COMHAIRLE NA NOSPIDÉAL

REPORT OF THE COMMITTEE ON

ACCIDENT & EMERGENCY SERVICES

~ February 2002 ~

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This Report examines and makes recommendations on the provision of Emergency Services in public hospitals in the Republic of Ireland. The Report explores factors that affect the efficiency and effectiveness of hospital emergency services, beginning with the patient’s arrival at the hospital, to seeing a doctor, through to discharge or admission to a hospital bed. The Report is presented in seven parts:

1. An Executive Summary
2. The work of the Committee
3. The Role of Emergency Medicine and Emergency Departments
4. Attendance at Emergency Departments
5. Improving Patient Care
6. Future structure and staffing of Emergency Departments
7. Appendices & Bibliography

This Report deals with emergency trauma policy and staffing only in relation to Emergency Departments. It does not make recommendations on ambulance response times or the organisation and future roles of ambulance staff. Some of these issues are more properly dealt with by the Pre-Hospital Emergency Care Council.

The Report takes the view that Emergency Departments should play a role within each hospital commensurate with the role of each hospital in the regional network, its medical staffing profile and the availability of appropriate clinical and diagnostic resources.

Terms of Reference
The aims of the Report are set out in the terms of reference of the Comhairle A&E Committee as follows:

“Arising from discussions with the Minister and Department of Health & Children, Comhairle na nOspidéal established a committee to undertake a review of the structure, operation and staffing of Accident & Emergency Services and Departments. The review will aim to:

1. Facilitate the development of a better quality service, with greater continuity in patient care, delivered twenty-four hours a day by appropriately trained doctors
2. Promote the development of regionalised A&E and trauma services in line with national and international best practice in patient care
3. Provide for a substantial increase in on-site senior clinical decision making on a 24 hour basis
4. Define the future roles of A&E Consultants

Simultaneous to the Comhairle review, it is envisaged that health authorities will consider how best to organise A&E services in their areas in conjunction with the Comhairle Committee.”
SECTION 1.
EXECUTIVE SUMMARY
1.1 CONSULTATIVE PROCESS AND LITERATURE REVIEW
A key element of the work of the Committee was an extensive consultative process. It involved meeting with and receiving submissions from representatives of each health board, relevant voluntary hospitals, appropriate professional bodies and other interested parties. The Committee also obtained information on attendances in each Emergency Department from each health board and acute general hospital, sought the views of Health Board CEO’s on the appropriate structuring, medical staffing profile and operation of Emergency Departments and reviewed literature regarding hospital emergency services in Britain, Europe, the USA, Canada and Australia.

1.2 THE NEED FOR CHANGE
The Committee found that while a range of initiatives have been introduced over the past two decades to improve hospital emergency services, there has been little improvement in waiting times for less urgent cases; access to inpatient beds continues to be difficult and while the number of Consultants and Non Consultant Hospital Doctors (NCHDs) has risen significantly, the proportion of senior to junior medical staff has not changed substantially during the period.

Comprehensive and comparable information on the work of Emergency Departments in Ireland is extremely limited. There is poor interaction with primary care. Many hospitals do not use formal triage systems. Hospitals depend largely on nurses and junior medical staff to provide emergency services. There are problems accessing radiology and pathology services and difficulties accessing inpatient beds, as well as inappropriate reassessment of admissions by less experienced junior doctors.

A key issue for both patients and staff in Emergency Departments is waiting time. The potential impact of prolonged waiting times on patient care are:

· Additional risk to patient outcomes where there are delays between presentation and assessment by a doctor (especially for patients with serious injury or illness)
· Risk that delays may be further extended in cases where triage is not undertaken
· Increased numbers of patients leaving the Emergency Department before treatment
· Overcrowding in the Emergency Department
· Restricted access to Emergency services and delays in treatment of patients on arrival

Delays can occur in waiting to be seen by a doctor, waiting for diagnostic services and waiting to be admitted to a hospital bed. The Committee, based on its consultation process, has identified the main causes of delay in Emergency Departments as:

· The absence or partial implementation of formal triage processes
· Restricted access to inpatient beds
· Restricted access to pathology and radiology services
· The treatment and management of large numbers of patients with minor injuries who could ideally be treated in other settings
Limited availability of senior clinical decision makers
• The design of, and resources available to, the Emergency Department

Transfer of a patient to a hospital bed and the mix of medical and nursing staff are key factors affecting the speed of patient throughput.

1.3 SYSTEM-WIDE PROBLEMS/ SYSTEM-WIDE SOLUTIONS
During the Committee’s consultation process, representatives of health boards and hospitals stressed that emergency services should be reformed or restructured in conjunction with the rest of the hospital. It was repeatedly stated that many of the difficulties and delays experienced in Emergency Departments reflect system-wide issues such as the demand experienced by each hospital, the resources available to it, as well as the structure, organisation and staffing profile of the hospital. Much of the literature studied by the Committee emphasised this point and it is echoed in the Health Strategy (1).

Many of those consulted stated that significant improvements in emergency services, including reduced waiting times, would not happen without changes in the organisation of emergency care, better use of care pathways, increased and more timely access to diagnostics, better access to and management of inpatient beds and changes in the way health services responded to seasonal pressures.

It was put to the Committee that its task, in making recommendations on reform of emergency services, was to outline a system-wide approach that addressed system-wide problems.

1.4 PRINCIPLES
The Committee concurs with the need for a “system-wide” approach to hospital care in order to ensure that hospital emergency services can be delivered effectively. The Committee also agrees with the focus in the Health Strategy (1) on the placement of the patient at the centre of care and has ensured that the needs of Emergency Department patients underlie each of its recommendations. The Committee believes that patients attending Emergency Departments are entitled to high quality and safe services through the most efficient and effective use of resources. Drawing on its consultation process and literature review, the Committee identified five principles that should underpin the future structure of emergency services.

1. Patients should be transferred directly to the hospital most capable of providing them with appropriate care.

2. All the services involved in the management of emergency health needs must be integrated. These services include: pre-hospital care, emergency transport, hospital based services of varying complexity levels and primary care.

3. Within the hospital, emergency care should be organised to provide distinct care pathways for patients, prioritised for acuity, and should be managed as a single, integrated comprehensive service unit.

4. A network of resources should be formed in each health board area to provide comprehensive emergency care to patients.

5. All emergency service staff should be guided by agreed protocols and standards, underpinned by data systems for planning, audit and evaluation.
1.5 KEY RECOMMENDATIONS

1.5.1 The Organisation of Hospital Services

In order to provide appropriate care to patients, through the right people in the right location and at the right time, the Committee recommends that hospital services are explicitly organised in three distinct but interdependent streams or services:

1. Emergency care
   Organised so that patients, depending on their needs, can move smoothly between Emergency Departments, assessment beds, intensive care, coronary care, the best inpatient medical and surgical care and have rapid access to appropriate diagnostic services and primary care.

2. In-patient Elective care
   Encompassing inpatient beds in clinical specialties, diagnostic facilities and services as well as strong links to outpatient and day care facilities.

3. Day & Outpatient care
   Addressing the needs of patients who require non-urgent care in a hospital setting but who do not need admission to the hospital. These include out-patient appointments, many diagnostic investigations, day surgery and various therapies and treatments.

1.5.2 Structure of Hospital Emergency Services

The Committee recommends that a three-tiered Emergency Department system be adopted nationally. Within this system, the three tiers would be as follows:

1. Regional Emergency Departments
   Such departments would be located in major regional hospitals and would serve a catchment population of about 250,000. Each of these hospitals would function as the major trauma receiving hospital for the region, provide a referral service for local general hospitals, provide advice and stabilisation for complex cases referred from general hospitals and other emergency services and participate in the regional retrieval service. The Regional Emergency Department would provide resuscitation, stabilisation and initial treatment for all emergencies. They would be staffed by a number of consultants in emergency medicine (one of whom should have a special interest in paediatric emergency medicine) and a multi-professional team. Each Regional Emergency Department would be led by a Director who would be one of the consultants in emergency medicine.

2. Hospital Emergency Departments with access to some specialist surgical and medical services on-site
   Such departments would be linked to the Regional Emergency Department for trauma services, subspecialty services and certain diagnostic services. Each would have access to regional retrieval services. Hospitals with these Emergency Departments would be able to manage most emergencies, including stabilisation and assisted ventilation. They would have an on-site ability to provide a team response and would be staffed by 1-2 consultants in emergency medicine and a multi-professional team. One of the consultants would function as Head of the Hospital Emergency Department.
3. **Hospital Emergency Departments with access to specialist services off-site**

Each of these Hospital Emergency Departments would provide nurse-led services for minor illness and injury together with 24-hour access to medical staff on-site and resuscitation and limited stabilisation prior to referral to the Regional Emergency Department (if necessary). Patients arriving at these Hospital Emergency Departments would have 24-hour access to medical staff. A consultant on the hospital staff would function as the lead clinician in, and have responsibility for, the organisation and co-ordination of the Hospital Emergency Department. There would be access to Consultants in Emergency Medicine in the Regional Emergency Department for support, development and training purposes.

Having taken population catchment size, attendance rates, accessibility, demographics, the hospital network, clinical resources, diagnostic resources, staffing profile and national and international best practice into account, the Committee recommends 13 Regional Emergency Departments. Specific recommendations for each health board and hospital are set out in later sections of this report.

1.5.3 **Staffing the Hospital Emergency Services**

The committee recommends the following clinical management structure for hospital emergency services.

**Regional Co-ordinator of Emergency Services**

Each health board should have a Regional Co-ordinator of Emergency Services who would advise the health board on the operation and organisation of emergency services and would be responsible for the development and implementation of agreed protocols across the regional emergency service including each hospital in the health board area. The Regional Emergency Service Co-ordinator would also function as the Director of the Regional Emergency Department where he/she would be based.

**Director of the Regional Emergency Department**

Each Regional Emergency Department would be led by a Director who would be one of the Consultants in Emergency Medicine. The post could rotate between different consultants in the Emergency Department or be filled from a competitive appointment process. It is envisaged that the Director of the Regional Emergency Department would have overall clinical and administrative responsibility for the Emergency Department. All staff in the department would be responsible to the Director on operational matters.

**Consultants in Emergency Medicine**

Consultants in Emergency Medicine treat patients of all ages with emergency medical problems and injuries, covering the breadth of medicine. They deal with episodic and emergency care, referring longer-term acute care, elective procedures and the follow-up of chronic problems to others. The large majority of the sessional commitment of a Consultant in Emergency Medicine should be to clinical as distinct from administrative duties or legal work. His or her clinical duties centre on the stabilisation of patients in order to ensure that all life-threatening causes of illness and injury are investigated. The Consultant in Emergency Medicine is responsible for ensuring that the patient is admitted to the most appropriate service to further explore the problem if such is required.
Depending on the number of consultant posts in Emergency Medicine in a service, different rosters and cover arrangements will apply. All Consultants in Emergency Medicine, other than the Regional Directors, should have a majority clinical commitment.

1.6 CONSULTANT STAFFING ISSUES
The Committee notes that 75% of patients attend Emergency Departments between the hours of 8am and 8pm. Having regard to the recommendations of the Forum on Medical Manpower, the Hanly Report and the remit of the National Taskforce on Medical Staffing the committee’s recommendations aim to put in place structures which facilitate the onsite presence of Consultants in Emergency Medicine in Regional Emergency Departments between the hours of 8am and 8pm, 7 days a week, 365 days a year. The Committee is aware of the industrial relations issues which will need to be resolved to support some of these recommendations.

1.7 FURTHER MEASURES REQUIRED TO IMPROVE HOSPITAL EMERGENCY SERVICES
Consultants in Emergency Medicine play a key clinical and managerial role in Emergency Departments. The appointment of additional Consultants should contribute to improvements in patient care and the flow of patients through the Emergency Department. However, appointing additional Consultants in Emergency Medicine, without ensuring changes in the organisation of Emergency Departments and hospital emergency care, will have little impact.

The primary means of ensuring high quality patient care in Emergency Departments is through the provision of services according to the clinical needs of patients as they present. This involves the introduction and use of triage systems, better interaction with primary care, the timely transfer of patients to the appropriate treatment location within the hospital or to another facility, greater roles for nurses within the Emergency Department, Minor Injury & Illness Areas, Observation Wards, dedicated and accessible diagnostic facilities and a distinct management structure for the Hospital Emergency Service.

The Committee believes that these systems and measures can be augmented by the appointment of additional Consultants in Emergency Medicine in each region where such consultants are of maximum benefit to patients and with on-site access to appropriate clinical and diagnostic resources.

1.8 THE CONTINUUM OF EMERGENCY CARE
Emergency services extend beyond the Emergency Department, into the hospital and the community. Hospitals play a central role in this continuum. There is a need for a defined management structure to be established within each hospital so that each hospital can act as the focal point for local emergency services.
1.9 HOSPITAL EMERGENCY SERVICE COMMITTEE
The Committee recommends that a Hospital Emergency Service Committee be established in each hospital. It should be chaired by the consultant in charge of emergency services in that hospital and supported by an appropriate administrative structure including a designated Hospital Emergency Service Manager. The committee should comprise acute medical, acute surgical, paediatric, obstetric, psychiatric, anaesthetic, radiology and pathology staff, together with nursing, health & social care professionals, ambulance staff and general practitioners.

1.10 OTHER RECOMMENDATIONS
Contained within this report are further recommendations regarding:

- Triage
- Access to diagnostic services
- Emergency Departments & primary care
- Minor injury & illness areas
- Trauma
- Emergency Departments & paediatric care
- Emergency Departments & psychiatric care
- Emergency Departments delivering other services
- Transfer & discharge of patients
- Admission & discharge of patients
- Design of Emergency Departments
- NCHDs in Emergency Departments

1.11 INCREASE IN CONSULTANT POSTS
This report recommends an increase in consultant in emergency medicine posts which will see the number of permanent posts more than treble, with numbers increasing initially from 21 to 55 posts and later to 74 posts. The Committee’s recommendations are designed to be implemented on a phased basis, allowing sufficient time for changes in organisation and service delivery, training and recruitment of additional Consultants in Emergency Medicine and achievement of a contractual environment which allows rostering of consultant staff to cover busy periods in the Emergency Department.

1.12 BENEFITS OF REFORM
The Committee recognises that implementation of its recommendations will involve detailed planning by health boards, hospitals and others involved in emergency services, commitment on the part of all staff and increased or redirected resources in order to allow for the necessary re-organisation, restructuring & re-engineering of hospitals. Central to the Committee’s thinking, however, is the finding that what happens in the Emergency Department is hugely influenced by the effective operation of the rest of the health care system.

The ‘Winter Initiative’ package announced by the Minister for Health & Children, Mr Micheál Martin is an important step towards meaningful change and improvements in the provision of hospital emergency services. The provision of funding for additional posts of Consultant in Emergency Medicine has been the catalyst for the first detailed national review of emergency services in Ireland.
Reform of hospital services will improve integration between different specialties and departments, allow the introduction of standardised protocols for admission, management and discharge of the patient and allow the patient, depending on their needs, to move smoothly between Emergency Departments, primary care, assessment beds, intensive care, coronary care, the best inpatient medical and surgical care and have rapid access to appropriate diagnostic services.

The implementation of the recommendations of this review, the increased consultant staffing flowing from the Winter Initiative and the changes to the delivery of health services envisaged in the Health Strategy \(^{(1)}\) will have real and tangible benefits for patient care.
SECTION 2.

THE WORK OF THE COMMITTEE
2.1 CONTEXT

2.1.1 Winter Initiative
On 16th November 2000 the Department of Health & Children outlined to Comhairle na nOspidéal a proposal to recruit an additional 27 Consultants in Emergency Medicine as part of the “Winter Initiative” package announced on 22nd October 2000 by the Minister for Health & Children, Mr. Micheál Martin T.D. The Department requested that Comhairle grant approval to the creation of these posts on a temporary basis for a period of 12 months and stated that, in the light of the nature and extent of A&E Services, funding for permanent posts would be granted in the context of precise details of employment / working arrangements / attendance patterns for each post being provided by health agencies.

Comhairle welcomed the substantial investment announced by the Minister, noting that it represented an increase of approximately 150% on the number of existing approved posts (21). Following discussions with the Minister and Department officials, Comhairle na nOspidéal at its meeting on 15th December 2000 decided to undertake a review of the structure, operation and staffing of A&E Services and Departments with the aim of improving the provision and quality of patient care. The review was recommended to be initiated as soon as possible after the nomination by the Minister of the members of the 9th Comhairle.

2.1.2 Approval of temporary A&E Consultant posts
In the interim, in line with the request from the Department, the outgoing Comhairle decided to approve the appointment until 31st December 2001 of 29 additional temporary Consultant posts in Emergency Medicine, including 2 additional posts to those previously announced.

It was determined that these consultant posts would be based at Regional Hospitals currently staffed with existing permanent Consultant(s) in Emergency Medicine in each health board area or, where such did not exist, would be based at the regional centre. Each post would have the majority of sessions at the regional hospital and would have a regional remit.

2.1.3 Current position regarding temporary consultant posts in Emergency Medicine
The current position in relation to the temporary Consultant posts approved by Comhairle na nOspidéal on 15th December 2000 is set out below. In approving these temporary consultant posts the outgoing Comhairle envisaged that an increased complement of Consultants in Emergency Medicine, based at the regional hospitals, would provide scope for greater continuity in patient care by appropriately trained doctors and increased clinical commitments by senior decision makers during the busy periods in Emergency Departments. These interim arrangements were not intended to prejudice whatever arrangements were made subsequently in respect of the permanent appointments. It was agreed that Comhairle would give consideration to permanent appointments following completion of the review.

At its meeting on 21st September 2001, the 9th Comhairle decided to extend the approval for these temporary posts to 31st December 2002 to allow for the completion of the review and the creation and filling of permanent posts.
In February 2001 the Minister for Health & Children appointed the members of the 9th Comhairle (Term of office 2001 – 2005). At its first meeting on 28th February 2001, Comhairle na nOspidéal established an Accident & Emergency Committee to commence the review.

### Table 1. Permanent and Non Permanent Consultant Posts at 1st January 2002

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<th>Health Board</th>
<th>Population 1996 Census</th>
<th>Base Hospital</th>
<th>Permanent Emergency Medicine Posts at 15.12.00</th>
<th>Temporary Emergency Medicine Posts approved on 15.12.00</th>
<th>Total by hospital</th>
<th>Total by health board area</th>
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<td>East Coast Area Health Board</td>
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<td>Mid-Western Health Board</td>
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<td>North Western Health Board</td>
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<td>5</td>
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<td>R. of Ireland</td>
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<td>21 29</td>
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</tr>
</tbody>
</table>

**2.1.4 Establishment of A&E Committee by new Comhairle**

In February 2001 the Minister for Health & Children appointed the members of the 9th Comhairle (Term of office 2001 – 2005). At its first meeting on 28th February 2001, Comhairle na nOspidéal established an Accident & Emergency Committee to commence the review.
2.1.5 The Committee’s terms of reference were agreed as follows:

“Arising from discussions with the Minister and Department of Health & Children, Comhairle na nOspidéal established a committee to undertake a review of the structure, operation and staffing of Accident & Emergency Services and Departments.

The review will aim to:

1. Facilitate the development of a better quality service, with greater continuity in patient care, delivered twenty-four hours a day by appropriately trained doctors
2. Promote the development of regionalised A&E and trauma services in line with national and international best practice in patient care
3. Provide for a substantial increase in on-site senior clinical decision making on a 24 hour basis
4. Define the future roles of A&E Consultants

Simultaneous to the Comhairle review, it is envisaged that health authorities will consider how best to organise A&E services in their areas in conjunction with the Comhairle Committee.”

2.1.6 The membership of the Committee* was agreed as follows:

Prof. Gerald C. O’Sullivan, Consultant General Surgeon, Mercy Hospital, Cork. Chairman

Mr. Joseph Cregan, Principal Officer, Department of Health & Children

Dr. Deirdre Lohan, Consultant Anaesthetist, Our Lady’s Hospital, Navan / Our Lady of Lourdes Hospital, Drogheda

Mr. Colman O’Leary, Consultant in Accident & Emergency, Mid-Western Regional Hospital, Limerick

Dr. Donie Ormonde, Consultant Radiologist, Waterford Regional Hospital

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

Mr. Tommie Martin, Chief Officer, Comhairle na nOspidéal

Mr. Andrew Condon, Higher Executive Officer (Secretary to Committee)

Ms Mary Jo Biggs, Executive Officer (Assistant Secretary to Committee)

Mr A. Condon and Ms. M. J. Biggs provided secretarial support to the Committee. Mr Condon undertook the research for, and drafting of, the report. Subsequent redrafting and editing was undertaken by Mr. T. Martin, Ms. M.J. Biggs, Ms. R. Langan and members of the committee.

* Owing to work commitments, Prof. Muiris Fitzgerald, Consultant General & Respiratory Physician, was unable to participate in the work of the committee.
2.2 METHODOLOGY
The A&E Committee met more than 30 times over the course of its work. 16 of these meetings were part of an extensive consultative process during which the Committee met with, and received submissions from, representatives of each health board, relevant voluntary hospitals, appropriate professional and training bodies and other interested parties.

The Committee also obtained information on attendances in each Emergency Department from each health board and acute general hospital; sought the views of Health Board CEO’s on the appropriate structuring, medical staffing and operation of Hospital Emergency Services and reviewed literature on hospital-based emergency services in Britain, Europe, the USA, Canada and Australia. Lists of those consulted and those who made submissions to the committee are set out in Appendix A.

The Committee has set out in this report the general principles it has formulated regarding the future development of Hospital Emergency services nationally. These, together with the information gathered during the Committee’s consultative process, form the basis of the Committee’s report to Comhairle na nOspidéal.

2.3 TERMINOLOGY
In 2000 the Irish Surgical Postgraduate Training Committee (ISPTC) and the Irish Association for Emergency Medicine (IAEM) proposed to change the name of the specialty from ‘Accident & Emergency Medicine’ to ‘Emergency Medicine’. In December 2000, the Medical Council of Ireland accepted the advice of the recognised body, i.e. the ISPTC, that the title of the specialty in Ireland be changed to ‘Emergency Medicine’. The term ‘Emergency Medicine’ is used in the United States, Canada, Australia and in a number of other countries. Emergency Medicine is recognised as a separate specialty in Ireland and the UK, but not in other EU countries.

The Committee notes, arising from the Medical Council decision, that Comhairle na nOspidéal has recently changed the title of consultant posts in the specialty to ‘Consultant in Emergency Medicine’.

In recognition of this and for consistency purposes, the term ‘Emergency Medicine’ is used throughout this document. ‘Emergency Department’ is used instead of ‘A&E’ or ‘Casualty’ department and ‘Consultant in Emergency Medicine’ instead of ‘A&E Consultant’.*

While this report was being printed, Comhairle na nOspidéal was informed that following receipt of correspondence from a number of parties, including the Royal College of Physicians of Ireland (RCPI) and the College of Anaesthetists (RCSI), the Medical Council is reviewing its decision and has sought the views of all the recognised bodies on the matter. If this review leads to a change of title, such will be taken into account by Comhairle na nOspidéal.

* Throughout the report direct quotations from cited sources appear verbatim.
2.4 **COMHAIRLE POLICY**

The report of the Committee on Accident & Emergency Services was adopted as policy by Comhairle na Ospideal at its meeting on 20th February, 2002, subject to a number of additions and amendments. These additions and amendments are incorporated in this report.

2.5 **FINDINGS OF THE CONSULTATIVE PROCESS**

2.5.1 Consultative Process

During its consultative process, the Committee was informed that, many of the difficulties and delays experienced in Emergency Departments have system-wide implications. These difficulties and delays reflect the demand experienced by each hospital, the resources available to it and the structure of hospital services. The Committee was advised that there is a clear need for a strategic approach to the planning of hospital emergency services, for integration with both acute hospital and community services and to define guidelines for the future operation and structure of services.

Hospital services are experiencing a range of problems. These include, rising levels of emergency admissions, rising demand for hospital services, long waiting times for admission, inappropriate and potentially avoidable use of hospital beds, the effects of historical cutbacks in the number of acute hospital beds, insufficient service alternatives to inpatient acute hospital care, seasonal pressures on emergency services and beds, availability of appropriate staff and consistent, timely access to diagnostic and support facilities.

Representatives of health boards and hospitals stressed that emergency services should be reformed and restructured in conjunction with the rest of the hospital. It was repeatedly stated that many of the difficulties and delays experienced in Emergency Departments reflect system-wide issues such as the demand experienced by each hospital, the resources available to it and the structure, organisation and staffing profile of the hospital. Much of the literature studied by the Committee emphasised this point and it is echoed in the Health Strategy \(^1\).

Many of those consulted stated that significant improvements in emergency services, including reductions in waiting times, would not happen without changes in the organisation of emergency care, better use of care pathways, increased and more timely access to diagnostics, better access to and management of inpatient beds and changes in the way health services responded to seasonal pressures. An important part of this would be an evaluation of whether some of those patients currently treated in acute hospital beds could be more appropriately treated and managed in other settings.

It was put to the Committee that its task, in making recommendations on reform of emergency services, was to outline a system-wide approach that addressed system-wide problems.
2.5.2 Problems facing Emergency Services

The problems identified by health boards, voluntary hospitals, the IAEM and the other parties consulted by the Committee lead to logjams in patient flow and difficulties in accessing appropriate care. These include:

- The increasing demand for hospital emergency services and hospital services generally
- The policy of transporting all patients to the nearest hospital which may not be necessarily the most appropriate location for treatment
- The use of Emergency Departments by patients for whom treatment by a general practitioner would be more appropriate
- Long waiting times for treatment
- Long waiting times for diagnostic results
- High numbers of review attendances in some hospitals
- Repeat reassessment of patients referred by GPs for admission by Emergency Department staff
- Repeat reassessment of referrals from the Emergency Department by in-house acute surgical or medical staff
- Long waiting times for admission to hospital
- Access to inpatient beds for admissions from the Emergency Department
- The channelling of elective patients through the Emergency Department
- The understaffing of the Emergency Department
- Deficits in the information available on Emergency Department activity and workload
- The perceived quality of patient care and responsiveness of emergency services to patient needs
- The perception that elective care can be accessed faster through Emergency Departments
- The Emergency Department acting as a resource for persons more properly cared for and managed by other social services
- The size and design of Emergency Departments.

