend specific roles for all acute hospitals, and the medical staffing levels in each case, in line with the principles proposed by the Task Force for the pilot regions.

The Task Force has set out the changes that should apply to the two pilot regions, including the numbers of additional consultant staff that should be appointed. The precise consultant and NCHD staffing requirements of each hospital, which have already been set out in broad national terms in **section 4.1** and **Appendix 3**, should be determined by the national implementation group as its work on defining the role of individual hospitals proceeds.

The Task Force believes that implementation of the report's recommendations should begin as soon as possible throughout the country, as set out in section 5.3 below. While Phase II will deal with the organisation of hospital services outside the pilot regions, the major building blocks have been set out in this report, including the overall staffing estimates, measures to reduce working hours of NCHD, and the principles underpinning a consultant-provided service. This should enable a number of steps to take place without delay, including, for example:

- national discussions on measures to reduce NCHD hours in the context of the Task Force's recommendations;

- actions by non-pilot regions to meet the requirements of the EWTD;
- negotiation of revised employment arrangements/contracts for medical staff and other health professionals as appropriate; and
- developing ways of speeding up the recruitment process, particularly for consultants.

5.2.4 Achieving change

Implementing the proposals in this report will be extremely challenging. They will require an atmosphere of mutual trust, substantial flexibility, imagination and willingness to change on the part of all stakeholders: patients, health professionals, management, unions, education and training bodies, regulatory bodies, government and the wider political system.

The Task Force recognises that issues such as teamwork, clinical autonomy and medical workforce planning will give rise to particular challenges during the implementation process. However, it must be stressed that change is in the interests of all stakeholders and, as such, it is incumbent on everyone to participate in and drive the reform agenda. The Task Force believes that a carefully prepared process of change management is required, which respects the understandable concerns that can arise when significant change is proposed, and which makes every effort to ensure a smooth transition.

The Task Force recommends that the national implementation group and the two local project groups should co-operate closely to identify how best to effect change as sensitively as possible, having regard to the importance of implementing the Task Force's recommendations within the specified time.

The Task Force has not attempted to frame an exclusive or exhaustive list of issues that will require negotiation between the relevant parties in advance of implementation. The Task Force is not a forum for industrial relations; the exact areas for discussion and the way in which they should be progressed is a matter for the IR process

5.2.5 Communicating the message

The Task Force is conscious that its proposals are far-reaching and are likely to give rise to considerable discussion at national and local level. It is vital that the Task Force's proposals are explained clearly so that they can be understood and examined objectively by all.

The Task Force recommends that there should be a proactive communications programme to educate health care staff, public representatives (local and national), the public generally and the media as to why the changes it proposes are required and how they will produce a significantly improved health service for patients.

5.3 Implementation plan

This section proposes an implementation plan for the report. It specifies the main actions required under four major headings: reducing NCHD hours, implementing a consultant-provided service, reforming medical education and training and reorganising hospital services. The Task Force believes that action can be taken immediately on the first three issues at both national and local level. Whereas the key principles have been identified, more detailed aspects of the fourth, reorganisation of hospital services, will need to be assessed in each of the two pilot regions to help inform implementation on a national basis.

Actions are set out in the short term: to 1 August 2004, the medium term: to 1 August 2009 and in the longer term: after 2009. Some of the medium to longer term dates are necessarily approximate, but those identified for action before August 2004 require immediate attention.

Five immediate steps for implementation	
Action	**Date**
1. Government decision to implement Task Force report	Immediate
2. Establishment of national implementation group	Immediate
3. Establishment of hospital implementation groups in pilot regions	Immediate
4. Negotiations begin on NCHD and consultant contracts in light of report	Immediate
5. Negotiations on relevant issues for other health professionals	Immediate

Short term: by 1 August 2004			
Key Requirements	**Section**	**Action**	**Date**
Reducing NCHD hours	**5.2**	— Establishment of hospital working groups in pilot regions	Immediate
	5.2	— Establishment of industrial relations process to reduce hours involving employers, unions and others	Immediate
	3.2	— Evaluation of extent to which on-call can be moved off-site	Immediate
	3.2	— Each hospital to evaluate potential for reduction in tiers of on-call cover	Immediate
	3.2	— Establishment of phlebotomy and cannulation teams	Immediate
	3.2	— Introduction of 'bleep policies'	Immediate
		— Introduction of new cross cover arrangements	November
	3.2	— Introduction of data recording system on NCHD working hours	November 2003
	3.2	— Submission of first statistics from data system	December 2003
	3.2	— Renegotiation of NCHD Contract	December 2003
	3.2	— Establishment of phlebotomy and cannulation teams	December 2003
	3.2	— Centralisation of rostering arrangements in each hospital	March 2004
	3.2	— Introduction of new working patterns	April 2004
	5.2	— Review NCHD numbers required in light of Phase 2 report	April 2004
	3.2	— Meet EWTD targets	June 2004
	4.2	— Employment/redistribution of dedicated frontline clerical/admin staff	2004 — 2009
Consultant-provided service	**4.3 & 3.4**	— Regulation of all hospital medical posts through a single agency and approval of each NCHD post by central training authority	As soon as possible
	3.3	— Commence renegotiation of consultant contract in context of Task Force report	Immediate
	5.2	— Review consultant numbers required as part of Phase II report	January 2004
	4.1	— Commence increase in consultant numbers and commensurate decrease in NCHD numbers (subject to agreement)	January 2004
	App 4	— Specific wider increases in pilot regions	January 2004
	3.3	— New working patterns in place	April 2004

Key Requirements	Section	Action	Date
Medical education and training	**3.4**	— Commence phasing out of all non-training NCHD posts	Immediate
	3.4	— No new non-training NCHD posts	Immediate
	3.4	— All NCHD post advertisements to clarify whether post is recognised for training	Immediate
	3.4	— Initiate legislative process required to establish central training authority	Immediate
	App 6	— Discontinue 'parallel' training schemes not leading to CSCST	Immediate
	3.4	— Adoption of National Flexible Training Strategy	September 2003
	3.4	— Initiate dialogue on international co-operation on training	January 2004
	3.4	— Introduction of innovative schemes for entry on the specialist register	March 2004
	3.4	— Develop career counselling/mentoring plan	October 2004
	3.4	— Develop training programme for skills complementary to clinical practice including up-skilling for existing specialists	October 2004
	3.4	— Protected training time structures in place for trainers and trainees nationally	2004 — 2009
Reorganising hospital services	**5.2**	— Establish Group to prepare Phase II Report	Immediate
	3.5	— Initiate measures to improve patient management	Immediate
	3.5	— Evaluation of bed capacity review in relation to pilot regions	October 2003
	5.2	— Complete Phase II review	January 2004
	4.3	— New hospital management structures in place in pilot regions	June 2004
	3.5	— Development of protocols for the delivery of acute hospital care	October 2004
		— Outline timetable for changes in other regions	January 2004
		— Ongoing implementation of changes in pilot regions	April 2004

Medium term: by 1 August 2009			
Key Requirements	**Section**	**Action**	**Date**
Reducing NCHD hours	**3.4**	— Graduated reduction in NCHD posts	2004 — 2009
	3.2	— Expansion of hospital information systems to support pathology, radiology and other departments	2005
	3.2	— Implementation of national guidelines for pathology and radiology requests	
	3.2 and 4.2	— Creation and training of new grade of operating department assistant	2005
	3.2	— National medication protocols in place in emergency departments	2006
	4.2	— Expanded decision-making role for nursing staff	2005
	4.2	— Review potential role for physician assistants	2008
Consultant-provided service	**4.1 & App 3**	— Ongoing increases in certain specialties	2004 — 2009
	3.3	— Ongoing implementation of changed work patterns	2004 — 2009
	5.2	— Review of consultant contract in light of information from pilot regions	2007
	5.2 & App 3	— Meet consultant staffing targets set by Phase II report	2009
Medical education and training	**3.4**	— Report on recommendations on outstanding MET issues	2004
	3.4	— Graduated reductions in NCHD numbers in line with increases in consultant posts	2004 — 2009
	App 6	— Ongoing implementation of Flexible Training Strategy	2004 — 2009
	3.4	— Full roll-out of central training authority functions	2004 — 2007
	3.4	— No replacement of non-training NCHD posts	2005
	3.4	— Ongoing implementation of mentoring / career counselling plan	2005 — 2009
	3.4	— Rollout of training programme for skills complementary to clinical training	2005 — 2009
	3.4	— Rollout of programme for up-skilling existing specialists	2005 — 2009
Re-organising hospital services	**3.5**	— Training of EMT-As	Currently underway
	3.5	— Implementation of bed capacity review for acute and non-acute beds	2004 — 2009
	3.5	— Implementation of Primary Care Strategy	Current
	3.5	— Ongoing transfer of elective services to local hospitals	2004 — 2009
	3.5	— National and regional trauma management protocols in place	2005
	5.2	— Revised regional management arrangements	2007
	3.5	— Ambulance service staffed by sufficient emergency medical technicians	2009

Longer term: After 2009			
Key Requirements	**Section**	**Action**	**Date**
Reducing NCHD hours	**3.2**	— On-going national monitoring of NCHD hours to ensure compliance with EWTD and other relevant legislation	2009 —
Consultant provided service	**3.3**	— Full achievement of consultant-provided service	2013
Medical education and training	**3.4**	— Ongoing review of all medical education and training recommendations	2009 —
		— Full implementation of medical education and training recommendations	2013
Reorganising hospital services	**3.5**	— Ongoing implementation of hospital reconfiguration set out in Phase II report	2009 —
		— Ongoing implementation of Primary Care Strategy	2009 —
		— Full implementation of bed capacity reports	2011

Pilot Regions		
Section	**Action**	**Date**
5.2	— Establishment of implementation groups	Immediate
3.5	— Commence identification of capital needs for Local and Major Hospitals	Immediate
4.1 and App 4	— Commence recruitment of additional consultants	Immediate
3.2, 3.3 and 4.2	— Identification of immediate industrial relations issues	Immediate
3.5	— Identification of immediate infra-structural needs	Immediate
3.2	— Initiate data recording system	Immediate
3.5	— Review and revise provision of out-patient services	Immediate
3.5	— Identify Local Hospitals developed as key link with and resource for general practitioners, primary care and community services and access point to hospital services	Immediate
3.5	— Initiate development of regional trauma management and ambulance bypass protocols	Immediate
3.5	— Initiate schedule of relocation of elective procedures to Local Hospitals	Immediate
3.5	— Continuing implementation of Primary Care Strategy	Current
3.2	— Submission of first statistics from data system	December 2003
3.4	— Identify and assess safeguarded time for medical trainers and trainees	January 2004
5.2	— Begin establishment of clinical directorates and regional management structure	January 2005
3.5	— Establish medical and surgical admission and assessment units	January 2005

5.4 Costs of proposals

The Task Force analysed the costs of its proposals with assistance from an external economist. It focused on the likely non-capital costs connected with reducing NCHD working hours, developing a consultant-provided system and extending the normal working day. The Task Force acknowledges that the costings shown in **Table 5.1** below are indicative: they are based on the assumptions set out below, do not include any further costs that may arise from the IR discussions that will need to take place with many groups, and cannot, for practical reasons, include a variety of other factors listed below. These caveats should be borne in mind in assessing the costs of the proposals.

5.4.1 Assumptions

The analysis used the following approach and assumptions:

- The number of consultants and NCHDs included in the cost estimates are those developed by the Task Force in respect of the period 2003 to 2013;
- In each case, the *marginal* costs of the proposals i.e. the addition to existing costs, are used;
- Pay scales are applied as at 1 October 2002 and all estimates are in constant 2002/3 prices. All future pay increases arising from such elements as national pay agreements and benchmarking have been excluded since they would occur irrespective of the Task Force's recommendations;
- The estimated costs of an extended working day are on the assumption of a 12-hour period from Monday to Saturday[37] inclusive for outpatient clinics, theatres and day units. Any indirect hospital impacts outside of these areas have not been included at this time.

As stated earlier, the Task Force explicitly set aside IR considerations. Accordingly, any costs that may arise from agreements reached though the industrial relations process have been excluded. Other costs not taken into account at this stage include:

- The cost of providing the 3,000 additional acute hospital beds announced in the Health Strategy (2001): these are considered necessary to accommodate the Task Force's proposals but do not arise directly from the Task Force's recommendations;
- The capital costs associated with the proposals;
- The medical education and training requirements of the 'consultant-provided' model are being examined separately;
- Links to primary care and the impact these changes have on primary care are not addressed in this model[38]. It is envisaged that they will be addressed by the Primary Care Task Force; and
- IT costs have not been included in this analysis. The forthcoming National Health Information Strategy will be important in this regard.

[37] The extended working day might apply from Monday to Friday only, depending on volume and demand.
[38] The argument was put to the Task Force that the number of general practitioners will need to be increased substantially. The Primary Care Strategy envisages that a further 500 will be required to implement the primary care model.

5.4.2 Estimated non-capital costs

Subject to the qualifications above, **Table 5.1** sets out the estimated non-capital costs of developing a consultant-provided service. *It is assumed that 2005 will be the first full year of operation for this model*, i.e. when all relevant aspects of the model would be operational for the full twelve-month period.

The overall additional cost to the system of supporting a consultant-provided model is expected to be in the region of an additional €39m in 2005 relative to the cost of running the system in 2003. By 2009, when the requirements of the EWTD have been met, the additional cost is estimated at €52 million. By 2013, the year in which a fully consultant-provided service is targeted, the additional cost (at 2003 prices) is estimated at €111 million.

It is estimated that there would be an overall national saving on *medical staff costs* in the region of €96m in 2005, but that this would be more than offset by additional non-medical staff costs and non-pay costs. The saving on medical staff costs arises from the decrease in NCHD numbers and a decrease in the overtime bill for NCHDs due to compliance with the *European Working Time Directive*. As noted above, the estimate excludes any IR-related costs and education and training costs that may arise in this regard.

The Task Force's proposals for an extended working day give rise to extra non-medical staff costs as set out in **Table 5.1**. These are assumed constant throughout the period after 2005 as it is envisaged that the working day would be extended by that year and remain unchanged thereafter.

There will also be additional non-pay costs. These are also constant throughout the period as they again relate to additional materials and supplies required to facilitate the increased working day.

Table 5.1: Estimated costs of a Consultant-Provided Service 2003-2013 (€m)

	2003	2005	2007	2009	2013
Consultants		74	141	197	279
NCHDs	—	(170)	(216)	(280)	(303)
Total Medical Pay Costs	**—**	**(96)**	**(75)**	**(83)**	**(24)**
Non-Medical Pay Costs	—	65	65	65	65
Total Pay Costs	**—**	**(31)**	**(10)**	**(18)**	**41**
Non-Pay Costs	—	70	70	70	70
TOTAL COSTS	**—**	**39m**	**60m**	**52m**	**111m**

Note: All costs are incremental from 2003, are in constant 2003 prices and do not include training or capital costs. They also exclude any costs arising from IR negotiations.

5.4.3 Estimated capital costs

Finally, the Task Force is conscious that its proposals will have capital implications. In the pilot regions, infrastructural investment will be needed in the Local Hospitals to prepare them for their expanded role in elective day work. Equally, the Major Hospitals are likely to require capital to prepare them for treating some of the patients currently seen in Local Hospitals. Costs will vary in individual sites depending on the exact infrastructural improvements required.

A formal capital assessment should be undertaken of the exact capital requirements that will be required in the two pilot regions, based on a detailed analysis of the changes which the Task Force's proposals will entail. A similar exercise will be required in other regions. In each case, the details will depend on the exact organisation of acute hospital services and the nature of the changes required.

Appendices and Bibliography

Appendix 1
Membership and Terms of Reference

The National Task Force on Medical Staffing was divided into a **Steering Group** and **Project Groups on NCHD Working Hours** and **Medical Education and Training**. Small working groups were appointed by each of the groups to progress their tasks. The secretariat was provided by the Department of Health and Children. *It should be noted that the members of the two Project Groups provided input to the Steering Group on their respective subject areas, and were invited to offer comments on the report as a whole, but were not asked to endorse the full report since they had not been fully involved in its preparation. The Steering Group members alone are signatories to the report.*

National Task Force on Medical Staffing

Mr. David Hanly, Chairperson

Mr. Frank Ahern, Director, Personnel Management and Development, Department of Health and Children*

Dr. Ruth Barrington, Chief Executive Officer, Health Research Board

Mr. Paul Barron, Assistant Secretary, Department of Health and Children

Dr. Richard Brennan, Chairperson, Irish College of General Practitioners

Prof. Gerard Bury, President, Medical Council

Dr. Jane Buttimer, Medical Director, National Task Force on Medical Staffing/Medical Education and Training

Mr. Jim Breslin, Director of Planning, Commissioning and Change, Eastern Regional Health Authority

Prof. Anthony Clare, Consultant General Adult Psychiatrist, St. Patrick's Hospital, Dublin

Dr. Deborah Condell, Consultant Histopathologist, Cavan Monaghan General Hospital

Mr. Rory Costello, Industrial Relations Executive, Health Service Employers' Agency

Mr. Denis Doherty, Chief Executive Officer, Midland Health Board. (Subsequently Chief Executive Officer, Health Boards Executive)

Dr. Trevor Duffy, Specialist Registrar, Rheumatology, St. Vincent's University Hospital, Dublin (*nominated by the Irish Medical Organisation*)

Ms. Sheila Early, Medical Manpower Manager, Beaumont Hospital, Dublin

Senator Geraldine Feeney, Chair, Medical Council Ethics Committee (*public interest representative on Task Force*)

Dr. Patricia Fitzsimons, Consultant Radiologist, Sligo General Hospital

Dr. Kate Ganter, Consultant Child and Adolescent Psychiatrist, Lucena Clinic, Dublin (*nominated by the Irish Medical Organisation*)

Mr. John Gloster, Chief Officer, Postgraduate Medical and Dental Board

Mr. John Hayden, Chief Executive, Higher Education Authority

Dr. Mary Hynes, Regional Manager, Acute Services, Western Health Board

Mr. Asam Ishtiaq, Registrar, Surgery, Waterford Regional Hospital

Mr. Nicky Jermyn, Chief Executive Officer, St. Vincent's University Hospital, Dublin

Dr. Verena Keane, Consultant Psychiatrist, Learning Disability, St. Vincent's Centre, Navan Road and St. Michael's House (*nominated by the Irish Hospital Consultants' Association*)

Dr. Peter Kelly, Consultant Histopathologist, Mater Hospital, Dublin

Dr. Jim Kiely, Chief Medical Officer, Department of Health and Children

Prof. Gerry Loftus, Consultant Paediatrician, University College Hospital Galway

Dr. Timothy Lynch, Consultant Neurologist, Mater Hospital (*nominated by the Irish Hospital Consultants' Association*)

Mr. Tommie Martin, Chief Officer, Comhairle na nOspidéal

Mr. Jim McCaffrey, Assistant Secretary, Department of Finance**

Ms. Mary McCarthy, Chief Nursing Officer, Department of Health and Children

Dr. Eilis McGovern, Consultant Cardio-thoracic Surgeon, St. James's Hospital, Dublin

Dr. Peter McKenna, Consultant Obstetrician and Gynaecologist, Rotunda Hospital

Prof. T.J. McKenna, Consultant Physician in Endocrinology and Diabetes Mellitus, St. Vincent's University Hospital, Dublin

Dr. Mick Molloy, Registrar, Emergency Medicine, St. Vincent's University Hospital, Dublin (*nominated by the Irish Medical Organisation*)

Mr. Joe Mooney, Principal Officer, Department of Finance

Dr. Sean Murphy, Consultant Physician in Geriatric Medicine, Longford/Westmeath General Hospital, Mullingar

Mr. Colman O'Leary, Consultant in Emergency Medicine, Mid-Western Regional Hospital, Limerick

Ms. Yvonne O'Shea, Chief Executive Officer, National Council for the Professional Development of Nursing and Midwifery

Dr. Dela Osthoff, Registrar, Child Psychiatry, St. Anne's Children's Centre, Galway

Dr. Jenny Porter, Consultant Anaesthetist, Longford/Westmeath General Hospital, Mullingar (*nominated by the Irish Hospital Consultants' Association*)

Mr. Pawan Rajpal, Consultant General Surgeon, Cavan/Monaghan General Hospital (*nominated by the Irish Hospital Consultants' Association*)

Mr. Pat Ring, Principal Officer, Department of Finance

Dr. Sheelah Ryan, Chief Executive Officer, Western Health Board

Prof. Arthur Tanner, Dean of Postgraduate Studies, Royal College of Surgeons in Ireland

Ms. Vivienne Tegg, Human Resources Director, South Eastern Health Board

Dr. Eamonn Tierney, Consultant Anaesthetist, Wexford General Hospital

Mr. Sean Tierney, Consultant General Surgeon, Tallaght Hospital, Dublin (*nominated by the Irish Medical Organisation*)

Dr. Cillian Twomey, Consultant Physician in Geriatric Medicine, Cork University Hospital

Dr. Dermot Walsh, Inspector of Mental Hospitals, Department of Health and Children

Ms. Frances Walsh, Physiotherapy Manager, Cork University Hospital

*__Mr. John Collins__ replaced Mr. Frank Ahern as Director, Personnel Management and Development, Department of Health and Children in May 2002 and was subsequently replaced by **Mr. Bernard Carey** in January 2003.

** Mr. Jim McCaffrey retired in October 2002 and was replaced by **Mr. Michael Scanlan,** Assistant Secretary.

Task Force Secretariat

Mr. Fergal Lynch, Principal Officer, Department of Health and Children, Project Director

Mr. Andrew Condon, Assistant Principal, Department of Health and Children

Ms. Arleen Heffernan, Assistant Principal, Department of Health and Children

Mr. Ciarán Ó Maoileoin, Assistant Principal, Department of Health and Children

Ms. Eithne Breathnach, Administrative Officer, Department of Health and Children

Mr. Peter Heffernan, Executive Officer, Department of Health and Children

Ms. Siobhán Doyle, Clerical Officer, Department of Health and Children

Steering Group

Membership: Mr. David Hanly (Chairperson), Mr. Paul Barron, Dr. Richard Brennan, Dr. Jane Buttimer, Mr. Jim Breslin, Mr. Bernard Carey, Mr. Rory Costello, Senator Geraldine Feeney, Dr. Kate Ganter, Mr. Asam Ishtiaq, Mr. Nicky Jermyn, Dr. Verena Keane, Dr. Peter Kelly, Dr. Jim Kiely, Prof. Gerry Loftus, Ms. Mary McCarthy, Dr. Mick Molloy, Mr. Pawan Rajpal, Dr. Sheelah Ryan, Mr. Michael Scanlan, Prof. Arthur Tanner, Ms. Vivienne Tegg, Dr. Cillian Twomey, Dr. Dermot Walsh, Ms. Frances Walsh.

Terms of Reference

"Co-ordinating the work of the Task Force and devising, costing and promoting implementation of a new model of hospital service delivery based on appropriately trained doctors providing patients with the highest quality service, using available resources as equitably, efficiently and effectively as possible."

1. The Steering Group will have an independent Chairperson appointed by the Minister for Health and Children for a period to be determined by the Minister. The members of the Steering Group will be appointed by the Minister for a period to be determined by the Minister. The Steering Group will report to the Minister.

2. The Steering Group will co-ordinate and oversee the work of each of the Task Force's Project Groups, including the Implementation Group on NCHD Working Hours and the Medical Education and Training Advisory Group. The Steering Group will comment on and revise as necessary draft reports or studies submitted to it by the Project Groups prior to submission to the Minister.

3. The Steering Group will complete a detailed study, within an agreed timeframe, to quantify the resource implications and costs arising from the recommendations

contained in the *Report of the National Joint Steering Group on the working hours of non consultant Hospital Doctors* and the *Report of the Forum on Medical Manpower.* To this end, the Steering Group may avail of such consultancy assistance as it deems appropriate, by agreement with the Minister. The study should have particular regard to the desired benefits to public hospital patients, continuity of care, flexible work patterns, clinical responsibility, training, professional development and the effect on other health care professions and ancillary services arising from the recommendations contained in both Reports. The study will, inter alia, focus on the specialty workload in the public hospital system with a view to identifying key areas for change.

4. The Steering Group will oversee pilot studies in a representative group of hospitals to assess new models of service delivery and patient care by appropriately trained doctors, with a view to providing the highest quality service, using available resources as equitably, efficiently and effectively as possible. These studies will be conducted in association with the relevant local hospital Working Groups.

5. The Steering Group will prepare national guidelines for health agencies to ensure national conformity and continuity on key areas of workforce planning.

6. The Steering Group will seek to devise innovative approaches to the future provision of hospital services on a best practice basis, with the involvement of each local hospital Working Group, and having regard to the recommendations of the *Report of the National Joint Steering Group on the working hours of NCHDs* and the *Report of the Forum on Medical Manpower.*

7. The Steering Group will undertake any other tasks that may be agreed from time to time with the Minister for Health and Children. The Steering Group will also review the Task Force's structures and terms of reference as it deems necessary and make appropriate changes by agreement with the Minister.

Working Group of Steering Group

The Steering Group appointed a Working Group to progress the detailed aspects of its tasks.

Membership: Mr. David Hanly (Chairperson), Dr. Trevor Duffy, Dr. Mary Hynes, Dr. Peter Kelly, Prof. Gerry Loftus and Dr. Cillian Twomey.

Implementation Group on NCHD Working Hours

Membership: Mr. David Hanly (Chairperson), Mr. Paul Barron, Dr. Jane Buttimer, Mr. Rory Costello, Mr. Denis Doherty, Ms. Sheila Early, Dr. Mary Hynes, Dr. Timothy Lynch, Mr. Tommie Martin, Prof. T.J. McKenna, Dr. Peter McKenna, Dr. Mick Molloy, Dr. Sean

Murphy, Mr. Colman O'Leary, Ms. Yvonne O'Shea, Dr. Dela Osthoff, Mr. Pat Ring, Dr. Eamonn Tierney, Mr. Sean Tierney, Ms. Frances Walsh.

Terms of Reference

"Ensuring compliance, nationally and locally, with the EU Working Time Directive's requirements for phased reductions in the working hours of non-consultant hospital doctors."

1. The Chairperson and members of the Implementation Group on NCHD Working Hours will be appointed by the Minister for Health and Children for a period to be determined by the Minister. The Group will report to the Steering Group.

2. The Group will prepare a detailed implementation strategy for an agreed programme to reduce NCHD working hours in compliance with the EU Working Time Directive (48-hour working week by 2009, with interim targets of 58 hours by 2004 and 56 hours by 2007). The implementation strategy should take account of the *Report of the National Joint Steering Group on the working hours of non consultant Hospital Doctors* and the *Report of the Forum on Medical Manpower.*

   In this regard the Group will:

   - submit its implementation programme to the Steering Group for approval and for submission in turn to the Minister for Health and Children;
   - oversee the establishment and operation of, and provide information, guidance and support to, local Working Groups within each public hospital: these Working Groups will report directly to the NCHD Hours Group and will progress measures agreed by the Task Force for the reduction of NCHD hours at local level;
   - agree a hospital action plan with each local hospital Working Group to ensure, initially, the introduction of a range of immediate measures to reduce NCHD hours: in developing the plan the Working Group should have regard to the implications of the recommendations contained in the *Report of the Forum on Medical Manpower*;
   - monitor and evaluate progress on measures to reduce NCHD hours at both local and national level;
   - in association with the local hospital Working Groups, develop and implement a communications policy at national and local level to ensure that there is a full understanding of and compliance with the measures to reduce NCHD hours: this policy should address the needs within the hospital, within the professional bodies and representative groups and within the general public.

3. The Group will liaise with and provide appropriate input to the Steering Group and the other Project Group(s) on relevant matters, including the future role of

doctors in training and the detailed resource implications and costing study to be carried out by the Steering Group.

4. The Group will undertake any other tasks that may be agreed from time to time between the Steering Group and the Minister. The Group will also review its structures and terms of reference as it deems necessary and propose appropriate amendments to the Steering Group.

Sub Group of Implementation Group on NCHD Working Hours

The Implementation Group on NCHD Working Hours appointed a Sub-Group to progress its work.

Membership: Mr. David Hanly (Chairperson), Ms. Sheila Early, Dr. Peter McKenna, Dr. Mick Molloy, Ms. Yvonne O'Shea, and Dr. Dela Osthoff.

Medical Education and Training Project Group

Membership: Dr. Jane Buttimer (Chairperson), Dr. Ruth Barrington, Dr. Richard Brennan, Prof. Gerard Bury, Prof. Anthony Clare, Dr. Deborah Condell, Dr. Trevor Duffy, Dr. Patricia Fitzsimons, Mr. John Gloster, Mr. John Hayden, Mr. Asam Ishtiaq, Prof. Gerry Loftus, Dr. Eilis McGovern, Mr. Joe Mooney, Mr. Pawan Rajpal, Dr. Jenny Porter, Dr. Cillian Twomey.

Terms of Reference

"Addressing the present and future medical education and training needs of all hospital doctors."

1. The Chairperson and members of the Medical Education and Training Project Group will be appointed by the Minister for Health and Children for a period to be determined by the Minister. The Group will report to the Steering Group.

2. The Group, in consultation with all of the key stakeholders, will quantify the education, training and relevant structural requirements arising from the recommendations of the *Report of the National Joint Steering Group on the working hours of non consultant Hospital Doctors* and the *Report of the Medical Manpower Forum*, and will formulate an appropriate implementation plan.

3. The Group will liaise with and provide appropriate input to the Steering Group and the other Project Group(s) on relevant matters.

4. The Group will undertake any other tasks that may be agreed from time to time between the Steering Group and the Minister. The Group will also review its structures and terms of reference as it deems necessary and propose appropriate amendments to the Steering Group.

Sub-Groups of Medical Education and Training Project Group

The Medical Education and Training Project Group appointed three sub-groups to focus on different components of its tasks and to report to the Group. Membership and terms of reference of the Framework, Access and Resource Requirements Sub-Groups were as follows.

Framework Sub-Group

Membership: Dr. Jane Buttimer (Chairperson), Dr. Ruth Barrington, Prof. Gerard Bury, Prof. Anthony Clare, Dr. Eilis McGovern and Prof. T.J. McKenna.

Terms of Reference

''The Framework Sub-Group will map out a legislative, structural and policy framework for the co-ordination of post-graduate and continuing medical education in the context of the changes proposed in the Hanly and Forum Reports, and make recommendations to the Project Group''.

Access Sub-Group

Membership: Dr. Jane Buttimer (Chairperson), Dr. Deborah Condell, Dr. Richard Brennan, Dr. Patricia Fitzsimons and Mr. Pawan Rajpal.

Terms of Reference

''The Access Sub-Group will consider how best to implement changes proposed in the Hanly and Forum Reports on issues affecting access to MET, including equality, gender, life/work commitments, position of EU and non-EU doctors etc with a view, in particular, to retention within the Irish health system of graduates of the Irish medical schools together with other appropriately trained doctors, and make recommendations to the Project Group.''

Resource Requirements Sub-Group

Membership: Dr. Jane Buttimer (Chairperson), Mr. John Gloster, Mr. Asam Ishtiaq, Mr. John Hayden, Mr. Joe Mooney and Dr. Jenny Porter.

Terms of Reference

''The Resource Requirements Sub-Group will

- Collate relevant data on the existing MET system including numbers, costs etc
- Apply the data to the proposed model(s) of projected numbers and ratios of consultants and NCHDs, taking account of the likely impact of the NCHD 48 hour week on MET

and make recommendations to the Project Group''.

Other persons assisting the Task Force

Mr. Dave Cawte was engaged by the Task Force to provide expert advice on the development of sample rosters.

Ms. Valerie Nagle, Health Economist, Eastern Regional Health Authority, assisted the Task Force in estimating the costs of its proposals.

Ms. Aileen Lynch, St. James's Hospital, was seconded to the Nursing Policy Unit of the Department of Health and Children from December 2002 to July 2003 to assist in considering the implications for nursing and midwifery of the Task Force's proposals.

Appendix 2
European Working Time Directive
Main provisions relating to doctors

This summary is intended for information purposes only. It does not purport to be a legal interpretation. The Council Directives 93/104/EC and 2000/34/EC[39] refer.

Context

The EU's Social Affairs Council adopted the *European Working Time Directive* (EWTD) in 1993 under Article 118a (now Article 138) of the Treaty on the European Union. The main provisions of the Directive are to limit maximum hours of working, and establish minimum entitlements to rest periods and paid annual leave for most workers in the EU.

The EWTD forms part of the EU's social policy agenda. This agenda was drawn largely from the *Community Charter of Fundamental Social Rights of Workers*, the so-called *Social Charter* adopted in 1989 by Member States other than the UK. The EU Commission is committed to a review of the operation of the EWTD in 2003.

The EWTD provides a basic framework of legal rights. It aims to limit long hours, provide minimum work-break entitlements, protect night workers and establish minimum holiday periods. Most EU member states already had more restrictive working time legislation in place before the EWTD.

Main provisions of EWTD

Working time limits (the '48 hour week')

By 1 August 2009, doctors are not obliged to work more than an average of 48 hours a week on the hospital site over a 17-week period. The standard reference period is 17 consecutive weeks in any period of a doctor's employment. In effect it is a rolling reference period.

Night-time work

Employers are required to take reasonable steps to ensure that the 'normal' hours of night work do not exceed an average of eight hours for each 24 hours over the 17-week period.

[39] See the following web address for full text of directive: http://europa.eu.int/smartapi/cgi/sga_doc?smartapi!celexapi!prod!CELEXnumdoc&lg=EN&numdoc=31993L0104&model=guichett

Health assessments for night-time work

Doctors are entitled to a free health assessment if they are to become a night worker. Employers must also make available the opportunity to have further assessments at regular intervals. Any doctor who is a night worker on 1 August 2004 should promptly be given a health assessment.

Rest periods

Doctors are entitled to a rest period of 11 consecutive hours between each working day. Doctors are also entitled to an uninterrupted rest period of not less than 24 hours in each 7-day period. This may be averaged over a two-week period i.e. equivalent to two day's rest over a fortnight.

Some doctors may be on shift work and change shift, and it may not be always be possible for them to take their full rest entitlement before starting the new pattern of work. In these circumstances, their entitlement to daily and weekly rest does not apply. The entitlements also do not apply where work is split up over the day and so precludes taking 11 consecutive hours of continuous rest.

In-work rest breaks

Doctors are entitled to an uninterrupted break of 20 minutes when daily working time is more than six hours. It should be a break in working time and not taken at the start or end of the working period.

Annual leave

Doctors in training are covered by the annual leave provisions of the *Organisation of Working Time Act, 1997.*

Definitions used in the EWTD

Working time means any period during which the worker is working, at the employer's disposal and carrying out his activity or duties, in accordance with national laws and/or practice.

The Organisation of Working Time Act 1997 (OWTA) transposed the EWTD into Irish law. Under the OWTA, working time is defined as net working time, exclusive of breaks, holidays, on-call or stand-by time.

As set out below, the European Court of Justice, in the SiMAP judgement, stated that all time spent on-site on-call can be defined as working time.

This means that for the purposes of estimating the working hours of NCHDs from 1 August 2004, working time is defined as all time on-site working or on-site on-call, not including breaks or rest periods. On-call off-site is not counted. Nor are holidays, leave, or time on training courses where the doctor is not available to his or her employer.

Rest period means any period which is not working time.

Compensatory rest refers to rest periods granted in lieu of previously worked time. Compensatory rest equivalent to time worked must be granted to workers who, in a shift system, exceed EWTD limitations on daily or weekly working time. Periods of compensatory rest must be preceded by an 11 hour daily rest period.

Night time means any period of not less than seven hours, as defined by national law, and which must include in any case the period between midnight and 5 a.m.

Shift work means any method of organising work in shifts whereby workers succeed each other at the same work stations according to a certain pattern, including a rotating pattern, and which may be continuous or discontinuous, entailing the need for workers to work at different times over a given period of days or weeks.

Shift worker means any worker whose work schedule is part of shift work.

EWTD: timetable for implementation

The timetable for the application of the EWTD to the working patterns of doctors in training is as follows:

1 August 2004	Interim 58 hour maximum working week Rest and break requirements become law
1 August 2007	Interim 56 hour maximum working week
1 August 2009	Deadline for 48 hour maximum working week (This may be extended for another 3 years at 52 hours if exceptional circumstances apply)

Member states are required to bring into force the laws, regulations and administrative provisions necessary for the implementation of the Directive (as it relates to doctors in training) by 1 August 2004.

The Task Force carried out detailed research on the working hours of NCHDs in EU member states and elsewhere. A summary of this information is in **Appendix 8.** In summary, of the 15 EU member states, ten appear to be fully compliant with the Directive: Austria, Denmark, Finland, Greece, Italy, Luxembourg, the Netherlands, Portugal, Spain and Sweden. The information available regarding Belgium, France, Germany and the UK indicates that they have varying distances to go before achieving full compliance in respect of doctors. Of the accession states, Estonia, Latvia, Lithuania and Slovenia appear to be compliant.

The EWTD and the European Court of Justice

To date, four cases that deal with the implementation of the EU Directive on Working Time (EWTD) have been referred to the European Court of Justice (ECJ) for a preliminary ruling under Article 234 of the Treaty. Two cases were essentially concerned with the **definition of 'working time' under the Directive in the context of 'on-call' activities of medical emergency personnel**. The Court handed down its judgement in what has become known as the *SiMAP* case on 3 October 2000.

EWTD and on-call

Most member states provide for some intermediate categories (readiness to work, on-call duty etc) that are not defined by the Directive. *These intermediate periods are characterised by the fact that the employee is not carrying out work, but has to be ready to work if necessary.* The distinctions between the different intermediate categories are linked to the degree of availability, which the employee must give to the employer i.e. whether the employee must remain immediately available, whether the employee must stay at the workplace, or whether s/he can stay in a freely chosen place. These different notions may be qualified differently in member states.

SiMAP Judgement

In the SiMAP case, the European Court of Justice held that *time spent on-call by doctors in public medical emergency services must be regarded as working time, and where appropriate as overtime, within the meaning of the European Working Time Directive, if they are required to be at the health centre.* According to the Court, if the doctors must merely be contactable at all times when on-call, only time linked to the actual provision of medical emergency services must be regarded as working time. The European Commission is currently examining the impact of the Court's judgement on Member States' provisions concerning on-call duty.

Application of SiMAP judgement

While the SiMAP judgement dealt with primary care physicians on-call at primary care clinics, legal opinion is that it would also apply to non-consultant hospital doctors.

Meaning of SiMAP Judgement

The SiMAP judgement establishes that the EWTD applies to employed doctors and also offers an EU definition of working time. The Court was asked how on-call time should be classified for the purposes of the EWTD. It ruled that when doctors are obliged by their employer to be present at a workplace, they are to be regarded as carrying out a duty. *Doctors who are on-call in their workplaces are constrained in pursing their own interests. Therefore, any time spent on-call in the workplace is regarded as working time.* Time spent off-site on-call does not count as working time.

European Court of Justice defines all work while on-call as Shift Work

The European Court of Justice also dealt with the nature of on-call work in its judgement on the SiMAP case. The Court stated that both types of 'working time', i.e. on-site on-call, and time spent when called into work, came within the definition of 'shift work' in the EWTD (Article 2(5)) as it involved the successive assignment of doctors to the same work post on a rotational basis, so that the doctors had to perform work at different hours over a given period of days or weeks.

The Jaeger case

A case seeking clarification of the issues raised by the SiMAP judgement has been brought to the European Court of Justice by a German doctor who works in a state hospital in Kiel. The case, *Landeshauptstadt Kiel v Dr. Med. Norbert Jaeger,* is referred to as the 'Jaeger' case.

The main point at issue is whether time spent on-site on-call counts as working time even when the doctor is resting. Under German national law, which is understood to have transposed the EWTD into domestic law, time spent on-call on-site is assumed to be rest unless work is actually required. However the SiMAP judgement has thrown doubt on this. Hence the reference to the ECJ for clarification.

The ECJ has been asked to decide two questions of relevance here:

1. Does time spent on-call by an employee in a hospital, in general, constitute working time within the meaning of Article 2(1) of Directive 93/104/EC even where the employee is permitted to sleep at times when he is not required to work?

2. Is it in breach of Article 3 of Directive 93/104/EC for a rule of national law to classify time spent on-call as a rest period unless work is actually carried out, where the employee stays in a room provided by the hospital and works as and when required to do so?

A ruling by the European Court of Justice on this case is awaited.

Appendix 3
Consultant staffing recommendations

This appendix sets out the Task Force's recommendations regarding the level of consultant staffing needed in each specialty to meet the requirements of the *European Working Time Directive* and a consultant-provided service.

In summary, the Task Force estimates that, in order to meet the hospital medical staffing requirements arising from implementation of the EWTD, *approximately 3,100 consultants,* an increase of some 1,300 posts over the current figure, *should be employed by 1 August 2009. In order to achieve a fully operational consultant-provided service, the Task Force estimates that some 3,600 consultants will be needed by 2013,* representing an increase of some 1,900 posts over the figure for 2003. The year 2013 is recommended as a target for achieving a fully consultant-provided service, but this could be adjusted in the light of experience if necessary. These recommendations are accompanied by a reduction over the same time period in the number of NCHDs from about 3,900 to some 2,200 (see **Appendix 4**).

Anaesthesia

Existing medical staffing

As of January 2003, there were 265 permanent consultant posts and 329 NCHDs (89 specialist registrars, 161 registrars and 79 SHOs) in anaesthesia in the public hospital system, a ratio of 1 consultant for every 1.2 NCHDs. Of the 265 consultants in the specialty, 13 had a special interest in intensive care, 13 had a special interest in paediatric anaesthesia and 2 had a special interest in pain management. The remaining 236 consultants had no formal special interest.