These findings were echoed in the Health Strategy (1), which noted “long delays in Accident and Emergency Departments”. The Deloitte & Touche ‘Audit of the Irish Health System for Value for Money’ Report (2) also noted that services were being provided by junior staff, people were attending because primary care services were not available and there was a lack of application of effective systems supported by the evidence such as triage and associated streaming of major and minor cases.

In relation to waiting times the ERHA (38) state that,

“It is widely known that minor cases presenting to A&E Departments often experience very long waits, because they have to wait for patients with more acute symptoms to be treated first. This problem is often exacerbated by patients on trolleys awaiting admission, further diverting the attention of medical and nursing staff”. 
More recently, in August 2001, figures published on the website of a major Dublin hospital gave indicative waiting times for ‘major cases’ of 5 hours 55 minutes and 4 hours 49 minutes for ‘minor cases’. The hospital, which had over 50,000 attendances in 2000, notes that ‘serious cases’ are seen immediately and that,

“waiting times will be longer than those published during times of increased attendance.

The VFM Report also notes a “lack of agreed standards against which Accident & Emergency services could be benchmarked”. Both of these documents are dealt with in detail in Section 6.1 of this Report.

2.5.3 Information on Emergency Services

The Committee found from the information supplied to it that there was an absence of uniform and adequate data collected regarding Emergency Departments in Ireland. Some hospitals did not record whether people were attending the Emergency Department for the first time or whether they had attended before that year. Many did not record who referred attendees to the department, how they arrived at the Emergency Department, or whether they were ultimately referred to another hospital. Different hospitals either did not record when people attended the department, or used different timescales to record attendance. There were a wide variety of systems in use for recording the nature of the illness or injury for which attendees sought treatment.

2.5.4 Attendances

Statistics obtained by the Committee highlight wide variations in the ratio of new to review attendances at Emergency Departments. Clear differences in the source of referral were evident. People in larger cities like Dublin and Cork were less likely to be referred by a General Practitioner, instead, they travelled directly to the Emergency Department without first attending their GP. Children under 16 account for about one third of attendances at Emergency Departments.

Over 75% of those who attended Emergency Departments in the year 2000 attended between 8am and 8pm. Health Boards and hospitals stressed that the vast majority of attendances were appropriate and that everyone who attended the Emergency Department should be triaged, if not treated, in the department.

2.5.5 Waiting times

The lengthy waiting times for assessment, treatment, diagnostics and admission were a source of concern to each hospital and health board. Waiting times were longest in major urban hospitals.

2.5.6 Triage

Triage can be defined as the sorting of patients for appropriate treatment and care by suitably trained and skilled staff. The Committee was informed that different hospitals use different triage systems to classify patients. Many hospitals did not use formal triage systems. All of the hospitals and health boards acknowledged the need for conformity in measuring acuity and regarded formal triage systems as a useful tool for appropriate management of Emergency Department attendees. Most of those hospitals using a triage scale used the NHS (‘Manchester’) Triage Scale. There was broad consensus regarding the need for a uniform triage Scale.
2.5.7 Primary Care

A variety of opinions were expressed regarding interaction between the Emergency Department and primary care. A number of suggestions were made as to how GPs could be involved. These included working within GP Co-operatives in the catchment area of the hospital, by working in Emergency Departments for limited periods on a sessional basis or by the incorporation of Emergency Department rotation into GP training programmes. GPs are currently involved in limited service provision on a sessional basis in some hospitals, including Beaumont, St James’s and Letterkenny.

At a meeting with the Committee in November 2000, ICGP representatives stated that there was a need for pragmatic solutions to the issue of GP involvement in Emergency Departments, negotiated at a local level. In certain situations, they stated, it is possible that some GPs could assist in staffing such departments. However, representatives from the Irish College of General Practitioners (ICGP) stated that GPs could not take responsibility for the operation of Emergency Departments. GPs would provide a level of care appropriate to general practice.

They stated that some hospitals could be appropriate sites for the location of GP co-ops depending on local circumstances and conditions, as well as local negotiation. They emphasised that Co-ops are not a replacement for Emergency Departments, or hospital emergency services, but are a more organised and accessible method of delivering out-of-hours GP care.

2.5.8 Minor Injury & Illness Areas

Most of the submissions to the Committee stated that there was a clear role for Minor Injury & Illness Clinics in separate accommodation within the Emergency Department. There was little support for off-site Clinics. It was argued that Minor Injury & Illness Clinics would decrease waiting times and provide a more appropriate means of treating patients.

2.5.9 Trauma services

It was repeatedly stated that major trauma accounted for a very small proportion of the workload of Emergency Departments. There was consensus that patients should be transferred as rapidly as possible to the most appropriate location for treatment as the international evidence would suggest better outcomes are more likely to be achieved.

2.5.10 Ambulance services

Many parties envisaged a greater role for ambulance services and staff in this process and repeated reference was made to the work of Pre-hospital Emergency Care Council regarding the future roles of ambulance services and staff. This Report does not make recommendations on ambulance response times or the organisation and future roles of ambulance staff.

2.5.11 Observation Areas

There was consensus that the use of an Observation Area would enable Emergency Department staff to monitor patients and allow in-house specialty teams to make an assessment of the patient before a decision was made, if appropriate, to admit or discharge.
2.5.12 **Radiology and Pathology services**

While some hospitals reported that Emergency Departments had negotiated priority access to radiology and pathology services, it was stated that these services were traditionally geared towards inpatients. Such services were often difficult to access outside 9am – 5pm Monday to Friday or at lunchtime. There was agreement that, in larger hospitals, it is necessary to explore whether separate radiology facilities and or designated staff in radiology and pathology would facilitate faster diagnostic processing.

2.5.13 **Admission to hospitals**

It was repeatedly emphasised by all parties to the consultative process that any improvement to patient flow in Emergency Departments was limited by difficulties in accessing inpatient beds and the congestion caused by being unable to move patients to a ward. It was suggested that alongside increases in the number of beds, there was a requirement to identify and resource suitable and safe alternatives to inpatient hospital care, particularly for the elderly and chronically ill needing rehabilitation or long-term care.

2.5.14 **Staffing**

While there was widespread agreement on the need for an increase in senior clinical decision making in Emergency Departments, there was little consensus on how this would be achieved. In some hospitals, Emergency Departments are currently staffed by nurses and junior doctors from medical and surgical in-house teams with little or no on-site consultant presence or supervision. There was a lack of clarity regarding who had clinical responsibility for patients in Emergency Departments which did not have Consultants in Emergency Medicine. It was agreed that senior medical staff in Emergency Departments would improve the quality of patient care, speed up and improve patient throughput and impact on the number of unnecessary investigations, admissions, waiting times and treatment times.

Senior staff were, it was stated, generally regarded as being of maximum benefit when allocated to peak times and busy periods in the Emergency Department.

A variety of proposals were advanced regarding the most appropriate means of improving the level of senior clinical decision-making within Emergency Departments. These included: the appointment of a Consultant in Emergency Medicine to lead the department, the appointment of up to three Consultants in Emergency Medicine, the creation of a permanent grade of NCHD, greater involvement in Emergency Departments by senior members of in-house speciality teams, including consultant physicians and consultant surgeons.

2.5.15 **Reorganisation of Emergency Departments**

Many of the submissions to the Committee set out proposals for the re-designation or redefinition of Emergency Departments, according to level of attendances, existing hospital staffing profile and role. It was emphasised that, in order for emergency care to work efficiently, the emergency services in hospitals should be organised so that patients, depending on their needs, could move smoothly between Emergency Departments, minor injury & illness areas, primary care, medical assessment beds, intensive care and the best inpatient medical and surgical care. They should also have rapid access to appropriate diagnostic facilities and services.
Nationally, a number of developments have taken place which move towards the integration of the Emergency Department with a defined number of inpatient beds and inpatient specialty teams. Within these new structures, emergency medical and surgical beds would be separated from the rest of the hospital and used for assessment purposes by in-house acute medical and surgical teams.

Chest Pain Units, Respiratory Care Units and Observation Areas are either in place or are planned in a number of hospitals nationally. Measures have been put in place to address the needs of geriatric attendees, paediatric attendees and members of at-risk social groups. Hospitals have identified a need for additional consultant appointments in geriatrics, general surgery, radiology and other specialties to support the changes outlined above.

2.5.16 Irish Association for Emergency Medicine

The Committee met with representatives of the IAEM in August 2001. The Committee welcomed the opportunity to meet with the IAEM. The previous Comhairle had met the IAEM in April 2000.

In March 2001 the IAEM published ‘Emergency Medicine Services in Ireland – Standards Document’ (3). This document is based on ‘Standards for Accident & Emergency Departments in Ireland’ (4) which had been published by the Association in 1997 and updated in 1999.

The document notes that Emergency Departments form part of the Emergency Medical Service, which includes the ambulance service, pre-hospital care systems, intensive care facilities and hospital services. The document states that the specialty of Emergency Medicine is at the core of the Emergency Medical Service.

The IAEM state that the primary function of the Emergency Department is to,

“...provide optimal facilities for the initial reception and treatment of patients with acute serious injuries and sudden unexpected critical illness so that the best possible patient outcome must be achieved. The treatment of minor injuries and illness is an important secondary function of the Emergency Department.”

The document makes detailed recommendations regarding training in Emergency Departments, bed requirements, processes and service indicators, support facilities for Emergency Departments, design features and equipment. It highlights the need for accurate patient records, accurate information collection, triage and audit and assessment of departmental performance.

The document outlines a categorisation of Emergency Departments. It states that,

“Emergency Departments should be under the direction of Consultants in Emergency Medicine.

The IAEM go on to recommend the “Hub and Spoke” model of provision of Emergency Medicine services. They state that this means a central base hospital, with a network of affiliated hospitals and note that this model may be adapted to provide for demographic factors in Ireland.
The IAEM recommend that the ‘Central Emergency Department’ should have the following specialties on-site: Acute Medicine, Cardiology, General Surgery, Orthopaedics, Anaesthetics, Intensive/Coronary Care, Radiology (with 24 hour access to a CT Scanner), Pathology (with 24 hr access to Haematology, Chemical Pathology and Blood transfusion), Gynaecology, Paediatrics and Psychiatry. A Consultant in Emergency Medicine should be on call 24 hours a day. This, they note, will require a minimum of 3 Consultants in Emergency Medicine.

They note that if an Emergency Department receives Paediatric or Psychiatric patients there must be ready access to Acute Paediatrics and Psychiatry to allow advice / support to be given. Ideally these facilities should be on-site.

The IAEM state that the hospital should support an active Trauma Team and a Cardiac Arrest Team. In the larger Institutions, these will usually be provided from within the Emergency Department itself. The following specialties need not necessarily be on-site, but suitable access is required: Ear, Nose & Throat, Ophthalmology, Care of the Elderly, Neurosurgery and Neurology, Obstetrics, Cardio-thoracic Surgery, Oral & Maxillo-facial Surgery, Plastic Surgery ( & Burns Unit ), Genito-urinary Medicine, Other Specialist Surgery e.g. Vascular Surgery, Urology and Substance Abuse

The IAEM recommend that in the ‘Affiliated Emergency Unit’ there should be at least General Medicine, General Surgery, Anaesthetics and X-ray facilities on-site and that these units have an affiliation with the Central Emergency Department. The range of services delivered in these units and protocols for management and transfer of patients to the Central Department would be agreed with the Consultants in Emergency Medicine.

The IAEM emphasises that all Emergency Departments should be under the direction of Consultants in Emergency Medicine and that all Central Departments should have a minimum of 3 Consultants in Emergency Medicine. The IAEM also outlines the need for staff nurses, for clerical and administrative staff, security staff, support staff and resourcing by other departments in the hospital (e.g Social Work). The IAEM also propose a middle grade of doctor in Emergency Departments.

The Committee took the IAEM’s views into consideration in the drafting of this Report. The Committee notes that during its consultative process the Committee was informed by Consultants in Emergency Medicine in most health boards that the IAEM recommended that all Central Emergency Departments should have a minimum of 3 Consultants in Emergency Medicine. They asserted that 3 Consultants should also be a maximum until industrial relations issues regarding more flexible working practices and rostering for consultants generally are addressed and resolved.
SECTION 3.
THE ROLE OF EMERGENCY MEDICINE AND EMERGENCY DEPARTMENTS
3.1 WHAT IS EMERGENCY MEDICINE?

3.1.1 Emergency Medicine
Emergency Medicine is a field of practice based on the knowledge and skills required for the prevention, diagnosis and management of acute and urgent aspects of illness and injury affecting patients of all age groups with a full spectrum of undifferentiated physical and behavioural disorders. It further encompasses an understanding of the development of pre-hospital and in-hospital Emergency medical systems and the skills necessary for this development.

(This is the definition agreed to by the American College of Emergency Physicians, the Australasian College for Emergency Medicine, the British Association for Accident and Emergency Medicine and the Canadian Association of Emergency Physicians contained in the Charter of the International Federation for Emergency Medicine - October 1991)

3.1.2 Origins of Emergency Medicine
Emergency Medicine emerged as a separate specialty in the United States in the late 1950’s. In 1964, the American Academy of Orthopaedic Surgeons initiated a series of training courses for emergency medical personnel and in 1965 the American Medical Association established a commission to study emergency medical services. The first textbook that reflects current established principles of emergency care, ‘Emergency Care and Transportation of the Sick and Injured’, was published in 1971 by the American Academy of Orthopaedic Surgeons.

In the United Kingdom, the Casualty Surgeons Association, later to become the British Association for Accident & Emergency, was established in 1967. Substantial increases in the number of Consultant posts in A&E medicine led, in 1975, to the establishment of a Specialist Advisory Committee in A&E and the beginning of a recognised training programme. The first Senior Registrars were appointed in the specialty in 1977, the first professorial appointment made in 1990.

In Ireland, Comhairle na nOspidéal established a ‘Sub-Committee on the Consultant Staffing of Accident & Emergency Services’ in mid-1974. The Committee’s terms of reference were:

“To advise the Comhairle on the principles to be adopted in relation to the staffing of Accident & Emergency departments at consultant and analogous levels... To make other such recommendations regarding the arrangements for dealing with Accident & Emergency cases as they consider appropriate.”

The Committee concluded that, “a major Accident & Emergency Department dealing with up to three times as many new patients as are dealt with as in-patients and involving a very wide range of medical and surgical problems (a growing number of which require urgent capable life-saving intervention), calls for tight day-to-day medical organisation and management. They feel that this medical management function, which should carry also a responsibility for training junior medical staff and others involved in dealing with accidents and emergencies, should be discharged by a consultant. The Consultant would also play a role in the teaching of medical students. The
Consultant in charge should be geographically whole-time except to the extent that his services might be made available to associated accident and emergency units.”

The first A&E Consultant in the Republic of Ireland was appointed to Jervis Street Hospital in 1974.

3.2 THE ROLE OF THE EMERGENCY DEPARTMENT

In Ireland, Emergency Departments range from small casualty units to complex departments in large acute hospitals. The primary role of Emergency Departments has been to provide timely, accessible and appropriate emergency services to patients with a wide variety of illness and injuries. However, Emergency Departments also support a number of clinics and other measures tailored to local community and hospital needs.

There are 40 Emergency Departments in the Republic of Ireland, 38 based in general hospitals and 2 in stand-alone childrens hospitals. Of these 40, 17 are staffed by a Consultant in Emergency Medicine and 5 staffed by two or more Consultants in Emergency Medicine. These figures do not include ‘Winter Initiative’ posts.

There is wide variation in the size of Emergency Departments and the level of care available in each department. Not all hospitals have Emergency Departments, and in those hospitals that do, even those of similar size and role, Emergency Departments vary in type, staffing profile and equipment. Currently, there are no guidelines for the location and size of Emergency Departments or the level and scope of services that should be available at each location.

‘By Accident or Design – Improving A&E Services in England and Wales’ (7) notes that Emergency Departments primarily offer;

- Immediate resuscitation
- Co-ordination of a range of services for treating severe trauma
- A diagnostic service for all who attend
- Assessment and referral of patients who may require admission (or specialist care) to the appropriate department
- The definitive care of emergencies and minor injuries.

Emergency Departments also provide treatment for General Practitioner referrals and patients seeking urgent medical advice or care who are unable to, or do not, at the time, make use of GP facilities. There has been a steady increase in demand for Emergency Department services over the past 12 years with the number of patients attending Emergency Departments in the Republic of Ireland rising from 1,007,533 in 1988 to 1,158,319 in the year 2000. This represents an increase of 15% [information supplied by hospitals & the Department of Health and Children (DOHC) to the Comhairle Committee]

Determining specific reasons for the increase in demand since 1988 is difficult. It may reflect an increasing number of people using Emergency Departments or an increase in the severity of conditions (ageing population) or a combination of both. It should be noted that the attendances peaked in 1988 at 1,244,241. The decline since then is accounted for by reduced attendances in the ERHA region (see table 6 for details).
The recent Department of Health & Children publication ‘Acute Hospital Bed Capacity, A National Review’ notes that the following factors almost certainly contribute to increases in Emergency Department attendances:

- population growth from approximately 3.4 million in 1980 to approximately 3.8 million in 2000
- limited availability of ‘out-of-hours’ primary care services
- financial disincentives to use primary care as the first option
- societal expectations regarding the ready availability and accessibility of A&E facilities

Patients attend Emergency Departments with a wide range of conditions and all Emergency Departments face uncertainty as to the volume and nature of the demands to which they will have to respond at any time. Approximately 1% of Emergency Department patients have life-threatening injuries. Considerably more require urgent attention for acute medical conditions. The proportion of Emergency Department patients who need to be admitted immediately as inpatients is difficult to measure as it is related to hospital admission protocols and whether all inpatients are automatically admitted through the department. Data from health boards and general hospitals provided to the Committee indicate that approximately 23% of patients attending Emergency Departments in the Republic of Ireland are admitted as inpatients.

International best practice indicates that the various categories of Emergency Department patients can be managed as follows:

**Ambulance-borne patients**

All ambulance borne emergencies are brought through a separate entrance to the clinical areas. Following assessment of a number of critical clinical indicators of the severity of the illness / injury and threat to patient survival, the patient is then placed in the resuscitation / trauma bay for immediate resuscitation or is placed in a trolley cubicle for further clinical interventions.

All ambulance borne emergencies are classified on the severity of illness or injury. In many instances no formal triage is performed as pre-hospital communications (e.g. paramedic, GP call-ahead) and common sense may have obviated this need.

Ambulance patients not in need of urgent or emergency care are redirected to triage / reception desk.

**Patients referred by a GP**

Those patients referred by a GP and deemed in need of emergency care for an immediately life-threatening illness or injury are also placed in the same way as ambulance-borne patients. Following resuscitation, intervention, stabilisation, complete examination, laboratory and radiology investigations, the condition and diagnosis of the patient determines further care.
Self-referred patients
These patients use a separate entrance to ambulance borne patients to access the services of the Emergency Department. The majority of those who utilise this entry route are less urgently ill but far greater in number than the ambulance borne cases. For this reason, and to apply scarce resources of staff, skills and equipment for the needs of the emergency patients within this group, a robust sustainable method of sorting of patients (triage) is applied prior to registration. Specific categories (Paediatric or Geriatric) may be triaged “up” to hasten care. It may also be appropriate to refer non-emergency cases to an on-site Primary Care Clinic.

Triage
Patients arriving at the Emergency Department should be triaged by a trained nurse or a designated member of the medical or nursing staff as their first point of contact with the emergency healthcare system. Patient registration is subsidiary to all other clinical demands, and may be completed simultaneously or subsequently by relatives or friends.

Clinical examination, investigation and diagnosis
As clinical priorities are established the sequence of appropriate clinical responses for many patients will alter. Ongoing actions in this phase are dependent on the continuing assessment of priorities for each patient. Within this phase of care patients are often moved to separate areas for investigation, treatment, monitoring, anaesthesia and sedation. In this physiologically and physically dynamic environment, children are best treated by designated and appropriately trained staff. Rapid decision-making is particularly essential for both children and for the elderly.

Patients should then be
- Diagnosed, treated, & discharged
- Diagnosed, treated and follow-up arranged with GP or Hospital OPD
- Admitted as an in-patient to Medical, Surgical, Paediatric or other acute admission bed
- Admitted for further observation to an Emergency Department Observation Area for 8-23 hrs. Such areas will have clinical pathways for chest pain, respiratory care, minor head injury observation, investigation and / or transfer to regional or tertiary level facilities
- Transferred to a Medical Day Unit / Surgical Day Unit for further assessment
- Transferred to a tertiary referral specialised unit i.e. Neurosurgical, Burns / Plastic, Spinal Injuries Unit

3.3 THE STAFFING OF EMERGENCY DEPARTMENTS IN IRELAND

3.3.1 Consultants
At January 2002 there were 21 permanent posts of Consultant in Emergency Medicine in the Republic of Ireland. As discussed earlier, an additional 29 temporary consultant posts were approved by Comhairle na nOspidéal in December 2000. The 21 permanent posts are distributed in 17 hospitals as set out previously in Table 1 in Section 2.1.3.
The number of permanent posts of Consultant in Emergency Medicine has increased steadily in recent years. The following table details these increases.

### Table 2: Increases in Consultant posts in Emergency Medicine 1990 – 2001

**Source:** Comhairle na nOspidéal

Currently, 5 hospitals (St James’s, Mater, Tallaght, CUH Group and UCHG) each have 2 permanent consultant posts.

In a meeting with Comhairle na nOspidéal in April 2000 the IAEA described the current role of a Consultant in Emergency Medicine. They stated that less than 30% of the working time of a Consultant in Emergency Medicine was spent in patient care. A significant amount of each consultant’s time is spent on call backs and reviews, checking NCHDs reports and charts, development of protocols, legal and court work, risk management, contacts with GPs and complaints from patients or patient’s relatives.

### 3.3.2 NCHDs

The Consultant to NCHD ratio in Emergency Medicine currently stands at 1:10. The Postgraduate Medical & Dental Board’s surveys of NCHD staffing illustrate a fourfold increase in the number of NCHDs working in Emergency Medicine over the past two decades.

### Table 3: NCHDS in Emergency Medicine 1984 - 2000

**Source:** Postgraduate Medical & Dental Board NCHD staffing survey of October 2000

In ‘Staffing Pressures in Irish Accident & Emergency Departments’ the IAEA state that,

“Given the multiplicity of responsibilities such Consultants have, the majority of frontline Accident & Emergency work is therefore carried out by Senior House Officers (SHOs) in Accident & Emergency Medicine. In the smaller hospitals, Senior House Officers in medicine or surgery who are ‘on call’ perform these tasks in the absence of A&E SHOs. Patient management is subject to a degree of Consultant supervision in hospitals having Accident & Emergency Consultants but in those having none there is little direct supervision as Consultant involvement from other services is purely administrative...”
The delivery of Emergency Department services in Ireland is particularly dependent on NCHDs from outside the European Union. While these doctors come to Ireland to train, many are not incorporated into formal or recognised training programmes. Section 6.4.7 of this Report makes recommendations on the role of NCHDs in Emergency Departments.

At a meeting between the Committee and representatives of the Royal College of Surgeons of Ireland (RCSI), the RCPI and the Irish College of General Practitioners (ICGP) in November 2001 it was ascertained that the RSCI had stipulated that Emergency Departments be staffed on the basis that SHOs receiving Basic Surgical Training (BST) see 1,750 new patients during a six month rotation or 3,500 new patients over the course of a year. The number of SHO trainees who could receive BST in a major teaching hospital would be based on the level of new attendances (e.g. 45,000 new attendances in 2000 would be needed for 13 SHO’s). SHO posts which did not meet these criteria would not be recognised by the RCSI for BST.

The Committee was advised that these criteria have replaced previous guidelines dealing with recognition of SHO posts in Emergency Medicine and SHO posts in surgery which issued from the RCSI in mid-2001.

The three Colleges also indicated to the Committee that they had initiated a series of meetings regarding joint recognition of training in emergency medicine and the possible establishment of an inter-collegiate body to accredit, recognise and inspect such posts.

The Colleges were of the view that if hospitals are to be recognised as offering training in Emergency Medicine they would require a recognised trainer on-site. In an optimal situation, all such Trainers would be Consultants in Emergency Medicine.

The Committee is aware that the NCHD staffing of Emergency Departments is currently being considered by the Medical Council, training bodies and employing authorities. The Medical Council has recently issued interim criteria for the approval of temporary registration of Emergency Departments which are not under the direct supervision of a Consultant in Emergency Medicine (67).

### 3.3.3 Nurses

Statistics on the number of nurses working in Emergency Departments are not currently available. However, nurses play a central role in the multidisciplinary teams working in Emergency Departments and engage in the triage, treatment and management of patients. Most Emergency Departments are staffed by nurses permanently assigned to the department. In some small departments, and at night in larger departments, nurses from general medical or surgical wards provide cover. The role of nurses in Emergency Departments has expanded in recent years. Advanced Nurse Practitioner (ANP) posts are being created in some large Emergency Departments. In some hospitals nurses are able to request X-rays, supply medicines, suture and take blood samples. Some are developing skills that enable them to assess, treat and discharge certain categories of patients.
3.3.4 Support Staff
It is important to note that doctors and nurses are only part of a multidisciplinary team working in the Emergency Department, which also includes diagnostic staff, technicians, secretaries, social workers, ward assistants, receptionists, porters, security staff and cleaners.

3.4 EMERGENCY MEDICINE – THE INTERNATIONAL EXPERIENCE
The Committee reviewed published reports and articles in specialty journals on Emergency Services in a number of countries. The Committee found that in many countries, data are either not collected, are recorded in a variety of different formats or takes place over a long period of time. This makes direct comparison difficult. Different philosophies have influenced the development of Emergency Services and different funding mechanisms, training systems and hospital structures are in place in Australia, Canada, the United States, continental Europe, Britain and Ireland. Time did not allow site visits which would have provided more detailed information on, and greater insight into, the operation and structures of emergency services in other countries.

The Committee took into account the various features of each country’s system when formulating its recommendations for Ireland. Demographic variations, as well as the differing organisation of health services in individual countries, means that some features are more relevant to Ireland than others.

3.4.1 Anglo-American model of emergency care
Many countries developing emergency medical systems today are following the Anglo-American model of emergency care delivery, in which patients are transported to the hospital to receive a higher level of care.

In this model, non-medical staff, such as emergency medical technicians or paramedics, initiate emergency care in the field and transport critically ill or injured patients to hospital-based Emergency Departments, where emergency doctors provide definitive emergency care.