Key requirements

The Task Force is in broad agreement with the recommendations of the Association of Anaesthetists of Great Britain and Ireland regarding levels of consultant staffing needed for a consultant-provided service. The Task Force also identified the following requirements for the future provision of anaesthetic services:

- Adequate facilities should be available for pre-operative assessment.
- All patients undergoing anaesthesia should be assessed pre-operatively.
- Anaesthetists, surgeons and hospital management should participate in planning the appropriate management of emergency admissions.
- Anaesthetists and surgeons should participate in a multi-disciplinary audit process.

- All anaesthetists providing paediatric anaesthesia should do so on a regular basis. Irregular practice is not conducive to good clinical outcomes.
- The recommendations of the *National Confidential Enquiry into Peri-Operative Death* (NCEPOD) form a useful benchmark for service providers and should be used as such.

Intensive Care

Currently, there is one post of consultant in intensive care in the public hospital system. The Task Force is aware of the continuing debate regarding the opportunities for doctors from specialties other than anaesthesia to enter specialist training in intensive care. No such programme exists in Ireland at the current time. This, together with the underdevelopment of intensive care as a separate specialty means that, for the foreseeable future, intensive care units will be staffed by consultant anaesthetists with a special interest in intensive care. Should a separate training programme in intensive care be established, it may be necessary to revisit this recommendation.

Supra-regional transfer

While each Major Hospital will be equipped and staffed to deal with the vast majority of emergencies, there will on occasion be a need for supra-regional transfer of adults, children or neonates e.g. patients referred to a neuro-surgical unit. Such patients often require monitoring during transport by experienced clinicians. During the working day, ample staff will be available to travel with the patient. However, at night, the need for a doctor to participate in supra-regional transfer has implications for the level of clinical cover available on-site and consequent rostering arrangements.

While it may be possible to incorporate the need for supra-regional transfer into local rostering arrangements, this could result in unnecessary overstaffing. The Task Force recommends that, as part of the implementation process, consideration be given to the establishment of a national retrieval team to co-ordinate and manage supra-regional transfer of adults, children and neonates.

Recommendation

The Task Force has determined that, taking account of the centralisation of emergency care, trauma, and obstetric services, restructuring the hospital system and other measures aimed at meeting the requirements of the EWTD and a consultant-provided service, *there is a clinical need for a consultant anaesthetic presence in each Major Hospital 24 hours a day.* At any one time, there should be a consultant on-site with primary responsibility for obstetric anaesthesia and a second consultant on-site with primary responsibility for the ICU. A third consultant should be on-call off-site for theatre after scheduled activity ceases. It must be stressed that implementation of this recommendation is dependent on volume and complexity of emergent workload.

The Task Force's recommendations regarding the consultant staffing required to implement the EWTD and introduce a consultant-provided service are set out below.

CONSULTANT STAFFING RECOMMENDATION: ANAESTHESIA							
Specialty	**2003**	**2009**			**2013**		
	Consultant staffing at 01.01.03	**Consultant staffing to implement EWTD at 01.08.09**	**Per head of population**	**Consultants per 350,000 population**	**National consultant staffing**	**Per head of population**	**Consultants per 350,000 population**
ANAESTHESIA							
Anaesthesia	236	299	1 / 13,100	27			
Intensive Care	13	77	1 / 50,900	7			
Paediatric Anaesthesia	13	33	1 / 119,000	3			
Pain Management	2	11	1 / 350,000	1			
Total Specialty	**265**	**424**	**1 / 9,240**	**38**	**470**	**1 / 8,330**	**42**

Emergency medicine

Existing medical staffing

As of January 2003, there were 31 permanent consultant posts and 274 NCHDs (3 specialist registrars, 103 registrars and 168 SHOs) in emergency medicine in the public hospital system: a ratio of 1 consultant to every 9 NCHDs.

Approach to staffing

The Task Force agrees with the recommendations of the Comhairle na nOspidéal *Report of the Committee on Accident and Emergency Services*. It emphasised that the appointment of additional consultants in emergency medicine would have limited impact without the introduction and use of triage systems and better interaction between secondary and primary care. It recommended (a) capacity within the hospital to facilitate timely transfer of patients from the emergency department to more appropriate locations within the hospital; (b) more developed roles for nurses within the emergency department; (c) the use of minor injury units, medical assessment and admission units and (d) the introduction of a defined management structure for the hospital emergency service.

International literature indicates that approximately 60% of those attending hospital emergency departments require non-urgent care, whether medical or surgical. Between 5% and 10% will have major trauma. Less than 1% will have lethal trauma. The remaining 30-34% of patients require urgent or semi-urgent care.

Just less than 1 in 3 attendees are admitted to hospital. Data provided to the Task Force indicates that between 60% and 70% of these are medical admissions.

The Task Force considers that:

- The establishment of medical and surgical assessment units and medical and surgical admission units should address between 30% and 40% of emergency department workload.
- The establishment of a minor illness and injury unit within the Emergency Department should address a further 30-35% of workload.
- The establishment of paediatric and gynaecological emergency referral clinics will improve access to care for the limited number of patients who are not treated in other areas of the hospital emergency department.
- The 5-10% of attendees with major or lethal trauma should be held in the emergency department for resuscitation and stabilisation before triage to coronary care, intensive care, high dependency unit, theatre, or another hospital.
- The establishment of GP co-operatives, further resourcing and improved access to primary care should reduce inappropriate attendance in emergency departments. Increased availability and improved access to diagnostics will improve speed of referral and cut waiting times.

Two key factors influence the rapid assessment, diagnosis and treatment of attendees: firstly, triage of patients by senior/experienced staff to the correct location/service and secondly, the management and co-ordination of the emergency department by a senior clinician. These factors, added to the measures detailed above, influence the need for consultants in emergency medicine. Such consultants, working in partnership with consultant physicians, surgeons, paediatricians, psychiatrists and obstetricians and gynaecologists in a hospital emergency service, should ensure that there is appropriate senior clinical staffing available as needed when the patient presents to hospital.

CONSULTANT STAFFING RECOMMENDATION: EMERGENCY MEDICINE							
Specialty	2003	2009			2013		
	Consultant staffing at 01.01.03	Consultant staffing to implement EWTD at 01.08.09	Per head of population	Consultants per 350,000 population	National consultant staffing	Per head of population	Consultants per 350,000 population
EMERGENCY MEDICINE	31	88	1 / 45,000	8	99	1 / 40,000	9

Medicine

Existing medical staffing

As of 1 January 2003, there were 316 permanent consultant posts and 1,198 NCHDs (161 specialist registrars, 303 registrars, 117 SHOs and 231 interns) in medicine in the public hospital sector: a ratio of 1 consultant to every 3.8 NCHDs. There were 164 general physicians, 132 of whom had formal special interests. There were also 25 cardiologists, 4 clinical pharmacologists, 2 consultants in genito-urinary medicine, 43 geriatricians, 6 consultants in infectious diseases, 3 consultants in medical genetics, 18 medical oncologists, 14 neurologists, 3 neurophysiologists, 13 consultants in palliative medicine and 3 consultants in rehabilitation medicine (see table overleaf).

Participation in general on-call

While the trend towards increased specialisation within medicine has developed expertise and improved patient outcomes, there is a need for an adequate number of physicians to possess and maintain the generalist skills needed to provide safe and quality emergency services. The Task Force believes that *general medical on-call should be provided by the following sub-specialties of general medicine, and subject to local agreement, consultant geriatricians*:

- General medicine
- General internal medicine, special interest in cardiology
- Gastroenterology
- Endocrinology
- Nephrology
- Respiratory medicine
- Rheumatology

In previous sections, the Task Force has set out recommendations regarding the assessment and management of emergency medical patients. While taking account of these issues, continuing problems in the management of emergency patients are due in part to the under-resourcing and under-development of certain specialties and sub-specialties within medicine.

The Task Force has concluded in the context of centralisation of acute medicine and a consultant-provided service, that *there is a clinical need for a consultant general physician to be present on-site in each regional hospital on a 24-hour basis.* It must be stressed that implementation of this recommendation is dependent on volume and complexity of emergent workload.

CONSULTANT STAFFING RECOMMENDATION: MEDICINE							
Specialty	**2003**	**2009**			**2013**		
	Consultant staffing at 01.01.03	**Consultant staffing to implement EWTD at 01.08.09**	**Per head of population**	**Consultants per 350,000 population**	**National consultant staffing**	**Per head of population**	**Consultants per 350,000 population**
MEDICINE							
Cardiology	**25**	**50**	**1 / 78,000**	**4**	**56**	**1 / 70,000**	**5**
Clinical Pharmacology	**4**	**11**	**1 / 350,000**	**1**	**22**	**1 / 178,000**	**2**
Dermatology	16	25					
Paediatric Dermatology	2	8					
Sub-total	***18***	***33***	***1 / 119,000***	***3***	**45**	**1 / 87,000**	***4***
General Medicine							
General Medicine	32	60	1 / 65,000	5	67	1 / 58,000	6
Cardiology	14	33	1 / 119,000	3	33	1 / 119,000	3
Gastroenterology *including hepatology*	32	60	1 / 65,000	5	67	1 / 58,000	6
Endocrinology / Diabetes Mellitus	24	60	1 / 65,000	5	67	1 / 58,000	6
Nephrology	17	34	1 / 115,000	3	55		5
Respiratory Medicine	24	60	1 / 65,000	5	67	1 / 58,000	6
cystic fibrosis	1						
lung transplantation	1						
Tuberculosis	1						
Rheumatology	18	60	1 / 65,000	5	67	1 / 58,000	6
Sub-total	***164***	***367***	***1 / 10,600***	***31***	**424**	**1 / 9,700**	***38***
Geriatric Medicine	**43**	**78**	**1 / 50,000**	**7**	**78**	**1 / 50,000**	**7**
Infectious Diseases and Genito-Urinary Medicine	**6** **2**	**34** **2**	**1 / 115,000**	**3**	**45**	**1 / 87,000**	**4**
Medical Genetics	**3**	**8**	**1 / 490,000**		**8**	**1 / 490,000**	
Medical Oncology	**18**	**45**	**1 / 87,000**	**4**	**45**	**1 / 87,000**	**4**
Neurology	**14**	**34**	**1 / 115,000**	**3**	**34**	**1 / 115,000**	**3**
Neurophysiology	**3**	**14**	**1 / 280,000**		**16**	**1 / 245,000**	
Palliative Medicine	**13**	**45**	**1 / 87,000**	**4**	**45**	**1 / 87,000**	**4**
Rehabilitation Medicine	**3**	**14**	**1 / 280,000**	**1**	**22**	**1 / 178,060**	**2**
Total Specialty	**316**	**735**	**1 / 5,300**	**61**	**840**	**1 / 4,700**	**73**

Obstetrics and gynaecology

Existing medical staffing

As of 1 January 2003, there were 93 permanent consultant posts and 222 NCHDs (24 Specialist Registrars, 82 Registrars and 116 SHOs) in obstetrics and gynaecology in the public hospital sector: a ratio of 1 consultant for every 2.4 NCHDs. One consultant had a formal special interest in gynaecological oncology and one in fetal medicine.

Consultant staffing of obstetric services

In Ireland almost all of approximately 50,000 deliveries each year are hospital based, less than 1% occur at home. Maternity services are characterised by complexity of provision, particularly at the time of delivery. The provision of safe, quality obstetric and peri-natal care relies on close co-ordination between midwives, obstetricians, neonatologists and anaesthetists. The Institute of Obstetricians and Gynaecologists has stated that the minimum staffing requirements to provide 24 hour, 365 days per year cover for a maternity unit 'should be at least 3 consultant obstetricians with appropriate paediatric and anaesthetic services.' While this recommendation has led to additional consultant appointments and some centralisation of acute obstetric services it is not based on a consultant provided-service and does not meet EWTD requirements.

Recommendation

The Task Force has concluded that *there is a clinical need for a consultant obstetrician and gynaecologist to be present on-site in each regional obstetric unit on a 24-hour basis.* Such units should also have dedicated consultant anaesthetist staff on-site throughout the 24-hour period. The Task Force recommendations regarding anaesthesia, neonatology and paediatrics should be read in conjunction with this section.

CONSULTANT STAFFING RECOMMENDATION: OBSTETRICS and GYNAECOLOGY							
Specialty	**2003**	**2009**			**2013**		
	Consultant staffing at 01.01.03	**Consultant staffing to implement EWTD at 01.08.09**	**Per head of population**	**Consultants per 350,000 population**	**National consultant staffing**	**Per head of population**	**Consultants per 350,000 population**
OBSTETRICS and GYNAECOLOGY							
Obstetrics & Gynaecology *Gynaecological Oncology* *Fetal Medicine*	**91** 1 1						
Total Specialty	**93**	**179**	**1 / 21,900**	**16**	**191**	**1 / 20,500**	**17**

The increase in posts recommended by the Task Force should enable the further development of the internationally recognised sub-specialties of obstetrics and gynaecology: fetal medicine, gynaecological oncology, reproductive medicine, and uro-gynaecology.

Paediatrics

Existing medical staffing

As of 1 January 2003, there were 96 permanent consultant posts and 250 NCHDs (29 specialist registrars, 73 registrars and 148 SHOs) in paediatrics in the public hospital sector: a ratio of 1 consultant to every 2.6 NCHDs. There were 64 general paediatricians, 27 of whom had formal special interests. There were also 6 paediatric cardiologists, 4 paediatric nephrologists, 5 paediatric neurologists, 2 paediatric oncologists and 15 consultant neonatologists.

Delivery of paediatric services

A number of paediatric units in hospitals around the state have relatively low neonatal workload. In these circumstances it will be difficult to maintain sufficient workload and casemix to justify sufficient numbers of appropriately qualified and trained staff. *For these reasons, consideration should to be given to centralisation in major hospitals of all neonatal intensive care.*

Recommendation

The Task Force has concluded that *there is a clinical need for a consultant paediatrician or consultant neonatologist, together with a specialist registrar, to be present on-site in each Major Hospital on a 24-hour basis.* The Task Force recommendations regarding anaesthesia, obstetrics & gynaecology should be read in conjunction with this section.

CONSULTANT STAFFING RECOMMENDATION: PAEDIATRICS

Specialty	2003	2009			2013		
	Consultant staffing at 01.01.03	Consultant staffing to implement EWTD at 01.08.09	Per head of population	Consultants per 350,000 population	National consultant staffing	Per head of population	Consultants per 350,000 population
PAEDIATRICS							
General	37						
Community Child Health	10						
Developmental	1						
Endocrinology	2						
Gastroenterology	3						
Infectious Diseases	1						
Learning Disability	1						
Metabolic Diseases	3						
Physical Handicap	2						
Respiratory Medicine	4						
Sub-total	***64***	***111***	***1 / 35,000***	***10***	***135***	***1 / 29,000***	***12***
Paediatric Cardiology	**6**	**8**			**8**	**1 / 490,000**	
Paediatric Nephrology	**4**	**7**			**8**	**1 / 490,000**	
Paediatric Neurology	**5**	**8**			**9**	**1 / 435,000**	
Paediatric Oncology	**2**	**5**			**5**	**1 / 783,000**	
Neonatology	**15**	**45**	**1 / 87,000**	**4**	**45**	**1 / 87,000**	**4**
Total Specialty	**96**	**184**	**1 / 21,300**	**14**	**210**	**1 / 18,700**	**16**

Pathology

Existing medical staffing

As of 1 January 2003, there were 159 permanent consultant posts and 118 NCHDs (49 specialist registrars, 24 registrars and 45 SHOs) in pathology in the public hospital sector: a ratio of 1 consultant to every 0.7 NCHDs. There were 80 histopathologists, 18 of whom had formal special interests. There were also 6 principal biochemists, 3 chemical pathologists, 37 haematologists, 4 immunologists and 28 microbiologists.

CONSULTANT STAFFING RECOMMENDATION: PATHOLOGY							
Specialty	**2003**	**2009**			**2013**		
	Consultant staffing at 01.01.03	**Consultant staffing to implement EWTD at 01.08.09**	**Per head of population**	**Consultants per 350,000 population**	**National consultant staffing**	**Per head of population**	**Consultants per 350,000 population**
PATHOLOGY							
Biochemistry	**6**	**12**	**1 / 326,000**	**1**	**15**	**1 / 261,000**	**1**
Chemical Pathology	**3**						
Paediatric	1						
Sub-total	***4***	***12***	***1 / 326,000***	***1***	***15***	***1 / 261,000***	***1***
Haematology	27	31		3	45		4
Paediatric	4	6			11		1
Transfusion Medicine	6	11		1	11		1
Sub-total	***37***	***48***	***1 / 87,000***	***4***	***67***	***1 / 58,000***	***6***
Histopathology	62	77		7	90	1 / 44,000	8
Cytology	9	11		1	22	1 / 178,000	2
Neuropathology	4						
Ocular Pathology	1						
Oral Pathology	1						
Paediatric	2						
Perinatal	1						
Sub-total	***80***	***102***	***1 / 38,400***	***8***	***126***	***1 / 31,000***	***10***
Immunology	**4**	**8**	**1 / 326,000**		**8**	**1 / 490,000**	
Microbiology	26	30					
Virology	2	4					
Sub-total	***28***	***34***	***1 / 115,000***	***3***	***49***	***1 / 80,000***	***4***
Total Specialty	**159**	**216**	**1 / 18,100**	**17**	**280**	**1 / 14,000**	**22**

Workload in pathology

The main means of estimating the numbers of consultant pathologists required is by relating staffing to workload in the individual specialties and sub-specialties of pathology. However, the different specialties each have different work practices, caseload, casemix and mix of laboratory and clinical duties.

The Task Force was guided by the recommendations of the Royal College of Pathologists report, *Medical and Scientific Staffing of National Health Service Pathology Departments, 1999*. In this document, the College outlines how consultant staffing in the various specialties and sub-specialities of medicine, surgery, paediatrics, obstetrics and gynaecology, taken together with workload generated by primary care can be factored into consultant staffing requirements in pathology.

Psychiatry

Existing medical staffing

As of 1 January 2003, there were 276 permanent consultant posts and 439 NCHDs (40 senior registrars, 164 registrars and 235 SHOs) in psychiatry in the public sector: a ratio of 1 consultant to every 1.6 NCHDs. There were 171 general adult psychiatry posts, 49 child psychiatry posts, 1 of which had a special interest in substance misuse, 21 old age psychiatry posts, 30 learning disability psychiatry posts and 5 forensic psychiatry posts. Of the 171 Consultant general adult posts, 7 had a formal special interest in liaison psychiatry, 5 in rehabilitation psychiatry and 6 in substance misuse. Of the 30 posts in the psychiatry of learning disability, 20 had a special interest in the psychiatry of learning disability in adults, 10 in the psychiatry of learning disability in children.

Planning for the future

During its consultation process, the Task Force received detailed submissions on future practice and workforce needs in psychiatry from the Irish College of Psychiatrists, the Irish Psychiatric Training Committee and the Inspector of Mental Hospitals. Comhairle na nOspidéal is currently conducting a review of the specialty while the Department of Health and Children is currently reviewing service provision in child and adolescent psychiatry in the context of the *Mental Health Act 2001*. The Task Force has sought therefore to focus its recommendations on the implementation of the EWTD and the introduction of a consultant-provided service in psychiatry, rather than involving itself in a detailed policy debate.

Current service provision in psychiatry is based on *Planning for the Future* (1984), which outlined a new framework for a modern psychiatric service that would move away from the hospitalised and isolated service to a service based on a comprehensive range of care facilities provided in the community.

The Health Strategy stated that *Planning for Future* would be reviewed. In the interim, the Task Force believes that, in order to ensure the availability of high quality and safe services to patients at all times, the process initiated by *Planning for the Future* should continue. Pending the outcome of a review, the Task Force concluded that the priority was to create additional consultant posts, primarily in sub-specialties of general adult psychiatry and within other psychiatric specialties.

Recommendation

- Sector size is currently approximately 20-25,000 population, although there are wide variations nationally. During the Task Force's consultation process, it was argued that the minimum population size for sectors might be increased to facilitate choice of doctor for patients. The Task Force supports this view.
- The Task Force believes that pending a review of sectorisation, sectors should continue to be overlaid with full time specialties of old age, learning disability, child and adolescent and rehabilitation psychiatry.
- The Task Force believes a broad increase in consultant posts should, pending review of *Planning for the Future*, enable the further development of supra-regional and national specialities, such as secure forensic care (Central Mental Hospital), supra-regional services for disturbed adolescents, services for persons with a learning disability and comorbid functional psychiatric illness/challenging behaviours, eating disorders, perinatal psychiatry and psychiatry for the homeless. These increases should serve to meet the needs of the *Mental Health Act 2001* and criminal law insanity requirements.
- The Task Force believes that, in line with the process initiated by *Planning for the Future*, the transfer of acute psychiatric units to the campuses of general hospitals should continue and that each Major Hospital should have a regional acute psychiatric unit on-site.
- Each regional acute unit should have sufficient beds for acute general adult psychiatric in-patient care with additional bed facilities for acute assessment usage by psychiatry of old age services, acute child and adolescent psychiatric admissions and patients with a learning disability and co-morbid acute psychiatric illness. Each regional acute unit should also have a consultant psychiatric liaison service.
- At regional level, there should also be an intensive-care unit directed by, depending on the model adopted, a consultant forensic psychiatrist or a consultant psychiatrist with a special interest in intensive care or rehabilitation with links to local prisons and courts. The Task Force is aware that the issue of intensive care units is currently being considered by the Department of Health and Children.

Acute cover

The Task Force concluded (**section 3.7**) that, *in an ideal situation*, acute psychiatric services currently in single-specialty hospitals would best be delivered, in conjunction with other specialist services, on the site of a Major Hospital. This would enable more speedy access to on-site specialist support, increase efficiencies in staffing cover and reduce the duplication of staff and support services. The Task Force is aware that much of this has been achieved, is underway or is outlined in current plans.

Should the recommendations above be implemented, it will result in a centralisation of acute psychiatry in one location in each region. This will have significant implications for the medical cover arrangements. In this regard, the Task Force believes that there is a clinical need for on-site psychiatric staffing in acute psychiatric units on a 24-hour basis. While the Task Force anticipates that this need can be met by experienced psychiatric

trainees, consideration should be given to senior registrar or consultant staffing in line with workload and casemix.

CONSULTANT STAFFING RECOMMENDATION: PSYCHIATRY							
Specialty	**2003**	**2009**			**2013**		
	Consultant staffing at 01.01.03	**Consultant staffing to implement EWTD at 01.08.09**	**Per head of population**	**Consultants per 350,000 population**	**National consultant staffing**	**Per head of population**	**Consultants per 350,000 population**
PSYCHIATRY							
Child & Adolescent Psychiatry	48						
Substance misuse	1						
Sub-total	***49***	***85***		***7***	***121***	***1 / 32,000***	***11***
Forensic Psychiatry	**5**	**14**	**1 / 280,000**	**1**	**14**	1 / 280,000	**1**
General Adult Psychiatry	151	167	1 / 23,500	14	242	1 / 16,000	22
Eating disorders		2			2	1 / 1,959,000	
Homeless	1	4			4	1 / 979,000	
Liaison	7	11		1	22	1 / 178,000	2
Neuropsychiatry		2			2	1 / 1,959,000	
Perinatal	1	2			2	1 / 1,959,000	
Rehabilitation	5	22		2	33	1 / 119,000	3
Substance Misuse	6	22		2	33	1 / 119,000	3
Sub-total	***171***	***232***	***1 / 16,900***	***19***	***340***	***1 / 16,300***	***30***
Psychiatry of Learning Disability							
Adult	20	28		2	33	1 / 119,000	3
Child	10	16		1	22	1 / 178,000	2
Sub-total	***30***	***44***	***1 / 119,000***	***3***	***55***	***1 / 71,000***	***5***
Psychotherapy	***0***	***11***	***1 / 356,000***	***1***	***22***	***1 / 178,000***	***2***
Psychiatry of Old Age	**21**	**35**	**1 / 119,000**	**3**	**44**	**1 / 119,000**	**4**
Total Specialty	**276**	**421**	**1 / 9,300**	**34**	**596**	**1 / 6,600**	**53**

Radiology

Existing medical staffing

As of 1 January 2003, there were 163 permanent consultant posts and 68 NCHDs (65 specialist registrars and 3 registrars) in radiology in the public hospital sector: a ratio of 5 consultants to every 2 NCHDs. There were 146 general radiologists, 28 of whom had formal special interests, 5 neuro-radiologists and 2 paediatric radiologists. Following a Comhairle na nOspidéal report in 2000, radiation oncologists were included in total workforce figures for the specialty. At 1 January 2003, there were 10 radiation oncologists, one of whom had a special interest in paediatric radiation oncology.

Measuring workload in radiology

The Task Force reviewed the various methods[40] of matching workload in clinical radiology to the need for consultant appointments. During the consultation process, support was expressed for the use of a relative value scale which would link the appointment of new consultants in other hospital specialties to the need for consultant radiologists. This scale assumes that consultants, depending on their specialty or sub-specialty, generate a certain radiological workload, which can then be used to estimate the need for additional radiologists.

The Task Force took a number of factors into account in determining the requirement for consultant radiology services nationally. These include deficits in current staffing and service provision, the increasing use of picture archiving and communications systems (PACS), the current shortage of radiographers in the Dublin area and the need to link staffing to resource provision.

CONSULTANT STAFFING RECOMMENDATION: RADIOLOGY

Specialty	2003	2009			2013		
	Consultant staffing at 01.01.03	Consultant staffing to implement EWTD at 01.08.09	Per head of population	Consultants per 350,000 population	National consultant staffing	Per head of population	Consultants per 350,000 population
RADIOLOGY							
General Radiology	118						
Breast	10						
Interventional	4						
Musclo-skeletal	1						
Nuclear	4						
Paediatric	7						
Vascular	2						
Sub-total	***146***	***228***	***1 / 17,100***	***20***	***269***	***1 / 14,600***	***24***
Neuroradiology	**5**	**10**	**1 / 350,000**		**10**	**1 / 392,000**	
Paediatric Radiology	**2**	**8**	**1 / 490,000**		**8**	**1 / 490,000**	
Radiation Oncology	9						
Paediatric	1						
Sub-total	***10***	***20***	***1 / 196,000***		***22***	***1 / 178,000***	
Total Specialty	**163**	**266**	**1 / 14,700**	**20**	**309**	**1 / 12,700**	**24**

Surgery

Existing medical staffing

As of 1 January 2003, there were 331 permanent consultant posts and 771 surgical NCHDs (146 specialist registrars, 253 registrars and 372 SHOs) in surgery in the public hospital sector: a ratio of 1 consultant to every 2.3 NCHDs. There were 125 general surgeons, 11

[40] This review included analysis of the Foresterhill scale, the Addenbrookes formula and a relative value scale in use in the United States.

cardio-thoracic surgeons, 9 neurosurgeons, 35 ophthalmic surgeons, 5 oral and maxillo-facial surgeons, 70 trauma and orthopaedic surgeons, 33 otolaryngologists (ENT surgeons), 5 paediatric surgeons, 15 plastic surgeons and 23 urologists. The table below details the range of special interests within many of these disciplines of surgery.

Surgery demands craft-based skills in the operating theatre in addition to the requirements, common to all hospital doctors, for outpatient clinic and ward work, teaching, training, audit, research and continuing professional development. Surgical outcomes are more easily identified, risks are higher and there is less scope for safe delegation of work to doctors in training.

Surgical services provide optimum emergency and elective care through systems of managed clinical networks and regional or supra-regional services. To do this, surgical services should be based on adequate population size to give sufficient critical mass to develop the expertise of staff and avoid unnecessary and costly duplication of services.

Participation in general on-call

While the trend towards increased specialisation within surgery has developed expertise and improved patient outcomes, there is a need for specialist surgeons to possess and maintain the generalist skills needed to provide safe and quality emergency services. The Task Force believes that general surgical on-call should be provided by existing general surgeons without a formal special interest and by the following sub-specialties of general surgery:

- Breast surgery
- Breast endocrine surgery
- Gastro-intestinal surgery
- Vascular surgery (although some hospitals may wish to maintain separate vascular rotas).

National Organ Retrieval Team

During its consultation process, the Task Force was made aware of the extremely long hours worked by surgical NCHDs involved in organ harvesting and retrieval for transplant programmes. It was noted that the implementation of the EWTD would make if difficult for such NCHDs to participate in organ retrieval and meet the criteria for training posts. This issue is of particular relevance in the ECAHB, as St Vincent's University Hospital is the nationally designated centre for liver transplant surgery. The Task Force recommends, that, as part of the implementation process, consideration be given to establishment of a cross-specialty national organ retrieval team.

Recommendation

The Task Force has concluded that, in the context of centralisation of emergency surgery and a consultant-provided service, that there is a clinical need for a consultant general surgeon to be present on-site in each regional hospital on a 24-hour basis. It must be stressed that implementation of this recommendation is dependent on volume and complexity of emergent surgical workload and the extent to which surgical procedures on patients presenting out of hours can be safely postponed to the following day.

The Task Force has prioritised the development of sub-specialties of general surgery which will participate in general surgical on-call rather than seeking to create posts of general surgeon with no special interest. Taking account of this, the recommendations regarding the assessment of surgical patients, the broader management of emergency patients within the hospital, and the management of beds and other resources set out earlier in this chapter, the Task Force has recommended increases in the specialties of surgery as set out below.

CONSULTANT STAFFING RECOMMENDATION: SURGERY							
Specialty	**2003**	**2009**			**2013**		
	Consultant staffing at 01.01.03	**Consultant staffing to implement EWTD at 01.08.09**	**Per head of population**	**Consultants per 350,000 population**	**National consultant staffing**	**Per head of population**	**Consultants per 350,000 population**
SURGERY							
Cardio-thoracic Surgery	8						
Paediatric	1						
Transplantation	2						
Sub-total	***11***	***19***	***1 / 206,000***		***22***	***1 / 178,000***	
General Surgery	51	31		Other general surgeons			
Breast	6	6					
Breast Endocrine	9	27	1 / 145,000	2	34	1 / 119,000	3
Gastro-intestinal	26	66		6	88	1 / 44,000	8
Lower Gastro-intestinal	2		1 / 119,000				
Hepato-biliary	4	7	1 / 560,000		7	1 / 560,000	
Urology	2	2					
Vascular	25	45	1 / 87,000	4	55	1 / 71,000	5
Sub-total	***125***	***184***	***1 / 21,300***	***14***	***184***	***1 / 21,300***	***16***
Neurosurgery	8						
Paediatric	1						
Sub-total	***9***	***15***	***1 / 261,000***		***16***	***1 / 245,000***	
Ophthalmic Surgery	28						
Medical Ophthalmology	1						
Neuro-ophthalmic	1						
Paediatric	1						
Vitreo-retinal	4						
Sub-total	***35***	***50***	***1 / 78,000***	***4***	***67***	***1 / 58,000***	***6***
Oral & Maxillofacial	**5**	**16**	**1 / 245,000**		**26**	**1 / 151,000**	
Trauma & Orthopaedic	62						
Paediatric	6						
Spinal	2						
Sub-total	***70***	***116***	***1 / 34,000***	***10***	***157***	***1 / 25,000***	***14***
Otolaryngology	31						
Paediatric Otolaryngology	2						
Sub-total	***33***	***55***	***1 / 71,000***	***5***	***55***	***1 / 71,000***	***5***
Paediatric Surgery	4						
Paediatric Urology	1						
Sub-total	***5***	***10***	***1 / 392,000***		***13***	***1 / 301,000***	
Plastic Surgery	**15**	**35**	**1 / 119,000**	**3**	**40**	**1 / 98,000**	**3**
Urology	16						
Transplantation / urology	6						
Paediatric	1						
Sub-total	***23***	***49***	***1 / 80,000***	***4***	***49***	***1 / 80,000***	***4***
Total Specialty	**331**	**549**	**1 / 7,100**	**40**	**629**	**1 / 6,200**	**48**

Consultant staffing requirements: National Summary 2003 to 2013								
Specialty	**2003**		**2009**			**2013**		
	Consultant staffing at 01.01.03	**Per head of population**	**Consultant staffing to implement EWTD at 01.08.09**	**Per head of population**	**Consultants per 350,000 population**	**National consultant staffing**	**Per head of population**	**Consultants per 350,000 population**
ANAESTHESIA	265	1 / 14,900	424	1 / 9,200	38	470	1 / 8,300	42
EMERGENCY MEDICINE	31	1 / 126,400	88	1 / 45,000	8	99	1 / 40,000	9
INTENSIVE CARE	1		1			1		
MEDICINE	316	1 / 12,400	735	1 / 5,300	61	840	1 / 4,700	73
OBSTETRICS and GYNAECOLOGY	93	1 / 42,100	179	1 / 21,900	16	191	1 / 20,500	17
PAEDIATRICS	96	1 / 40,800	184	1 / 21,300	14	210	1 / 18,700	16
PATHOLOGY	159	1 / 24,600	216	1 / 18,100	17	280	1 / 14,000	22
PSYCHIATRY	276	1 / 14,200	421	1 / 9,300	34	596	1 / 6,600	53
RADIOLOGY	163	1 / 24,000	266	1 / 14,700	20	309	1 / 12,700	24
SURGERY	331	1 / 11,800	549	1 / 7,100	40	629	1 / 6,200	48
Total	**1,731**	**1 / 2,260**	**3,063**	**1 / 1,280**	**248**	**3,625**	1 / 1,080	**302**

In Section 4.1.6, ‘Safe delivery of specialist services’, the Task Force described specialties within the following structure:

- Regional specialties: those specialty services that can be provided safely and effectively in a region of 350,000 — 500,000 catchment population.
- Supra-regional specialties: those specialty services that, taking account of catchment population, workload and casemix, can only be provided in a limited number of locations, each of which serves a catchment population of 750,000 — 1,000,000.
- National specialties: tertiary care services, which for reasons of caseload, quality and cost-effectiveness, are only provided at single, individually recognised sites which meet the national requirement for the diagnosis or treatment of all patients with a particularly complex or rare condition.

Set out below are tables describing the staffing of supra-regional and national specialties previously summarised above. These tables do not represent additional staffing to that described above.

Supra-regional Specialties				
Specialty	**2003**	**2009**	**2013**	
	Consultant staffing at 01.01.03	**Consultant staffing to implement EWTD at 01.08.09**	**National consultant staffing**	**Per head of population**
MEDICINE				
Neurophysiology	**3**	**14**	**16**	**1 / 245,000**
PAEDIATRICS				
Paediatric Neurology	**5**	**8**	**9**	**1 / 435,000**
PATHOLOGY				
Histopathology *Neuropathology* *Perinatal*	 4 1	Included in overall histopathology projection	Included in overall histopathology projection	
Immunology	**4**	**8**	**8**	**1 / 490,000**
PSYCHIATRY				
General Adult Psychiatry Eating disorders Homeless Neuropsychiatry Perinatal	 1 1	 2 4 2 2	 2 4 2 2	 1 / 1,959,000 1 / 979,000 1 / 1,959,000 1 / 1,959,000
RADIOLOGY				
Neuroradiology	**5**	**10**	**10**	**1 / 392,000**
Paediatric Radiology	**2**	**8**	**8**	**1 / 490,000**
Radiation Oncology *Paediatric* ***Sub-total***	9 1 ***10***	 ***20***	 ***22***	 ***1 / 178,000***
SURGERY				
Cardio-thoracic Surgery ***Sub-total***	 ***11***	 ***19***	 ***22***	 ***1 / 178,000***
Neurosurgery *Paediatric* ***Sub-total***	8 1 ***9***	 ***15***	 ***16***	 ***1 / 245,000***
Oral & Maxillofacial	**5**	**16**	**26**	**1 / 151,000**

National Specialties					
Specialty	**Procedures delivered at individually recognised sites**	**2003**	**2009**	**2013**	
		Consultant staffing at 01.01.03	**National consultant staffing in this specialty**	**National consultant staffing in this specialty**	**Per head of population**
MEDICINE					
Respiratory Medicine *Cystic fibrosis* *Lung transplantation*	Treatment of adult and paediatric cystic fibrosis Lung transplantation	 1 1	Included in overall respiratory medicine projection	Included in overall respiratory medicine projection	
Medical Genetics		3	8	8	1 / 490,000
PAEDIATRICS					
General Paediatrics *Metabolic Diseases*	Metabolic Screening Programme	 3	Included in overall paediatric projection	Included in overall paediatric projection	
Paediatric Cardiology **Paediatric Nephrology** **Paediatric Neurology** **Paediatric Oncology**		6 4 5 2	8 7 8 5	8 8 9 5	1 / 490,000 1 / 490,000 1 / 435,000 1 / 783,000
PATHOLOGY					
Microbiology *Virology*	Virus Reference Laboratory	 2	Included in overall microbiology projection	Included in overall microbiology projection	
PSYCHIATRY					
Forensic Psychiatry	Central Mental Hospital	5	16	17	1 / 230,000
SURGERY					
Cardio-thoracic Surgery *Paediatric* *Transplantation*	Adult & paediatric heart transplants	 1 2	Included in overall cardiothoracic projection	Included in overall cardiothoracic projection	
General Surgery *Hepato-biliary*	Liver transplants	 4	7	7	1 / 560,000
Neurosurgery *Paediatric*		 1	Included in overall neurosurgery projection	Included in overall neurosurgery projection	
Trauma & Orthopaedic *Spinal*	Spinal Injuries Unit	 2	Included in overall orthopaedic surgery projection	Included in overall orthopaedic surgery projection	
Otolaryngology (ENT)	Cochlear Implants		Incl in overall ENT projection	Incl in overall ENT projection	
Paediatric Surgery *Paediatric Urology* ***Sub-total***	Tertiary Neonatal and Paediatric Surgery Tertiary Paediatric Urology	 1 5	 10	 13	 1 / 301,000
Urology *Transplantation /urology* *Paediatric urology*	Kidney Transplantation Tertiary Paediatric Urology	 6 1	Included in overall urology projection	Included in overall urology projection	

Consultant staffing projection example: Respiratory Medicine

Respiratory medicine is a specialty with clear links to general internal medicine. Consultants in this specialty provide general medical as well as respiratory services. As of 1 January 2003, there were 3 Senior House Officers, 1 registrar and 1 consultant working in respiratory medicine in Mid-Western Regional Hospital, Limerick and 4 Senior House Officers, 3 Registrars, 3 Specialist Registrars and 4 whole-time equivalent consultant posts in St Vincent's University Hospital. St Vincent's also functions as the national centre for the treatment of cystic fibrosis.

Staffing projections for respiratory medicine must take account of three main factors:

1. *Reductions in NCHD Hours:* According to the *Hanly Report*, NCHDs in respiratory medicine work an average of 71 hours per week, 97% of which are spent on the hospital site. NCHDs in respiratory medicine in the two pilot sites currently work for periods of between 60 and 111 hours per week. Nationally, delivery of services in respiratory medicine is heavily dependent on NCHDs. As of January 2003, there were 24 consultants[41] and 79 NCHDs in the specialty: a ratio of 3.3 NCHDs to every consultant.

2. *A consultant-provided service:* The proposal to proceed with a consultant-provided service is outlined in detail in section 3.3 of this report.

3. *Workload in respiratory medicine:* Patients with acute exacerbations of Chronic Obstructive Pulmonary Disease (COPD) are the leading source of hospital medical admissions during the winter. In every acute hospital, approximately 35 per cent of acute medical admissions are patients with respiratory-related conditions. One third of all acute medical call is delivered by the departments of respiratory medicine in each of the pilot sites. Acute medical admissions represent over 70 per cent of all emergency admissions nationally, 75 per cent of which present to hospital between the hours of 8am and 8pm.

Consultant staffing: The Task Force is of the view that in order to implement the EWTD by 2009, each population of 350,000 persons should be served by 5 consultants in respiratory medicine. This number would sustain a consultant-provided respiratory service on the hospital site between 8am and 8pm and allow participation in general medical on-call. The figure of 5 consultants is based on the following assumptions:

- Consultants may be contracted to work up to 39 hours a week at present. After on-call commitments are included, on-site working time may not exceed the EWTD maximum of an average of 48 hours a week.
- Standard holiday, study and sick leave provisions mean that for every five staff on a roster, one is always unavailable.
- 4 consultants working 39 hours per week = 156 hours. If 2 consultants were required to be on-site 6 days a week between the hours of 8am and 8pm, a total of 144 hours would be required. This would leave an average of 12 hours per week for participation in general medical on-call.

[41] Expressed in wholetime equivalents (WTE).

Appendix 4
Pilot regions: service configuration and consultant workforce requirements

Introduction

The Task Force set out its recommendations for the organisation of hospital services in section 3. The detailed recommendations for medical staffing in the two pilot regions are set out below.

Staffing of hospital services: ECAHB and MWHB

Recommended consultant staffing for the ECAHB and MWHB regions is set out in the table below. Given population projections and current demography, the Task Force has assumed that the population of both regions will continue to increase and has thus assigned a population of 350,000 from 2009 onwards. Further population increases will require further staffing, as set out in this table.