The growing list of countries adopting the Anglo-American model includes Australia, Canada, Ireland, the Netherlands and New Zealand.

3.4.2 European model of emergency care
In contrast, other countries have adopted a European model of emergency care, which brings the hospital to the patient, delivering emergency doctors and technology to the scene in the hope of providing a higher level of care.

In this model, emergency doctors (often anaesthetists) provide emergency care (usually resuscitation and pain control) exclusively in the prehospital setting. Patients are triaged and admitted directly to inpatient services. Emergency Medicine is not an independent specialty in these countries and often is controlled by anaesthetists.

Countries that follow this model of emergency care delivery include Austria, Finland, France, Germany, Norway, Portugal, Russia and Sweden.
3.4.3 Comparisons of the two models

The Committee has not been able to source any multinational studies that directly compare the Anglo-American models and European models. In many countries, the collection of patient outcome data are inadequate, making the level of medical efficacy difficult to quantify.

Set out below is a table which outlines and compares a limited range of international data on Emergency Departments internationally.*

<table>
<thead>
<tr>
<th>Country</th>
<th>Ireland</th>
<th>England &amp; Wales</th>
<th>Scotland</th>
<th>N. Ireland</th>
<th>United States</th>
<th>Canada</th>
<th>Australia</th>
</tr>
</thead>
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<tr>
<td>Population</td>
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<td>54,450,000</td>
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<td>1,674,949</td>
<td>275,563,000</td>
<td>30,750,000</td>
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<td>No of attendances</td>
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<td>15,000,000</td>
<td>1,601,963</td>
<td>671,000</td>
<td>95,000,000</td>
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<tr>
<td>ED Attendance per 1000 pop.</td>
<td>313</td>
<td>275</td>
<td>314</td>
<td>401</td>
<td>345</td>
<td></td>
<td>232</td>
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<tr>
<td>Emergency Departments</td>
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<td>26</td>
<td>16</td>
<td>4,945</td>
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<td>Emergency consultants</td>
<td>21</td>
<td>440</td>
<td>40</td>
<td>9</td>
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<tr>
<td>NCHDs</td>
<td>208</td>
<td>1,875</td>
<td>245</td>
<td></td>
<td></td>
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<td>Other doctors</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>395</td>
<td>24</td>
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<tr>
<td>Consultants per Department</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Average of 7</td>
<td></td>
<td>Up to 10</td>
</tr>
<tr>
<td>Consultant : Population</td>
<td>1 / 172,626</td>
<td>1 / 123,750</td>
<td>1 / 128,062</td>
<td>1 / 186,105</td>
<td>1 / 82,000</td>
<td></td>
<td>1 / 62,586</td>
</tr>
<tr>
<td>Consultant : attendance</td>
<td>1 / 55,200</td>
<td>1 / 34,090</td>
<td>1 / 40,049</td>
<td>1 / 74,555</td>
<td></td>
<td></td>
<td>1 / 14,516</td>
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<tr>
<td>Emergency Doctor : Population</td>
<td>1 / 15,830</td>
<td>1 / 20,092</td>
<td>1 / 16,578</td>
<td></td>
<td>1 / 79,591</td>
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<td></td>
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<tr>
<td>Emergency Doctor : attendance</td>
<td>1 / 5,062</td>
<td>1 / 5,535</td>
<td>1 / 5,184</td>
<td></td>
<td>1 / 2,744</td>
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Table 4: Emergency Services – international data

* Note: Meaningful comparison of staffing levels is particularly difficult as different medical hierarchical systems and layers of staff exist in, most notably, North America and Australia.

3.4.5 England & Wales (54.4m population)

Approximately 220 Emergency Departments in England and Wales treat all types of injuries and medical emergencies. On average, these departments serve populations of 250,000. In September 2000, there were 440 WTE A&E Consultant posts, 395 associate specialist or staff grade posts and approximately 1,875 NCHD posts. There are about 15 million attendances per annum. Most Emergency Departments are open 24 hours a day and treat an average of 70 – 200 new patients per day, although some departments in
remote areas treat much smaller numbers of patients. The largest departments see in excess of 300 patients per day.

The number of new Emergency Department attendances has risen by an average 2% per year since 1981, with considerable local variation. However, the total number of attendances has changed less than this because, as alternative facilities in general practice have improved, fewer patients are being asked by Emergency Departments to re-attend for follow-up treatment or review. Nationally, return attendances account for about 14% of total Emergency Department attendances.

Currently, the majority of patients are treated by Senior House Officers, middle grade doctors are likely to see patients about half of the time. Consultants devote most of their time to review, audit, teaching and administration. Because of this, the British Association for Accident & Emergency Medicine (BAEM) has defined the concept of an ‘SHO equivalent’ doctor.\(^{(13)}\)

The BAEM recommends that one such ‘SHO equivalent’ working 40 hours per week is required for each 4,000 new patients per year with a minimum of 6 SHOs in each department providing 24 hour cover. There should be at least one ‘experienced SHO’, senior registrar, specialist registrar, staff grade or associate specialist per three SHOs. The BAEM recommend that an extra A&E Consultant is required for each 25,000 new attendances.

A detailed examination of the provision of Emergency Departments in England and Wales by the Audit Commission\(^{(7)}\) came to the conclusion that three tiers of services were necessary. The Audit Commission undertook a survey of existing services and made a number of recommendations - the most notable of which was their suggestion that Emergency Departments receiving less than 50,000 attendances per year should be reviewed with a view to centralising their facilities. As well as advocating a smaller number of major centres, the report accepted the need for a limited number of district general hospital-based clinics and called for the greater development of minor clinics that included more pronounced roles for nurses and GPs.

The Commission note that,

> “An A&E Department needs a certain minimum level of attendance to maintain the expertise of its doctors and nurses and to provide junior doctors with an adequate breadth of training and experience ... many A&E Departments have difficulty in providing a sustainable, high quality service because of their size, or because they lack essential specialist support on-site. Seriously ill patients are less likely to achieve a good outcome – including survival – if treated at small units where specialist expertise is less available.”

The Report goes on to state that concentrating Emergency services in fewer, larger departments offers the potential for short-term operational advantages and improved standards of care. It notes that if Emergency services were concentrated in fewer departments,

- It would be possible to increase the number of hours per week during which there are senior A&E doctors or specialist A&E staff (for example, nurses trained to care for children) on-site
The quality of training received by junior doctors would be improved, with consequent benefits for patients

It would be somewhat more straightforward to roster staff to match expected workload and to retain the flexibility to deal with unexpected demands

More A&E Departments would be sited in hospitals where supporting specialities and services are available

It is noted that in 1995 the London Implementation Group (60) recommended that 35,000 new patients should constitute minimum attendance for a main Emergency Department. In 1996, the Audit Commission (7) recommended that, in order to provide adequate cover, departments seeing in excess of 30,000 patients per year require 3, and at 55,000 patients per year a minimum of 4, A&E Consultants.

The UK Department of Health published “Reforming Emergency Care” in late 2001 (62)

In it, they identify problems with emergency service provision which included,

- Patients wait too long and have difficulty getting the right service
- Staff capacity in Emergency Departments is too stretched
- Capacity in hospitals is not sufficient
- Delays in discharging patients from hospital
- Patients with emergency needs compete with those who have routine (elective) needs leading to disruption of both services
- Diagnostic and other services not available at evenings or weekends
- Patients wait within a single queue in many Emergency Departments
- Demarcation of working practices resulting in barriers to team working, duplication of services and repeated requests for the same information

Among the range of measures they propose are:

- Recruitment of an additional 183 (from 440 an increase of 40%) consultants in Emergency Medicine by 2004
- Recruitment of an additional 600 A&E nurses
- Reduction in bed occupancy in public acute hospitals to 82%
- Investment in social care structures, such as nursing and residential homes
- Separation of elective and emergency workload into different ‘paths’ of work
- Provision of 24 hour seven day a week services, adoption of new technologies and ‘near patient’ testing.
- Separation of patients with minor injuries or illness from those with serious conditions by parallel streaming in Emergency Departments
- Enhanced use of nurse practitioners, and GPs to see patients with primary care needs
- Integration of services will be promoted by the specialists of medicine, surgery, critical care, anaesthetics, and general practice coming together with those of emergency medicine to form a hospital based emergency service
- Improved non-urgent self care advice and redirection of urgent care needs of patients toward general practice care professionals
Improvement in information technology infrastructure to improve the dissemination of information and reduce duplication of data gathering, thereby eliminating the need for the patient to repeat information and for reduction in repeat documentation by professional staff.

Appointment of Emergency Care Lead Clinicians will be appointed to co-ordinate and network regional emergency care systems.

The arguments for concentrating emergency services into fewer, larger Emergency Departments are usually based on quality of outcome rather than cost. The balance to be struck is between access for all patients (made easier by having many, smaller departments) and quality of treatment for the seriously injured and sick (improved by larger centres).

The quality arguments for rationalising emergency provision were sufficiently strong for the Audit Commission (7) to recommend in 1996 that reviews should be initiated for all small Emergency Departments where there was good access to alternative facilities.

The Commission stated,

“Each situation will need to be assessed on its merits and specific local circumstances taken into account. The reviews should include the type of patients seen during the year, levels of staffing and facilities, and information on travel times within the catchment area and to other departments”

3.4.6 Scotland (5.1m population)

As of September 2000 there were 40 wte A&E Consultant posts, 24 Associate Specialist or Staff Grade posts and approximately 245 NCHD posts. The 40 consultant posts are distributed between 11 hospitals. At present, 26 major hospitals throughout Scotland receive acute medical emergencies (Scottish Acute Services Review 1998) (12) and approximately 84 hospitals and clinics have general practitioners on-site who deal with non-urgent ambulatory patients. In the year 2000 there were 1.6 million Emergency Department attendances in Scotland. Scotland is divided into 15 health board areas with a wide range of attendance patterns. New attendances in the Greater Glasgow health board area, for example, stood at 84,430 in 2000 – 9.2% of the population catchment. In contrast, new attendances in the Borders health board area were 6,127 in 2000 – 5.7% of the population.

A major review of emergency services in Scotland in 1994 (58) concluded that a new service should be based around three main components:

- primary care centres either based in hospitals or free-standing
- hospital-based emergency services
- a limited number of major trauma tertiary centres

More recently, in 2001, the Greater Glasgow Health Board (59) proposed four measures to improve hospital emergency services. These were:

- The development of clinical pathways which ‘re-engineer’ the sequence of events experienced by patients and apply available evidence about the most effective clinical practice
- Ambulatory Care Centres which provide flexible accommodation and a range of services in one place rather than scattered round the hospital
· Bringing together of consultants and junior staff who are currently dispersed too thinly
· Better streaming and separation of the flow of patients arriving at A&E department

In order to achieve this, they note that,

“for GP referrals this requires faster assessment by dedicated consultant teams on duty each day for general medicine and general surgery, eliminating the inappropriate filter of these being seen first by A&E medical staff (which can contribute to delay) ...

Multiple injuries and accidents occur sporadically but the ability to respond rapidly requires senior A&E consultant cover from say 7.00am until around midnight most days, with dedicated emergency support from an orthopaedic consultant readily available. Other arrivals at an A&E department need front-door assessment (called ‘triage’) to decide whether they can be treated by a nurse practitioner or need to be seen by a doctor ”

Their aim is “to create two adult A&E departments ... ” from 5 existing in Glasgow (pop: 611,600) which,

· Each would have at least 5 A&E consultants
· Each would be supported by a dedicated orthopaedic trauma team
· Each would be strategically accessible for ambulances
· Each would have internal triage, and nurse practitioners, to allow quick and reliable treatment of minor injuries / illnesses without those patients being delayed by the priority necessarily given by A&E Consultants to seriously ill or injured patients

In addition, minor injuries areas would be provided at three other hospital sites in the city.

3.4.7 Northern Ireland (1.6m population)

There are currently 16 Emergency Departments in Northern Ireland providing a wide range of services and several minor injuries areas, some nurse led and some led by medical staff. 9 Emergency Departments are consultant led. There are significant differences in the size of hospitals, the range of services available and their ability to deal with complex cases. Catchment populations range from less than 50,000 to 200,000.

In 1999-2000 there were some 671,000 attendances at Emergency Departments, a rise of 3% on 1990-1991. New attendances have risen by 23% while review attendances have fallen by 47%.

The Report of the Northern Ireland Acute Hospitals review group (13) states that,

“Attendance rates at A&E Departments are 37% higher than in England, 29% higher than in Scotland, 18% higher than in Wales and 20% higher than in the Republic. In England, 20% to 30% of A&E attendances are regarded as ‘inappropriate’ (in the sense that they could have been adequately dealt with in another setting and more conveniently for the patient). The number of such attendances is at least as high in Northern Ireland.”
The Report notes that while the overall number of emergency admissions has remained constant during the last five years, admission rates were high compared to other parts of the UK and Ireland. There were surges in emergency admission during the wintertime, and in some hospitals, into March and April. The provision of emergency services during these times compromised the level and quality of other services and placed great pressure on staff.

The Report recommends that emergency care services be provided at three levels:

“Level One – an accident and emergency centre that can take major trauma and those emergencies specifically defined as appropriate for highly specialised care, for example, serious head and spinal injuries and major burns. It would provide the basis for the Northern Ireland Critical Care Transfer Service, which ensures the safe retrieval of critically ill injured patients who have been stabilised at a local hospital, to appropriate intensive care facilities in a major hospital. There would be one centre of such expertise in Northern Ireland. It would have A&E Consultants available at all times with full backup.

Level Two – a centre that can deal with all emergencies (except those specifically defined as appropriate for Level One). Level Two centres would be capable of responding to major incidents on a 24 hour basis, would be staffed by A&E consultants with appropriate backup and would provide resuscitation, assessment and treatment of acute illness and injury 24 hours a day for patients of all ages by appropriately trained and experienced staff. We envisage Level Two units at five hospitals.

Level Three – a centre serving a smaller catchment population, operating in a managed clinical network with a Level Two service. The range of services available in each centre will vary according to local circumstances. They would have physicians, surgeons and anaesthetists available during the day and a full A&E service. We envisage Level Three Units at three hospitals.”

3.4.8 Germany (80m population)

As in most EU countries, Emergency Medicine is not a separate specialty in the German medical system. The aim of emergency services in Germany is to take a doctor to the patient in the community rather than bringing the patient to the doctor in the hospital. There are no Emergency Departments such as exist in Ireland.

Emergency doctors are mainly anaesthetists, physicians or surgeons who engage in emergency medicine in addition to their primary employment. Most emergency doctors in Germany are employed by hospitals rather than ambulance services and have trained as specialists in anaesthesia, surgery or general medicine. Many of these doctors have commitments to the ambulance services while a small number of doctors work solely in prehospital care. The first ambulance service staffed by doctors was established in 1957.

In most cases, the standard ambulance service delivers patients to hospital where they are evaluated in an admission area by the appropriate specialty, brought to an admission ward of the particular specialty or brought directly to an ICU. Specialties may cross-refer before the patient is ultimately admitted or discharged. Emergency patients are taken care of by junior doctors or specialists in the respective specialty.
3.4.9 United States of America (275.5m population)

In 1997, there were approximately 95 million patient attendances at Emergency Departments in the United States. Injury related attendances at Emergency Departments stood at 35 million while circulatory and respiratory related illness accounted for the majority of other attendances.

Traditional staffing standards for Emergency Departments in the United States assume a standard mix of services provided in the Emergency Department. The number of staff required to provide services is proportional to the number of patients treated in the facility. For specialists in emergency medicine, the standard is one specialist for every 4,000 to 4,500 patient visits to the Emergency Department per year.

A survey of Emergency Departments by the American Hospital Association reported a total of 4,945 hospitals with Emergency Departments and stated that there were about 5 WTEs per department - or an average of about 7.5 persons scheduled per institution.

Staff is distributed on the day, evening, and night shift proportional to the frequency of patient arrival in the department during those shifts. Most departments have the greatest influx of patients during the evening shift and the second half of the day shift.

3.4.10 Canada (30.7m population)

In 2001, there were 374 consultant level doctors specialising in emergency medicine in Canada. It is not clear how many hospitals can be described as having Emergency Departments. In the last five years, 275 hospitals have been closed, merged, or relocated and major reforms of the acute hospital sector in recent years have resulted in a reduction of almost 40% in hospital beds.

There are wide variations in rates of preventable admissions across Canada (Health Care in Canada 2001) and reform of Emergency Departments has focused on overcrowding as a key issue. Approximately 5% of the care provided in Emergency Departments was defined as ‘ambulatory care’. Neighbourhoods with a higher proportion of total ambulatory care provided in Emergency Departments were characterised by lower mean household income, a higher proportion of Emergency Department visits for mental illness and a higher proportion of residents with treaty Indian status.

Overcrowding is defined by the Canadian Association of Emergency Physicians as,

“a situation in which demand for service exceeds the ability to provide care within a reasonable time, causing physicians and nurses to be unable to provide quality care”

Research in Canada has identified the causes of overcrowding in Emergency Departments as follows,

- Lack of beds for admitted patients
- Lack of access to primary care, specialist physicians and nurse practitioners
- Shortage of nursing and physician staff
- Increased complexity and acuity of patients presenting to the Emergency Department
- Large volumes of patients with non-urgent problems presenting who could be assessed and treated in other settings
Lack of alternative advanced diagnostic testing and facilities

Recommended solutions include,

- Implementation of triage and acuity scales in Emergency Departments
- Linking primary care reform to Emergency Department overcrowding
- Improved access to diagnostic testing
- Development of home-care

Specific reforms (Toronto, Montreal and Vancouver) have focused on the establishment of,

- Emergency service networks and regional co-ordinating hospitals
- The creation of flexible beds and additional critical care capacity
- Expansion of discharge planning services
- Expansion of ambulance services

3.4.11 Australia (19.4m population)

Emergency medicine has grown rapidly and diffused throughout the hospital system in Australia over the past two decades. Emergency Departments in Australia have some 4.5 million attendances per annum and large Emergency Departments may be staffed by up to ten 10 Consultants in Emergency Medicine and 15 training registrars. There are approximately 260 public hospital Emergency Departments in Australia, serving a population of 19.4 million. There are approximately 310 Consultants in Emergency Medicine. 79 Emergency Departments are accredited for specialist training.

While the vast majority of Emergency Department attendances occur in public sector hospitals, fee-for-service emergency medicine is practiced in a growing number of private hospitals, the first having been established at the Gold Coast in 1987. There are currently 16 private Emergency Departments in Australia.

The Australasian College of Emergency Physicians has developed a framework(16) for the classification of Australian Hospital Emergency Departments by role, outlining the functional capacity and resources required to fulfil each role. Within this framework, levels of hospital based emergency service are identified as follows,

1. Major Referral Emergency Department (a Regional Centre)
2. District Emergency Department (Large general hospital)
3. Hospital Emergency Department (small general hospital)

They note that the role of the Emergency Department is a major determinant of the level of staffing, resources and physical design required. These factors are also influenced by the casemix-weighted throughput of the department, and its research, teaching, pre-hospital and other roles.

In this context, the Australian Medical Workforce Advisory Committee published a report entitled ‘The Emergency Medicine Workforce in Australia’(17) in 1997. This report stated that,

“It is estimated that, in ten years time in 2007, approximately 1200 registered emergency medicine specialists will be required.

To derive this estimate the Working Party has assumed major referral hospital Emergency Departments will require 11 emergency medicine specialists, other capital city and major provincial hospitals will require six emergency medicine
specialists, paediatric hospitals will require three emergency medicine specialists, and major rural hospitals will require two emergency medicine specialists. In small rural and remote hospitals it is expected that emergency services will continue to be provided by the local GP and organised critical care retrieval systems.”

Given the current numbers of Consultant posts in Emergency Medicine in Australia, this would involve a quadrupling of the number of consultant posts in that country.

3.5 TRAINING IN EMERGENCY MEDICINE

3.5.1 Training in Ireland and the UK

Training in Emergency Medicine in Ireland is organised by the Irish Surgical Postgraduate Training Committee (ISPTC) of the RCSI. In line with other specialties, specialist training in Ireland has recently become more organised than heretofore. In November 2000, at the request of the ISPTC, Comhairle na nOspidéal gave approval to the appointment of two posts of Specialist Registrar in Emergency Medicine. This is the start of the Higher Specialist Training scheme in Emergency Medicine. An early increase in the number of Specialist Registrar posts is required to contribute to the complement of suitably qualified candidates for future consultant posts in Emergency medicine. Currently many Irish doctors aspiring to be Consultants in Emergency Medicine train in the U.K. or North America.

The current training of Consultants in Emergency Medicine in Ireland and the United Kingdom (U.K.) consists of general professional training, a year or more in an Emergency Department, followed by between 1 – 3 years in a variety of acute specialties in order to obtain Emergency Medicine experience, achieve a higher qualification and gain clinical experience in other acute specialties.

The mix of posts will depend on the interests of the individual. Often, experience is gained in acute general medicine, general surgery, paediatrics, anaesthesia or orthopaedics. Emergency Medicine also allows a broad range of subspecialty interests. NCHDs then obtain a higher qualification – MRCPI, FRCSI, FCA, RCSI - or a qualification equivalent to one of these.

Higher specialist training in Emergency Medicine has a 5-year duration and involves a year in an acute specialty, 4 years training in Emergency Medicine, management training and education training. In the U.K., the Specialist Advisory Committee on A&E of the Faculty of Emergency Medicine (which is linked to 6 royal colleges) has stated that, “three months working experience is obligatory in general medicine with cardiology, paediatrics, intensive care / anaesthesia, general surgery and orthopaedics if the trainee has not previously had experience in those specialties. These obligatory attachments must take place in the first half of the programme. Short secondments and day release attachments to other specialties – for example eyes, ENT and the emergency services – will also need to be arranged throughout the programme, depending on a trainee’s previous experience.” (18)
3.5.2 Training in the United States
In the United States, postgraduate training in Emergency Medicine is accredited by the Accreditation Council for Graduate Medical Education (ACGME). Training programmes are normally of three years duration. Doctors enter such programmes on completion of their primary degree and a transitional year (equivalent to the Intern Year). Credit is available for those doctors who have spent time training in other specialties.

3.5.3 Training in Canada
In Canada, the Royal College of Physicians and Surgeons of Canada accredits training in emergency medicine. The College sets the criteria for the designation of the specialty; develops and defines the educational objectives and national standards for medical, laboratory and surgical specialties and accredits the specialty training programs and conducts examinations for certificates of qualification.

Doctors begin postgraduate training on completion of their primary degree. Commencing with a year of basic clinical training, training in Emergency Medicine lasts five years. Those doctors who complete the requirements of postgraduate residency education in emergency medicine prescribed by the College (5 year training course) and who pass the examinations conducted by the College are granted a Specialist Certificate in Emergency Medicine. Certificated specialists are invited to join the College as Fellows and are entitled to use the FRCPC or FRCSC designation.

3.5.4 Training in Australia
In Australia, the Australasian College of Emergency Medicine accredits training in emergency medicine. The current program for advanced training requires 30 months training in Emergency Departments and 18 months training in other disciplines after receipt of primary degree and completion of an intern year. As no Emergency Department is accredited for more than 24 months, it is necessary for training to take place at multiple locations. Training must be co-ordinated and administered by a Director of Emergency Medicine Training. Trainees gain membership of the ACEM before proceeding to fellowship.

3.5.5 Qualifications for Consultant posts in the Republic of Ireland
The Committee notes that Comhairle na nOspidéal has recently changed the title and qualifications specified for Consultant posts in the specialty and agrees with the changes.

The qualifications specified by Comhairle na nOspidéal for consultant appointments in Emergency Medicine are as follows,
Consultant in Emergency Medicine:

(a) Full registration in the General Register of Medical Practitioners maintained by the Medical Council in Ireland or entitlement to be so registered.

and

(b) The possession of the MRCPI or the FRCSI or the FCA, RCSI or a qualification equivalent to one of these

and

(c) (i) Inclusion on the division of emergency medicine of the Register of Medical Specialists maintained by the Medical Council in Ireland

Or

(ii) Seven years satisfactory postgraduate training and experience in the medical profession including four years in emergency medicine and one year in related specialties.

Consultant in Emergency Medicine with a special interest in paediatric emergency medicine:

and

(c) (i) Inclusion on the division of emergency medicine of the Register of Medical Specialists maintained by the Medical Council in Ireland

Or

(c) (ii) Seven years satisfactory postgraduate training and experience in the medical profession including four years in emergency medicine and two years in related paediatric specialties.
SECTION 4.

ATTENDANCE AT THE
EMERGENCY DEPARTMENT
4.1 STATISTICS ON EMERGENCY DEPARTMENTS IN THE REPUBLIC OF IRELAND

Immediately following its first meeting in March 2001, the Committee wrote to each health board, general hospital and specialist paediatric hospital seeking information under the following headings:

(a) number of attendances at A&E / Casualty (new, review and total) in the year 2000
(b) source of referral to A&E / Casualty by number e.g.; G.P. self-referral, ambulance, other hospital, other
(c) hours of attendance at A&E / Casualty of patients by number in each period - 8.00 a.m. - 8.00 p.m.; 8.00 p.m. - 12 midnight; 12 midnight - 8.00 a.m.
(d) number of admissions to your hospital from A/E/(Casualty) and total admissions;
(e) number referred to other hospitals.
(f) List of attendances at A&E / Casualty by principal diagnosis for the seven day period beginning Monday the 5th of February 2001 and ending Monday 12th of February 2001 inclusive.

The Committee received replies from each health board and relevant voluntary hospital covering 40 Emergency Departments. A number of health boards and hospitals submitted amended data during meetings with the Committee. The Committee recognises the heavy workload, intense pressures and problems in accessing suitable resources in Emergency Departments throughout the state. This means that the recording of comparable and consistent information about attendees can often prove difficult. The Committee is grateful for the efforts made by health board and hospital staff to collate and return data in a timely fashion.

However, there were significant deficits in the information received that made it difficult to either undertake further analysis of the data received, or to make meaningful comparisons between Emergency Departments with similar population catchments in different locations.

Some hospitals did not record whether people were attending the Emergency Department for the first time or whether they had attended before that year. Many did not record who had referred attendees to the department, how they arrived at the Emergency Department, or whether they were ultimately referred to another hospital. Different hospitals either did not record when people attended the department or used different time scales to record attendance.