Consultant staffing requirements — Pilot Sites						
Specialty	EAST COAST AREA HEALTH BOARD			MID-WESTERN HEALTH BOARD		
	2003	2009	2013	2003	2009	2013
	Consultant staffing at 01.01.03	Projected 350,000 population	Projected 350,000 population	Consultant staffing at 01.01.03	Projected 350,000 population	Projected 350,000 population
ANAESTHESIA						
Anaesthesia Intensive Care Paediatric Anaesthesia Pain Management	23.6 1 0.4	27 7 3 1		18 1	27 7 3 1	
Total Specialty	*25*	*38*	*42*	*19*	*38*	*42*
EMERGENCY MEDICINE	3	8	9	1	8	9

Specialty	EAST COAST AREA HEALTH BOARD			MID-WESTERN HEALTH BOARD		
	2003	2009	2013	2003	2009	2013
	Consultant staffing at 01.01.03	Projected 350,000 population	Projected 350,000 population	Consultant staffing at 01.01.03	Projected 350,000 population	Projected 350,000 population
MEDICINE						
Cardiology	4.64	4	5	2	4	5
Clinical Pharmacology		**1**	**2**		**1**	**2**
Dermatology				0.91		
Paediatric Dermatology						
Sub-total	***2***	***3***	***4***	***0.91***	***3***	***4***
General Medicine						
General Medicine	3.52	5	6	4	5	6
Cardiology		3			3	
Gastroenterology	1.81	5	6	2	5	6
including hepatology	1					
Endocrinology/Diabetes Mellitus	3	5	6	1	5	6
Nephrology	0.91	3	5	2	3	5
Respiratory Medicine	4	5	6	1	5	6
Rheumatology	1.81	5	6	1	5	6
Sub-total	***16.05***	***31***	***35***	***11***	***31***	***35***
Geriatric Medicine	**3**	**7**	**7**	**4**	**7**	**7**
Infectious Diseases and genito-urinary medicine	**0.18**	**3**	**4**		**3**	**4**
Medical Oncology	**2.82**	**4**	**4**	**1**	**4**	**4**
Neurology	**1.64**	**3**	**3**		**3**	**3**
Neurophysiology	**0.36**					
Palliative Medicine	**1.55**	**4**	**4**	**1**	**4**	**4**
Rehabilitation Medicine	**2.09**	**1**	**2**		**1**	**2**
Total Specialty	***36.33***	***61***	***68***	***20***	***61***	***68***
OBSTETRICS & GYNAECOLOGY						
Obstetrics & Gynaecology	**10.27**			**5**		
Gynaecological Oncology				1		
Fetal Medicine	0.09					
Total Specialty	***11***	***16***	***17***	***6***	***16***	***17***
PAEDIATRICS*						
General				3		
Community Child Health				1		
other subspecialties of general paediatrics						
Sub-total	***2.14***	***10***	***12***	***4***	***10***	***12***
Neonatology	**2.27**	**4**	**4**	**2**	**4**	**4**
Total Specialty	***4.41***	***14***	***16***	***6***	***14***	***16***

Specialty	EAST COAST AREA HEALTH BOARD			MID-WESTERN HEALTH BOARD		
	2003	2009	2013	2003	2009	2013
	Consultant staffing at 01.01.03	Projected 350,000 population	Projected 350,000 population	Consultant staffing at 01.01.03	Projected 350,000 population	Projected 350,000 population
PATHOLOGY						
Biochemistry	**1**	**1**	**1**		**1**	**1**
Chemical Pathology						
Sub-total		***1***	***1***		***1***	***1***
Haematology	2	3	4		3	4
Paediatric			1			1
Transfusion Medicine	0.27	1	1		1	1
Sub-total	***2.27***	***4***	***6***	***2***	***4***	***6***
Histopathology	8.37	7	8	2	7	8
Cytology	*0.36*	*1*	*2*	*1*	*1*	*2*
Ocular Pathology	*1*					
Perinatal	*1*					
Sub-total	***10.73***	***11***	***12***	***3***	***8***	***10***
Immunology						
Microbiology	3.46			1		
Virology	0.72					
Sub-total	***4.18***	***4***	***4***	***1***	***3***	***4***
Total Specialty	***18.18***	***21***	***24***	***6***	***17***	***22***
PSYCHIATRY						
Child & Adolescent Psychiatry	***6***			***4***		
Sub-total		***7***	***11***		***7***	***11***
Forensic Psychiatry		**1**	**1**		**1**	**1**
General Adult Psychiatry	16	14	22	11	15	22
Liaison	1	1	2	1	1	2
Rehabilitation		2	3	1	1	3
Substance Misuse	1	2	3		2	3
Sub-total	***18***	***19***	***30***	***13***	***19***	***30***
Psychiatry of Learning Disability						
Adult	2	2	3	1	2	3
Child	1	1	2	0.91	1	2
Sub-total	***3***	***3***	***5***	***1.91***	***3***	***5***
Psychotherapy		**1**	**2**		**1**	**2**
Psychiatry of Old Age	**1**	**3**	**4**	**2**	**3**	**4**
Total Specialty	***28***	***34***	***53***	***20.91***	***34***	***53***

Specialty	EAST COAST AREA HEALTH BOARD			MID-WESTERN HEALTH BOARD		
	2003	2009	2013	2003	2009	2013
	Consultant staffing at 01.01.03	Projected 350,000 population	Projected 350,000 population	Consultant staffing at 01.01.03	Projected 350,000 population	Projected 350,000 population
RADIOLOGY						
General Radiology	10.05			6		
Breast	2.45					
Interventional	1.18			1		
Musclo-skeletal						
Nuclear	1.09					
Paediatric				1		
Vascular						
Sub-total	***14.77***	***20***	***24***	***8***	***20***	***24***
Radiation Oncology	Supra-regional					
Paediatric						
Sub-total						
Total Specialty	***14.77***	***20***	***24***	***8***	***20***	***24***
SURGERY						
General Surgery	5.46	Other general surgeons		4	Other general surgeons	
Breast	1					
Breast Endocrine	2	2	3		2	3
Gastro-intestinal		6	8		6	8
Upper and Lower						
Hepato-biliary	2.27	4	4			
Urology				1		
Vascular	3	4	5	2	4	5
Sub-total	***13.73***	***20***	***20***	***7***	***14***	***16***
Ophthalmic Surgery						
Sub-total	***9.91****	***4***	***6***	***3***	***4***	***6***
Oral & Maxillofacial	**0.18**			**1**	**3**	**5**
Trauma & Orthopaedic						
Sub-total	***3.91***	***10***	***14***	***5***	***10***	***14***
Otolaryngology						
Sub-total	***4.09***	***5***	***5***	***3***	***5***	***5***
Plastic Surgery	**1.45**	**3**	**3**		**3**	**3**
Urology						
Sub-total	***3.95***	***4***	***4***	***1***	***4***	***4***
Total Specialty	***37.23***	***46***	***52***	***22***	***43***	***51***
Total	**177.92**	**258**	**307**	**108.91**	**255**	**304**

*Projections for consultant paediatricians reflect the number required to manage the needs of the population of the ECAHB. They are not a recommendation for an additional paediatric unit in the ECAHB area.

**Includes sessional commitments from consultant ophthalmic surgeons to the Royal Victoria Eye & Ear Hospital.

Appendix 5
Medical Training Numbers Projection Model

NOTE: All figures shown below are rounded to 4 decimal places.

This appendix includes details of a projection model developed by the National Task Force on Medical Staffing. The model aims to align medical training numbers in Ireland at all levels with expected future medical staffing requirements. The methodology underpinning the model is set out below using the specialty of surgery as an example.

Methodology: Training Numbers Model (based on pilot study consultant targets)

The model projects **backwards** from:

- consultant targets **to** higher specialist training numbers
- higher specialist training targets **to** initial/basic specialist training numbers
- total medical practitioner targets **to** intern numbers
- intern targets **to** undergraduate numbers.

To simplify, the **basic methodology** for each of the projections listed above is

1. calculate the minimum replacement numbers required to fill average projected vacancies each year (i.e. target number for stage of training *divided by* number of expected years at that stage *multiplied by* number of training years prior to that stage) and
2. multiply this figure to allow for 2 ''inflation'' factors (estimated attrition rates, degree of uptake of flexible working/training)

Assumptions made in drawing up this model include the following:

- the appropriate approach is based on the following underpinning principles:
  - (a) aim, at a minimum, for self-sufficiency — enough doctors in training in Ireland to meet the future needs of the Irish health service
  - (b) avoid undersupply, i.e. err on the side of slight oversupply
- projections in relation to appropriate attrition and flexible working/training rates can at best be reasonable estimates
- all NCHD posts will, eventually, be training posts
- trainee projections are numbers/bodies required (i.e. the flexible working/training factor adds part-WTEs to whole WTEs)
- there should be competition for consultant posts and specialist training posts. This is allowed for in the context of the attrition rates used
- allowance has been made for significant expansion of GP numbers, in light of suggestions that GP numbers in Ireland are likely to increase substantially. Pending recommendations from the Primary Care Task Force, however, a

"dummy" figure of an additional 50% of GPs has been included *purely for estimating purposes to avoid significant undersupply* in the present exercise. From the perspective of hospital staffing, an expansion in the overall number of GPs, together with the envisaged restructuring of GP specialist training to incorporate two hospital-based IST years and three general practice-based HST years, would require an increase in intern and IST numbers

- other than for GP numbers, no further allowance has been made for expansion of services other than those proposed by the Task Force and
- competition for posts means that there will be some gaps in time between completing stages of training and achieving 'promotion' to the next stage or to a consultant appointment.

1. Consultant numbers and duration in post

1.1 Target number of consultants **(T)**

The national consultant targets used in the medical training numbers projection model are those outlined in the section on hospital medical staffing *(Section 4.1)*, based on work in the pilot sites to date. These targets will be revisited as the pilot projects are evaluated and as more detailed analyses are carried out in the other health board areas.

Example (surgery):

- National consultant establishment target = 3625
- Consultant establishment target for surgery ($T_{consultant}$) = 629

1.2 Expected no. of years as consultant **(B)**

- Maximum retirement age = 65
- Less allowance (3 years) for early retirement, premature death etc. = –3
- Less post-qualification 'gap' period awaiting consultant appointment = –2
- Less minimum HST training period = –6
- Less post-IST 'gap' period awaiting HST post = –0.5
- Less minimum IST2+ training period (1 year) = –1
- Less post-Intern/IST1 'gap' period awaiting IST2 post = 0
- Less combined Intern year / IST year 1 = –2
- Less 5 years as Undergraduate = –5
- Less approx undergraduate entry age = –18.5
- Less allowance for late entry etc (2 years) = –2

SUMMARY — Expected number of years as surgery consultant (B)
= 65 – (3 + 2 + 6 + 0.5 + 1 + 0 + 2 + 5 + 18.5 + 2)
= 65 – 40 = 25

2. HST numbers

2.1 Average no. of expected consultant vacancies per year = target no. of consultants **($T_{consultant}$)** / average no. of years as a consultant **(B)**

Example (surgery):

- Task Force consultant target = 629
- Average years as surgery consultant (B) = 25
- Av surgery consultant vacancies per annum = 629 ÷ 25 = 25.16

2.2 To simply fill those vacancies, each year's minimum annual HST output (and intake) must match 2.1 above. Total minimum HST requirement, therefore, is 2.1 above multiplied by the expected number of years in Higher Specialist Training **(A)**.

Example (surgery):

- Average annual surgery consultant vacancies = 25.16
- Average no. years HST in surgery (A) = 6
- Min. total HST requirement to replenish consultant establishment = 25.16 × 6 = 150.96

2.3 Attrition factor **(C)**

But there will be some attrition — some Higher Specialist Trainees will fail to proceed to qualification, some will ''drop out'' for whatever reason, some will opt for a different career path on qualification, some will go abroad on qualification (whether returning home or emigrating from Ireland), etc. These attrition rates include a modest allowance for some competition to ensure the appointment of the highest calibre specialists.

The attrition factor (C) represents the required intake to compensate for the expected fall-off — i.e. in order to retain 100 trainees, we need 125 entrants (125%) if the attrition rate is 20%.

The HST attrition rate applied (12.5%) is a best estimate, but is somewhat lower than the estimated attrition rates at earlier stages, in the expectation that most doctors who commence the final leg of specialist training in Ireland will seek consultant/specialist level work in Ireland.

Example (surgery):

- Min. total HST requirement to replenish consultant establishment = 150.96
- Estimated HST Attrition Rate = 12.5%
- Attrition factor (C) = 1 ÷ (100% − 12.5%) = 1 ÷ 87.5% = 1.1429
- Min. total HST requirement allowing for attrition = 150.96 × 1.1429 = 172.5257

2.4 Flexible working/training factor **(D)**

Another factor taken into account is that more doctors may opt to work or train flexibly rather than full-time. While the Task Force's draft Flexible Training Strategy does not stipulate target percentages for flexible posts, consultation with the Conference of Postgraduate Medical Deans of the United Kingdom suggests that a ''critical mass'' of between 5% – 10% of flexible posts at consultant level is necessary to underpin a sustainable flexible working/training culture in medicine.

The percentage targets for flexible posts used in this projection model are:

- Consultants: 10%
- HSTs: 7.5%
- ISTs: 5%
- Interns: 2.5%

Example (surgery):

- Min. total HST requirement allowing for attrition = 172.5257
- Flexible Working/Training Factor (D) = 1.1 — based on target of 10% flexible consultant posts
- Total HST requirement allowing for attrition and flexible working/training = $T_{hst} = 172.5257 \times 1.1 = 189.7783$

2.5 Training implications of private hospital specialist numbers

A (relatively small) number of trained doctors will go on to work as private hospital specialists. As the number of approved training posts in private hospitals is negligible, it is assumed for modelling purposes that all private hospital specialists will receive their training in public hospital training posts. The relevant projections for each grade in the ''Private Hospital Specialists'' sheet below are therefore added to the appropriate projection based on public hospital consultant targets. *(See ''Private Hospital Specialists'' sheet below, for a note on the distribution of those projections to individual specialties in public hospitals).*

Example (surgery):

- Total HST requirement allowing for attrition and flexible working/training = $T_{hst} = 189.7783$
- Additional HST requirements — private hospital implications (surgery) = {Priv} = 14.4551
- **GRAND TOTAL — HST requirements (surgery)** = **189.7783** + **14.4551** = **204.2334**

2.6 Summary — projecting HST numbers

To summarise 2.1 – 2.5 above, the projected grand total number of HSTs required to replenish the consultant establishment in a given specialty (adjusting for expected attrition and flexible working/training rates, and factoring in some trainees who will go into private hospital work as specialists) is calculated as:

{target no of consultants in the specialty **($T_{consultant}$)** × Multiplier **(M)**} + **{Priv}**
(where **M = (A ÷ B) × C × D** below)

M = [expected number of years in Higher Specialist Training **(A)**
÷ average no. of years as a consultant **(B)**]
× an attrition factor **(C)** = 1 ÷ (100% – % attrition rate)
× a flexible working/training factor **(D)**

Example (surgery):

- Consultant target ($T_{consultant}$) = 629
- Expected no. years HST in surgery (A) = 6
- Average years as surgery consultant (B) = 25
- HST Attrition factor (C) = 1.1429 — based on est. attrition rate of 12.5%
- HST Flexible working/training factor (D) = 1.1
- Private hospital specialist implications {Priv} = 14.4551

- **Grand Total HST requirement (surgery)** =
{$T_{consultant}$ × ([A ÷ B] × C × D)} + {Priv} = ($T_{consultant}$ × M) + {Priv}
= {629 × ([6 ÷ 25] × 1.1429 × 1.1)} + 14.4551 = (629 × 0.3017) + 14.4551
= 204.2334

- **Average HST intake (surgery) per annum**
= Grand Total HST ÷ A = 204.2334 ÷6 = 34.0389

3. IST numbers (Years 2^+)

3.1 The same methodology as outlined at 2.5 above for HSTs applies to projecting $IST2^+$ requirements, i.e. :

{target no. of HSTs **(T_{hst})** × Multiplier **(M)**} + **{Priv}**
(where **M = (A ÷ B) × C × D** below)

M = [expected number of years in IST (year 2 onwards) **(A)**
÷ expected number of years in Higher Specialist Training **(B)**]
× an attrition factor **(C)** = 1 ÷ (100% – % attrition rate)
× a flexible working/training factor **(D)**

Example (surgery):

- HST target (T_{hst}) = 189.7783
- Expected no. years $IST2^+$ in surgery (A) = 1
- Average years as surgery HST (B) = 6
- $IST2^+$ Attrition factor (C) = 1.1765 — based on est. attrition rate of 15%
- Flexible Working/Training Factor (D) = 1.075 — based on target of 7.5% flexible HST posts
- Private hospital specialist implications {Priv} = 3.667

- **Grand Total IST2^{+} requirement (surgery)** =
  {T_{hst} × ([A ÷ B] × C × D)} + {Priv} = {T_{hst} × M} + {Priv} =
  {189.7783 × ([1 ÷ 6] × 1.1765 × 1.075)} + 3.667 =
  (189.7783 × 0.2108) + 3.667 = 43.6693

Average IST2^{+} intake (surgery) per annum =
Grand Total IST2^{+} ÷ A = 43.6693 ÷ 1 = 43.6693

4. Intern / 1st year IST numbers

4.1 Introduction

As intern training is general rather than specialist in nature, intern numbers cannot be projected from Initial Specialist Training targets. Interns are our future GPs, Public & Occupational Health Specialists, Private Hospital Consultants etc as well as our future public hospital consultants. The intake at internship level must therefore be generated from the entire corpus of our projected specialist medical practitioner numbers. The methodology used in this model is set out below.

4.2 Intern / IST1 numbers nationally

Target (All Specialist Doctors) **(T_{all})** × Multiplier **(M)**
(where **M = (A ÷ B) × C × D** below)

M = [expected number of years as Intern/IST1 **(A)**
÷ expected average number of years as Specialist **(B)**]
× an attrition factor **(C)** = 1 ÷ (100% − cumulative Intern→Specialist % attrition rate)
× a flexible working/training factor **(D)**

- Overall target for all specialist doctors (T_{all}) = 7629
- Expected no. years as Intern/IST1 (A) = 2
- (Weighted) average years as Specialist Doctor (B) = 26.0203
- Cumulative Intern/IST1 to Consultant attrition factor (C) = 1.6297 — based on estimated cumulative attrition rate of 38.6406%
- Flexible Working/Training Factor (D) = 1.05 — based on target of 5% flexible IST posts

- **Total national Intern/IST1 requirement = T_{intern} =**
  T_{all} × ([A ÷ B]× C × D) = T_{all} × M =
  7629 × ([2 ÷ 26.0203] × 1.6297 × 1.05) = 7629 × 0.1315 = 1003.4462

Average Intern/IST1 intake per annum = T_{intern} ÷ A = 1003.4462 ÷ 2 = 501.7231

4.3 Intern numbers by specialty

At present, interns are allocated approximately 50% : 50% between Medicine and Surgery. However, recent regulatory changes allow for the possibility of part of the intern year being spent in other specialist environments, including general practice,

psychiatry, paediatrics, emergency medicine. It is not possible to predict the extent to which internships will in fact develop as regards assignment to individual specialty areas. However, for illustrative purposes, a modest percentage (10%) has been ''assigned'' to the other specialties in the model.

The ICGP has advised the Task Force that GP specialist training will in future shift from the present 3 year cycle to a 5-year cycle (2 in a hospital environment and 3 in a general practice environment). The appropriate proportion (i.e. 2/5ths × 0.5 = 1/5th = 20%) of hospital-based 1st Year initial specialist GP trainees has been shown in the ''Other/Unspecified'' column in the Summary Numbers sheet for reference purposes.

Example (surgery):

- Total National Intern/IST1 requirement = T_{intern} = 1003.4462
- % of Intern/IST1s assigned to surgery = 45%
- Projected number of surgery Intern/IST1s = 451.5508

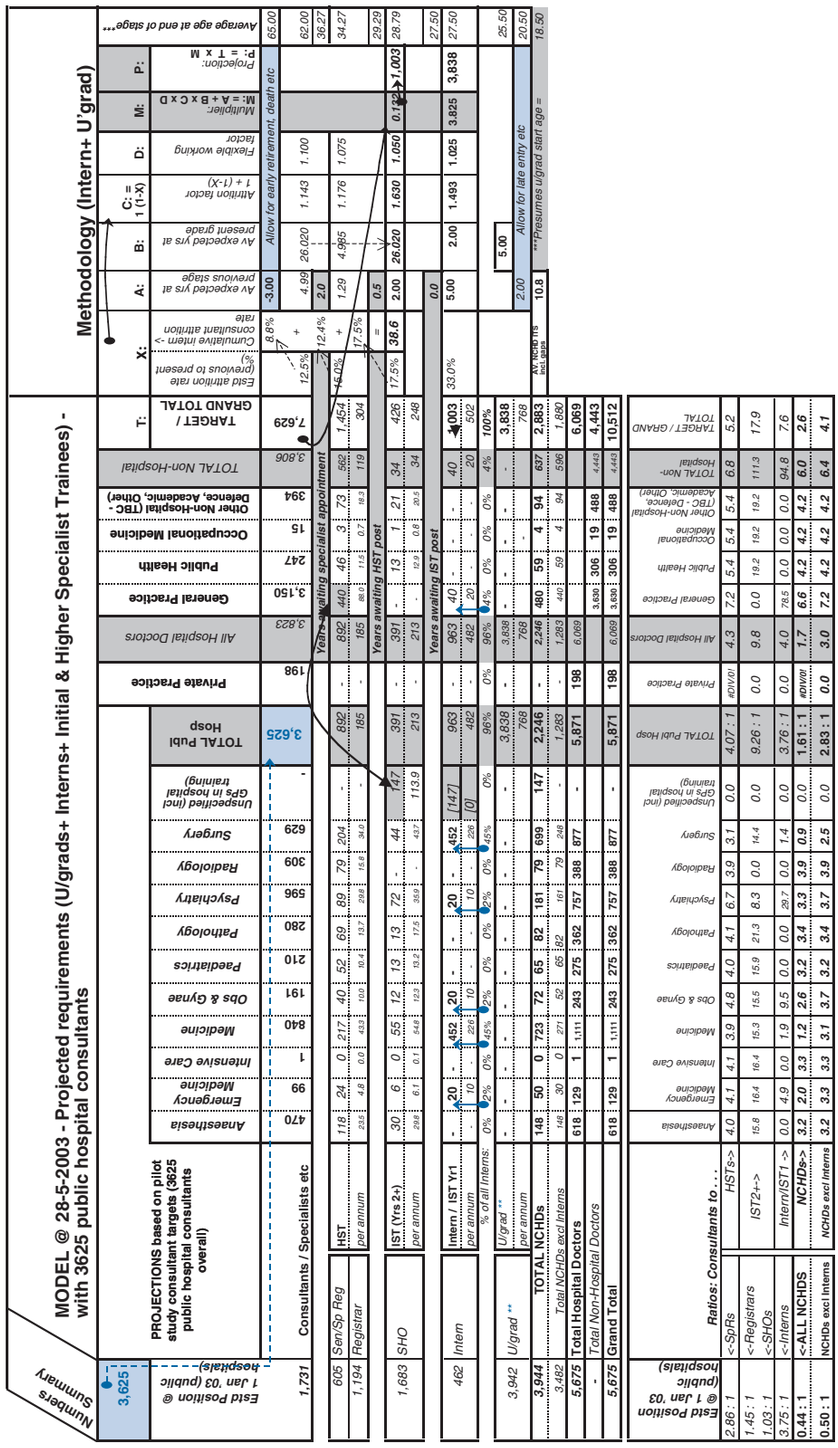
5. Undergraduate numbers (national)

5.1 Undergraduate numbers are derived from intern numbers on the same principles as applied to projecting HST and IST numbers from consultant & HST targets respectively, i.e. :

target total no. of Intern/IST1s (T_{intern}) = 1003.4462
× [expected number of years as Undergraduate (A = 5)
÷ expected number of years as Intern/IST1 (B = 2)]
× an attrition factor (C) = 1 ÷ (100% − % attrition rate) = 1 ÷ (100% − 33%) = 1.4925
× a flexible working/training factor (D) = 1.025 — based on target of 2.5% flexible Intern/IST1 posts

- **Total undergraduate requirement = $T_{undergrad}$ = $T_{intern} \times ([A \div B] \times C \times D) = T_{intern} \times M$ = 1003.4462 × ([5 ÷ 2] × 1.4925 × 1.025) = 1003.4462 × (3.8246) = 3837.8072**

- **Average undergraduate intake per year = 3837.8072 ÷ 5 = 767.5614**


Numbers Summary
MODEL @ 28-5-2003 - Projected requirements (U/grads+ Interns+ Initial & Higher Specialist Trainees) - with 3625 public hospital consultants
Methodology (Intern+ U'grad)
PROJECTIONS based on pilot study consultant targets (3625 public hospital consultants overall)
Estd Position @ 1 Jan '03 (public hospitals)
Consultants / Specialists etc
Sen/Sp Reg
Registrar
HST
per annum
SHO
IST (Yrs 2+)
per annum
Intern
Intern / IST Yr1
per annum
% of all Interns:
U/grad **
per annum
TOTAL NCHDs
Total NCHDs excl Interns
Total Hospital Doctors
Total Non-Hospital Doctors
Grand Total
NCHDs excl Interns
Ratios: Consultants to ...
<-Sp/Rs
<-Registrars
<-SHOs
IST2+>>
<-Interns
Intern/IST1 ->
<-ALL NCHDs
NCHDs->
Estd Position @ 1 Jan '03 (public hospitals)
Anaesthesia
Emergency Medicine
Intensive Care
Medicine
Obs & Gynae
Paediatrics
Pathology
Psychiatry
Radiology
Surgery
Unspecified (incl GPs in hospital training)
TOTAL Publ Hosp
Private Practice
All Hospital Doctors
General Practice
Public Health
Occupational Medicine
Other Non-Hospital (TBC - Defence, Academic, Other)
TOTAL Non-Hospital
TARGET / GRAND TOTAL
T:
TARGET / GRAND TOTAL
Estd attrition rate (%) previous to present
X:
Cumulative intern -> consultant attrition rate
A:
Av expected yrs at previous stage
B:
Av expected yrs at present grade
C: = 1 (1-X)
Attrition factor 1 + (1-X)
D:
Flexible working factor
M:
Multiplier: M: = A + B x C x D
P:
Projection: P: = T x M
Average age at end of stage***
Allow for early retirement, death etc
Allow for late entry etc
***Presumes u/grad start age =

Surgery

Training Numbers Projection Model @ 28-5-2003 based on Public Hospital Consultant target of: 3625

Methodology*

Estd Position @ 1 Jan '03 (public hospitals)	PROJECTIONS based on pilot study consultant targets (3625 public hospital consultants overall)			X: Estimated attrition rate (previous to present) (%)	T: Target numbers (Ch 7 redraft @ 6/8/2003 pp14-27)	A: = expected yrs at previous stage	B: expected yrs at present stage	C: Attrition factor (=1/(1-X))	D: Flexible working/training factor	Multiplier: M: = A + B x C x D	Projection to prev stage: P: = T x M	Average age at end of stage***	*Annual Intake/Vacancies at present stage (T + B)*
							-3.00	Allow for early retirement, premature death etc				65.00	
331	**Consultants**	#	**17.4%**	12.5%	**629.0**	6.00	25.00	1.143	1.100	**0.302**	**189.8**	62.00	***25.2***
				Years awaiting specialist appointment:			*2.00*					*37.00*	
146	Sen/Sp Reg		**HST**		189.8	1.00	6.00	1.176	1.075	**0.211**	**40.0**	35.00	*34.0*
253	Registrar			15.0%									
Add: Private Hospital Specialist implications:				*+ 14.5*	**204.2**								
					Years awaiting HST post:		*0.50*					*29.00*	
372	SHO		**IST2->**	17.5%	40.0	2.00	1.00	1.212	1.050		451.6	28.50	*43.7*
Add: Private Hospital Specialist implications:				*+ 3.7*	**43.7**								
					Years awaiting IST post:		*0.00*					*27.50*	
231	Intern		**Intern / IST1**	33.0%	**451.6**	5.00	2.00	*45% x Total Intern requirement (Summary Sheet)*			-	27.50	225.8
	Undergrad		**U/grad**		-		5.00					25.50	
							2.00	Allow for late entry etc				20.50	
1,002	TOTAL NCHDs				699.5	**Av NCHD yrs**	**9.50**	*** Presumes u/grad start age=				18.50	
1,333	**Total Hospital Doctors**				**1,328.5**								

Ratios: Consultants to . . .			
2.27 : 1	<-SpRs	*HSTs->*	3.31 : 1
1.31 : 1	<-Registrars		
0.89 : 1	<-SHOs	*ISTs->*	15.72 : 1
1.43 : 1	<-Interns	*Interns->*	1.39 : 1
0.33 : 1	<-ALL NCHDS	*NCHDs->*	0.90 : 1

*** Worked examples based on target of 629 Surgery consultants/specialists**

1. Projected Higher Specialist Training (HST) requirement **(P)** = Target no. consultants **($T_{consultant}$)** *multiplied by* expected yrs in HST **(A)** *divided by* expected yrs @ consultant grade **(B)** *multiplied by* attrition factor **(C)** *multiplied by* flexible working/training factor **(D)** *plus* private hospital specialist implications

   = 629 x 6 ÷ 25 x 1.143 x 1.1 = 189.778 + 14.455 = 394.012 ≈ 394

2. Projected Initial Specialist Training (IST) requirement **(P)** = Projected no. HSTs **(T_{hst})** *multiplied by* expected yrs in IST **(A)** *divided by* expected yrs @ HST grade **(B)** *multiplied by* attrition factor **(C)** *multiplied by* flexible working/training factor **(D)** *plus* private hospital specialist implications

   = 189.778 x 1 ÷ 6 x 1.176 x 1.075 = 40.002 + 3.667 = 83.672 ≈ 84

Private Hospital Specialists

Training Numbers Projection Model @ 28-5-2003 based on Public Hospital Consultant target of: 3625

Methodology*

Estd Position @ 1 Jan '03 (public hospitals)	PROJECTIONS (dummy figures)		(Dummy) Expansion Estimate	X: Estimated attrition rate (previous to present) (%)	T: (Dummy) Target numbers	A: = expected yrs at previous stage	B: expected yrs at present stage		C: Attrition factor (=1-(1/1-X))	D: Flexible working/training factor	Multiplier: M: = A + B x C x D	Projection to prev stage: P: = T x M	Average age at end of stage**		*Annual Intake/Vacancies at present stage (T + B)*
							-3.00						65.00		
198	**Specialists**	#	**0%**	12.5%	**198.0**	4.99	26.01		1.143	1.100	**0.241**	**47.7**	62.00		*7.6*
						Years awaiting specialist appointment:	*2.00*						*35.99*		
3	Sen/Sp Reg		**HST**		47.7	1.00	4.99		1.176	1.075	**0.254**	**12.1**	33.99		*9.6*
24	Registrar			15.0%											
						Years awaiting HST post:	*0.50*						*29.00*		
42	SHO		**IST2->**	17.5%	12.1	2.00	1.00		1.212	1.050		-	28.50		*12.1*
						Years awaiting IST post:	*0.00*						*27.50*		
4	Intern		**Intern / IST1**	33.0%	-	5.00	2.00		*0% x Total Intern requirement (Summary Sheet)*			-	27.50		0.0
	Undergrad		**U/grad**		-		5.00						25.50		
							2.00		Allow for late entry etc				20.50		
73	TOTAL NCHDs				59.8	**Av NCHD yrs**	**8.49**		***Presumes u/grad start age=				18.50		
271	**Total Hospital Doctors**				**257.8**										

Ratios: Consultants to . . .			
66.00 : 1	<-SpRs	*HSTs->*	4.15 : 1
8.25 : 1	<-Registrars		
4.71 : 1	<-SHOs	*ISTs->*	16.36 : 1
49.50 : 1	<-Interns	*Interns->*	-
2.71 : 1	<-ALL NCHDS	*NCHDs->*	3.31 : 1

NOTE: Calculations above relate to training requirements arising from the number of trained specialists (approx 200 @ January 2003) opting to practice as private hospital specialists. As the number of approved training posts in private hospitals is negligible, it is deemed to be NIL for the purposes of this model. The training numbers generated above are divided prorata among the public hospital specialties according to the proportionate specialty breakdown of private specialists *(see below)* .

198 Private Specialists - Specialty breakdown @ 1 January 2003

*** Worked examples based on (dummy) target of 198 Private Hospital Specialists consultants/specialists**

1. Projected Higher Specialist Training (HST) requirement **(P)** = Target no. consultants ($T_{consultant}$) *multiplied by* expected yrs in HST **(A)** *divided by* expected yrs @ consultant grade **(B)** *multiplied by* attrition factor **(C)** *multiplied by* flexible working/training factor **(D)**

= 198 x 4.985 ÷ 26.015 x 1.143 x 1.1 = 47.702 ≈ 48

2. Projected Initial Specialist Training (IST) requirement **(P)** = Projected no. HSTs (T_{hst}) *multiplied by* expected yrs in IST **(A)** *divided by* expected yrs @ HST grade **(B)** *multiplied by* attrition factor **(C)** *multiplied by* flexible working/training factor **(D)**

= 47.702 x 1 ÷ 4.985 x 1.176 x 1.075 = 12.101 ≈ 12

	Anaesthesia	Emergency Medicine	Intensive Care	Medicine	Obs & Gynae	Paediatrics	Pathology	Psychiatry	Radiology	Surgery	
	17	**0**	**0**	**56**	**18**	**6**	**7**	**25**	**9**	**60**	**Specialist**
	8.6%	*0.0%*	*0.0%*	*28.3%*	*9.1%*	*3.0%*	*3.5%*	*12.6%*	*4.5%*	*30.3%*	%
	4.1	-	-	13.5	4.3	1.4	1.7	6.0	2.7	14.5	**HSTs (48.25)**
	1.0	-	-	3.4	1.1	0.4	0.4	1.5	included above	3.7	**IST2+ (11.55)**
Specialist trainees	5.1	-	-	16.9	5.4	1.8	2.1	7.6	2.7	18.1	59.8

Appendix 6
Flexible Training Strategy: Summary

The full *Flexible Training Strategy* is available in a separate document.

The Flexible Training Strategy, while endorsing flexible/part-time options recognises that the preferred option for the majority of doctors in training and consultants is most likely to continue to be full-time training and working. This may become increasingly attractive when the forty-eight hour week is implemented. However, given the increasing interest in balancing work/life commitments, the need to retain graduates and the increasing number of female graduates, there is a need for better access to flexible/part-time training and work in Ireland. The Task Force considers that this can best be delivered by the commitment of all stakeholders to a Flexible Training Strategy.

The goal of the Flexible Training Strategy is the provision of an adequate number of flexible training posts to facilitate doctors in training in Ireland who have a requirement for part-time training, where compatible with service needs. There should, in turn, be a number of flexible permanent posts in order to provide career opportunities for doctors with these requirements. By enhancing the work/life environment, more doctors will be encouraged to remain in the health care sector.

The Strategy refers to the requirements for flexible training under European law (EU Directive EC 93/16/EEC) and defines a flexible trainee as a doctor in training who works less than full time but at least 50% of the full time hours. Flexible training can be one post shared by two people, or one person occupying part of a post.

The need for a Flexible Training Strategy is substantiated in the document together with a review of the national and international experience. This includes policies and practices in various countries, the criteria for acceptance on flexible training programmes and the barriers experienced. The experience from other countries demonstrates that substantial efforts will need to be made in Ireland at all levels of specialist training to meet the goal.

The Strategy identifies the need for:

- Leadership and commitment to the Flexible Training Strategy at national, regional and local level.
- Unified national, regional and local policies and plans where the government, employers and training bodies are committed to the success of the scheme at internship, initial and higher specialist training level.
- A significant cultural and attitudinal change amongst all stakeholders.
- Specific responsibilities for each of the main stakeholders.
- On-going incremental increase in the funding of the Postgraduate Medical and Dental Board flexible training scheme to enable the development of flexible training in line with the strategy.

- More detailed tracking and monitoring of graduates who are in specialist training/work so that the benefits of flexible training/working can be quantified.
- Flexible specialist posts and retraining facilities for doctors who wish to re-enter the work force.

It is recommended that, given the rising trend in the percentage of women medical graduates and the anticipated expansion in the specialist workforce, a flexible training/work strategy is adopted and implemented urgently. This should be phased in, and together with the service implications be closely monitored.

Appendix 7
NCHD and consultant salary costs

Current NCHD costs

The Task Force developed a framework within which current NCHD salary costs were estimated. This framework is set out below. Staffing figures were obtained from the Postgraduate Medical and Dental Board's survey of approved NCHD staff in October 2002. Salary data also relate to October 2002. It is important to note that the number of doctors at individual points on each salary scale is not available. Salary costs have therefore been averaged.

NCHD Salary Costs as on 1 October 2002									
Grade	**Annual Basic Salary**	**Monthly Basic**	**Weekly Basic**	**Weekly basic + PRSI @ 7.75%**	**Time & quarter per hour**	**Time & half per hour**	**Sunday Double Time per hour**	**Average Overtime hour**	**Average overtime hour + PRSI @ 7.75%**
Intern	€27,094.59	€2,257.88	€519.25	€559.49	€16.64	€19.97	€26.63	€21.08	€22.71
SHO									
1	€30,525.32	€2,543.78	€585.00		€18.75	€22.50	€30.00		
2	€32,255.21	€2,687.93	€618.15		€19.81	€23.78	€31.70		
3	€34,840.80	€2,903.40	€667.70		€21.40	€25.68	€34.24		
4	€36,532.40	€3,044.37	€700.12		€22.44	€26.93	€35.90		
5	€39,932.75	€3,327.73	€765.29		€24.53	€29.43	€39.25		
6	€41,623.03	€3,468.59	€797.68		€25.57	€30.68	€40.91		
7	€43,272.37	€3,606.03	€829.29		€26.58	€31.90	€42.53		
Average	€36,997.41	€3,083.12	€709.03	€763.98	€22.73	€27.27	€36.36	€28.79	€31.02
Registrar									
1	€39,932.75	€3,327.73	€765.29		€24.53	€29.43	€39.25		
2	€41,623.03	€3,468.59	€797.68		€25.57	€30.68	€40.91		
3	€43,272.37	€3,606.03	€829.29		€26.58	€31.90	€42.53		
4	€44,485.93	€3,707.16	€852.55		€27.33	€32.79	€43.72		
5	€46,104.90	€3,842.08	€883.57		€28.32	€33.98	€45.31		
6	€47,727.83	€3,977.32	€914.68		€29.32	€35.18	€46.91		
Average	€43,857.80	€3,654.82	€840.51	€905.65	€26.94	€32.33	€43.10	€34.12	€36.77
SpR									
1	€46,099.62	€3,841.63	€883.47		€28.32	€33.98	€45.31		
2	€47,220.75	€3,935.06	€904.96		€29.01	€34.81	€46.41		
3	€48,843.67	€4,070.31	€936.06		€30.00	€36.00	€48.00		
4	€51,101.78	€4,258.48	€979.34		€31.39	€37.67	€50.22		
5	€53,546.07	€4,462.17	€1,026.18		€32.89	€39.47	€52.62		
6	€55,990.37	€4,665.86	€1,031.78		€33.07	€39.68	€52.91		
7	€58,434.67	€4,869.56	€1,119.87		€35.89	€43.07	€57.43		
Average	€51,605.28	€4,300.44	€988.99	€1,065.63	€31.70	€38.04	€50.72	€40.15	€43.26

National NCHD Staffing and Salary Costs 2002

NCHD ANNUAL SALARY + OVERTIME COSTS BY GRADE	Interns					Senior House Officers				
	No.	Hours per Week	Basic	Overtime	Annual Pay Cost	*No.*	Hours per Week	Basic	Overtime	Annual Pay Cost
Average NCHD	*1*	*76*	€29,194	€45,942	**€75,136**	*1*	*75*	€39,865	€54,809	**€94,674**
All doctors in this grade	*462*	*35,112*	€13,487,822	€21,225,204	**€34,713,026**	*1,683*	*126,225*	€67,092,306	€92,243,614	**€159,335,920**

	Registrars					Senior and Specialist Registrars				
	No.	Hours per Week	Basic	Overtime	Annual Pay Cost	*No.*	Hours per Week	Basic	Overtime	Annual Pay Cost
Average NCHD	*1*	*78*	€47,257	€74,453	**€121,709**	*1*	*82*	€55,605	€101,924	**€157,529**
All doctors in this grade	*1,194*	*93,132*	€56,424,595	€88,896,512	**€145,321,107**	*594*	*48,667*	€33,001,639	€60,491,894	**€93,493,533**

NATIONAL TOTALS AT 31st December 2002	*Number*	Hours per week	Annual Basic	Annual Overtime	TOTAL ANNUAL PAY COST
Average NCHD	*1*	*77*	€43,231	€66,842	**€110,073**
All NCHDs	*3,933*	*303,136*	€170,006,362	€262,857,224	**€432,863,586**

Source:
NCHD data from PGMDB Census 30th October 2002

Notes:
Salary data effective 1st October 2002
Average costs drawn from NCHD Hours data in Hanly Report and ERHA data
Salary Costs are averaged

Consultant salary costs

The Task Force developed a framework within which current consultant costs were estimated as set out below. Staffing figures are from Comhairle na nOspidéal's published statistics for 1 January 2003 and previous years. Salary data relate to October 2002.

CONSULTANT SALARY COSTS AT 1 January 2003

Consultant data extrapolated from Comhairle na nOspidéal statistics at 1 January 2003 and previous years
Salary data effective 1 October 2002
Averaged allowances costs drawn from information from health employers

Consultant	Annual Basic Salary	Monthly Basic	Weekly Basic	+ PRSI @ 7.75%	% consultants holding this type of contract	+€9,000	+ PRSI @ 7.75%
Category 1	€135,241				56.20%	€144,241	**€155,420**
Category 2	€120,715				33.70%	€129,715	**€139,768**
Category 1 — Academic	€183,275				4.50%	€192,275	**€207,176**
Category 2 — Academic	€163,628				0.70%	€172,628	**€186,007**
Category 1 — Part-time Academic	€156,159				0.80%	€165,159	**€177,959**
Category 2 — Part-time Academic	€136,248				0.90%	€145,248	**€156,505**
Geographical Whole-time	€149,184				2.70%	€158,184	**€170,443**
Top grade Biochemists	€76,981				0.35%	€85,981	**€92,645**
Remainder (0.15% @ av)	*€132,852*				*0.15%*	*€141,852*	***€152,846***
Average Consultant Salary	**€133,051**	11,087.61	2,549.85	**€2,747**	100.00%	**€142,051**	**€153,060**
Incl €9,000 allowances	**€142,051**	€11,838	€2,722	**€2,933**			

Each salary multiplied by the percentage it forms of total sessional commitments to the hospital — when added to similar equations for the other salaries = an average salary. Emergency call-out payments, on-call payments, extended duty liability and emergency services payments for both 1991 and revised 1998 contracts have been rounded and a crude payment of 9,000 Euro per annum applied.