Of most concern to the Committee, however, was the wide variety of systems in use for recording the nature of the illness or injury for which attendees sought treatment. While a small number of hospitals used internationally recognised triage categories to record and classify attendances, most hospitals did not. Many used different terms to describe the same condition, used broad terms to describe a wide variety of symptoms or recorded information about the attendee rather than the illness or injury. In this context, the Committee has been constrained in its ability to present comprehensive and comparable information on Emergency Department services and workload on a nationwide basis.
As part of its information-seeking exercise, the Committee also sought a list of attendances at each Emergency Department, by principal diagnosis, for a one-week period (Monday the 5th of February – Monday the 12th of February). While the majority of hospitals returned data in response to this query, a number of hospitals, including 3 of the 10 largest hospitals in the country, stated that they did not record this type of information. One hospital noted that they recorded triage category instead. This has been accepted by the Committee as a valid alternative.

Those hospitals that did return the list of attendances used a variety of different means to record the data. Some of the data were hand-written. Some was generated using electronic systems. Neither category of data was summarised. Most of the data were presented in list form, with no differentiation made between incidence, day of presentation or general and specific terms.

Attempts to summarise this data are difficult because of the crudeness of the data and the absence of systems that record this kind of information. In general terms, it can be stated that the main diagnostic categories presenting in Emergency Departments appear to be,

- Minor injuries
- Respiratory problems
- Chest pain
- Head injuries
- Orthopaedic Injuries
- Gastro-intestinal problems

4.2 THE NEED FOR COMPREHENSIVE AND COMPARABLE DATA

The Committee wishes to stress the urgent need for comprehensive, comparable and reliable data regarding activity in Emergency Departments nation-wide. Such information would assist in the decision making of hospitals, health boards, the Department of Health & Children, Comhairle na nOspidéal, the Eastern Regional Health Authority and others regarding the future funding and development of Emergency Department services. It would provide doctors, nurses and other staff in Emergency Departments with a valuable tool in structuring their service to meet the needs of patients. The proposed Health Information & Quality Authority is expected to play a significant role in this area.

At a minimum, such data could reveal the age and sex of attendees, the time of attendance, whether they had attended previously, the nature of their illness or injury (based on level of acuity) how soon they were treated, whether they were admitted (if so, under which specialty) and whether they were referred elsewhere or discharged. Terms used to describe the patient’s diagnosis should also be standardised. A sample ‘Patient Information Form’ is enclosed at Appendix B.
4.3 ARRIVAL AT THE EMERGENCY DEPARTMENT

4.3.1 Stages in attendance
The main stages of an Emergency Department attendance are:

- Arrival by ambulance, private car, public transport or on foot
- The assessment by Emergency Department staff of clinical priority
- Treatment in the order of clinical priority
- Discharge to home, admission to hospital or inter-hospital transfer

4.3.2 Patient flow
The vast majority of patients make their own way to an Emergency Department for treatment. The proportion of patients arriving at the Emergency Department via ambulance, or other emergency services, varied widely. Nationally, about 17% of all patients arrive at the Emergency Department via ambulance or other emergency services. 24% of patients attending the Emergency Department end up being admitted to a hospital ward.

Around 73% of patients depart after treatment, 3% are transferred to another hospital. An extremely small proportion of patients (less than 1%) are either dead on arrival or die in the Emergency Department.

4.3.3 Utilisation of Emergency Departments
Internationally, research has found that Emergency Departments are used by a disproportionate number of young males, most of whom regard the department as more accessible, convenient or cheaper than their GP and believe hospitals are better suited for the care of unintentional injury, especially with their capacity to perform x-ray examinations (19)(20). A similar picture emerges for the attendance patterns of children, where accidents are viewed as the preserve of the hospital and sickness the domain of the GP (21).

Accessibility is also a factor, with families living closer to a hospital more likely to attend that facility than visit a GP (22). For adult attendees and the parents of children, another factor is cost (22). Each of the above factors was mentioned repeatedly during the Committee’s consultative process.

Many studies note rising levels of admissions to the hospital from Emergency Departments. Reasons for increases identified by the Scottish Office’s “Acute Services Review Report” (12) included - lower thresholds for hospital admission, an ageing population, increased detection of illness by more sensitive investigations, early or premature discharge, multiple admissions for chronic conditions and changing patterns of clinical practice (emphasising hospital rather than community based care).

4.3.4 The appropriateness of Emergency Department attendance
It is important to consider the appropriateness of Emergency Department use because the Emergency Department is the major conduit for acute hospital admissions. The Emergency Department receives patients directed by practitioners as well as self referred patients (22)(23).
In the literature on Emergency Department usage, presentations to the Emergency Department have often been described as being either appropriate or not. Numerous studies have found that as many as 80% of all presentations to Emergency departments are for non-urgent reasons and could be deemed to be inappropriate. However, few evaluations of the appropriateness of Emergency Department-based care have actually defined the concept of ‘appropriateness’. Furthermore, among those studies that have defined the concept of appropriateness, few have used the same definition. In general most definitions of the appropriateness of Emergency Department use are urgency based.

A number of studies have identified varying definitions of an ‘inappropriate visit’ and have used them to evaluate how many attendees could be said to be appropriately attending. The Centre for Disease Control defined an inappropriate visit as a patient who did not require attention immediately or within a few hours. Under this definition, 55% of attendances were inappropriate. The US General Accounting Office defined inappropriate visits as ones where no life-threatening or time-sensitive condition existed. 42% of attendees were inappropriate under this definition. Finally, Mitchell and Remmell used a definition which stated that an attendee whose condition was not acute or who was not in distress could be termed an inappropriate attendee. Less than 5% of attendees were inappropriate under this definition.

The concept of what constitutes an appropriate Emergency Department visit largely depends upon whose perspective is being considered. While health professionals determine appropriateness by medical criteria, third party payers use discharge diagnoses, and patients include a range of other factors such as transportation, childcare needs and convenience. Although definitions of appropriateness usually closely relate to the concept of urgency, significant disparity exists between, and amongst, patients, doctors, and administrators as to what can, and should be, defined as urgent.

In general, the literature has mainly adopted a medical definition of the urgency and appropriateness of care.

During the Committee’s consultative process, health boards, hospitals and consultants emphasised that the majority of Emergency Department attendances were appropriate. The correct approach, it was argued, was not to turn away attendees who had made a conscious, and often informed, decision to seek help from the Emergency Department. Instead, all attendees should be triaged and then, if appropriate, referred to more suitable locations for treatment.

4.3.5 Reasons for attendance at Emergency Departments by attendees

Surveys carried out to examine the reasons why attendees considered Emergency Departments to be the most appropriate venue for medical care rarely include medical concepts of urgency. Instead, such surveys record that attendees emphasise access and convenience.
A number of studies have focused on the most important reason why it was appropriate for the patient to attend an Emergency Department. These studies found that the most important reasons were the lack of availability of primary care professionals (33); the convenience associated with the Emergency Department being open after hours (34); the attendee’s proximity to the Emergency Department (35).

In contrast, Steele (37) summarised the reasons presented in the literature, reasons echoed in submissions to the Committee, as to why patients inappropriately attend the Emergency Department and not their GP. These factors were,

- proximity to the Emergency Department
- social deprivation
- inability to attend the GP
- a poor knowledge of GP services
- cost of GP services
- convenience of 24 hour service
- perceived urgency of the complaint
- perceived need for investigations in a hospital setting.

Many of the submissions to the Committee highlight these factors.

4.3.6 Emergency Department attendance patterns

It is important to note that data relating to Emergency Department attendances comprise the number of patient visits to the Emergency Department in any given year. Some patients may be called back for review and others may attend numerous times. Attendees may also rely on the Emergency Department for many services more appropriately delivered by primary care.

Since 1988, the number of Emergency Department attendances has risen by approximately 15%. More recently – since 1998 – there has been a dip in attendances of approximately 6%. This is mainly accounted for by a decrease in attendances in the ERHA area.
### All Emergency Department Attendances by Health Board Area 1988 – 2000

<table>
<thead>
<tr>
<th>Year</th>
<th>EHB/ERHA</th>
<th>MHB</th>
<th>MWHB</th>
<th>NEHB</th>
<th>NWHB</th>
<th>SEHB</th>
<th>SHB</th>
<th>WHB</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>440,646</td>
<td>63,676</td>
<td>101,749</td>
<td>101,625</td>
<td>52,689</td>
<td>123,626</td>
<td>155,281</td>
<td>119,918</td>
<td>1,159,210</td>
</tr>
<tr>
<td>1998</td>
<td>541,818</td>
<td>57,086</td>
<td>112,229</td>
<td>102,697</td>
<td>49,703</td>
<td>113,087</td>
<td>157,252</td>
<td>108,371</td>
<td>1,244,241</td>
</tr>
<tr>
<td>1997</td>
<td>540,342</td>
<td>54,472</td>
<td>110,840</td>
<td>98,969</td>
<td>47,923</td>
<td>110,134</td>
<td>142,771</td>
<td>107,870</td>
<td>1,167,443</td>
</tr>
<tr>
<td>1996</td>
<td>540,567</td>
<td>51,952</td>
<td>110,615</td>
<td>92,688</td>
<td>45,837</td>
<td>107,684</td>
<td>141,468</td>
<td>102,866</td>
<td>1,195,673</td>
</tr>
<tr>
<td>1995</td>
<td>547,385</td>
<td>50,907</td>
<td>109,147</td>
<td>94,149</td>
<td>47,975</td>
<td>106,229</td>
<td>143,044</td>
<td>100,616</td>
<td>1,199,452</td>
</tr>
<tr>
<td>1994</td>
<td>526,796</td>
<td>45,684</td>
<td>103,072</td>
<td>85,760</td>
<td>47,369</td>
<td>100,709</td>
<td>135,166</td>
<td>93,127</td>
<td>1,137,683</td>
</tr>
<tr>
<td>1993</td>
<td>527,731</td>
<td>44,498</td>
<td>99,243</td>
<td>86,864</td>
<td>44,943</td>
<td>93,981</td>
<td>138,701</td>
<td>88,611</td>
<td>1,124,572</td>
</tr>
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<td>1992</td>
<td>535,642</td>
<td>41,408</td>
<td>96,427</td>
<td>91,450</td>
<td>44,993</td>
<td>95,965</td>
<td>138,488</td>
<td>86,136</td>
<td>1,131,805</td>
</tr>
<tr>
<td>1991</td>
<td>542,428</td>
<td>37,541</td>
<td>92,708</td>
<td>89,454</td>
<td>45,878</td>
<td>89,038</td>
<td>136,809</td>
<td>86,290</td>
<td>1,127,803</td>
</tr>
<tr>
<td>1990</td>
<td>536,399</td>
<td>31,386</td>
<td>95,852</td>
<td>90,169</td>
<td>44,720</td>
<td>79,083</td>
<td>159,929</td>
<td>82,229</td>
<td>1,127,120</td>
</tr>
<tr>
<td>1989*</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1,062,532</td>
</tr>
<tr>
<td>1988*</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>1,007,533</td>
</tr>
</tbody>
</table>

Table 5. All Emergency Department attendances by health board area – 1988 – 2000

**Source:** 1988 - 1999 Department of Health & Children, 2000 - Comhairle na nOspidéal

* Detailed figures were not recorded for the years 1988 and 1989. National Emergency Department attendance figures are not available for the years before 1988.
Figure 1. Emergency Department attendances 1988 – 2000

Source: Information supplied by health boards, hospitals & DOHC to Comhairle na nOspidéal 2001

4.4 COMPARISON OF EMERGENCY DEPARTMENT ATTENDANCES

While the Committee considered information for each hospital in the State regarding bed numbers, total staffing, demographic factors, the numbers of patients treated by the Emergency Department, Hospital Inpatient Enquiry system (HIPE) data and the acuity of presentations recorded by each Emergency Department, the Committee has not however outlined a detailed national classification and comparison of individual hospitals. Information supplied to the Committee by each hospital is set out by health board area in Appendix C.

Of particular importance, however, is the volume of new attendances at each hospital as this is a key indicator of demand for, and usage of, Emergency Department services. It can be noted that, internationally, new attendances should comprise approximately 90–95% of all attendances. This is not the case in many hospitals in Ireland as outlined later in this Report. Set out below is a list of hospitals by volume of new attendances at Emergency Departments.
Table 6. Volume of new attendances 2000, by hospital

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Volume 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tallaght * §</td>
<td>67210</td>
</tr>
<tr>
<td>Limerick §</td>
<td>53403</td>
</tr>
<tr>
<td>Galway §</td>
<td>51589</td>
</tr>
<tr>
<td>Mater</td>
<td>50952</td>
</tr>
<tr>
<td>CUH §</td>
<td>48243</td>
</tr>
<tr>
<td>Waterford §</td>
<td>46624</td>
</tr>
<tr>
<td>Beaumont</td>
<td>46554</td>
</tr>
<tr>
<td>St James</td>
<td>44698</td>
</tr>
<tr>
<td>Temple Street §</td>
<td>41256</td>
</tr>
<tr>
<td>St Vincent’s</td>
<td>34548</td>
</tr>
<tr>
<td>Crumlin §</td>
<td>28375</td>
</tr>
<tr>
<td>Drogheda §</td>
<td>27420</td>
</tr>
<tr>
<td>Blanchardstown</td>
<td>24556</td>
</tr>
<tr>
<td>Tralee §</td>
<td>23775</td>
</tr>
</tbody>
</table>

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Letterkenny §</td>
<td>23476</td>
</tr>
<tr>
<td>Mayo §</td>
<td>23320</td>
</tr>
<tr>
<td>Sligo §</td>
<td>23238</td>
</tr>
<tr>
<td>Loughlinstown</td>
<td>22593</td>
</tr>
<tr>
<td>Mullingar §</td>
<td>22492</td>
</tr>
<tr>
<td>Tullamore</td>
<td>21282</td>
</tr>
<tr>
<td>Sth Inf/Victoria</td>
<td>20658</td>
</tr>
<tr>
<td>Wexford §</td>
<td>20562</td>
</tr>
<tr>
<td>Cashel &amp; Clonmel§</td>
<td>20030</td>
</tr>
<tr>
<td>Mercy §</td>
<td>19750</td>
</tr>
<tr>
<td>Dundalk</td>
<td>18975</td>
</tr>
<tr>
<td>Naas</td>
<td>17064</td>
</tr>
<tr>
<td>Kilkenny §</td>
<td>16798</td>
</tr>
<tr>
<td>Portiuncula §</td>
<td>16207</td>
</tr>
</tbody>
</table>

* Adult attendances - 42547 Paediatric attendances - 24663
§ Denotes Emergency Departments with on-site paediatric facilities and consultant paediatricians

It is important to note that the hospitals omitted from the following tables or graphs did not return the relevant categories of requested information to the Committee.
4.4.1 **New & Review attendances as percentage of total attendances**

In the year 2000 there were 1,000,255 (86%) new attendances and 158,955 (14%) review attendances at Emergency Departments in Ireland.

*Figure 2. Percentage of New and Review attendances by health board area 2000*

*Source: Information supplied by health boards and hospitals to Comhairle na nOspidéal 2001.*

*Information for new and review attendances at paediatric hospitals included.*
Emergency Departments with over 25,000 new A&E attendances in the year 2000

Twelve hospitals in the country have emergency departments that fall into this category. These hospitals - Beaumont, Cork University Hospital, Drogheda, Mid-Western Regional Hospital, Limerick, the Mater, St James’s, Temple Street, St Vincent’s, Tallaght, Crumlin, University College Hospital Galway, and Waterford Regional – account for 54% of all new attendances at Emergency Departments. All of these hospitals have one or more existing permanent posts of Consultant in Emergency Medicine.

Situated in urban locations, most of these hospitals are designated as regional centres. Many have systems in places that reduce the number of review attendances. Review attendances account for only 4-8% of total attendances in Mid-Western Regional Hospital, Limerick, St. Vincent’s, Crumlin and Tallaght Hospitals. This figure rises to 18% in CUH and Waterford Regional. While new attendances at these departments account for 54% of all new attendances nationally, the volume of review attendances is lower, at 43.5% of all review attendances nationally.

Figure 3. Percentage of New and Review Emergency Department Attendances for hospitals with over 25,000 new A&E attendances per annum

Source: Information supplied by health boards and hospitals to Comhairle na nOspidéal 2001.

* Combined data for adult and paediatric attendances.
Emergency Departments with 16 – 25,000 new A&E attendances in the year 2000
These Emergency Departments are based in hospitals with catchment populations of approximately 100,000. The extent to which these hospitals generate review attendances varies widely, ranging from 2% of total attendances in the Tullamore to 24% in the 5th Infirmary/Victoria. Nationally, such hospitals account for 33.5% of new attendances and 29.3% of review attendances. About half of these departments have Consultants in Emergency Medicine on-site.

![Hospitals with 16,000-25,000 new A&E attendances in 2000](image)

Figure 4. Percentage of New and Review attendances in hospitals with 16,000-25,000 new A&E attendances in 2000

Source: Information supplied by health boards and hospitals to Comhairle na nOspidéal 2001.
Emergency Departments with less than 16,000 new A&E attendances in the year 2000

Emergency Departments in this category are based in some of the smaller general hospitals in the state. The extent to which these hospitals generate review attendances varies widely - from 3% of total attendances in Portlaoise to 49% of total attendances in Monaghan. Nationally, these hospitals account for 12.5% of new attendances but more than double that, 27.3%, of review attendances. None of these hospitals has a Consultant post in Emergency Medicine on-site.

Figure 5. Percentage of New and Review attendances in hospitals with less than 16,000 new A&E attendances in 2000

Source: Information supplied by health boards and hospitals to Comhairle na nOspidéal 2001.
4.4.2 Referral patterns

Clear differences in the source of referral are evident as evidenced from the information in the following graphs; from 5% GP referrals in St. Michael’s to 66% in Kilkenny.

Figure 6. Source of referral in hospitals with more than 25,000 new A&E attendances in 2000

Source: Information supplied by health boards and hospitals to Comhairle na nOspidéal 2001.
* Data relates only to adult attendances, information not supplied regarding paediatric attendances.
Figure 7. Source of referral in hospitals with 16 – 25,000 new A&E attendances in 2000
Source: Information supplied by health boards and hospitals to Comhairle na nOspidéal in 2000

Figure 8. Source of referral in hospitals with less than 16,000 new A&E attendances in 2000
Source: Information supplied by health boards and hospitals to Comhairle na nOspidéal 2001.
4.4.3 Hours of attendance

Most people attended Emergency Departments between the hours of 8am and 8pm in the year 2000. The proportion of attendances between 8pm and midnight was broadly consistent across the larger hospitals – ranging from 13 – 16% of total attendances. Differences of note only emerge when attendances at hospitals in Dublin between midnight and 8am are compared with Waterford, Galway, Cork and Limerick. In Dublin hospitals – the Mater, St James’s, Tallaght and St Vincent’s – such attendances ranged between 12% and 18% of all attendances. Outside Dublin, attendances between midnight and 8am ranged between 6% and 13% of total attendances.

Figure 9. Hours of attendance in hospitals with more than 25,000 new A&E attendances in 2000

Source: Information supplied by health boards and hospitals to Comhairle na nOspidéal 2001.

* Combined data for adult & paediatric attendances
**Figure 10. Hours of attendance in hospitals with 16 – 25,000 new A&E attendances in 2000**

**Source:** Information supplied by health boards and hospitals to Comhairle na nOspidéal 2001.

**Figure 11. Hours of attendance in hospitals with less than 16,000 new A&E attendances in 2000**

**Source:** Information supplied by health boards and hospitals to Comhairle na nOspidéal 2001.
4.4.4 Percentage of Emergency Department attendances admitted to hospital

The proportion of those attending Emergency Departments who are subsequently admitted to hospital is influenced by hospital admission protocols. The range is evident from tables 14, 15 and 16 below.

![Percentage of attendees admitted to hospital from Emergency Departments with more than 25,000 new attendances in 2000](image)

Figure: 12. Percentage of Emergency Department attendees admitted to hospital from Emergency Departments with more than 25,000 new attendances in 2000

**Source:** Information supplied by health boards and hospitals to Comhairle na nOspidéal 2001.

* Data includes adult & paediatric admissions

![Percentage of attendees admitted to hospital from Emergency Departments with 16-25,000 new attendances in 2000](image)

Figure: 13. Percentage of Emergency Department attendees admitted to hospital from Emergency Departments with 16 – 25,000 new attendances in 2000

**Source:** Information supplied by health boards and hospitals to Comhairle na nOspidéal 2001.
Figure 14. Percentage of Emergency Department attendees admitted to hospital from Emergency Departments with less than 16,000 new attendances in 2000

Source: Information supplied by health boards and hospitals to Comhairle na nOspidéal 2001.

4.4.5 New attendances and catchment population

Table 7 provides information on new A&E attendances in 2000 in each area / hospital; the percentage of new A&E attendances nationally at each and the estimated population catchment.
<table>
<thead>
<tr>
<th>Hospital</th>
<th>New A&amp;E Attendances 2000</th>
<th>Percentage of New Attendances nationally</th>
<th>Estimated Population Catchments</th>
<th>Percentage of National Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cork City*</td>
<td>88651</td>
<td>8.9%</td>
<td>330000</td>
<td>9.1%</td>
</tr>
<tr>
<td>Tallaght &amp; Naas</td>
<td>84274</td>
<td>8.5%</td>
<td>260000</td>
<td>7.2%</td>
</tr>
<tr>
<td>Limerick City*</td>
<td>66304</td>
<td>6.7%</td>
<td>210000</td>
<td>5.8%</td>
</tr>
<tr>
<td>UCH Galway</td>
<td>51589</td>
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<td>140000</td>
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</tr>
<tr>
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<td>50952</td>
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<td>150000</td>
<td>4.1%</td>
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<td>St Vincent’s &amp; St Michael’s</td>
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<td>200000</td>
<td>5%</td>
</tr>
<tr>
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<td>3.3%</td>
</tr>
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<td>150000</td>
<td>4.1%</td>
</tr>
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<td>44698</td>
<td>4.5%</td>
<td>180000</td>
<td>5%</td>
</tr>
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<td>3.4%</td>
<td>100000</td>
<td>2.8%</td>
</tr>
<tr>
<td>Crumlin</td>
<td>28375</td>
<td>2.9%</td>
<td>100000</td>
<td>2.8%</td>
</tr>
<tr>
<td>Drogheda</td>
<td>27420</td>
<td>2.8%</td>
<td>100000</td>
<td>2.8%</td>
</tr>
<tr>
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<td>125000</td>
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<td>120000</td>
<td>3.3%</td>
</tr>
<tr>
<td>Mayo</td>
<td>23320</td>
<td>2.3%</td>
<td>110000</td>
<td>3.1%</td>
</tr>
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<td>100000</td>
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<td>75000</td>
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</tr>
<tr>
<td>Dundalk</td>
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<td>50000</td>
<td>1.4%</td>
</tr>
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<td>1.7%</td>
<td>100000</td>
<td>2.8%</td>
</tr>
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<td>Portiuncula</td>
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<td>1.6%</td>
<td>60000</td>
<td>1.8%</td>
</tr>
<tr>
<td>Cavan</td>
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<td>1.6%</td>
<td>60000</td>
<td>1.4%</td>
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<td>Ennis</td>
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<td>60000</td>
<td>1.8%</td>
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<td>Navan</td>
<td>14656</td>
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<td>50000</td>
<td>1.5%</td>
</tr>
<tr>
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<td>1%</td>
<td>50000</td>
<td>1.4%</td>
</tr>
<tr>
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<td>40000</td>
<td>1.4%</td>
</tr>
<tr>
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<td>0.7%</td>
<td>50000</td>
<td>1.4%</td>
</tr>
<tr>
<td>Banty</td>
<td>5285</td>
<td>0.5%</td>
<td>40000</td>
<td>1.4%</td>
</tr>
<tr>
<td>Monaghan</td>
<td>3228</td>
<td>0.3%</td>
<td>40000</td>
<td>1.4%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>1,000,255</strong></td>
<td><strong>100%</strong></td>
<td><strong>3626000</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Table 7. New A&E attendances & estimated catchment populations

* Cork City includes Cork University Hospital, Mercy Hospital and South Infirmary/Victoria Hospital.
* Limerick city includes Mid-Western Regional Hospital, Limerick and St. John’s, Limerick
SECTION 5.

IMPROVING PATIENT CARE
5.1 WAITING FOR TREATMENT
A key issue for the public generally as well as staff working in, and patients attending, Emergency Departments in Ireland is waiting time.

The Committee has found, based on its consultative process and literature review, that the potential impacts of prolonged waiting times on patient care can be,

- Additional risk to patient outcomes where there are delays between presentation and being seen by a doctor (especially for patients with serious injuries or illness)
- Risk that delays may be further extended in cases where triage is not undertaken
- Increases in the number of patients leaving before treatment
- Overcrowding in the Emergency Department and waiting room
- Restricted access to Emergency services and treatment for patients arriving.

Delays can occur in waiting to be seen by a doctor, waiting to be admitted to a hospital bed and waiting for diagnostic services. The Committee has identified the main causes of delays in Emergency Departments as:

- The absence or poor implementation of a triage process
- Restricted access to inpatient beds
- Restricted access to pathology and radiology services
- The treatment and management of large numbers of patients with minor injuries or illness who could ideally be treated in other settings
- Limited availability of senior clinical decision makers
- The design of, and resources available to, the Emergency Department

Moving a patient to a hospital bed and the mix of medical and nursing staff are key factors affecting the speed of patient throughput. These issues are discussed in later sections of this document.

The Committee’s recommendations are set out in the following sections of this Report. They focus on improving patient care and the efficiency and effectiveness of hospital emergency services and will, if implemented, have a direct effect on issues such as waiting time.
5.2 TRIAGE

5.2.1 Definition of triage
Triage can be defined as the process of sorting patients according to the urgency of their illness or injury. Triage in its simplest form is the sorting or prioritising of items, patients, or tasks. Some form of triaging has been in place, formally or informally, since the first Emergency Department opened. Triage is usually performed by nurses. In larger Emergency Departments, trained triage nurses and / or designated Emergency Department staff perform triage.

It is important not to confuse triage, which is a clinical tool, with the time it takes to be treated by Emergency Department staff.

5.2.2 The triage process
Triage involves an assessment of the patient by a member of staff who directs that patient to the most appropriate form of care for him or her. Triage should take place as soon as possible after the patient's arrival at the Emergency Department and the triage process should form the start of a documented care pathway for each individual patient.

For some patients, triage begins outside the Emergency Department with an assessment by a GP or ambulance crew and a subsequent decision on where to bring the patient for appropriate treatment.

5.2.3 Waiting for treatment after triage
After being triaged, the patient may have to wait for long periods of time. This is because most decisions about investigation and initiation of treatment do not occur until a doctor either sees the patient, or has the preliminary results necessary to recommend a course of action. Waiting times are also influenced by the clinical needs of other patients and the resources available to the Emergency Department.

5.2.4 Triage Scales
Triage Scales set out time responses for appropriate care. They state how long a patient should wait for treatment after being triaged. These are objectives rather than established care standards. They are based on a patient focus (i.e. what most of us would want for family members or ourselves) and the need for timely intervention to improve outcomes.

Anecdotal evidence indicates that in many Irish Emergency Departments triage is not always undertaken as soon as the patient arrives at the Emergency Department. Under some circumstances, patients wait for triage for an hour or more. The goals of triage can be summarised as follows:

- To rapidly identify patients with urgent, life threatening conditions
- To determine the most appropriate treatment area for patients presenting to the Emergency Department
- To decrease congestion in emergency treatment areas
- To provide ongoing assessment of patients
- To provide information to patients and families regarding the department’s expected care and waiting times
- To contribute information that helps to define departmental acuity
5.2.5 **Benefits of triage**
Rapid access to assessment by a doctor increases patient satisfaction, improves health outcomes and enhances public relations. An efficient triage system should reduce patient anxiety and increase satisfaction by reducing length of stay and waiting times in the Emergency Department.

5.2.6 **Information gained from triage**
The mix of patients in each triage and acuity level can be seen as the ‘fingerprint’ of that Emergency Department and can be expected to be similar to other hospitals of similar size and designation. What may vary is the ability to achieve time objectives as a result of available resources, efficiency of system design (computerisation, bed numbers, room size, physical layout, and appropriate equipment), consistency of care (use of guidelines/protocols), or overcrowding (inability to discharge, transfer or admit patients).

5.2.7 **Different triage scales**
A number of triage scales are in use in Emergency Departments in Ireland. While most departments use the ‘Manchester’ (NHS) Triage Scale, Australian and Canadian Triage Scales are also used. Each of these scales uses five categories of ‘clinical urgency’:

1. Resuscitation
2. Emergency
3. Urgent
4. Semi-urgent
5. Non-urgent

The three scales are briefly described below:

**Manchester Triage Scale**
The Manchester or NHS Triage scale uses ‘presentations’ and ‘discriminators’ in all cases to define the appropriate category i.e.: presentation = shortness of breath, adult / wheeze.

**Canadian Triage Scale**
The Canadian Triage Scale attempts to define patients’ needs for timely care and to allow Emergency Departments to evaluate their acuity level, resource needs and performance against certain operating ‘objectives’.

**Australasian Triage Scale**
The Australasian Triage Scale (ATS) was designed for use in hospital-based emergency services throughout Australia and New Zealand. It is a scale for rating clinical urgency. Although primarily a clinical tool for ensuring that patients are seen in a timely manner commensurate with their clinical urgency, the ATS is also a useful casemix measure.
Recommendation

It is important that all hospitals use the same process in evaluating the appropriate treatment to deliver to patients attending the Emergency Department, train staff in the same procedures, and produce comparable information.

The Committee recommends that:

- All Emergency Departments use a uniform triage scale that produces comparable and comprehensive information on patient attendance and acuity.
- The Irish Association for Emergency Medicine gives urgent consideration to the development of a scale adapted to the needs of Irish Emergency Departments and advises the Department of Health & Children, the Health Boards Executive (HEBE), Health Boards, Voluntary Hospitals and the proposed Health Information & Quality Authority appropriately.
- This advisory process should be completed by December 2002. An implementation process should be in place by the beginning of 2003.
- The Committee notes the recommendations set out in the Health Strategy(1) regarding the establishment of a ‘Health Information & Quality Authority’ and expects that the Authority will play a role in further developing information systems in Emergency Departments.
- Patients should be directed to triage as the first point of contact with the Emergency Department. Where triage is not immediate, hospitals should monitor the time from arrival to triage, and seek to minimise delays.

5.3 ACCESS TO DIAGNOSTIC SERVICES

Emergency Departments rely on other hospital services to ensure accurate and timely treatment of Emergency Department patients. In particular, diagnostic services (radiology and pathology) assist doctors in performing comprehensive patient assessment and treatment.

Diagnostic services are traditionally geared toward inpatient services, operating during standard business hours. Although arrangements for diagnostic services vary in different hospitals, most hospitals have arranged extended services and/or on-call services for Emergency Department after-hours access.

While some Emergency Departments have negotiated priority access to these services, delays can still occur after hours, during lunchtime or if radiology or pathology staff are busy with workload from other hospital departments. Other Emergency Departments have poor or no access to specific types of diagnostic tools such as CT scans and ultrasound. Some Emergency Departments experience long delays in receiving reports from pathology and radiology departments.

It is clear that although on-call and extended services exist, there is still scope to improve the provision of diagnostic services to better meet the needs of Emergency Department patients.
Recommendation

The Committee recommends that:

- Hospitals should review and realign radiology and pathology services to ensure that these services are readily available from early morning, throughout the day (including mealtimes) and at peak times in the Emergency Department, thereby minimising delays and congestion.

- Hospitals with high Emergency Department patient throughput (20,000 new attendances or more per annum) should also explore the possibilities of designating specific facilities and / or staff in radiology and pathology to serve the needs of the Emergency Department.

5.4 THE EMERGENCY DEPARTMENT & PRIMARY CARE

The Report of the Study Group on the Working Hours of NCHDs (2001) (40) stated that if the State was to,

‘provide more efficient, patient oriented, cost effective and employee caring services’

it must address the issue of,

‘primary care and how it interfaces with the hospital system particularly in the context of A&E.’

The Health Strategy – ‘Quality and Fairness, A Health System for You’(1) – states that,

“primary care must become the central focus of the health system. It is the appropriate setting to meet 90-95% of all health and social service needs . . . Overall the strengthened primary care system will have a major impact in reducing demand for specialist services and the hospital system, particularly accident and emergency and out-patient services.”

The Department of Health & Children’s document “Primary Care, A new direction”(41) - published as part of the Health Strategy (1) – states that its

“analysis indicates that primary care, planned and organised on a 24-hour basis, has the potential to lessen the current reliance on specialist services and the hospital system, particularly accident and emergency and out-patient services.”

It points out that the term ‘primary care’,

“is often used synonymously with ‘general practice’. While general practice is a key element, it is broader than general practice alone. It encompasses the range of services that are currently provided by general practitioners (GPs), public health nurses, general nurses, social workers, practice nurses, midwives, community mental health nurses, dieticians, dentists, community welfare officers, physiotherapists, occupational therapists, home helps, health care assistants, speech and language therapists, chiropodists, community pharmacists, psychologists and others.”
The document notes that,

“the current primary care system is delivered by a combination of these disciplines, very often working in isolation, either as private practitioners or as direct employees of the public health system. GPs are independent contractors while most other services are provided by employees of health boards and voluntary organisations.”

Emergency Department attendance and the provision of GP care are closely linked. Several cross-sectional studies have found that most Emergency Department attendances are by people in low socio-economic classes who often do not have regular primary care (26) (42).

A study involving 9 Scottish health boards and 27 hospitals, cited in the Acute Services Review Report 1998, (12) found that 71% of patients attending Emergency Departments were referred by GPs and 34% of patients came from the most deprived and marginalised sections of the population in Scotland (which represents about 16% of the Scottish population).

The study found that in 25-28% of cases, admission would not have been the only way of treating, or caring for, a given patient had alternative care settings been available at the time.

However, simply providing all patients with a regular primary care provider does not necessarily ensure that Emergency Department attendance will drop. Access to care involves other dimensions, such as cost to the patient or the provision of available appointments (25).

Although it is often argued that receiving primary care from the Emergency Department is inferior to GP care, there is a lack of robust evidence to prove (or refute) this assertion (48). It has been suggested that Emergency Department-based primary care is less effective than GP care because,

1. **Staff in Emergency Departments are not trained to provide primary care-type treatment.**
   Few analytical studies have specifically addressed this issue although some authors have expressed the opinion that Emergency Department-based doctors do not have adequate primary care training (44).

2. **Emergency Department staff tend to over-investigate problems in comparison to their GP colleagues.**
   Two small randomised controlled trials based in London and Dublin found that GPs working in Emergency Departments use fewer investigations but still achieve similar patient health outcomes compared with their hospital-based colleagues (45) (46).

A number of patient surveys have found that poor access to primary care is a major factor in why patients choose to seek care at the Emergency Department. (26), (47), (35), (48)

Improved access to primary care could therefore reasonably be expected to reduce Emergency Department utilisation.

However, most of the research has been based in the United States and has concerned the effects of providing people on low-incomes with accessible primary care instead of leaving them to receive episodic care at Emergency Departments.
Most studies have found that Emergency Department utilisation was reduced by this provision of access to primary care. For example, a before and after study examined the effects of the introduction of a primary care health centre in Stockholm, Sweden. The study found that the number of Emergency Department attendances decreased while there was a simultaneous increase in primary care visits in the area.

The Northern Ireland Acute Hospitals Review Group notes that there is a useful role for GPs in Emergency Departments and that there is evidence that this is likely to improve appropriateness of treatment. It suggested that there is scope for greater use of nurse consultants and nurse practitioners. An alternative option suggested by the group is to locate primary care centres or out-of-hours facilities close to Emergency Departments or local emergency units.

In 1995, new arrangements were introduced in Scotland for the provision of general medical services out of hours. By the end of 1997, 75% of the Scottish population was covered by GP Co-operatives.

The Glasgow Emergency Medical Service is the biggest integrated system of its kind in the UK. Some 98% of the city’s 620 GPs are involved in the scheme, which directs patients requesting GP care at night and weekends to one of 6 centres run by GPs and based in the outpatients facilities of local acute or community hospitals. GPs based at these centres are drawn from local areas and provide emergency care and referral as appropriate. Ambulance transport is available for patients to and from these centres. The service dealt with 381,000 patients in its first two years, 49% of whom were children.

‘Primary Care, A new direction’ proposes the introduction of an inter-disciplinary team-based approach to primary care provision. These teams will serve small population groups of approximately 3,000-7,000 people, depending on whether a region is rural or urban. Among other factors, the number and ratio of team members will depend on needs assessment, location and population size. Teams will be based in single locations where possible and will be easily accessible. Many services will be provided on an extended-hours basis and out-of-hours cover for defined services will be greatly enhanced.

The document states that,

“liaison between primary and secondary care services will be improved. The primary care team will have better access to hospital services. Discharge planning will also be improved, with the development of individual care plans and the identification of key workers for individuals when appropriate. Integration between primary care and specialist services in the community will be strengthened . . .

Further development of current GP co-operative models will take place on a national basis as a key support to the enhanced availability for a defined range of primary care services on a 24-hour basis. Along with medical cover, 24-hour cover will be provided through the availability of nursing services, health care assistants and home helps, leading to the development of primary care co-operatives.”

The document recommends that a small, full-time task force, called the “National Primary Care Task Force”,

“be established to take responsibility for driving the implementation of the changes and developments set out in the model”. 
Recommendation

Links between Primary Care Services and Emergency Departments are a separate issue to the appropriate triage and treatment of attendees at Emergency Departments. Patients attend for a wide variety of reasons and their decision to bypass primary care, if primary care is available, means that the initial triage (if not treatment) of that patient is the responsibility of the Emergency Department. In this context the Committee recommends that:

- Links between primary care and Emergency Departments, including the potential impact of the development and location of GP Co-ops, are examined as part of the work of the proposed National Primary Care Taskforce.
- In the medium term, those patients who attend Emergency Departments with minor injuries and illnesses which could, potentially, be treated by general practitioners, are referred to Minor Injury & Illness areas (see following section).

5.5 MINOR INJURY & ILLNESS AREAS

A report published by the NHS Management Executive, entitled ‘A study of Minor Injury Services’, provides guidelines for the provision of minor injury services. Minor injuries should be treated by nurse practitioners or junior doctors, in defined Minor Injury Areas on the same site as hospital Emergency Departments.

The Health Strategy states that,

“Minor injury units will be established to ensure appropriate treatment and management of non-urgent cases”.

The main advantages of having a separate minor injuries & illness area within the Emergency Department include:

- Flexibility in the functioning of the department and better streaming of patients
- Decreased waiting times
- Maintaining the flow of patients even if the ‘major’ area of the department is busy

The Committee notes that some hospitals and Emergency Departments already have areas allocated for the treatment of minor injuries or illnesses and that following its A&E review, the ERHA has decided to establish dedicated Minor injuries space and staffing in five of the major acute hospitals in the Eastern region. Funding was made available in December 2000 for this purpose.

It is important that Minor Injury & Illness areas within Emergency Departments have access to the following:

- Staff exclusively assigned to the Minor Injury & Illness area
- Trained staff and liaison between such staff and senior Emergency Department staff
- Access to diagnostic facilities
- Link with local General Practitioners
Recommendation

The Committee recommends that:

- Each Hospital with an Emergency Department should consider the establishment of Minor Injury & Illness areas within the Emergency Department where such does not exist already
- In this context the Committee recommends that health boards and hospitals formulate agreed structures and protocols for the establishment and operation of Minor Injury & Illness areas within Emergency Departments.

5.6 EMERGENCY DEPARTMENTS & TRAUMA

While this Committee was not asked to make recommendations on the structure and organisation of trauma services per se, there is significant overlap between the trauma services, the work of Emergency Departments and the work of ambulance and other retrieval services. In this context, the Committee has decided to make recommendations on the management of trauma in the context of the proposed future structure of Emergency Department services set out later in this report.

5.6.1 Definition of trauma

Major trauma can be defined as having involved the presence of at least one of the following:

- Death after injury.
- Admission to an Intensive Care Unit for more than 24 hours, requiring mechanical ventilation.
- Serious injury to two or more of the body’s internal systems.
- Injury Severity Score (ISS) > 15.
- Urgent surgery for intra-cranial, intra-thoracic, or intra-abdominal injury, or for fixation of pelvic or spinal fractures.

5.6.2 Road traffic statistics

A total of 413 persons were killed in 374 traffic accidents on Irish Roads in 1999 (Source: National Roads Authority and An Garda Síochána). 12,340 persons were injured in 7,433 accidents.
In 1999, the number of reported serious injury accidents stood at 1,302. 28% of all fatal accidents took place between the hours of 9pm and 3am. A further 11% took place between 3am and 6am. 15% of attendances arrive at Emergency Departments during these time periods – this would indicate that there is significant acuity within a relatively small number of Emergency Department attendances during this part of the night.

Internationally, on a basis of road deaths per 100,000 population, Ireland is ranked 9th out of the 15 member states of the European Union with a rate of 12.4 road deaths per 100,000 population.

5.6.3 Appropriate management of trauma

In Australia, the Consultative Council on Road Traffic Fatalities identified potentially preventable outcomes contributing to death in up to 38 per cent of road traffic fatalities in Victoria \(^{52}\). The Major Trauma Management Study \(^{53}\) identified similar potentially preventable outcomes from all causes of trauma, as well as potentially preventable complications in survivors.

Studies have identified deficiencies in trauma management and system response. Problems were identified from the initial response through to definitive treatment. Examples of these deficiencies are:

- Inadequate availability of pre-hospital and Emergency Department advanced life support skills
- Prolonged times spent at the scene of accidents
- Inadequate reception in Emergency Departments by junior staff as well as delayed investigation and surgical consultation
- Triage of patients to hospitals lacking optimal skills or resources to manage time-critical major trauma patients
- Delays in, and inadequate medical escort for, rural and metropolitan inter-hospital transfer of major trauma patients.
The incidence of major trauma may be relatively low (less than 5% - fatal trauma is less than 1%). However, this group of patients has high morbidity and mortality. These patients constitute the most severely injured subgroup of trauma patients and are ‘time-critical’, in that their morbidity and mortality increase with the time taken to reach definitive treatment.

There is now substantial evidence that early, appropriate, definitive management in major trauma results in optimal outcomes. The Irish Institute of Orthopaedic Surgeons have noted that,

“Fundamental to trauma organisation is a necessity to establish criteria for categorisation of hospitals and patients to ensure optimal utilisation of the former and optimal treatment of the latter.” (54)

Trauma management systems provide a co-ordinated and systematic means for delivering trauma patients rapidly to definitive care. Much of this evidence is from the United States where a number of state-wide regionalised trauma systems have been in operation for more than 20 years. The collective, published research and authoritative guidelines from professional bodies identify key features associated with optimal clinical outcomes. Generally, these centre around strategies for delivering the right patient to the right hospital by the fastest and safest means, and include:

· Integration, co-ordination and inclusiveness of hospital and ambulance services
· Designation of hospitals to receive major trauma
· Concentration of expertise in trauma management
· Agreed triage and transport protocols.

5.6.4 Integrated trauma system

Providers of trauma care should be integrated and not operate in isolation. Such integration includes that within and between prehospital and hospital services as well as that within and between different hospitals. Integration requires hospitals and ambulance services to operate with the same terminology and approaches, such as standardised triage and clinical protocols, and to have a clear understanding of their role and areas of expertise within the system. Co-ordination is essential from time of notification of ambulance services through every phase of care.

5.6.5 Designation of hospitals to receive major trauma

The designation of hospitals as having specific trauma care roles is important and is based on resource and geographical considerations. Trauma patients should be managed in the hospital that is most appropriate for the level of care indicated by their injuries. Only a very limited number of hospitals can be designated to provide major trauma services and act as ‘centres of excellence’ in all aspects of trauma management.

The literature in general supports an inverse relationship between mortality rates and caseload volume, i.e. mortality rates for events of similar severity diminish as doctors’ experience and institutional caseload increases. Designating a limited number of hospitals to receive major trauma effectively concentrates services and expertise in a few institutions. Concentrating expertise in a few specialist institutions requires that the majority of major trauma cases be delivered to these sites, according to agreed triage and transfer protocols, in order to maximise outcome benefits for patients and maintain clinician skills.
Recommendation

The Committee recommends that:

1. **Triage and transfer**
   - Major trauma should be identified in the prehospital setting according to specified physiological, anatomical and mechanistic criteria
   - Ideally, triage and transport should be to a Regional Emergency Department
   - Where a patient has to be brought to another hospital for initial stabilisation, early liaison with the Regional Emergency Department should occur and consideration should be given to inter-hospital transfer
   - The triage process for major trauma patients should be formally audited, specifically, with respect to the appropriateness of the time cut-off for delivery to a Regional Emergency Department
   - Transfer policies should allow for transfer across health board boundaries to the nearest Regional Emergency Department as appropriate

2. **Reception and Management of Trauma Patients**
   - Regional Emergency Departments designated to receive major trauma patients should have a formal trauma team responsible for the initial reception of trauma patients
   - The composition of the trauma team should be sourced from senior doctors throughout the hospital (such as surgery, intensive care, anaesthesia and emergency medicine) in order to provide optimal expertise in filling each role in the team.

3. **Co-ordinated Intra-regional Retrieval Services**
   - Each ambulance service should operate as part of a co-ordinated intra-regional retrieval system
   - The referring clinician should be able to discuss patient management prior to transfer with a consultant in the receiving hospital
   - It is important to note that a small number of patients will require a higher level of intervention than is available in some Regional Emergency Departments e.g. Cardio-thoracic or Neurosurgical interventions.

5.7 **AMBULANCE SERVICES**

This Committee was not asked to make recommendations on the structure and organisation of ambulance services. However, the Committee notes the key role played by ambulance services staff in the initial care and management of patients in a wide variety of settings.

The Health Strategy notes that the findings of a review of ambulance services currently being undertaken by health boards and the ERHA, together with the recommendations of the Report of the Review Group on the Ambulance Services (1993), the Comptroller and Auditor General’s Report on the Emergency Ambulance Services...

The Strategy\(^{(1)}\) states that areas to be targeted will include:

- Ongoing upgrading of the ambulance fleet
- 24-hour duty staffing for all ambulance stations
- Crewing of all ambulances with Emergency Medical Technicians
- Strengthening of IT Links between ambulances and Emergency Departments
- Augmentation of current response capability

It is important to note that the Pre-hospital Emergency Care Council is currently in the process of developing professional and performance standards for ambulance services and personnel. The Council is a statutory agency established by the Minister for Health & Children in 2000 which replaced the National Ambulance Advisory Council. The Council is currently developing training standards for pre-hospital care in such areas as advanced care and paramedic training for ambulance personnel.

The Committee suggests that:

- Protocols for transfer of patients within health board areas and between health board areas are further developed in consultation with the Pre-hospital Emergency Care Council, health board and hospital staff, ambulance staff and other service providers.

**5.8 EMERGENCY DEPARTMENTS & PAEDIATRIC CARE**

The information provided to the Committee does not make clear what proportion of attendances to Irish Emergency Departments children and adolescents (up to 16 years of age) represent. In Britain, Australia and Canada, children (up to 16 years of age) represent about 30% of the total attendances in Emergency Departments. About two thirds of these are related to trauma and one third to medical problems\(^{(66)}\).

In all Emergency Departments there should be a general awareness of the special needs of children. Emergency Departments should also have special guidelines for triaging children. These guidelines could list the different observation techniques for children and the need for children to be given prompt treatment.

Paediatric patients should be shielded as much as possible from adult treatment areas. However, most Emergency Departments treating children do not have paediatric treatment areas.

A UK report by a multidisciplinary working party of the Royal College of Paediatrics and Child Health entitled “Accident & Emergency Services for Children”\(^{(66)}\) – makes a number of recommendations of relevance to this committee.
Recommendation
Having taken account of these, the Committee recommends that:

- Hospitals should consider paediatric design requirements (e.g. separate waiting rooms and treatment areas within the Emergency Department) when refurbishing an existing or building a new Emergency Department. Treatment areas for children should be appropriately child friendly.

- Ideally only Emergency Departments that are on the same hospital site as inpatient paediatric facilities should accept children. All children should be triaged immediately upon arrival. There should be close liaison between the Emergency Department, the Paediatric Department and paediatric staff.

- Emergency Departments accepting children should ideally have staff who have undertaken a recognised training program in paediatric emergency medicine. One of the Consultants in Emergency Medicine in each Regional Emergency Department accepting children should have a special interest in paediatric emergency medicine.

- Formal procedures and protocols should be in place within the Emergency Departments for the management of suspected child abuse and for the management of Sudden Infant Death Syndrome.

5.9 EMERGENCY DEPARTMENTS & OBSTETRIC EMERGENCIES
The committee did not give detailed consideration to emergency attendance by pregnant women at maternity units. Some units do not keep figures but in Dublin in the 3 maternity hospitals, we have been informed that in 2001 there were 21,000 out-of-hours emergencies in total. It is reasonable to expect that with increasing public expectations, and increasing medico-legal problems, the number of GP referrals for obstetric emergencies will increase. Because many of those attendances take place out of normal working hours, they will not be seen by consultant staff. This is not the ideal position.

The committee notes that the Health Strategy (1) has stated that a working party will be established to prepare a plan for the future development of maternity services. It is envisaged that the working party will address this matter.

5.10 EMERGENCY DEPARTMENTS & PSYCHIATRIC CARE
Internationally, there has been an increasing trend for Emergency Departments to be used by patients with a mental illness as a source of mental health care.

One of the most common issues in the treatment of these patients is the risk that staff will not recognise that the patient has a mental illness or not recognise the severity of the risk of self-harm.

Guidelines for service provision to psychiatric patients in Emergency Departments are set out in a report published by a joint working party of the British Association for Emergency Medicine and the Royal College of Psychiatrists – entitled ‘Psychiatric Service to Emergency Departments’ (57).
Recommendation
Having taken account of the guidelines, the committee recommends that there should be:

- A nominated Psychiatric team, including a Consultant Psychiatrist, for Emergency Department liaison where such a service is not already in place.
- Training for all Emergency Department staff in risk management, the management of aggression and breakaway techniques.
- Safe, visible assessment areas in Emergency Departments for people with acute mental health problems who are waiting for an assessment.
- Agreed protocols for emergency Psychiatric Units, security and other support staff available as required.

5.11 EMERGENCY DEPARTMENTS DELIVERING OTHER SERVICES
A number of Emergency Departments are currently undertaking functions that do not involve the immediate treatment of Emergency Department patients. For example, some Emergency Departments are running dressing and fracture clinics, processing elective admissions and undertaking procedures more appropriately performed in other facilities.

On some sites, clinics such as dental and eye clinics still operate using Emergency Department facilities. Although these clinics do not involve Emergency Department staff, they can utilise space in an often already crowded Emergency Department and waiting area.

While most of the larger hospitals have generally divested themselves of these additional duties, examples remain.

Recommendation
The Committee recommends that:

- Other services and activities located in Emergency Departments which affect the treatment of Emergency Department patients should be transferred to other locations within the hospital.

5.12 TRANSFER AND DISCHARGE OF PATIENTS
A number of Emergency Departments experience difficulties transferring patients to other hospitals. These problems can include contacting the receiving hospital and finding a doctor of sufficient seniority to accept the patient. Some Emergency Departments have negotiated agreements with receiving hospitals to streamline the process.

There can be prolonged waits for ambulance transport for patients who have received treatment in the Emergency Department and are ready to leave the hospital. Some hospitals have their own patient transport service. However this service is often available during business hours only and may not be appropriate for patients whose clinical condition is not stable.
Discharging patients
Similarly, Emergency Departments have difficulties discharging patients, especially patients that cannot arrange their own transport. This is a particular problem in rural areas where the distance between the hospital and home is often too far for a taxi. In these cases, patients can remain in the Emergency Department for long periods waiting for transport.

Recommendation
The Committee recommends that:

- Hospitals and health boards should monitor and review the impact on the provision of Emergency Department services of delays in inter-hospital transfer and discharge of patients from the Emergency Department.
- Hospitals and health boards should explore the extent to which dedicated transport services can be developed to facilitate rapid discharge.
- Links should be developed between transferring and receiving hospitals to facilitate seamless transfer of patients.
- Where a hospital has a designated regional or national specialist care function it should take steps to ensure equity of access between its own patients and patients from transferring hospitals.

5.13 ADMISSION TO HOSPITAL FROM THE EMERGENCY DEPARTMENT
Improvements in patient flow in the Emergency Department are limited by difficulties in accessing inpatient beds and the congestion caused by being unable to move patients to a ward. The detrimental effect of a lack of early access to beds and subsequent congestion are detailed previously in this document.