Appendix 8
Working time legislation for doctors in training: international review

1. Introduction

Over the course of its work, the Task Force engaged in a wide-ranging review of the implementation of the *European Working Time Directive* and other working time legislation in EU member states. The Task Force also examined the literature regarding working time for hospital doctors in Australia, Canada, New Zealand, the United States and some EU accession states.

The Task Force also drew on the experience and literature obtained by the National Joint Steering Group on the Working Hours of Non-Consultant Hospital Doctors (*Hanly*) which visited Denmark, the Netherlands and the United Kingdom during the preparation of its report.

This review starts by discussing a number of key themes emerging from the international literature. It then summarises the situation in EU member states and in Australia, New Zealand and the United States.

2. Key themes in service provision

Reform of acute hospital care

The acute hospital system constitutes the largest single component of health expenditure in most European countries. Within the European Union, reforms of the acute hospital sector have concentrated on improving health outcomes, service configuration, service delivery and managerial efficiency. This has included substituting more appropriate for less appropriate forms of care, enhancing the capacities of primary health care, ensuring more appropriate use and delivery of hospital services, restructuring the internal and external organisation of hospitals and developing quality of care programmes.

Reducing the number of hospitals providing certain acute services

Belgium has established minimum bed levels for acute general hospitals as part of a drive to move acute services from 521 to 287 hospital sites. *Denmark* has reduced its general hospitals from 113 to 80 while increasing outpatient and day casework. The Netherlands has concentrated acute care in a smaller number of hospitals in order to improve patient outcomes, facilitate reduced working hours for junior hospital doctors and improve the delivery of medical training.

In *Ireland*, factors such as sufficient volumes of activity, ready access to complex diagnostics and availability of the necessary support services has meant that over the past two decades, specialist services such as trauma and orthopaedic surgery, medical oncology and maternity services are being concentrated in facilities serving regional populations.

Regional planning

In *France*, regional hospital agencies have been established to improve co-ordination between different hospitals. They decide on the size and number of hospitals, the distribution of specialty beds and facilities and emergency care facilities, as well as the amount and allocation of highly technical equipment such as MRIs or CAT Scanners.

In *Spain*, the organisation and planning of specialised care is regionally based and all health areas must either have, or be linked to, a general hospital with the full range of specialties available and a 24-hour emergency service for acute cases. All these hospitals have 24-hour emergency services. Alongside the hospital system there is an extensive network of outpatient ambulatory centres. While they depend on hospitals to a significant extent, they are responsible for the provision of outpatient care.

In *Austria*, the federal and regional governments have entered into an agreement on reform of the healthcare system, further development of the Austrian Hospitals Plan and resolution of supra-regional issues arising from its implementation.

Hospital networks

In *Sweden*, hospitals are divided into regional hospitals, central county hospitals or district county hospitals depending on their size and degree of specialisation. Currently, Sweden has 23 central county hospitals, at least one hospital for each county council area. These also serve as referral hospitals for their neighbourhoods. In these hospitals, there are about 15-20 specialties and an average of 422 short-term beds. Patients with complicated and/or unusual diseases and injuries need highly specialised care and are attended at one of 9 regional hospitals. Regional hospitals serve a population of between 1 and 2 million and also function as research and teaching hospitals. They have an average of 911 short-term beds per hospital and provide an extensive range of medical specialities.

3. Summary of working time legislation in other EU member states

Set out below is a brief summary of the situation in EU member states regarding the implementation of those aspects of the EWTD which must be in place by 1 August 2004.

Austria: *largely compliant with EWTD*

Austrian law is largely compliant with the requirements of the EWTD. Normal weekly working time may in principle not exceed 40 hours. Under a ‘different distribution of working time’, however, the maximum weekly working time may be increased by collective agreement up to a maximum of 50 hours over a reference period of up to 8 weeks and up to a maximum of 48 hours over a longer consecutive period provided the

average working time does not exceed 40 hours. Similarly to Irish law, the reference period may be extended by collective agreement to 12 months.

Belgium: *excludes doctors in training*

Belgian legislation excludes persons employed by 'fair operators', persons employed by central government on a contractual basis, *doctors*, veterinary surgeons and dentists from the scope of the EWTD provisions on working time and rest periods (although these workers are entitled to annual leave).

Denmark: *compliant with EWTD*

Since 1981, Danish legislation has limited the average weekly working time for doctors in training to 37 hours. This can be averaged over a period of 14 weeks. The reference period ranges from a minimum of 4 weeks to a maximum of 26 weeks. Overtime must result in an equivalent amount of time taken off in lieu within the following calendar month. The average number of hours worked by junior doctors in Denmark is currently 41.3 hours.

The concept of a consultant-provided health service is well established in Denmark. The ratio of consultants to junior doctors is currently 1:1. Consultants are employees of the State, and private practice is relatively rare. Consultants work an average of 43.8 hours a week in a rostered shift system which spans the 24-hour day, where necessary.

France: *not yet compliant with EWTD*

Under French law, average weekly working time calculated over any period of 12 consecutive weeks may not exceed 46 hours. In the course of a single week, working time may not exceed 48 hours. Derogations may be applied by way of exception, in certain sectors, regions or undertakings. Recent legislation requires a standard weekly working time of 35 hours. The annual limit is 1600 hours.

However, the working time of doctors in training in France, i.e. of interns and residents, is regulated by Ministerial decree since 1983. The number of hours worked on-call (time spent at the hospital in addition to the minimum monthly time of 173 hours) is defined as 12 hours above and beyond the normal obligations of working time.

Germany: *not yet compliant with EWTD*

Under German law, leading doctors and managers in the public service are not covered by legislation on working time and rest periods. Junior doctors must not work for more than 24 hours per duty period.

German law stipulates that daily working time must not exceed 8 hours. Doctors working on-call duty for more than 12 hours after a working day of at least 7.5 hours are entitled to a rest period of 11 consecutive hours the following day. Doctors are then barred from working the following day. Doctors are not allowed work for more than 12 consecutive periods on-call. While German national law is understood to have transposed the EWTD into domestic law (see also Appendix 2), literature provided by the *Permanent Working*

Group of European Junior Hospital Doctors indicates that these provisions are not yet enforced in all hospitals in Germany.

Greece: *compliant with EWTD*

Greek legislation provides that, without prejudice to legislation previously in force, the maximum weekly working time may not exceed an average of 48 hours over a 4-month reference period, including overtime. Derogations are allowed in the cases referred to in Article 17 of the EU Directive.

Italy: *compliant with EWTD*

In Italy, the legislation requires a maximum daily working time of eight hours and a maximum weekly working time of 40 hours. Overtime is allowed within the following limits: 8 hours per day, 12 hours per week, 80 hours per quarter and 250 hours per year. Collective agreements at national level usually require a maximum working time of 38 to 40 hours in the private sector and 36 hours in the public sector. Such agreements may allow the average maximum regular working time to be calculated over a period of 12 months.

Luxembourg: *compliant with EWTD*

In Luxembourg, legislation requires that normal working time does not exceed 8 hours a day and 40 hours per week. Total working time may not exceed 10 hours a day and 48 hours per week. Maximum working time is 40 hours, which may be increased to 44 hours and, in some cases, to 48 hours a week. In such circumstances, workers are entitled to compensatory rest.

Netherlands: *compliant with EWTD*

Dutch legislation excludes scientific research and medical specialists, general practitioners, doctors employed in nursing homes, environmental officers and dentists from the majority of the working time and rest provisions of the EWTD.

In the Netherlands, junior doctors currently work a 46-hour week, averaged over 13 weeks. The 46-hour working week incorporates 8 hours for education. Each hospital is inspected 4 – 6 times per annum to ensure they are complying with the working time rules. Penalties are applied for every breach of the 46-hour working time rules at a rate of €681 per person per day.

Portugal: *compliant with EWTD*

Portuguese legislation provides that the average weekly working time may not exceed 48 hours on average over a reference period of four months. This reference period may be extended to twelve months by collective agreement. The average 48 hours allowed includes any overtime or additional work that is performed.

Spain: *compliant with EWTD*

In Spain, the legislation states that no worker may work more than 40 hours per week on average, calculated on an annual basis. However, this limit applies to 'normal' working hours and therefore does not include overtime, which, if taken, may mean the limit is exceeded. However, a minimum rest period of 12 hours between working days must be respected and there is a maximum limit of 80 hours of overtime per year.

Initially, public medical emergency services in some autonomous municipalities in Spain were excluded from the application of the EWTD. However, the European Court of Justice judgement in the SIMAP case has meant that doctors working in such services are considered to be covered by the EWTD.

Sweden: *compliant with EWTD*

In Sweden, legislation states that 'regular working hours' per week may not exceed 40. However, it is possible to calculate the 40 hours per week on average over a period of a maximum of four weeks when this is necessary in view of the nature of the work or general working conditions. General overtime is limited to a maximum of 48 hours over a period of four weeks (or 50 hours over a calendar month) with a maximum of 200 hours per calendar year. While the majority of collective agreements between employers and unions derogate from these general rules, they must comply with the EWTD.

United Kingdom: *not yet compliant with EWTD*

In the UK, the New Deal, agreed in 1991 by representatives of the profession, NHS management and the government, set out a package of measures designed to improve conditions under which junior doctors worked. It stipulated that from 31 December 1994, no junior doctor should have been expected to work for more than 56 hours a week. By 31 December 1996, the maximum contracted hours for each type of working pattern worked by junior doctors should have been: 72 hours a week for on-call rotas; 64 hours a week for partial shifts; and 56 hours a week for full shifts. The New Deal hours limits included maximum periods of continuous duty, minimum periods of off-duty between duty periods, minimum periods of continuous off-duty for each type of working arrangement and minimum rest requirements during duty periods.

Regional task forces are responsible for overseeing and monitoring the implementation of the New Deal at local level. Task force returns from March 2000, showed that over 1 in 3 (36%) of juniors' posts did not comply with the New Deal limits on hours of work. Just under 1 in 2 (47%) of pre-registration house officer posts failed the New Deal hours' criteria. This meant that nearly 11,000 junior doctors were still working outside the hours limits.

More recently, the Department of Health, the National Assembly for Wales, the NHS Confederation and the British Medical Association issued guidance on working patterns for junior doctors as part of a strategy to comply with the EWTD by August 2004. This guidance calls for increases in shift working, changes in the roles of junior doctors, nurses

and other professionals, changes in tiered on-call and acute on-call arrangements and points to the need to 'divert workload geographically'.

Working hours in Australia, New Zealand and the United States

Australia: *no legal limit to hours worked*

In Australia, working time legislation does not stipulate maximum hours of work for junior doctors. Average hours worked per week are illustrated in the following table:

Australian Hospital Doctors: Hours worked per week — 1998

Extracted from — Australian Institute of Health & Welfare — The Australian Medical Labour Force 1998

Average hours worked	Specialists	%	Specialists in training	%	Interns & Resident Medical Officers	%	Others	%
0-19	970	*5.9%*	58	*1.3%*	36	*1.1%*	80	*7.3%*
20-34	1,673	*10.1%*	142	*3.2%*	72	*2.3%*	152	*13.8%*
35-49	4,581	*27.8%*	1,380	*30.9%*	996	*31.5%*	439	*40%*
50-64	5,956	*36.1%*	2,004	*44.8%*	1,684	*53.2%*	315	*28.7%*
65-79	1,891	*11.5%*	522	*11.7%*	238	*7.5%*	64	*5.8%*
80+	1,419	*8.6%*	367	*8.2%*	140	*4.4%*	48	*4.4%*
Total	**16,490**		**4,473**		**3,166**		**1,098**	

New Zealand: *hours reduced since 1985*

In 1985, the so-called M10 determination changed the way in which junior medical officers (RMOs) were employed and remunerated. This change, from an annual salary with no restriction on hours worked, to salary bands based on hours worked with penalties for non-compliance, was a response to the general perception that RMO employment conditions were debilitating and stressful for junior doctors and potentially dangerous for patients.

Within a year, RMOs' working hours had dropped to an average of 57 a week and only 10% of house surgeons and 13% of registrars were working longer than 72 hours in any one week.

Change was costly. Compensatory payments necessitated by M10 added 50.4% to the basic salary in 1986 and overall salaries for RMOs in Canterbury were 46% higher than before the change. (That these were high inflation years accounts for some of the rise.)

Implementation of the new legislation, however, resulted in:

- large increases in junior doctor numbers;
- rigid and uncritical use of medical practitioners within both the primary and secondary health care sectors;
- failure to effectively utilise new technology and management techniques;
- junior doctors had come to constitute 24% of the medical workforce, when the optimum for a balanced staff mix was considered to be 8-12%;
- the NZ hospital system had become structurally dependent on overseas graduates; and
- continuity of patient care was no longer usually provided by junior staff.

There were also positive changes. Previous practice was considered exploitative and sleep deprivation possibly harmful to patients and doctors. It was believed that the legislation would ultimately prove to be the impetus for comprehensive change in the deployment of medical practitioners.

Since 1987, there have been further increases in the number of RMO staff to the extent that the Senior Medical Officer (SMO) to RMO ratio has become inverted. Whilst the Medical Council and the Clinical Training Agency place increasing emphasis on the responsibility of SMOs for the supervision and training of junior staff, there are proportionally fewer of them to undertake these tasks. Many SMOs believe that an ''upward shift'' of workload has occurred as continuity of care becomes increasingly provided at the consultant level.

United States: *law allows 88-hour week*

American medical residents work among the highest, if not the highest, number of hours in the professional world, regularly reaching 95 and as many as 136 out of the 168 hours in a week. New York is the only state within the United States with legislation that limits resident work hours. These are commonly known as the Bell Regulations, after the chair of the investigational commission, Bertrand Bell, M.D. The New York State Health Department is charged with enforcing the following standards:

- An 80-hour work week averaged over 4 weeks;
- Shifts not exceeding 24 consecutive hours;
- Shifts separated by at least 8 hours;
- Maximum shifts of 12 hours per day for emergency medicine residents;
- At least one scheduled 24-hour period of non-working time per week;
- Surgical residencies were exempt from the 24-hour maximum shift, if surgeons met all of the following conditions:
    - were scheduled to be on-call only every third night,
    - received a rest period of 16 hours following their on-call shift
    - could be documented to get adequate rest with infrequent patient interruption during the night hours of their on-call shift, and
    - could be immediately relieved from duty if fatigued.

The other major component of the code required better supervision of house-staff by attending faculty members.

In September 2001, in response to changes in health care delivery and concerns that restricted sleep could have a detrimental effect on patient safety, education and resident safety and well-being, the Accreditation Committee for Graduate Medical Education (ACGME) appointed a 'Work Group on Resident Duty Hours and the Learning Environment'. The group was charged with developing a template that could be adopted and adapted by individual Residency Review Committees. This group released a report in June 2002 which set out common accreditation standards that addressed three areas:

- placing appropriate limits on duty hours;
- promoting institutional oversight; and
- fostering high-quality education and safe patient care.

The Report stated that residents must not be scheduled for more than 80 duty hours per week, averaged over a four-week period, with the provision that individual programs may apply to their sponsoring institution's Graduate Medical Education Committee (GMEC) for an increase in this limit of up to 10 percent, if they can provide a sound educational rationale.

There would be a 24-hour limit on in-house call duty, with an added period of up to 6 hours for inpatient and outpatient continuity and transfer of care, educational debriefing and didactic activities; no new patients could be accepted after 24 hours; a 10-hour minimum rest period should be provided between duty periods; and when residents take call from home and are called into the hospital, the time spent in the hospital must be counted toward the weekly duty hour limit.

Appendix 9
Review of medical education, training and hospital services in Finland

Introduction

While the presence and enforcement of working time legislation is a key determinant of the working hours of hospital doctors, the structure of each state's hospital system, the organisation of emergency and acute hospital care, the ratio of specialists to trainees and the nature of on-site hospital medical staffing and training must also be taken into account.

The Task Force decided to examine in detail the inter-relationship between the organisation of working time, hospital medical staffing, medical education and training and the structure of the hospital system in another EU member state. The Task Force took the view that it would be useful to visit a state that had already implemented legislation similar to the EWTD, had a well-developed medical education and training system and a better ratio of specialists to trainees. Finland met these criteria and a group of Task Force members travelled to Helsinki in January 2003.

The group met with representatives of the Ministry for Health and Social Affairs (including a senior medical officer who is the current President of the World Medical Association), the Helsinki University Hospital, the Faculty of Medicine of the University of Helsinki (including the Head of the Committee for Specialist Training), the Finnish Medical Society and the Finnish Medical Association (including the current President of the Permanent Working Group of European Junior Doctors).

The group also visited the Hospital for Children and Adolescents, a part of the University Hospital Helsinki. The University Hospital is based on 23 sites, has a catchment population of 1.4 million, 3,830 beds and a budget of €1.03 billion. In 2001, the hospital treated 156,890 inpatients, 290,504 outpatients and managed 16,507 births.

Comparative data on Irish and Finnish health systems		
	Ireland	**Finland**
Population	3,917,336	5,200,000
Land area	70,000km^2	338,145km^2
Life expectancy 2000	78	78
Infant mortality rate per 1,000 live births 2000	5.8	3.6
% of GNP spent on public health 2000	6.7%	5.3%
Public funding 2000	78%	75.2%

	Ireland	Finland
Private funding 2000	8.5%	24.8%
Inpatient hospital beds per 1,000 population 2001	3.7	9.2
Average inpatient length of stay 2001	6.8	5.6
Acute Hospital Beds per 1,000 population 2001	3.4	3.7
Nurses per 1,000 population 2001	16.5	14.4
Doctors per 1,000 population 2001	2.3	3.1
Public hospital doctors per 100,000 population 2002	145	150
Specialists working in the public hospital sector 2002	1,731	5,200
Trainees working in the public hospital sector 2002	3,932	2,600
Ratio of specialists to trainees in the public sector 2002	0.44 : 1	2 : 1
Average basic salary of a specialist in the public sector	€133,051	€45,000
Average basic salary of a trainee working in the public sector	€43,231	€30,960
Specialists working only in the private sector 2002	175	1,370
Other specialist doctors 2002	350	3,885
General Practitioners 2002	2,400	3,600

Health funding

Health services in Finland are funded mainly from public health insurance payments by each citizen, partly from local taxation and partly from central government grants. Around 10% of healthcare costs are covered by customer charges. Finland is divided into 453 municipalities, each of which is responsible for providing and funding healthcare for its inhabitants. Municipalities are also subsidised by central government to provide certain services in line with population size, age structure and morbidity. Health funding is determined annually, within the context of a 4-year plan.

Insurance-based system

Each citizen pays public health insurance, which guarantees that after they have spent €590 in one year, they will be charged no more than €12 per day for care.

Primary care

Municipalities range in size from 128 to 550,000 inhabitants. Each municipality provides care through one of 278 Primary Health Care Centres. Health centres are staffed by General Practitioners and have inpatient beds to which GPs can admit patients. In 2001, there were approximately 3,600 GPs working in the public health system.

Centres provide medical, paediatric, obstetric, psychiatric, dental and rehabilitative care to patients who are not acutely ill. They often have limited radiology and pathology facilities, are responsible for the local ambulance service, social workers, occupational health, home nursing services and provide a base for outpatient clinics for specialist doctors. Other than in an emergency, patients must be referred to specialist care by a doctor.

In 2000, there were 23,910 beds in 278 health centres. 201 municipalities have their own health centre, 252 municipalities have entered cooperative agreements to provide care jointly, in one of 77 health centres, and there is one private health centre.

Secondary care

Finland is divided into 20 hospital districts, covering populations ranging between 70,000 and 1.3 million. Patients cannot access hospital care outside their hospital district unless referred for services that are not available in that district. Each hospital district is responsible for providing care to a number of municipalities, who fund the district by purchasing its services. Each district has a central hospital surrounded by a network of district and municipal hospitals. Five of the 20 central hospitals are university hospitals, which provide more specialised care. In total, there are 17,600 public hospital beds distributed among 84 public hospitals.

As of 2001, there were approximately 5,200 specialists and 2,600 trainees working in the public hospital sector. There were 940,000 inpatient care episodes and 3.7 million outpatient visits in hospital districts in 2000. The average inpatient length of stay was 5.6 days.

Private care

Specialist doctors in the public hospital sector have rights to private practice, although the number of procedures they can perform on private patients within the public hospital system is regulated. There are 900 private group practices in Finland, 200 individual surgeries and 1,760 beds in 37 private hospitals. Approximately 1,400 specialists were engaged purely in private practice.