Approximately one quarter of all patients presenting to an Emergency Department are admitted to hospital and these represent around 50% of total hospital admissions.
For these patients, admission to hospital is the final step in the treatment process in the Emergency Department. However, delays in accessing a hospital bed (referred to as ‘access block’ in the US, Australia and New Zealand) has become a serious problem, particularly for urban hospitals.

The Acute Hospital Bed Capacity Report (8) states that,

“Approximately one-quarter of A&E attendances are admitted to hospital. In the context of essentially static bed numbers and increasing A&E attendances, this means that an increasing proportion of acute hospital beds are occupied by patients admitted through A&E. There is no established ‘correct ratio’ of emergency to elective admissions. Suffice it to say that emergency admissions, by their nature, take precedence over elective admissions.

Explanations for the increasing proportions of inpatient admissions which are deemed to be emergencies include:

- Increasing attendances at A&E
- Increasing longevity due to better health care and social circumstances
- Changing age distribution of the population (more older people)
- Changing traditional care structures in society”
5.13.1 Availability of inpatient beds

The availability of inpatient beds is often cited as the chief factor in limiting access to the hospital and a major cause of delays in the Emergency Department. While bed availability is just one of a number of factors, it is an important one. One factor that affects the availability of beds within a hospital is the hospital bed occupancy rate.

Internationally, estimates (8) of the ‘optimal’ bed occupancy level for acute hospitals range from 70 – 85%. The Bed Capacity Review uses an average bed occupancy of 85% to benchmark the need for additional bed capacity in Ireland.

As occupancy rates rise over 85%, hospitals are less able to accommodate unplanned admissions. The ERHA (38) note that:

“The review team found that a problem common to all A&E departments was the lack of available beds within the hospital for the admission of A&E patients, and that this was the main reason for patients having to wait for long periods on trolleys within the A&E department. The significance of this finding is underscored by the fact that for the year 2000 the number of patients waiting on trolleys for more than 6 hours averaged 62 patients per day - an increase of 15% on the previous year.

Most hospitals agree that the problem is partly one of bed shortage. The ERHA findings from its bed capacity study supports this analysis.”

5.13.2 Competition for beds

A major challenge for hospitals is managing the competing demands of Emergency Departments and booked patients while optimising bed utilisation (Acute Hospital Bed Capacity Report8). Hospitals have to achieve a balance between elective admissions and emergency admissions with access based on clinical priority.

However, if Emergency Department admissions are under-estimated or if too many elective patients are scheduled, then patients requiring admission from the Emergency Department will experience delays in being moved to a hospital ward (especially where there is a strong reluctance to cancel elective procedures).

5.13.3 Cancelling booked admissions

In competing for beds, it is generally assumed (8) that admissions through the Emergency Department have clinical priority over elective admissions, which can be cancelled if necessary. However, overload in the Emergency Department is not always the trigger for cancellations and some hospitals have sought to maintain levels of elective procedures despite rising levels of attendance at Emergency Departments.

High occupancy rates, particularly in urban hospitals, along with a reduction in bed numbers fifteen years ago during a period of national economic difficulty have exacerbated the problem. The challenge for hospitals is in predicting demand for Emergency Department admissions and finding and allocating sufficient resources to manage it.

During the 1980s there was a reduction in bed numbers in public hospitals and a greater focus on reducing elective surgery waiting lists. This has meant that Emergency Departments have experienced increased waiting times for non urgent treatment and has lead to an increase in the time taken to move a patient to a ward.
5.13.4 Other factors

While bed availability is a key factor in moving patients to a hospital ward, there are other factors which contribute to performance. These include:

- Delays in accessing diagnostic and laboratory services and/or delays in receiving pathology test results and radiology reports
- Delays in discharging inpatients over weekends and other times when senior clinical decision-makers are not available
- Senior Emergency Department doctors having the authority to admit patients to hospital. However, this authority is meaningless where patients require further assessment by inpatient teams (within the Emergency department) before admission. Often, doctors from the hospitals surgical and medical teams are undertaking theatre work or ward rounds and are delayed in attending the Emergency Department
- ‘Ownership’ of beds by particular specialties
- The need of consultants (due to shortage of beds) to delay discharging their patients in order to ensure bed availability for their incoming patients

Some submissions to the Committee stated that there were numerous administrative tasks required to process admissions. Often these were undertaken by medical or nursing staff, when clerical staff were unavailable. Some hospitals have difficulties accessing intensive care or coronary care beds. When beds in these units were full, Emergency Department patients were either transferred to other hospitals (if a bed could be found) or kept in the Emergency Department until a bed became available.

Anecdotal evidence indicates that some staff in Emergency Departments are reluctant to send patients to inpatient wards which they consider to be unable to provide the required level of care, particularly during night shifts. As a result, patients requiring admission would remain in the Emergency Department longer than necessary (and generally overnight).

5.13.5 Measures to improve access to inpatient beds

Integrated bed management

Many of the larger hospitals have centralised bed management systems. In the large hospitals, one or two full time staff are dedicated to co-ordinating patient admissions and discharges. However, these bed managers are often only available during business hours Monday to Friday. Relief staff take over during nights and on weekends but these staff can have other responsibilities within the hospital. A variety of different bed management strategies can be put in place - examples include:

- flexible bed base (i.e. ability to open additional inpatient beds or the power to reallocate beds between specialties and consultants based on clinical priorities)
- increases in day surgery
- day of surgery admissions (supported by pre-admission clinics)
- transfer protocols with other hospitals (including acute, aged care and private hospitals)
- early discharge planning (including discharge planners, fixed discharge hours)
- discharge ward or ‘transit lounge’
- centralised bed management system.
For Emergency Departments, weekends and nights are often the busiest times for admitting patients. On Monday mornings there is often a backlog of patients in the Emergency Department waiting for admission to a hospital bed (these are patients that presented over the weekend). Monday is also usually the busiest day for booked surgery. Accessing in-patient beds is a more complex problem than just trying to make a bed available in a ward.

**Recommendation**

Access to inpatient beds in general hospitals is influenced by the lack of alternative facilities for the elderly and facilities for young chronically sick patients. The Committee agrees with the ERHA (38) proposals in this area and notes that the Health Strategy (1) has made substantial reference to the further development of services for older people – in terms of acute care, rehabilitation, day care, continuing care and enhanced community services.

The Committee recommends that:

- Consideration be given to the appointment of discharge co-ordinators to acute hospitals and the use of discharge lounges
- Standard protocols and procedures for discharge planning should be agreed in each health board area - capable of being measured in a national context.
- Studies should be undertaken by health boards to establish how services can be most effectively developed to care for older people at home.
- Studies should be undertaken to evaluate the strategies that can be developed to prevent re-admission, or admission to an acute hospital in the first place, where care at home could provide a better quality of life and would be the preferred choice of the patient.
- Funding should be targeted at developing bed capacity for the elderly and young chronic sick.

### 5.14 DESIGN OF EMERGENCY DEPARTMENTS

#### 5.14.1 Patient flow

The design of Emergency Departments (even some newer departments) does not always maximise patient flow. Design limitations can prevent maximum utilisation of Emergency Department facilities, compromise patient safety and confidentiality and lead to inefficient staffing and work practices within the department. Common problems include:

- An inadequate triage area, limited access from triage to treatment area, physical separation of reception and triage, staff being unable to observe waiting room
- Physical separation of acute area and examination cubicles
- Staff being unable to observe treatment areas from a central staff station
- Treatment areas and/or waiting room used as a pedestrian thoroughfare
Inadequate space around beds or in examination cubicles

Lack of safe room for managing aggressive patients or patients presenting with self-inflicted injuries

Inadequate staff facilities.

5.14.2 Size of the Emergency Department

A number of submissions to the Committee indicated that some Emergency Departments were too small to cater for the demand and that they suffered chronic overcrowding. It cannot be assumed however, that more space in the Emergency Department would prevent overcrowding without also considering other factors that contribute to delays in treatment. The ERHA (38) note that some Emergency Departments in the Eastern Region:

“. . were lacking in basic resources such as signage for waiting time, a room for bereaved relatives and security systems. The key finding from the site visits was that physical space was a severe constraint for all hospitals. In particular the shortage of cubicles and lack of patient privacy was notable. Some of the major hospitals expressed concern about the lack of appropriate facilities available to deal with psychiatric patients.”

Recommendation

The Committee notes that if the recommendations set out in earlier sections of this Report are to be met, significant resources should be made available in the context of increased system capacity to allow design changes and improvements to take place. The Committee recommends that:

- Hospitals identify and remove design elements that limit patient flow when refurbishing or building new Emergency Departments.

- Information systems in Emergency Departments should ensure that all data is computerised.

- There should be improvements in the waiting facilities of all Emergency Departments. Not only do physical facilities need to be improved, but there needs to be a liaison person to inform and attend to the needs of patients experiencing long delays in Emergency Departments.

- There should be bereavement facilities accessible from Emergency Departments. Specifically the comfort and design of relatives’ rooms, temporary mortuary facilities, and counselling services for bereaved relatives should be targeted for immediate improvement.
SECTION 6.
FUTURE ORGANISATION AND STAFFING
OF HOSPITAL EMERGENCY SERVICES
6.1 EMERGENCY SERVICE POLICY IN IRELAND

The Committee reviewed published reports and articles in specialty journals on Emergency Services in a number of countries including proposals for the reform and restructuring of Emergency Departments (Section 3.4).

In Ireland, two recently published documents consider and make recommendations on hospital-based emergency care. The Committee took particular account of these in formulating its recommendations.

‘Value for Money’ Report

In April 2000 the Department of Health & Children commissioned Deloitte & Touche, in conjunction with the University of York Health Economics consortium, to carry out an audit of the Irish health system over the past ten years under the heading of ‘Value for Money Report’ \(^{(2)}\). The Report was published in November 2001. The Report states that,

“There are however still a number of noticeable policy gaps, for example in relation to acute hospital services, (and) Accident & Emergency services”.

The Report highlights a number of issues.

“No one is promoting the debate as to what is the appropriate level of Accident & Emergency or other specialty service for a region”

“Circa 80 % of presentation is covered in 10 DRGs. Hospitals need to resource senior clinical decision-making for these areas in Accident & Emergency, and should put in place the appropriate levels of support for this in areas such as Anaesthetics, Labs and Surgery.”

The Report recommends that,

“Reviews should be carried out to assess the most appropriate way to deliver safe, high quality hospital services across the country. The terms of reference here should focus on:

- Development of regional Accident & Emergency centres of excellence (1-2 per region).
- The rationalisation of Accident & Emergency facilities across the country.”

“There are a number of priority areas where we believe investment needs to be targeted ... Priority areas include the development of systems for the acute sector. These include management systems for Accident & Emergency (primarily in Dublin)”.

In section 8.16, under the heading of ‘Accident & Emergency Services’, the Report states that,

“A fundamental issue with particular relevance to Ireland is the size of accident departments. There is a move in the UK and in Europe to provide urgent care for seriously ill patients by:

- Having fewer major providers of services for serious illness and accidents
- Treating minor injuries in less specialised facilities or through GPs
Sharing less serious work between doctors and nurses so that the most skilled resources can be kept free for the most serious cases

Establishing a network of centres to deal with major trauma.”

The Report goes on to note that,

“studies have found that minor hospitals are reasonably effective in dealing with urgent care. US studies support the advantages of major trauma centres, which have less frequent procedural mistakes and fewer avoidable deaths. Rapid access to an emergency operating facility and observation wards for monitoring of elderly and head-injured patients are also seen as key facilities for optimum patient management.”

“A particularly important feature to emerge from several reviews of the evidence and performance of accident departments is the need for senior medical input. Junior doctors in accident departments are often very junior and require skilled and experienced support. This is best provided by consultants. However, unless there is a team of about six to eight consultants, it is not possible to offer such support round the clock.”

“Many Accident & Emergency departments in Ireland continue to have no consultant staff, in spite of recent initiatives to recruit more. Some Board staff expressed a concern that additional consultants would not, on their own, resolve local service problems: One consultant is not of great value because they can only cover a department for a limited amount of time; Three consultants, for example, (due to additional recent recruitment) could cause other problems, in the absence of a clear strategy for Accident & Emergency, since their location in three departments could cause problems of competition for resources while provision of one per department would do little to raise standards.”

“Health Board staff also raised concerns about the quality of service available from NCHDs in Accident & Emergency departments at busy times without consultant supervision.”

“In the course of the present study, a range of factors, which may reduce the value for money of Accident & Emergency units, were noted:

- Some Health Boards currently operate several Accident & Emergency departments, which could ideally be rationalised and restructured
- Frequent reference is made to local political factors, including the views of local clinicians, that militated against change in Accident & Emergency services
- The lack of a national strategy for Accident & Emergency is a barrier to change locally
- There is scope to improve Accident & Emergency services through the development of trauma units, which could stimulate further change in the system. Services could be run in future on hub-and-spoke models with a central Accident & Emergency service, with two consultants, providing support for a local network of Accident & Emergency Departments.”
There are a number of concerns on aspects of management of Accident & Emergency services which arise:

- The lack of application of effective systems supported by the evidence, for example triage and associated streaming of major and minor cases
- The lack of agreed standards against which Accident & Emergency services could be benchmarked
- The management of follow-up patients
- The slow introduction of Medical Admissions Units
- The lack of consistent, timely, reliable information on Accident & Emergency activity across the health sector

The Report indicated that:

“There was also concern about the potential impact of the lack of integration of hospital and GP services. Many Health Board staff indicated that they believed too great a number of attendances at Accident & Emergency were “inappropriate”. One Board has interviewed attendees to find the reasons why people attended an Accident & Emergency department. The reasons include:

- A belief that it is a more appropriate place to attend than a GP surgery
- Because of the nature of their medical condition
- That they had to attend outside normal GP working hours
- That the cost (or perceived cost) of attending Accident & Emergency was less than the cost of seeing a GP for non-GMS cardholders”

The Report concludes the section on Emergency Departments by stating that,

“There is undoubtedly value in developing an extended role for nurse practitioners in Accident & Emergency; we recognise that industrial relations issues may arise in trying to achieve this objective. GPs are now widely employed in the UK to treat minor illness in Accident & Emergency departments ... it should be noted that GPs are typically more experienced than the grade of staff normally seeing patients in Accident & Emergency, the junior hospital doctor.”

**The Health Strategy**

The Health Strategy – “Quality and Fairness, A Health System for You” (1) – published by the Department of Health & Children in November 2001 identifies overall national goals to guide activity and planning in the health system for the next 7-10 years. The Committee welcomed the Strategy’s recommendations in relation to the staffing and resourcing of Emergency Departments.

The Strategy notes that during the consultative process which informed its recommendations,

“much concern was expressed about opening hours and appointment arrangements for out-patient clinics as well as excessive waiting times in Accident and Emergency departments. Submissions argued that patients’ loss of time, and how this affects their work and family commitments, are inadequately recognised in the organisation of the system.”

The underlying principle of the Strategy is ‘the right care in the right place at the right time’ and it goes on to note that,
“At present eligibility arrangements and availability of community-based services may encourage people to seek care in a setting that is not appropriate to their needs, e.g. persons who attend at Accident and Emergency (A&E) departments where there is an option to visit their GP”.

It states that,

“systems in hospitals will be reviewed to enhance clinical pathways. This will be aimed at improving the flow of patients through A&E departments, diagnostic services and the hospital generally.”

It proposes that,

“the strengthened primary care system will have a major impact in reducing demand for specialist services and the hospital system, particularly accident and emergency and out-patient services.”

Section 86 of the Strategy states that a substantial programme of improvements in Emergency Departments will be introduced.

“Significant initiatives will be taken to improve the operation of accident and emergency departments by directing patients to the most appropriate form of care and ensuring that those who need treatment are seen as quickly as possible.

- Additional A&E consultants will be appointed to organise and run A&E departments
- The increased availability of senior medical staff will facilitate rapid clinical decision making, enhanced management, diagnosis and treatment of patients
- Triage procedures will be put in place to help channel patients quickly to the most appropriate form of care
- The establishment of 24-hour GP co-operatives as part of the strengthening of primary care will help to reduce demand from, and treat appropriately, patients who would otherwise have to attend at an A&E department
- Minor injury units will be established to ensure appropriate treatment and management of non-urgent cases
- Chest pain clinics, respiratory clinics and in-house specialist teams will be used to fast-track patients as appropriate
- Diagnostic services will be organised to ensure increased access to and availability of services at busy times in A&E departments
- Advanced Nurse Practitioners (ANPs) (Emergency) will be appointed in acute hospitals. ANPs diagnose and treat certain groups of patients independently within agreed protocols
- Admission protocols will ensure that emergency patients will be the only group of patients admitted to hospital through the A&E department
- Hospitals will ensure that a member of staff will be available to liaise with patients while they await diagnosis and treatment at A&E departments
- Information systems will be introduced that record comprehensive, comparable and reliable data on activity in A&E departments. Such information will provide staff with a valuable tool in structuring services to meet the needs of patients.”
The Committee welcomes the improvements to hospital-based emergency care outlined in the Health Strategy \(^1\). In particular, the Committee considers that:

- Emergency health services must be enable patients to rapidly access appropriate care delivered in appropriate settings by relevant health care professionals.
- Emergency health services must be integrated and organised on a regional basis.
- Each service should have a clear, designated role within the regional network commensurate with its ability to provide appropriate and timely care to patients presenting and the clinical, diagnostic and other resources available to it. These services include: pre-hospital care, emergency transport, and hospital based services of varying complexity levels.
- All emergency health services should be guided by and have to meet agreed protocols and standards.

### 6.2 RE-ORGANISATION OF HOSPITAL-BASED EMERGENCY CARE

#### 6.2.1 The aim of hospital services

The Committee believes that the aim of hospital services is to ensure that people who need hospital treatment have the best possible outcome. This means that:

- **Patients must receive the right care** – bringing appropriate resources, staff and skills for optimal management of that person’s condition
- **Care must be delivered at the right time** – long waiting times have adverse impacts on the quality of patient care and outcomes for patients
- **Care must be delivered in the right place** – in a setting with the capacity and capability to meet the needs of the patient
- **Care must be delivered by the right people** – by staff appropriate to and trained for the best possible management of that patient’s condition.

#### 6.2.2 System-wide problems / system-wide solutions

During the Committee’s consultative process, representatives of health boards and hospitals stressed that emergency services should be reformed or restructured in conjunction with the rest of the hospital. It was repeatedly stated that many of the difficulties and delays experienced in Emergency Departments reflect system-wide problems: issues such as the demand experienced by each hospital, the resources available to it and the structure, organisation and staffing profile of the hospital. Much of the literature studied by the Committee emphasised this point and it is echoed in the Health Strategy \(^1\).

Many of those consulted stated that significant improvements in emergency services, including reductions in waiting times, would not happen without changes in the organisation of emergency care, better use of care pathways, increased and more timely access to diagnostics, better access to and management of inpatient beds and changes in the way health services responded to seasonal pressures. An important part of this
would be an evaluation of whether some of those patients currently treated in acute hospital beds could be more appropriately treated and managed in other settings.

It was put to the Committee that its task in making recommendations on reform of emergency services was to outline a system-wide approach that addressed system-wide problems.

The Committee concurs, and its key finding is that a ‘whole system’ approach to hospital care is required in order to ensure that hospital emergency services can be delivered effectively.

6.2.3 The organisation of hospital services
In order to provide appropriate care to patients, through the right people in the right location and at the right time, the Committee recommends that hospital services be explicitly organised in three distinct, but interdependent, streams or services:

1. Emergency care -
   Organised so that patients, depending on their needs, can move smoothly between Emergency Departments, assessment beds, intensive care, coronary care, the best inpatient medical and surgical care and have rapid access to appropriate diagnostic services and primary care.

2. In-patient Elective care -
   Encompassing inpatient beds in clinical specialties, diagnostic services – with strong links to Outpatient and Day Care facilities.

3. Day & Outpatient Care –
   Addressing the needs of patients who require non-urgent care in a hospital setting but who do not need admission to the hospital – including out-patient appointments, many diagnostic investigations, day surgery and various therapies and treatments.

This reconfiguration of services would require a range of designated beds including the following:

- Emergency Department Observation beds / trolleys for additional monitoring, investigation and treatment of emergency patients prior to admission or discharge.
- Beds in acute admission wards for short duration in-patient stay.
- Intensive care beds.
- Coronary care beds.
- Specifically designated beds which deal with elective patients and longer stay patients in need of acute care, medical, surgical and other specialty care.
- Rehabilitation beds.
- Long-stay beds for patients in need of continuing acute care.

The hospital would also be supported by beds in a range of other facilities.

6.2.4 The Hospital Emergency Service
For emergency care to work efficiently, the hospital emergency service must be organised so that patients, depending on their needs, can move smoothly between Emergency Departments, minor injury & illness areas, primary care, assessment beds, intensive care, coronary care, the best inpatient medical and surgical care and have rapid
access to appropriate diagnostic services. The Hospital Emergency Service would therefore:

1. be supported – as appropriate - by observation and minor injury & illness areas
2. encompass triage areas, treatment and observation facilities, diagnostic facilities, assessment beds, acute inpatient beds for short-stay emergencies
3. be staffed by emergency doctors, nurses and other grades of staff

6.2.5 Benefits of reform

The Committee recognises that its proposals will involve significant reorganisation, restructuring and re-engineering of hospitals and the development of Hospital Emergency Services.

Reform of hospital services however, will improve integration between different specialties and departments; allow the introduction of standardised protocols for admission, management and discharge of the patient; and facilitate the timely flow of patients through the hospital.

6.2.6 Hospital Emergency Service Flowchart

On the following page is a flowchart illustrating ideal patient flow through a hospital emergency service. For departments with 20,000 or more new attendances per annum, facilities should include the following,

- Separate entrance for ambulance referrals
- Dedicated radiology facilities
- Separate waiting area
- Separate resuscitation room
- Separate treatment / procedure room
- Separate area for patients on trolleys

Separate streams for assessment and treatment related to acuity and severity of injury and illness and appropriate treatment areas for children and patients presenting with psychiatric problems.
HOSPITAL EMERGENCY SERVICE FLOWCHART

AMBULANCE-BORNE EMERGENCIES

GP EMERGENCY REFERRALS

SELF REFERRED UNDIFFERENTIATED

TRIAGE NURSE
Clinical sorting

RECEPTIONIST
Patient administration

WAITING ROOM

EXAMINATION / DIAGNOSIS / INVESTIGATION / RESUSCITATION / STABILISATION
DEFINITIVE CARE DECISION

SPECIALTY ATTENDING STAFF

DISCHARGE HOME

HOSPITAL ADMISSION
(ICY / CCU / OP. THEATRE & ACUTE ADMISSION WARDS)

MEDICAL SURGICAL DAY UNITS

EMERGENCY DEPARTMENT OBSERVATION UNIT

OUTPATIENTS:
FRACTURE CLINICS AND SELECTED ENT.
OPHTHALMOLOGY & MAXILLO-FACIAL EMERGENCIES ONLY
6.3 THE CHANGING ROLE OF THE CONSULTANT IN EMERGENCY MEDICINE

As is set out previously, Emergency Departments in Ireland are currently staffed by a small number of consultants (a total of 21 permanent posts), junior doctors (245 – a ratio of 10 junior doctors for every consultant) and nurses. In Emergency Departments there is wide variation in the mix of staff (i.e. the number of consultants in Emergency Medicine, registrars, SHOs and nurses) employed.

This review and the funding by the Department of Health & Children of 29 additional consultant posts offer an opportunity to make recommendations on operational and staffing structures more appropriate to the needs of modern Emergency Departments.

6.3.1 Consultants

Information supplied to the Committee throughout the course of its consultations indicates that Emergency Departments are generally busier at lunchtime, in the evenings (around 6-7pm), on Fridays and at weekends. However most hospitals do not appear to use attendance data to develop medical staff rosters. In most hospitals, the number of medical staff at work during high activity periods is often the same as, or less than, normal business hours. In the current hospital medical system, senior cover (and the number of consultants in Emergency Medicine on the floor) peaks during normal working hours. The result is that the most qualified and experienced doctors are not necessarily working when the Emergency Department is at its busiest.

From the presence of consultant and senior medical staff in the Emergency Department the following benefits could be expected to accrue;

- Improvement in the quality of care in Emergency Departments
- More rapid and improved patient throughput
- Reduction in the number of errors attributable to junior staff inexperience
- A reduction in the number of unnecessary investigations, admissions, waiting times, treatment times and review attendances
- Improvements in teaching, training and supervision of medical staff
- Reduction in costs associated with inefficient use of medical staff
- Improvement in the community’s perception of, and confidence in, the Emergency Department.
- Improved quality assurance and risk management
- A reduction in the number of complaints
- Improvement in the reputation of the Emergency Department among other medical groups
- Improvement the use of new technology.

Consultants and senior medical staff should be of maximum benefit to patients when;

- Staff are allocated according to peak times and demands
- Senior staff are rostered during the busy periods (including evenings and weekends)
- Senior staff provide cover after hours
- Junior medical staff are rostered with senior medical staff for supervision
- There is sufficient overlap between shifts to ensure a comprehensive patient handover process
- The risk of fatigue associated with working long hours in any one period is minimised.
Consultants in Emergency Medicine play a key clinical and managerial role in Emergency Departments. The appointment of additional consultants should contribute to improvements in patient care and the flow of patients through the Emergency Department. However, appointing additional Consultants in Emergency Medicine without ensuring changes in the organisation of Emergency Departments and hospital emergency care will have limited impact.

The primary means of ensuring high quality patient care in Emergency Departments is through the provision of services according to the clinical needs of patients as they present. This involves the introduction and use of triage systems, better interaction with primary care, the timely transfer of patients to the appropriate treatment location within the hospital or to another facility, greater roles for nurses within the Emergency Department, Minor Injury & Illness Areas, Observation Wards, dedicated and accessible diagnostic facilities and a distinct management structure for the Hospital Emergency Service.

The Committee believes that these systems and measures can be augmented by the appointment of additional Consultants in Emergency Medicine with substantially increased clinical commitments, located within each region where such consultants are of maximum benefit to patients and with on-site access to appropriate clinical and diagnostic resources.

6.4 NATIONAL STRUCTURE OF EMERGENCY DEPARTMENTS

Taking account of the above, it is recommended that a three-tiered Emergency Department system be adopted nationally.