Provision and funding of medical education and training

In Finland, both basic and specialist medical training are provided by the Faculties of Medicine of five Universities, each of which operates a University Hospital. Collectively, the five universities receive €100 million per annum in government funding for medical education, approximately 50% of which is spent on training and 50% on research. Each hospital with specialist trainees receives €1,300 per month per trainee from the relevant university. This accounts for approximately 50% of each trainee's monthly salary and means that the university is granted significant involvement in the structure, organisation and monitoring of training on the hospital site.

Medical education and training is accredited by the National Board for Medicolegal Affairs, which is responsible for the registration, regulation and accreditation of over 290,000 healthcare professionals, including doctors.

Basic medical training

Basic medical training lasts six years, and comprises two years academic study, followed by four years of hospital-based study which includes six months of practice in hospital clinics. Medical students are legally entitled to work as doctors after four years of study, and often gain experience and supplement income by working as physician assistants in primary care centres or private group practices. This means that on graduation, each doctor has clinical experience.

On graduation, those who wish to proceed to specialist training are required to work for nine months in a primary care centre. On completion of this nine-month period, they may wait for up to twelve months before being able to access training in their chosen specialty.

Specialist medical training

Since 1989, specialist training has been, by law, based on a documented system of continuous evaluation and assessment. Evaluations must be regular and must be documented. Junior doctors must outline (in written form) their aims for the next 3 months, agree them with their superior and be evaluated on that basis. Junior doctors also evaluate their superiors and the quality of training.

Each trainee uses a logbook which specifies minimum workload and casemix appropriate to completion of the training programme. Completion of specialist training is dependent on passing a 6 hour written exam which, uniquely in the European Union, results in a university degree.

Specialist training consists of:

- 9 months primary health care

- 4.5 – 5.5 years in specialist training of which 2.5 years is in a 'common trunk' with related specialties while 3 years are spent in pure specialist training
- 80 – 220 hours of academic lectures

At least 50% of training takes place in hospitals, most of which is in University or Regional hospitals. Trainees qualify as specialists, on average, 7 or 8 years after graduation from medical school. Doctors appointed as specialists range in age from 31 to 38. The average age of newly appointed specialists is 36.

Specialties and sub-specialties

Since 1999, the Finnish state has recognised 49 medical specialties, certification in 33 of which requires 6 years specialist training, while 16 require 5 years of specialist training. It is should be noted that many of the disciplines referred to in Finland as 'specialties' would be considered 'sub-specialties' in Ireland.

Prior to 1999, there were 96 specialties, many of which required 5-6 years of specialist training and 2 years of sub-specialist training. In an attempt to provide nationally recognised sub-specialty experience, the Finnish Medical Association, in cooperation with the five universities and relevant specialist societies, has initiated a sub-specialty training scheme which enables doctors to acquire a 'competency' in one of 32 specialist or sub-specialty areas. To date, 1,400 competencies have been granted to individual doctors.

Informally, most specialties retain defined sub-specialty areas, within which individual specialists practise. For example, there are 3 sub-specialty areas within paediatric surgery — general, gastroenterological and urological; and 8 sub-specialty areas within paediatrics.

Regulation of doctors

Doctors, together with other health professionals, are regulated by the National Authority for Medicolegal Affairs. The Authority maintains a central register which includes personal data and information about rights to practise on almost 290,000 healthcare professionals. The Authority is a statutory body established under the aegis of the Ministry of Social Affairs and Health.

Reform of the acute hospital system

Current problems in the Finnish health system include limitations on the patient's ability to choose their care provider, insufficient resources, shortages of specialists and general practitioners and waiting lists for both inpatient and outpatient care. Individual municipalities are responsible for both selling and buying care, a situation that has limited patient choice and meant that limiting access to services is seen as one means of regulating costs.

Waiting lists in Finland, 2001		
Procedure	**Number on list**	**Length of time to procedure**
Cataract operations	17,000	Over 3 months
Coronary artery scan/angioplasty	1,200	Over 3 months
Hip or knee replacement surgery	7,200	Over 3 months

In March 2002, the Finnish government adopted as national policy a report titled *Securing the Future of Health Care Services*. The report outlines a national strategy for reform and restructuring of health care services in Finland, and addresses four key themes: health promotion, structural reform, development of the health care workforce and the financing of health care.

Implementation of the report is ongoing and involves further centralisation of specialised hospital services and centralisation of diagnostic services. Hospitals are being encouraged to form part of merged 'cooperation districts' to facilitate the provision of acute specialised services.

Smaller hospitals will, in the future, focus on the delivery of basic hospital care. Health service planning will take place at hospital district level, rather than at municipal level. Hospital districts are required to prepare detailed plans stating how they will cooperate with other districts in reorganising elective services and reducing waiting lists.

Working time

In Finland normal working time for doctors in health centres is 37 hours a week; for doctors in hospitals, normal working time is 38.25 hours per week. The normal working day begins at 8am and ends at 4pm. Most doctors work on-call on-site, which means that on average, doctors employed in the public hospital sector work a total of 43 hours per week.

On-call

On-call duty usually takes place following a normal working day. Although on-call duty cannot take place more than 6 days a month, doctors working on-call typically work for periods of between 8 and 15 hours at a time immediately following a normal working day. This means that doctors can spend more than 24 hours working.

On-call duty is paid at double time, weekend work at 2.5 times. Because on-call work is highly paid, there is ongoing pressure from health service employers to introduce shiftwork.

Working time legislation

Public sector working time was not regulated in Finland before 1996. Previously, working time for doctors was regulated by collective agreement. The Physicians' Collective Agreement is one of five collective agreements in the Municipal Sector.

The Working Time Act of 1996 applies to both trainee and specialist doctors working in health centres and hospitals. The Act excludes independent practitioners and doctors in managerial positions. Two thirds of general practitioners are outside the scope of the EWTD because they work as independent practitioners.

The Working Time Act is based on a combination of two rules — one determining the maximum length of regular working hours and the other setting limits for the number of hours of overtime allowed. Regular working hours are restricted to a maximum of eight hours per day and 40 hours per week, while the maximum number of overtime hours is 138 hours over a period of four months (8 hours per week for 17 weeks). Overtime may not exceed 330 hours in one calendar year. Average weekly working time is limited to 46 hours 20 minutes (averaged over a year).

Impact of reduced working hours on the quality of patient care

In Finland, care is team-based; patients are cared for by a team of specialists and junior doctors, led by a department head. There is an hour of cross-over between each period of cover. None of those consulted felt that reduced working hours and revised work practices have had negative implications for either quality or continuity of care.

Compliance with EWTD

As set out elsewhere in this report, the European Court of Justice has ruled, in the SiMAP case, that time spent on-call by doctors in public medical emergency services must be regarded as working time, and where appropriate as overtime, within the meaning of the European Working Time Directive, if doctors are required to be on-site in their place of employment. Legal opinion is that this judgement also applies to doctors in training in the hospital sector.

In this context, the amount of time spent on-call on-site means that doctors working in a number of specialties in Finland are not compliant with elements of the directive relating to maximum daily working time and rest periods. It is the opinion of the Finnish Medical Association that this had serious implications for a number of specialties whose workload was so low and specialised that it was not possible to employ more doctors as this would result in inappropriately low workloads for individual doctors.

Most of those consulted believed that compliance with SiMAP would involve shiftwork. It was acknowledged that the European Court of Justice had stated that both types of 'working time' — on-site on-call, and time spent when called into work — came within

the definition of 'shift work' in the EWTD. It was believed that this would have negative salary implications.

One solution currently being considered is to employ doctors who work on-call as a regular part of their working month. Under the EWTD however, this would mean that such doctors would be categorised as 'nightworkers', subject to intensive regulation, shorter daily working times and health and safety restrictions.

Quality of medical education and training

Over the course of their consultation with specialists, trainers and representatives of the Committee for Specialist Training in Helsinki University, Task Force representatives noted that a view existed among some doctors in Ireland that the medical education and training systems in Finland, Sweden, Norway or Denmark did not produce high quality specialists capable of autonomous practice. These doctors had argued that specialist trainees needed to work for periods in excess of 48 hours per week to obtain sufficient experience to practice competently.

In response, specialists (including specialist paediatric surgeons), trainers, trainees and a number of professors from the Faculty of Medicine of the University of Helsinki stated that the system of specialist medical education and training in Finland had the value of being based on externally validated continuous assessment and audit. It was noted that the best means of ensuring sufficient experience was to expose the trainee to sufficient workload, rather than time spent on the hospital site. In this context, each trainee's workload was recorded and assessed at 3 monthly intervals. It was queried whether all of the notional doctors in training in Ireland actually received adequate validated training. The Finnish perception was that the Irish system was based on time spent in training rather than audited caseload and experience.

In conclusion, it was noted that the majority of doctors who complete specialist training are considered competent to practice independently. However, if a sub-speciality interest was required, doctors needed further training (a competency) before being seen to be competent by their peers.

Appendix 10
List of submissions to Task Force

During the course of its work the Task Force received written submissions from the following individuals and organisations:

Individuals

1. **Mr. Pat Barron**, Chief Nurse Specialist, Mid-Western Regional Hospital, Limerick.

2. **Dr. Ruth Barrington**, Chief Executive Officer, Health Research Board.

3. **Dr. Siobhán Barry**, Consultant General Adult Psychiatrist and Clinical Director, Hospitaller Order of Saint John of God Cluain Mhuire Service.

4. **Dr. Yvonne Begley**, Consultant Child and Adolescent Psychiatrist, Mid-Western Regional Hospital, Limerick.

5. **Dr. Patrick Benson**, Consultant Anaesthetist and Chairman, Department of Anaesthesia, St. Vincent's University Hospital, Dublin.

6. **Ms. Margaret Boland**, Emergency Department Nursing Services, St. Vincent's University Hospital, Dublin.

7. **Dr. Mary Boland**, Consultant Physician in Geriatric Medicine, Ennis General Hospital.

8. **Ms. Sheila Bowers**, Dietician Manager, Mid-Western Regional Hospital, Limerick.

9. **Dr. Richard Brennan**, Chairman, Irish College of General Practitioners.

10. **Dr. Gerard Burke**, Consultant Obstetrician and Gynaecologist, Mid-Western Regional Hospital, Limerick.

11. **Mr. Paul Burke**, Consultant General Surgeon with a special interest in Vascular Surgery, St. John's Hospital, Limerick.

12. **Dr. Mary Cahill**, Consultant Haematologist, Mid-Western Regional Hospital, Limerick.

13. **Dr. Liam Carroll**, Consultant General Paediatrician, Mid-Western Regional Hospital, Limerick.

14. **Dr. Geoff Chadwick**, Head of General Professional Training, Royal College of Physicians of Ireland.

15. **Ms. Sophie Charles**, Cardiac Rehabilitation Co-ordinator, St. Columcille's Hospital, Loughlinstown.

16. **Ms. Kay Chawke**, Acting Assistant Director of Nursing, Mid-Western Regional Hospital, Limerick.

17. **Professor Anthony Clare**, Consultant General Adult Psychiatrist, St. Edmundsbury Hospital, Lucan.

18. **Dr. David Clinch**, Consultant Physician in Geriatric Medicine, Mid-Western Regional Hospital, Limerick.

19. **Dr. Paul Collins**, Consultant Dermatologist, St. Vincent's University Hospital, Dublin.

20. **Dr. Deborah Condell,** Consultant Histopathologist, Cavan Monaghan General Hospital.

21. **Dr. Brendan Conroy**, Consultant Anaesthetist, St. John's Hospital, Limerick.

22. **Ms. Susan Coyle**, Radiography Services Manager, Ennis General Hospital.

23. **Dr. Con Cronin**, Consultant General Physician with special interest in Nephrology, St. John's Hospital, Limerick.

24. **Dr. Tom Crotty**, Consultant Histopathologist, St. Vincent's University Hospital, Dublin.

25. **Dr. Morgan Crowe**, Consultant Physician in Geriatric Medicine, St. Columcille's Hospital, Loughlinstown.

26. **Dr. Sinead Donnelly**, Consultant in Palliative Medicine, Mid-Western Regional Hospital, Limerick.

27. **Dr. John Fennell**, Consultant General Physician, St. Columcille's Hospital, Loughlinstown.

28. **Prof. Oliver Fitzgerald**, Consultant Rheumatologist and General Physician and Chairman, Medical Board, St. Vincent's University Hospital, Dublin.

29. **Ms. Nora Fitzpatrick**, Director of Nursing, Mid-Western Regional Hospital, Limerick.

30. **Dr. Kate Ganter,** Consultant Child and Adolescent Psychiatrist, Lucena Clinic, Dublin.

31. **Dr. Rajnish Gupta**, Consultant Medical Oncologist and Regional Director of Cancer Services, Mid-Western Regional Hospital, Limerick.

32. **Ms. Deirdre Harnett**, Acting Assistant Director of Nursing, Mid-Western Regional Hospital, Limerick.

33. **Mr. John Hennessy**, Manager, Mid-Western Regional Hospital, Limerick.

34. **Dr. Terry Hennessy**, Consultant Cardiologist and General Physician, Ennis General Hospital.

35. **Prof. Michael Hutchinson**, Consultant Neurologist, St. Vincent's University Hospital, Dublin.

36. **Mr. Asam Ishtiaq**, Registrar (Surgery), Waterford Regional Hospital.

37. **Dr. Verena Keane**, Consultant General Adult Psychiatrist with a special interest in the psychiatry of learning disability, St. Vincent's Centre, Navan Road and St. Michael's House.

38. **Mr. Gerard Kearns**, Consultant Oral and Maxillofacial Surgeon, Mid-Western Regional Hospital, Limerick.

39. **Ms. Patricia Keeshan**, Administration Services Co-ordinator, St. John's Hospital, Limerick.

40. **Dr. John Kellett**, Consultant General Physician, Nenagh General Hospital.

41. **Mr. Tim Kennelly**, Chief Executive Officer, St. John's Hospital, Limerick.

42. **Ms. Pauline Leahy**, Physiotherapy Manager, St. Vincent's University Hospital, Dublin.

43. **Dr. Ruth Loane**, Consultant General Adult Psychiatrist with a special interest in the psychiatry of old age, Mid-Western Regional Hospital, Limerick.

44. **Ms. Sadhb Lyons**, Patient Services Manager, Mid-Western Regional Hospital, Limerick.

45. **Mr. Eric Masterson**, Consultant Orthopaedic Surgeon, Regional Orthopaedic Hospital, Croom.

46. **Dr. Brian Maurer**, Consultant Cardiologist and General Physician, St. Vincent's University Hospital, Dublin.

47. **Mr Ken Mealy**, Consultant General Surgeon with a special interest in gastro-intestinal surgery, Wexford General Hospital, Wexford.

48. **Mr. David McAvinchey**, Consultant General Surgeon, Nenagh General Hospital.

49. **Dr. Neil McDonald**, Consultant Anaesthetist, St. Vincent's University Hospital, Dublin

50. **Dr. Gerry McElvaney**, National Specialty Director in General (Internal) Medicine, Irish Committee on Higher Medical Training at the Royal College of Physicians of Ireland.

51. **Dr. Brian McGlone**, Consultant Radiologist, St. Columcille's Hospital, Loughlinstown.

52. **Dr. Eilis McGovern**, Consultant Cardiac Surgeon, St. James's Hospital, Dublin.

53. **Dr. Malachi McKenna**, Consultant Physician in Endocrinology and Diabetes Mellitus, St. Vincent's University Hospital, Dublin.

54. **Prof. T. Joseph McKenna**, Consultant Physician in Endocrinology and Diabetes Mellitus, St. Vincent's University Hospital, Dublin.

55. **Ms. Catherine McNamara**, Clinical Nurse Manager, Mid-Western Regional Hospital, Limerick.

56. **Mr. Robert McQuillan**, Consultant Orthopaedic Surgeon, St. Vincent's University Hospital, Dublin.

57. **Dr. Eithne Mulloy**, Consultant General Physician, St. John's Hospital, Limerick.

58. **Ms. Elaine Murphy**, Medical Manpower Manager, Mid-Western Regional Hospital, Limerick.

59. **Mr. Liam Murray**, Radiography Services Manager, St. John's Hospital, Limerick.

60. **Mr. Patrick Murray**, Medical Manpower Manager, Letterkenny Hospital.

61. **Dr. Brídín Ni Chanainn**, Institute of Public Administration.

62. **Ms. Gena Nicholas**, Radiographer, Mid-Western Regional Hospital, Limerick.

63. **Radiology Services**, Nenagh General Hospital.

64. **Dr. Niamh Nolan**, Consultant Histopathologist, St. Columcille's Hospital, Loughlinstown.

65. **Prof. Tom O'Dowd**, Professor of General Practice, University College Dublin.

66. **Dr. James O'Hare**, Consultant Physician in Endocrinology and Diabetes Mellitus, Mid-Western Regional Hospital, Limerick.

67. **Dr. Risteard O'Laoide**, Consultant Radiologist and Director of Radiology, St. Vincent's University Hospital, Dublin.

68. **Dr. Diarmuid O'Shea**, Consultant Physician in Geriatric Medicine, St. Vincent's University Hospital, Dublin.

69. **Dr. Donal O'Shea**, Consultant Physician in Endocrinology and Diabetes Mellitus, St. Columcille's Hospital, Loughlinstown.

70. **Dr. Tom H. Peirce**, National Specialty Director in General (Internal) Medicine, Irish Committee on Higher Medical Training at the Royal College of Physicians of Ireland.

71. **Mr. Pawan Rajpal**, Consultant Surgeon, Cavan General Hospital.

72. **Dr. Bart Ramsey**, Consultant Dermatologist, Mid-Western Regional Hospital, Limerick.

73. **Dr. Nicola Ryall**, Consultant in Rehabilitation Medicine, St. Vincent's University Hospital, Dublin.

74. **Mr. Bernard Ryan**, Principal Clinical Engineering Technologist, Mid-Western Regional Hospital, Limerick.

75. **Mr. John Ryan**, Accident and Emergency Consultant, St. Vincent's University Hospital, Dublin.

76. **Dr. Tim Stanley**, St. Vincent's University Hospital, Dublin.

77. **Prof. Arthur Tanner**, Director of Surgical Affairs, Royal College of Surgeons in Ireland.

78. **Dr. Eoin Tiernan**, Consultant Neurologist, St. Vincent's University Hospital, Dublin.

79. **Mr. Seán Tierney**, Consultant General Surgeon, Tallaght Hospital.

80. **Dr. Dermot Walsh**, Inspector of Mental Hospitals, Department of Health and Children.

81. **Dr. Margot Wrigley**, Consultant General Adult Psychiatrist with a special interest in the psychiatry of old age and Chairman, The Irish Psychiatric Training Committee.

Organisations

82. **College of Anaesthetists, Royal College of Surgeons in Ireland.**

83. **Comhairle na nOspidéal.**

84. **Council of Deans of Irish Faculties with Medical Schools.**

85. **Department of Anaesthesia, Mid-Western Regional Hospital, Limerick.**

86. **Department of Nutrition and Dietetics, St. Vincent's University Hospital, Dublin.**

87. **Department of Orthopaedic Surgery, St. Vincent's University Hospital, Dublin.**

88. **Department of Respiratory Medicine, St. Vincent's University Hospital, Dublin**

89. **Dublin Regional Basic Surgical Training Programme, Royal College of Surgeons in Ireland.**

90. **Faculty of Occupational Medicine, Royal College of Physicians of Ireland.**

91. **Faculty of Paediatrics, Royal College of Physicians of Ireland.**

92. **Faculty of Pathology, Royal College of Physicians of Ireland.**

93. **Faculty of Public Health Medicine, Royal College of Physicians of Ireland.**

94. **Faculty of Radiologists, Royal College of Physicians of Ireland.**

95. **Higher Education Authority.**

96. **Institute of Obstetricians and Gynaecologists of the Royal College of Physicians of Ireland.**

97. **Irish Association for Emergency Medicine, Royal College of Surgeons in Ireland.**

98. **Irish College of General Practitioners.**

99. **Irish College of Ophthalmologists.**

100. **Irish College of Psychiatrists.**

101. **Irish Committee on Higher Medical Training at the Royal College of Physicians of Ireland.**

102. **Irish Medical Organisation, Nominees to Task Force**

103. **Irish Medical Organisation — Non-EU Advisory Committee**

104. **Irish Psychiatric Training Committee.**

105. **Irish Division of the Royal College of Psychiatrists.**

106. **Limerick Faculty of The Irish College of General Practitioners.**

107. **Medical Council.**

108. **Midwifery Group — Regional Maternity Hospital, Limerick.**

109. **National Council for the Professional Development of Nursing and Midwifery.**

110. **Nursing Group — Oncology, Haematology and Palliative Care, Mid-Western Regional Hospital, Limerick.**

111. **Occupational Therapy Department, St. Vincent's University Hospital, Dublin.**

112. **Pharmacy Department, St. Vincent's University Hospital, Dublin.**

113. **Postgraduate Medical and Dental Board.**

114. **Royal College of Surgeons in Ireland.**

115. **South Dublin Immunology Service Group, Immunology Department, Trinity College, Dublin.**

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