Within this system, the three tiers would be organised as follows,

1. A Regional Emergency Department providing a comprehensive service and located in a major regional hospital
2. A Hospital Emergency Department with access to some specialist surgical and medical services on-site
3. A Hospital Emergency Department with access to specialist services off-site.

Factors such as population catchment size, attendance rates, accessibility, the hospital network, clinical resources, diagnostic resources, staffing profile and national and international best practice indicate that, in some instances, it is more appropriate for two or more hospitals to function, be staffed and be organised as one Emergency Department. In this context, specific recommendations for each health board area are set out in later sections of this report.

6.4.1 Regional Emergency Departments (RED)

- The Regional Emergency Department, located in a major regional hospital, would serve a catchment population of about 250,000. The hospital would function as the major trauma-receiving hospital for the region, provide a referral service for local general hospitals, provide advice and stabilisation for complex cases referred from general hospitals and other emergency services and participate in the regional retrieval service.
Emergency Departments in these hospitals would provide resuscitation, stabilisation and initial treatment for all emergencies. They would be staffed by a number of consultants in Emergency Medicine (one of whom would have a special interest in paediatric emergency medicine) and a multi-professional team. This team would include emergency nurse practitioners, NCHDs in emergency medicine and NCHDs in recognised training posts in other specialties. Each Regional Emergency Department would be led by a Director who would be one of the consultants in emergency medicine. The consultants in emergency medicine would provide extensive out-of-hours cover.

Each of these hospitals would require rapid access to the following specialist, diagnostic and support services: Acute Medicine (including cardiology), General Surgery, Trauma & Orthopaedic Surgery, Obstetrics & Gynaecology, Intensive Care Medicine, Anaesthesia, Paediatrics, Pathology, Radiology, Liaison Psychiatry. Medical and surgical sub-specialties would be available, or on-call, 24 hours. Most, if not all, of these would be on-site. Rapid access to Neuro-surgery and Cardi-thoracic Surgery services would be required. Extended hours access to health and social care professionals. 24 hour availability of CT, x-ray rooms and operating theatres. Access to nuclear medicine, ultrasound, interventional radiology and MRI. Link to local GPs, including GP Co-ops and primary care centres.

Having regard to the recommendations of the Forum on Medical Manpower and the Hanly Report as well as the remit of the recently established National Taskforce on Medical Staffing, the Committee recommends that a Consultant provided service is available in these Regional Emergency Departments between the hours of 8am and 8pm and during busy periods, 7 days a week, 365 days a year.

6.4.2 Hospital Emergency Departments with access to some specialist surgical and medical services on-site

Such Departments would be linked to the Regional Emergency Department for trauma services, sub-specialty services, and certain diagnostic services. Each would have access to regional retrieval services.

Hospitals with these Departments would be able to manage most emergencies, including stabilisation and assisted ventilation. They would have an on-site ability to provide a team response and would be staffed by 1-2 Consultants in Emergency Medicine and a multi-professional team. This team would include emergency nurse practitioners, NCHDs in emergency medicine and/or NCHDs in recognised training posts in other specialties. One of the consultants would function as Head of the Hospital Emergency Department. There would be access to Consultants in Emergency Medicine in the Regional Emergency Department for support, development and training purposes. Experienced doctors, with resuscitation training, should be on-site 24 hours.

Each of these hospitals would require the following specialist, diagnostic and support services on-site: Acute Medicine, General Surgery, Anaesthesia, Paediatrics, Pathology, Radiology, Psychiatry. Access to health & social care professionals. After hours availability of pathology, radiology, CT and operating theatres. Links to local GPs including, GP Co-ops and primary care centres.
6.4.3 Hospital Emergency Departments with access to specialist services off-site.

- Each of these Hospital Emergency Departments would provide nurse-led services for minor illness and injury together with 24-hour access to medical staff on-site and resuscitation and limited stabilisation prior to referral to the Regional Emergency Department (if necessary). Services would be provided mainly between 8am – 8pm.

- Patients arriving at these Hospital Emergency Departments would have 24-hour access to medical staff. A consultant on the hospital staff would function as the lead clinician in, and have responsibility for, the organisation and co-ordination of the Hospital Emergency Department. This consultant should have protected time to undertake this task. There would be access to Consultants in Emergency Medicine in the Regional Emergency Department for support, development and training purposes.

- Each of these Hospital Emergency Departments would have access by phone to specialist consultation through a well-organised communication system and referral network, a retrieval and transport service as well as on-call access to pathology, radiology and operating theatres. Each hospital would have strong links to local GPs including GP Co-ops and primary care centres.

Having taken population catchment size, attendance rates, accessibility, demographics, the hospital network, clinical resources, diagnostic resources, staffing profile and national and international best practice into account, the Committee recommends 13 Regional Emergency Departments. Specific recommendations for each health board and hospital are set out in later sections of this report.

6.5 FUTURE STAFFING OF HOSPITAL EMERGENCY SERVICES

The Committee recognises the need for senior clinical decision making within the Hospital Emergency Service. Clear clinical governance and accountability arrangements must be in place within the Hospital Emergency Service, 24 hours a day, 7 days a week. This means that there is a need to put in place dedicated cover / roster arrangements for emergency acute admissions as appropriate.

This will involve Consultants in a variety of specialties, most importantly in Medicine and Surgery and Emergency Medicine where such are appointed.

6.5.1 Regional Co-ordinator of Emergency Services

The Committee recommends that each health board should have a Regional Co-ordinator of Emergency Services who would advise the health board on the operation and organisation of emergency services and would be responsible for the development and implementation of agreed protocols across the regional emergency service including each hospital in the health board area. Additionally, the Co-ordinator must reach out into the community to establish and provide services for pre-hospital care and disaster planning.

- The Regional Co-ordinator of Emergency Services would also function as the Director of the Regional Emergency Department where he/she would be based.
In health board areas where there are two or more hospitals functioning as Regional Emergency Departments, the post of Regional Co-ordinator of Emergency Services could be assigned to one of the RED Directors after local negotiation. A rotation arrangement would be an alternative possibility.

6.5.2 Director of the Regional Emergency Department

- The Committee recommends that each Regional Emergency Department would be led by a Director who would be one of the Consultants in Emergency Medicine. The post could rotate between different consultants in the Emergency Department or be filled from a competitive appointment process.
- It is envisaged that the Director of the Regional Emergency Department would have overall clinical and administrative responsibility for the Emergency Department. All staff in the department would be responsible to the Director on operational matters. This does not preclude policy and ethical responsibility that staff members may have to others in the hospital.
- He / She would chair the Hospital Emergency Service Committee
- The Director must have a significant sessional commitment to clinical duties in addition to his or her management role.
- Besides clinical duties, the Director must work closely with hospital administration, medical staff and committees to build and maintain efficient Emergency Department services. Equally importantly, a close working relationship with nursing and ancillary personnel must be fostered to provide the teamwork necessary in an emergency situation.

6.5.3 Consultant in Emergency Medicine

Consultants in Emergency Medicine treat patients of all ages with emergency medical problems and injuries, covering the breadth of medicine. They deal with episodic and emergency care, referring longer-term acute care, elective procedures and the follow-up of chronic problems to others. The large majority of the sessional commitment of a Consultant in Emergency Medicine should be to clinical as distinct from administrative duties or legal work. His or her clinical duties centre on the stabilisation of patients in order to ensure that all life-threatening causes of illness and injury are investigated. The Consultant in Emergency Medicine is responsible for ensuring that the patient is admitted to the most appropriate service to further explore the problem if such is required.

Depending on the number of Consultant posts in Emergency Medicine in a service, different rosters and cover arrangements will apply. All Consultants in Emergency Medicine, other than the Regional Directors, should have a majority clinical commitment.

One of the Consultants in Emergency Medicine in the Regional Emergency Department should have a special interest in paediatric emergency medicine.

In those hospitals where two Consultants in Emergency Medicine are recommended, it is envisaged that the clinical and administrative work will be shared. One of the consultants would function as Head of the Emergency Department, perhaps on a rotational basis.
6.5.4 Hospitals Emergency Services which do not have a Consultant in Emergency Medicine

In hospitals which do not have a Consultant in Emergency Medicine, the committee envisions that one of the existing complement of consultants or an appointee to a new post would function as the lead clinician of the Hospital Emergency Service. In this context, the Committee recommends that consideration be given to additional consultant staffing or revised sessional commitments in, for example, medicine and surgery to ensure appropriate clinical governance arrangements and facilitate the operation and staffing of the Hospital Emergency Department in these hospitals.

6.5.5 Consultant staffing issues

The main proposal of the Report of the Forum on Medical Manpower is that change in the work practices of hospital consultants to provide for the formal rostering of consultants and participation in flexible rostering arrangements outside 9am to 5pm Monday to Friday, together with a substantial increase in the number of consultant posts, would be the most coherent, efficient, and cost effective way of resolving deficits in the medical workforce and improving patient care.

The Committee notes that 75% of patients attend Emergency Departments between the hours of 8am and 8pm. Having regard to the recommendations of the Forum on Medical Manpower, the Hanly Report and the remit of the recently established National Taskforce on Medical Staffing, the Committee’s recommendations aim to put in place structures which facilitate the on-site presence of Consultants in Emergency Medicine in Regional Emergency Departments between the hours of 8am and 8pm, 7 days a week, 365 days a year.

The Committee is aware of the industrial relations issues which will need to be resolved to support some of these recommendations. The Health Strategy (1) states,

“The forthcoming negotiations on the consultant contract must be undertaken using a developmental agenda which will involve restructuring key elements of the current system to promote equity of access, organisational improvements and more clinical involvement in and responsibility for management programmes. In addition, the introduction of more flexible work practices, including team-working, rostering, cover arrangements, competence assurance and accountability initiatives must be addressed. The aim will be to build on the strengths of the present system while also providing the necessary flexibility to implement the improvements which are required in the provision of health services to public patients.”

6.5.6 The continuum of emergency services

Emergency services extend beyond the Emergency Department, into the hospital and out to the community. Hospitals play a central role in this continuum. There is a need for a defined management structure to be established within each hospital so that each hospital can act as the focal point for local emergency services.

6.5.7 Hospital Emergency Service Committee

The Committee recommends that a Hospital Emergency Service Committee be established in each hospital. It should be chaired by the consultant in charge of emergency services in that hospital and supported by an appropriate administrative
structure including a designated Hospital Emergency Service Manager. The committee should comprise acute medical, acute surgical, paediatric, obstetric, psychiatric, anaesthetic, radiology and pathology staff, together with nursing, health & social care professionals, ambulance staff and general practitioners.

6.5.8 Appropriately trained doctors
The Committee notes that while appropriately trained doctors must be available to each patient attending the Emergency Department, elements of patient care are often most appropriately delivered by nurses, emergency medical technicians, paramedics, ambulance staff and other staff.

During the course of its consultations, the Committee was repeatedly urged by Consultants in Emergency Medicine to recommend the introduction of a middle-grade doctor in Emergency Medicine. No firm definition of the qualifications or training appropriate to this proposed grade was offered. However comparisons were made to the roles of Clinical Assistant and Staff Grades in the UK and the proposals of the Irish Association for Emergency Medicine.

The Committee is aware that many Emergency Departments rely on long-term NCHDs – often employed as registrars - who are not in training posts to deliver services. The Committee was informed that these doctors are vital to out-of-hours and weekend service provision in Emergency Departments.

The Committee suggests that the issue of a permanent middle or career grade doctor be considered by the National Task Force on Medical Staffing. The trebling of consultant posts recommended later may address the service issues currently provided by such doctors.

6.5.9 Role of NCHDs
The report of the National Joint Steering Group on the Working Hours of NCHDs (Hanly Report) examined the current working hours of NCHDs with the aim of informing the EU Working Time Directive implementation process. The Report notes that NCHDs are currently working an average of 77 hours per week. This number of hours includes all duty hours, whether working or resting, on-site or at home. The Report identifies the following main causes of long working hours for NCHDs,

- Inappropriate working patterns
- Inefficient on-call rotas
- Inappropriate activities
- Inadequate rest periods
- Persistent unrostered hours
- Lack of locum cover
- Too few doctors

The Report concluded that 17% of NCHD working hours are spent on inappropriate activities and recommends that these activities be performed by other grades of hospital staff, including consultants, nurses, clerical staff and others. It also concludes that the implementation of the EU Working Time Directive will result in a deficit in hospital medical hours, that this deficit should be addressed by the creation of additional consultant posts and notes that consultant work practices are about to be renegotiated.
The British Accident & Emergency Association (BAEM) has made recommendations regarding SHO staffing of Emergency Departments which have been reiterated by the Irish Association for Emergency Medicine.

The Committee recognises that the quality of care in the Emergency Department relies heavily on the skills and experience of medical staff and the supervision and training of NCHDs.

While NCHDs can form part of the workforce in an Emergency Department (the current ration of Consultant:NCHD in Emergency Departments is 1:10) and while much training is experiential; supervision is essential and there is a need for them to be able to call for assistance and guidance whenever required.

The Report of the Forum on Medical Manpower (39) notes that:

“Frontline services are mainly provided by NCHDs in temporary positions, many of whom are in the early stages of their training or not in formal training posts.”

It goes on to state that:

“A primary concern in re-evaluating the skill mix required for different grades of doctor in the Irish hospital medical system is ensuring competence and quality in service delivery ...

In this respect, identifying those tasks that can be delivered – for instance – by clerical and administrative staff or other support staff should impact positively on both quality assurance and service delivery.

Job descriptions specifying the scope and duration of the duties expected of a NCHD and reduction in unsupervised work practices could also result in improved service delivery.”

The Committee recommends that,

- NCHDs working in Emergency Departments should have access to accredited training opportunities – ideally, all NCHDs in Emergency Departments would be in structured training posts.

- Each Emergency Department should have a training strategy in place that defines the approach used and the duties of those responsible for the provision of training and provides supervision, monitoring and assessment of trainee progress.

- Hospitals should provide orientation for doctors commencing work in the Emergency Department and consider the introduction of formal programmes that allow doctors to be supernumerary for a number of shifts while they learn the system.

- NCHDs should be able to rotate between hospitals within a Regional Emergency Service.
6.5.10 Role of Nurses

Many nurses are educated to undertake roles that extend beyond their traditional duties. Nurse-initiated treatments are commonplace (as doctors may not always be available immediately) where there are appropriate protocols in place and training is provided. One study has found that experienced Emergency Department nurses were frequently advising junior doctors regarding areas of diagnosis and treatment.

“Properly trained accident and emergency nurse practitioners who work within agreed guidelines can provide care for patients with minor injuries that is equal or in some ways better than that provided by junior doctors.

The nurse practitioners were better than junior doctors at recording medical history and fewer patients seen by a nurse practitioner had to seek unplanned follow-up advice about their injury. There were no significant differences between nurse practitioners and junior doctors in the accuracy of examination, adequacy of treatment, planned follow-up, or requests for radiography. Interpretation (of x-rays) was similar (between nurse practitioners and junior doctors).” Lancet – Vol 354

In the UK, the number of doctors working in Emergency Departments has increased by 10% since 1998. There has been little or no change in the number of nurses. The Audit Commission (62) note that about 60% of patients attending Emergency Departments can be classified as ‘non-urgent’ and that “a high proportion of these could be treated by nurse practitioners.

‘By Accident & Design’ (7) states that,

“at Southend, one quarter of all A&E patients were treated solely by nurses, and most are discharged within 15 minutes of arrival”.

A number of reports (63) (64) (65) have encouraged the further development of the Nurse Practitioner role as one method of improving the quality of care and reducing waiting times. The Health Strategy (1) states that,

“Advanced Nurse Practitioners (ANPs) (Emergency) will be appointed in acute hospitals. ANPs diagnose and treat certain groups of patients independently within agreed protocols.”

The Strategy goes on to state that further initiatives will,

“Develop further clinical specialist and advanced practitioner posts in nursing and midwifery within the framework of the new National Council on Nursing and Midwifery.

The National Council for the Professional Development of Nursing and Midwifery is the statutory body preparing the framework for the introduction of the Advanced Nurse Practitioner in the Irish health system. The National Council has developed the definition and core concepts of the role of the Advanced Nurse Practitioner/Advanced Midwife Practitioner (ANP/AMP):

“Advanced nursing and midwifery practice is carried out by autonomous, experienced practitioners who are competent, accountable and responsible for their own practice. They are highly experienced in clinical practice and are educated to Masters degree level (or higher). The post-graduate programme must be in
nursing/midwifery or an area which is highly relevant to the specialist field of practice (educational preparation must include substantial clinical modular component(s) pertaining to the relevant area of specialist practice).

ANPs/AMPs promote wellness, offer healthcare interventions and advocate healthy lifestyle choices for patients/clients, their families and carers in a wide variety of settings in collaboration with other healthcare professionals, according to agreed scope of practice guidelines. They utilise sophisticated clinical nursing/midwifery knowledge and critical thinking skills to independently provide optimum patient/client care through caseload management of acute and/or chronic illness. Advanced nursing/midwifery practice is grounded in the theory and practice of nursing/midwifery and incorporates nursing/midwifery and other related research, management and leadership theories and skills in order to encourage a collegiate, multidisciplinary approach to quality patient/client care.

ANP/AMP roles are developed in response to patient/client need and healthcare service requirements at local, national and international level. ANPs/AMPs must have a vision of areas of nursing/midwifery practice that can be developed beyond the current scope of nursing/midwifery practice and a commitment to the development of these areas.

In Ireland, a small number of Advanced Nurse Practitioner (ANP) posts are in place in Emergency Departments. In the UK, Emergency Nurse Practitioner (ENP) teams were set up in 1996 as a direct result of the government initiative to reduce waiting times and improve quality within Emergency Departments as advocated by the Audit Commissions report (7). This was the formalisation of practice that had occurred within Emergency Departments for many years, recognising that senior nursing staff had been treating and discharging patients and utilising their skills and knowledge of minor injuries and complaints. The initial programme included the recruitment of full time ENP’s from within the existing nursing establishment and training them “in-house” to assess, diagnose, treat and discharge patients which enabled them to manage a complete patient caseload.

The committee welcomes the policies and developments that are taking place in relation to extending the role of nurses in Emergency Departments.

6.5.11 Ambulance & Paramedical Staff
As is set out in Section 5.7 of this Report, this Committee was not asked to make recommendations on the structure and organisation of ambulance services. It is important to note that the Pre-hospital Emergency Care Council is currently in the process of developing professional and performance standards for ambulance services and personnel.

6.5.12 Summary
In summary, staffing of the Hospital Emergency Service will involve:

- Consultants in Emergency Medicine where appropriate (including one with a special interest in paediatric emergency medicine)
- Consultants in Medicine, Surgery and Paediatrics– participating in the clinical governance of the Hospital Emergency Service. Increases in consultant staffing or
revised sessional commitments may be required. This particularly applies to smaller hospitals with low attendances in the Emergency Department.

- NCHDs in emergency medicine and in a number of other specialties – ideally in accredited training positions
- Nursing staff – some of whom may be Advanced Nurse Practitioners (Emergency)
- Administrative and clerical staff – including a Manager for the Hospital Emergency Service
- Essential support staff

6.6 HOSPITAL EMERGENCY SERVICES BY HEALTH BOARD AREA

The consultative process, population catchments, attendance rates, geographical factors, the hospital network, clinical and diagnostic resources and the policy considerations set out earlier have been taken into account by the Committee in recommending the following structure of Hospital Emergency Services in each health board area.

6.6.1 East Coast Area Health Board (population 325,000)

There are 3 acute general hospitals in the East Coast Area: St Vincent’s – with 34,548 new Emergency Department attendances in 2000; St Colmcille’s – with 22,593 new attendances; and St Michael’s - with 15,874 new attendances. There is one existing permanent post of Consultant in Emergency Medicine in the East Coast Area – based in St Vincent’s Hospital.

A package of proposals regarding the future structure and staffing of Emergency Departments in the East Coast Area was submitted to the Comhairle Committee by the ECAHB, St Vincent’s and St Michael’s. The Committee took account of these proposals in formulating its recommendations.

The Committee recommends that a Regional Emergency Service be established in the ECAHB region, with St Vincent’s as the Regional Emergency Department. The Coordinator of the Regional Emergency Service, who would also be the Director of the Regional Emergency Department, would be based in St Vincent’s Hospital. The Committee recommends 2 additional posts of Consultant in Emergency Medicine for the East Coast Regional Emergency Service – leading to a total of 3 posts based at St Vincent’s University Hospital with sessional commitments to St Colmcille’s and St Michael’s hospitals.

The Committee also recommends that in the event of:

- The putting in place of the internal Emergency Department processes and systems detailed in this report
- The development of Hospital Emergency Services and a Regional Emergency Service along the lines set out in this report
- Resolution of a number of industrial relations issues which would enable on-site rostering of consultants at busy times in the Emergency Department

that an additional 2 posts of Consultant in Emergency Medicine be approved for the East Coast Regional Emergency Service – contributing to a total of 5 posts based at St. Vincent’s Hospital.
6.6.2 Northern Area Health Board (population 455,000)

There are 3 acute general hospitals and a standalone children's hospital in the Northern area:- The Mater Misericordiae Hospital– with 50,952 new Emergency Department attendances in 2000; Beaumont Hospital – with 46,554 new attendances; James Connolly Memorial Hospital, Blanchardstown – with 24,556; and The Children’s Hospital, Temple Street with 41,256 new attendances in 2000. There are 5 existing permanent posts of Consultant in Emergency Medicine in the Northern area – 2 based in the Mater, 1 in Beaumont, 1 in JCM Blanchardstown and 1 in the Children’s Hospital Temple Street.

The Committee recommends that a Regional Emergency Service be established in the Northern area with a Regional Co-ordinator to be determined after local agreement.

The Committee recommends that Beaumont Hospital be designated as a Regional Emergency Department with a complement – initially – of 3 posts of Consultant in Emergency Medicine, one of whom would be the Director. This will entail the creation of 2 additional posts. The Committee also recommends the appointment of 1 additional post of Consultant in Emergency Medicine to JCM Hospital, Blanchardstown – leading to a complement of 2 posts.

The Committee notes that The Children’s Hospital, Temple Street is in the process of moving to a new site on the Mater Hospital campus. The Committee was informed by representatives of the two hospitals that ‘back to back’ Emergency Departments would be constructed – with some joint facilities. The Committee recommends a unified Regional Emergency Department at the Mater/Temple Street campus staffed initially by 5 consultants, one of whom would be the Director. This will entail the creation of two new posts.

The Committee also recommends that in the event of:

- The putting in place of the internal Emergency Department processes and systems detailed in this report.
- The development of Hospital Emergency Services and a Regional Emergency Service along the lines set out in this report.
- Resolution of a number of industrial relations issues which would enable on-site rostering of consultants at busy times in the Emergency Department.

That an additional post of Consultant in Emergency Medicine be approved for Beaumont giving a complement of 4 posts: that an additional post be approved for the Mater/ Temple Street. The later is subject to the establishment of a Regional Emergency Department on the combined Mater/Temple Street campus dealing with adults and children. Such a department would then have a complement of 6 consultant posts in Emergency Medicine.

6.6.3 South Western Area Health Board (population 515,000)

There are 3 acute general hospitals and a standalone children’s hospital in the South Western area:- St James’s – with 44,698 new Emergency attendances in 2000; Tallaght Hospital – with 42,547 new adult Emergency Department attendances and 24,663 new paediatric Emergency Department attendances; Naas Hospital – with 17,064 new attendances; and Our Lady’s Hospital for Sick Children, Crumlin – with 28,375 new attendances in 2000.
attendances in 2000. There are 5 existing permanent posts of Consultant in Emergency Medicine in the South Western area – 2 based in St James’s, 2 in Tallaght, and 1 in OLHSC Crumlin.

The Committee recommends that a Regional Emergency Service be established in the South Western area with a Regional Co-ordinator to be established after local agreement.

The Committee recommends that St James’s and Tallaght hospitals are each designated as Regional Emergency Departments.

The Committee recommends that Tallaght and Naas function as one Regional Emergency Department – and is staffed by the same complement of consultants based at Tallaght with sessional commitments to Naas. The Committee notes the separation of adult and paediatric attendees in Tallaght and the volume of such attendances and it is recommended that Tallaght have a complement – initially – of 4 posts of Consultant in Emergency Medicine. This will entail the creation of 2 additional posts.

The Committee recommends the creation of 1 additional post of Consultant in Emergency Medicine in St James’s Hospital – leading to a complement of 3 permanent posts; and the creation of 1 additional post in OLHSC Crumlin – leading to a complement of 2 permanent posts.

The Committee also recommends that in the event of:

- The putting in place of the internal Emergency Department processes and systems detailed in this report
- The development of Hospital Emergency Services and a Regional Emergency Service along the lines set out in this report
- Resolution of a number of industrial relations issues which would enable on-site rostering of consultants at busy times in the Emergency Department.

that an additional 1 post of Consultant in Emergency Medicine be approved for Tallaght Hospital – subject to the operation of single department of Emergency Medicine serving adults and children from the combined Tallaght and Naas catchment areas - contributing to a total of 5 posts; that an additional 1 post be approved for St James’s – leading to a complement of 4 posts; and that 1 additional post be created in OLHSC – for a total of 3 posts.

6.6.4 Midland Health Board (population 205,542)

There are 3 acute general hospitals in the Midland Health Board area:- Tullamore – with 21,282 new Emergency Department attendances in 2000; Mullingar – with 22,492 new attendances; and Portlaoise - with 15,745. There are no permanent posts of Consultant in Emergency Medicine in the Midland Health Board area.

Tullamore is designated as the Regional Centre for some specialties – including Trauma & Orthopaedic Surgery and Otolaryngology. However, it does not have Paediatrics, Obstetrics & Gynaecology or Psychiatry services on-site. Mullingar has a larger catchment population and a slightly larger number of new attendances and has Paediatrics, Obstetrics & Gynaecology and Psychiatric services on-site or nearby. There is little agreement at health board, hospital or staff level regarding the designation of one or other of these hospitals as a regional centre. Mullingar and Portlaoise are equidistant – about 30 miles – from Tullamore.
In the context of geographical and demographic factors, the hospital network, specialty distribution and international best practice, the Committee recommends that a Regional Emergency Department be established at Tullamore.

The Co-ordinator of the Regional Emergency Service, who would also be the Director of the Regional Emergency Department, would be based in Tullamore.

The Committee recommends 2 posts of Consultant in Emergency Medicine for Tullamore, one with a sessional commitment to Portlaoise; and 2 posts of Consultant in Emergency Medicine for Mullingar - each with a sessional commitment to Tullamore.

**The Committee also recommends that in the event of:**

- The putting in place of the internal Emergency Department processes and systems detailed in this report
- The development of Hospital Emergency Services and a Regional Emergency Service along the lines set out in this report
- Resolution of a number of industrial relations issues which would enable on-site rostering of consultants at busy times in the Emergency Department

that an additional post of Consultant in Emergency Medicine be approved for Tullamore – contributing to a total of 5 posts in the Midland region.

6.6.5 Mid-Western Health Board (population 317,069)

There are 4 acute general hospitals in the Mid-Western Health Board area:- Mid-Western Regional Hospital, Limerick – with 53,403 new Emergency Department attendances in 2000; Our Lady’s Hospital Ennis – with 15,249; Nenagh – with 7,414; and St John’s Hospital with 12,901. There is 1 existing post of Consultant in Emergency Medicine in the Mid-Western Health Board area, based in Mid-Western Regional Hospital, Limerick.

The Committee took into account the plan for the development of emergency services in the region presented by the MWHB and recommends that a Regional Emergency Service be established in the Mid-Western area. The Director of the Regional Emergency Department, who would also be the Regional Co-ordinator, would be based in the Regional Emergency Department at the Mid-Western Regional Hospital, Limerick, formerly known as Limerick Regional.

The Committee recommends that 2 additional posts of Consultant in Emergency Medicine be approved for the Mid-Western Regional Emergency Department – based in Mid-Western Regional Hospital. This would lead - initially - to a total of 3 posts with sessional commitments to Ennis, Nenagh and St. John’s hospitals.

**The Committee also recommends that in the event of:**

- The putting in place of the internal Emergency Department processes and systems detailed in this report
- The development of Hospital Emergency Services and a Regional Emergency Service along the lines set out in this report
- Resolution of a number of industrial relations issues which would enable on-site rostering of consultants at busy times in the Emergency Department

that 2 additional posts of Consultant in Emergency Medicine be approved for the Mid-Western Emergency Service – each post to be based in the Mid-Western Regional Hospital, Limerick - contributing to a total of 5 posts in the Mid-Western region.
6.6.6 North Eastern Health Board (population 306,155)
There are five acute general hospitals in the North Eastern Health Board, organised in two hospital groups – the Louth Meath Hospital Group, comprising Our Lady of Lourdes Hospital Drogheda – with 27,420 new Emergency Department attendances in 2000; Dundalk – with 18,975 and Navan – with 14,656 new attendances in 2000; and the Cavan/Monaghan Hospital Group, comprising Cavan – with 15,906 new Emergency Department attendances in 2000 and Monaghan – with 3,338 new attendances in 2000. Dundalk and Navan are both less than 20 miles from Drogheda. There is one existing post of Consultant in Emergency Medicine in the NEHB area, based in Our Lady of Lourdes Hospital, Drogheda – which has a regional remit.

In the context of geographical and demographic factors, the hospital network, specialty distribution and international best practice, the Committee recommends that a Regional Emergency Department be established in the NEHB area based at Drogheda. The Regional Emergency Service Co-ordinator, who would be the Director of the Regional Emergency Department, would be based in Drogheda.

The Committee recommends the creation of 3 additional posts of Consultant in Emergency Medicine – 2 based in Drogheda with sessional commitments to Dundalk and Navan and 1 based on the Cavan site of the Cavan / Monaghan Hospital – with access to the Regional Emergency Department in Drogheda.

These arrangements would lead - initially - to a total of 3 posts based in Drogheda and 1 in Cavan.

The Committee also recommends that in the event of:
- The putting in place of the internal Emergency Department processes and systems detailed in this report
- The development of Hospital Emergency Services and a Regional Emergency Service along the lines set out in this report
- Resolution of a number of industrial relations issues which would enable on-site rostering of consultants at busy times in the Emergency Department.

that 1 additional post of Consultant in Emergency Medicine be approved for the North Eastern Emergency Service – to be based in Drogheda - contributing to a total of 5 posts in the North Eastern region.

6.6.7 North Western Health Board (population 210,872)
In the North Western Health Board area here are two acute general hospitals of similar size, staffing and remit, over 70 miles apart. Letterkenny – with 23,476 new Emergency Department attendances in 2000 and Sligo – with 23,328 new attendances in 2000. There is no designated regional centre in the North Western Health Board area. There are 2 existing permanent posts of Consultant in Emergency Medicine in the NWHB area – 1 in Letterkenny and 1 in Sligo.

The Committee recommends that a Regional Emergency Service be established in the North Western area with a Regional Co-ordinator to be determined after local agreement. It is suggested that the post of Co-ordinator of the Regional Emergency Service could rotate between different consultants in Emergency Medicine or arise from a competitive appointment process.
In the absence of a clear regional centre and the distance between Sligo and Letterkenny, the Committee recommends that 2 additional posts of Consultant in Emergency Medicine are approved for the North Western Regional Emergency Service – 1 based in Letterkenny and 1 based in Sligo – for a total of 2 in each Emergency Department.

The Committee also recommends that in the event of:

- The putting in place of the internal Emergency Department processes and systems detailed in this report
- The development of Hospital Emergency Services and a Regional Emergency Service along the lines set out in this report
- Resolution of a number of industrial relations issues which would enable on-site rostering of consultants at busy times in the Emergency Department

that consideration be given to an additional post of Consultant in Emergency Medicine for the North Western Regional Emergency Service.

The Committee notes that, under the Good Friday Agreement, Accident and Emergency Services have been highlighted as an area where co-operation can be enhanced, and supports the further development of cross border co-operation in this regard.

6.6.8 South Eastern Health Board (population 391,517)

There are four acute general hospitals in the South Eastern Health Board area:- Waterford Regional – with 46,624 new Emergency Department attendances in 2000; Wexford – with 20,56; Cashel / Clonmel with 20,030 and Kilkenny, with 16,798 new attendances in 2000. Each of these hospitals is about 30 miles from Waterford. There is 1 existing permanent post of Consultant in Emergency Medicine in the South Eastern Health Board area – based in Waterford Regional Hospital.

Currently, emergency trauma and orthopaedic surgery is centralised in Waterford Regional Hospital and elective orthopaedics will be presently. The Committee recommends that a Regional Emergency Service be established in the South Eastern Health Board area with the Regional Co-ordinator and Director of the Regional Emergency Department based in Waterford.

The Committee recommends the appointment of 2 additional Consultants in Emergency Medicine in Waterford – for a total of 3 – and 1 Consultant in Emergency Medicine in each of Wexford, Kilkenny and Cashel / Clonmel with sessional commitments to Waterford Regional Hospital.

The Committee also recommends that in the event of:

- The putting in place of the internal Emergency Department processes and systems detailed in this report
- The development of Hospital Emergency Services and a Regional Emergency Service along the lines set out in this report
- Resolution of a number of industrial relations issues which would enable on-site rostering of consultants at busy times in the Emergency Department

that 2 additional posts of Consultant in Emergency Medicine be approved for the South Eastern Regional Emergency Service – to be based in Waterford – leading to a total of 5 posts in the Regional Emergency Department and 8 posts in the region as a whole.
6.6.9 **Southern Health Board (population 546,640)**

There are 6 acute general hospitals in the Southern Health Board area:– three in Cork City: Cork University Hospital with 48,243 new Emergency Department attendances in 2000, the South Infirmary / Victoria Hospital with 20,658 and the Mercy Hospital with 19,750. Tralee Hospital had 23,775 new Emergency Department attendances in 2000, Mallow – 9,908, and Bantry – 5,285. There are 2 existing permanent posts of Consultant in Emergency Medicine in the Southern Health Board area – both are based in CUH with sessional commitments to the voluntary hospitals in Cork City.

A package of proposals regarding the future structure and staffing of Emergency Departments in Cork City and County was submitted to the Comhairle Committee by the SHB and the two voluntary hospitals in Cork. The Committee took account of the proposals set out in this document in formulating its recommendations.

The Committee recommends that a Regional Emergency Service be established in the SHB area, with CUH Group as the Regional Emergency Department. The Co-ordinator of the Regional Emergency Service and the Director of the Regional Emergency Department would be based in CUH.

The Committee recommends 3 additional posts of Consultant in Emergency Medicine for the Cork Hospitals Emergency Service leading – initially - to a total of 5 posts based at CUH with sessional commitments to the Mercy Hospital and the South Infirmary / Victoria Hospital.

The Committee recommend that Bantry and Mallow hospitals come under the remit of the Cork Hospital Emergency Service. In the context of geographical and demographic factors, the hospital network, specialty distribution and international best practice, the Committee recommends the approval of 1 post of Consultant in Emergency Medicine for Tralee which is 70 miles from Cork City. An Orthopaedic service staffed by two consultant orthopaedic surgeons is based in Tralee as well as a consultant staffed otolaryngology service.

**The Committee also recommends that in the event of:**

- The putting in place of the internal Emergency Department processes and systems detailed in this report
- The development of Hospital Emergency Services and a Regional Emergency Service along the lines set out in this report
- Resolution of a number of industrial relations issues which would enable on-site rostering of consultants at busy times in the Emergency Department

that 2 additional posts of Consultant in Emergency Medicine be approved for the Cork Hospital Emergency Service – to be based in the Regional Emergency Department at CUH and leading to a complement of 7 posts at CUH and associated hospitals; and that 1 additional post be approved for Tralee – leading to a total of 2 posts in Tralee and 9 posts in the region.
6.6.10 Western Health Board (population 352,353)

There are four acute general hospitals in the Western Health Board area:- University College Hospital, Galway with 51,589 new Emergency Department attendances in 2000; Castlebar – with 23,320; Portiuncula Hospital, Ballinasloe – with 16,207; and Roscommon – with 8,935 new attendances. There are 3 existing permanent posts of Consultant in Emergency Medicine in the Western Health Board area – 2 in UCHG and 1 in Castlebar.

The Committee recommends that a Regional Emergency Service be established in the WHB area, with UCHG as the Regional Emergency Department. The Co-ordinator of the Regional Emergency Service and Director of the Regional Emergency Service would be based in UCHG.

The Committee recommends 1 additional post of Consultant in Emergency Medicine for UCHG leading – initially - to a total of 3 posts.

In the context of geographical and demographic factors, the hospital network, specialty distribution and international best practice, the Committee recommends 1 additional post of Consultant in Emergency Medicine for Castlebar – for a complement of 2 permanent posts. Castlebar is 60 miles from Galway and serves the widely dispersed population of Mayo (115,000). It will shortly have a consultant staffed orthopaedic unit on-site.

The Committee also recommends 1 post to be based at Portiuncula Hospital, Ballinasloe - which is about 45 miles from Galway - with sessional commitments to Roscommon and UCHG.

The Committee also recommends that in the event of:

- The putting in place of the internal Emergency Department processes and systems detailed in this report
- The development of Hospital Emergency Services and a Regional Emergency Service along the lines set out in this report
- Resolution of a number of industrial relations issues which would enable on-site rostering of consultants at busy times in the Emergency Department

that 2 additional posts of Consultant in Emergency Medicine be approved for the Western Regional Emergency Department – at UCHG – leading to a total of 5 posts in the Regional Emergency Department and 8 posts in the region as a whole.
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Table 8. Committee’s recommendations by health board area
* denotes at least one of the posts as having a special interest in paediatric emergency medicine
# denotes the hospital with the major sessional commitment
6.7 IMPLEMENTATION

The Committee recognises that implementation of the recommendations set out in this report will take time. Health boards and hospitals should take account of the recommendations of this report in formulating plans for the development of hospital emergency services.

Implementation of the Committee’s recommendations will also require detailed planning by health boards, hospitals and others involved in emergency services and commitment on the part of all staff and increased or redirected resources. Central to the Committee’s thinking, however, is the finding that what happens in the Emergency Department is hugely influenced by the effective operation of the rest of the health care system.

The ‘Winter Initiative’ package announced by the Minister for Health & Children, Mr Micheál Martin is an important step towards meaningful change and improvements in the provision of hospital emergency services. The provision of funding for an additional 29 posts of Consultant in Emergency Medicine has been the catalyst for the first detailed national review of emergency services in Ireland.

The implementation of the recommendations of this review, the increased consultant staffing flowing from the Winter Initiative and the changes to the delivery of health services envisaged in the Health Strategy (1) will have real and tangible benefits for patient care.

Need for managerial and organisational change

There is a need for significant managerial and organisational change; reorganisation so that patients, depending on their needs, can move smoothly between Emergency Departments, primary care, assessment beds, intensive care, coronary care, the best inpatient medical and surgical care and have rapid access to appropriate diagnostic services.

Implementation on a phased basis

The Committee’s recommendations are designed to be implemented on a phased basis – allowing sufficient time for changes in organisation and service delivery, training and recruitment of additional Consultants in Emergency Medicine, and achievement of a contractual environment which allows rostering of Consultant staff to cover busy periods in the Emergency Department. The implementation of the first phase will involve the creation of 34 permanent posts of Consultant in Emergency Medicine – 5 more than the 29 detailed in the ‘Winter Initiative’. The Committee recommends that funding be made available for these additional posts.
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APPENDIX A
SUBMISSIONS TO THE COMMITTEE

The Committee met with and received presentations / written submissions from representatives of the following:

- The Eastern Regional Health Authority
- The A&E Sub-Group of the Eastern Regional Health Authority
- The East Coast Area Health Board, St Vincent’s University Hospital and St Michael’s Hospital
- The Northern Area Health Board, The Mater Misericordiae Hospital, Beaumont Hospital and The Children’s Hospital, Temple Street.
- The South Western Area Health Board, St James’s Hospital, Tallaght Hospital and Our Lady’s Hospital for Sick Children, Crumlin
- The Midland Health Board
- The Mid-Western Health Board and St John’s Hospital
- The North Eastern Health Board
- The North Western Health Board
- The South Eastern Health Board
- The Southern Health Board, The Mercy Hospital and the South Infirmary / Victoria Hospital
- The Western Health Board
- The Irish Association for Emergency Medicine
- The Royal College of Surgeons in Ireland
- The Royal College of Physicians of Ireland
- The Irish College of General Practitioners

Additional written submissions were received from the following:

- Mr Owen C. D. Barry, Consultant Trauma & Orthopaedic Surgeon, Clinical Director, of Orthopaedic Surgery, Our Lady of Lourdes Hospital, Drogheda
- Mr Noel Cox
- The Consultants Committee at Longford-Westmeath General Hospital, Mullingar
- Dr Kieran Cunningham, Specialist Registrar in A&E, Warrington Hospital, Cheshire
- Dr Patrick O’Dwyer, General Practitioner, Mountrath, Co. Laois
APPENDIX B
SAMPLE PATIENT INFORMATION CATEGORIES
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122
## ACCIDENT & EMERGENCY STATISTICS - EAST COAST AREA HEALTH BOARD AREA 2000

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**NOTE:** Revised data was supplied to Comhairle for new attendances and admissions at a meeting on 10.10.01. Percentages used in other categories are derived from original data supplied.
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<td>Hours of Attendance</td>
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<td>Referred from other hospitals &amp; % of total attendances</td>
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## ACCIDENT & EMERGENCY STATISTICS - SOUTH WESTERN AREA HEALTH BOARD AREA 2000

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<th>Tallaght (Adults Only)</th>
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<th>TOTALS</th>
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* Naas total includes 1248 "dressing attendances" which are not included in SWAHB area overall total figure for attendances.
## ACCIDENT & EMERGENCY STATISTICS - MIDLAND HEALTH BOARD AREA 2000

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**ACCIDENT & EMERGENCY STATISTICS - MID-WESTERN HEALTH BOARD AREA 2000**

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* St John's total includes 6199 "dressings" attendances.
* Nenagh total includes 426 patients referred from wards to the A&E
* Ennis figure is an estimate derived from performance indicator data supplied to the Department of Health. Ennis did not supply the Committee with a breakdown of new vs review attendances.
* Overall total for MWHB area does not include St John's 6199 dressing attendances or Nenagh's 426 patients referred from wards to A&E
### ACCIDENT & EMERGENCY STATISTICS - NORTH EASTERN HEALTH BOARD AREA 2000

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<th>Drogheada</th>
<th>Dundalk</th>
<th>Cavan</th>
<th>Monaghan</th>
<th>Navan</th>
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<th>Cavan</th>
<th>Monaghan</th>
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<th>Monaghan</th>
<th>Navan</th>
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<th>Referred from other hospitals &amp; % of total attendances</th>
<th>Drogheada</th>
<th>Dundalk</th>
<th>Cavan</th>
<th>Monaghan</th>
<th>Navan</th>
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<td>0.2%</td>
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</table>

NOTE: Revised data was supplied to Comhairle for new and review attendances at a meeting with the NEHB on 20.09.01. Percentages used in other categories are derived from original data supplied.
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<th></th>
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<td>8am - 8pm</td>
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<td>73%</td>
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### Accident & Emergency Statistics - South Eastern Health Board Area 2000

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<th>Kilkenny</th>
<th>Wexford</th>
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<td>%</td>
<td>No.</td>
<td>%</td>
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<tr>
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<td>20030</td>
<td>80%</td>
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<td></td>
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<tr>
<td>Hospital</td>
<td></td>
<td></td>
<td>5%</td>
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</tr>
<tr>
<td>Other</td>
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<td></td>
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<td></td>
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<td>8am - 8pm</td>
<td>80%</td>
<td></td>
<td>Not</td>
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</tr>
<tr>
<td>8pm - Midnight</td>
<td>14%</td>
<td></td>
<td>Supplied</td>
<td></td>
</tr>
<tr>
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<td><strong>Referred from other hospitals &amp; % of total attendances</strong></td>
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<tr>
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<td>7%</td>
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</table>

NOTE: Revised data was supplied to Comhairle for new and review attendances and admissions at a meeting with the SEHB on 17.09.01. Percentages used in other categories are derived from original data supplied.
### ACCIDENT & EMERGENCY STATISTICS - SOUTHERN HEALTH BOARD AREA 2000

<table>
<thead>
<tr>
<th></th>
<th>Cork UH</th>
<th>Tralee</th>
<th>South Infirmary / Vic</th>
<th>Mercy</th>
<th>Mallow*</th>
<th>Bantry</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td>Attendances</td>
<td>46243</td>
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<td>23775</td>
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<td>78%</td>
<td>19750</td>
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<td></td>
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<td>3402</td>
<td>13%</td>
<td>6368</td>
<td>24%</td>
<td>2405</td>
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<td>58807</td>
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<td>27177</td>
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<td>22265</td>
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<td>17661</td>
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</table>

* Mallow Totals vary throughout. Percentages used are those relevant to each total.

* Cork University Hospital total includes patients attending with acute eye problems, currently seen by ophthalmology service, will become responsibility of consultants in emergency medicine when new department opens.

<table>
<thead>
<tr>
<th>Source of Referral</th>
<th>No.</th>
<th>%</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self</td>
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<td>64%</td>
<td>14877</td>
<td>26%</td>
</tr>
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<td>GP</td>
<td>16456</td>
<td>28%</td>
<td>6836</td>
<td>37%</td>
</tr>
<tr>
<td>Ambulance</td>
<td>1666</td>
<td>3%</td>
<td>5534</td>
<td>22%</td>
</tr>
<tr>
<td>Hospital</td>
<td>4705</td>
<td>8%</td>
<td>1040</td>
<td>4%</td>
</tr>
<tr>
<td>Other</td>
<td>90</td>
<td>0.1%</td>
<td>1705</td>
<td>8%</td>
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<table>
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<th>No.</th>
<th>%</th>
<th>No.</th>
<th>%</th>
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</tr>
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<th>%</th>
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## ACCIDENT & EMERGENCY STATISTICS - WESTERN HEALTH BOARD AREA 2000

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<th>%</th>
<th>No.</th>
<th>%</th>
<th>No.</th>
<th>%</th>
<th>No.</th>
<th>%</th>
<th>TOTAL</th>
<th>%</th>
</tr>
</thead>
<tbody>
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<td>8935</td>
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<td>38%</td>
<td>19867</td>
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<th>No.</th>
<th>%</th>
<th>No.</th>
<th>%</th>
<th>No.</th>
<th>%</th>
<th>TOTAL</th>
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<th>%</th>
<th>No.</th>
<th>%</th>
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<th>%</th>
<th>TOTAL</th>
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<th>%</th>
<th>No.</th>
<th>%</th>
<th>No.</th>
<th>%</th>
<th>No.</th>
<th>%</th>
<th>No.</th>
<th>%</th>
<th>TOTAL</th>
<th>%</th>
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<tr>
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<td></td>
<td>55%</td>
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<table>
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<th>No.</th>
<th>%</th>
<th>No.</th>
<th>%</th>
<th>No.</th>
<th>%</th>
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# ACCIDENT & EMERGENCY STATISTICS - PAEDATRIC HOSPITALS

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<th>NCH Tallaght</th>
<th>TOTALS</th>
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<tbody>
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<td></td>
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<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td><strong>Attendances</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New</td>
<td>28375</td>
<td>92%</td>
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<td>86%</td>
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<tr>
<td>Return</td>
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<td>6641</td>
<td>14%</td>
</tr>
<tr>
<td>Total</td>
<td>30931*</td>
<td></td>
<td>47897</td>
<td></td>
</tr>
<tr>
<td><strong>Source of Referral</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self</td>
<td></td>
<td>Crumlin have</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>used a document</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>published in</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>68%</td>
<td>34600</td>
<td>72%</td>
</tr>
<tr>
<td>GP</td>
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<td>28%</td>
<td>5263</td>
<td>11%</td>
</tr>
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<td>Ambulance</td>
<td></td>
<td>1998 as the</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospital</td>
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<td>source of</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>their statistics</td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>4%</td>
<td>343</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td>7691</td>
<td></td>
</tr>
<tr>
<td><strong>Hours of Attendance</strong></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>8am - 8pm</td>
<td></td>
<td>9am - 5pm</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>43%</td>
<td>35723</td>
<td>75%</td>
</tr>
<tr>
<td>8pm - Midnight</td>
<td></td>
<td>5pm - midnight</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>49%</td>
<td>9067</td>
<td>19%</td>
</tr>
<tr>
<td>Midnight - 8am</td>
<td></td>
<td>midnight - 9am</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>8%</td>
<td>3107</td>
<td>6%</td>
</tr>
<tr>
<td><strong>Admissions</strong></td>
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<td></td>
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<tr>
<td>From A&amp;E</td>
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<td>4605</td>
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<tr>
<td>All Admissions</td>
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<td>17036</td>
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<tr>
<td>A&amp;E % of all</td>
<td></td>
<td>40%</td>
<td></td>
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</tr>
<tr>
<td><strong>Referred from other hospitals &amp; % of total attendances</strong></td>
<td></td>
<td>Estimated average*</td>
<td></td>
<td>0.1%</td>
</tr>
</tbody>
</table>

* Crumlin total includes 1337 "dressing attendances"
* Overall paediatric total does not include Crumlin's "dressing attendances"
## ACCIDENT & EMERGENCY STATISTICS BY HEALTH BOARD AREA 2000

<table>
<thead>
<tr>
<th>Population</th>
<th>ECAB</th>
<th>NAAB</th>
<th>SWAB</th>
<th>MAKB</th>
<th>NWAB</th>
<th>NEAB</th>
<th>SEAB</th>
<th>SHB</th>
<th>WHB</th>
<th>Paediatric</th>
<th>Overall</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
<td>320539</td>
<td>485000</td>
<td>515000</td>
<td>205542</td>
<td>517069</td>
<td>305155</td>
<td>210872</td>
<td>385157</td>
<td>540840</td>
<td>352353</td>
<td>3626087</td>
<td></td>
</tr>
<tr>
<td>%</td>
<td>83%</td>
<td>90%</td>
<td>93%</td>
<td>93%</td>
<td>83%</td>
<td>83%</td>
<td>83%</td>
<td>94%</td>
<td>84%</td>
<td>84%</td>
<td>82%</td>
<td>82%</td>
</tr>
</tbody>
</table>

### Attendances
- **New**
  - ECAB: 73015 (83%)
  - NAAB: 122063 (90%)
  - SWAB: 154309 (93%)
  - MAKB: 19206 (93%)
  - NWAB: 85967 (83%)
  - NEAB: 80164 (83%)
  - SEAB: 46714 (83%)
  - SHB: 104014 (83%)
  - WHB: 127619 (83%)
  - Paediatric: 100355 (80%)
  - Overall: 106235 (86%)
- **Return**
  - ECAB: 148386 (17%)
  - NAAB: 13305 (13%)
  - SWAB: 7550 (7%)
  - MAKB: 4650 (7%)
  - NWAB: 12752 (13%)
  - NEAB: 21441 (21%)
  - SEAB: 5075 (11%)
  - SHB: 18012 (18%)
  - WHB: 27662 (17%)
  - Paediatric: 158855 (14%)
  - Overall: 158855 (13%)

### Total
- ECAB: 87731 (25%)
- NAAB: 135386 (33%)
- SWAB: 151689 (31%)
- MAKB: 10749 (31%)
- NWAB: 1101625 (31%)
- NEAB: 52689 (31%)
- SEAB: 123626 (31%)
- SHB: 151281 (31%)
- WHB: 1159320 (31%)

### % of Population attending A&E
- ECAB: 25%
- NAAB: 35%
- SWAB: 27%
- MAKB: 33%
- NWAB: 26%
- NEAB: 35%
- SEAB: 29%
- SHB: 33%
- WHB: 38%
- Paediatric: 24%
- Overall: 32%

### Admissions
- From A&E
  - ECAB: 2703 (20%)
  - NAAB: 20735 (19%)
  - SWAB: 16711 (28%)
  - MAKB: 20570 (26%)
  - NWAB: 15053 (29%)
  - NEAB: 37991 (31%)
  - SEAB: 26564 (17%)
  - SHB: 32800 (27%)
  - WHB: 32800 (27%)
- All Admissions
  - ECAB: 47254
  - NAAB: 33062
  - SWAB: 35687
  - MAKB: 34664
  - NWAB: 59421
  - NEAB: 69620
  - SEAB: 55507
  - SHB: 438
  - WHB: 595

**A&E % of All**
- ECAB: 57%
- NAAB: 49%
- SWAB: 57%
- MAKB: 43%
- NWAB: 64%
- NEAB: 38%
- SEAB: 55%