EASTERN REGIONAL HEALTH AUTHORITY

Údarás Réigiúnda Sláinte an Oithir

FINAL REPORT OF THE REVIEW OF ACCIDENT AND EMERGENCY SERVICES IN THE EASTERN REGION

January 2001

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EXECUTIVE SUMMARY

1. INTRODUCTION

Following the submission of a report to the Board on problems with A&E services in the Eastern Region, in May 2000, it was proposed and agreed that an A&E review group be set up with the following aim:

To examine in detail the existing A&E services and to bring forward a comprehensive policy on A&E services which will improve access and reduce waiting times for treatment and admission.

The group consisted of:

Chairperson: The Director of Monitoring and Evaluation at the ERHA

Members:
- 1 A&E consultant;
- 1 nurse manager;
- 1 GP;
- 2 public health specialists;
- The monitoring and evaluation manager;
- 2 ERHA researchers
- 2 ERHA information analysts.

1.1 Terms of reference agreed by the group were as follows

1. To conduct a critical analysis of existing A&E Services in the region.
2. To review management and organisational structures within A&E departments
3. To examine the physical and human resource capacity within individual hospitals to deliver A&E services.
4. To review policies procedures and protocols for emergency services
5. To review alternative/complementary options for care

Stages of Review

It was deemed that the development of a comprehensive policy on A&E services would require different stages.

Stage 1

- Profile and analyse activity for the current year and previous years.
- Conduct site visits for the nine adult acute hospitals in the Eastern region.

Stage 2

- Set up sub-groups within the team to conduct an overview of international findings on best practice for
  - (i) processes and structures in A&E departments
  - (ii) staffing levels
  - (iii) bed management

- Conduct small scale studies to gather information on issues not currently documented

on A&E services in the Eastern region
- Identify findings and key areas for action

Stage 3
- Produce an interim report for the Board
- Conduct facilitated workshops with key stakeholders

Stage 4
- Put in place structures to drive forward recommendations
- Prepare progress report setting out short and medium term actions
- Outline issues which need further consideration

In the course of its review the group consulted with all the stakeholders. This included discussion with the Adult Acute Hospitals, representatives of the Area Health Boards and Ambulance services.

ANALYSIS OF CURRENT SITUATION:

Profile and analysis of current activity
For the year 2000, a total of 410,039* patients attended the nine A&E departments reviewed in this study. Of these 359,003 (88%) were new patients, and 46,330 (12%) were return patients. Approximately 17% of all patients attending presenting at A&E Departments were admitted, still yielding a total of 342,211 patients that had to be treated before discharge by the A&E department. These figures indicate the considerable demand placed on A&E resources. *(* end of year figures to be validated)*

Site visits
The team visited all adult A&E departments of the voluntary and health board hospitals in the Eastern Region, amounting to 9 initial site visits. It became evident during the site visits that there are two distinct sets of issues to be addressed in relation to the provision to A&E services in the region as follows:
- *Issues relating to the processes and structures within the A&E department itself*
- Issues relating to bed management in the context of the wider hospital operation.

Both of these issues have been considered and addressed over the course of the review.

KEY FINDINGS:

□ Processes and structures within the A&E

The findings in relation to processes and structures are documented below.

Physical environment of A&E and waiting facilities
Physical space was a constraint for all hospitals. Other deficiencies included issues such as signage for waiting time, appropriate facilities for bereaved relatives and security systems.

Assessment of A&E Patients
The need for good communications with patients, particularly patients with special needs was identified. Some hospitals do not have adequate cover for assessment in the form of 24 hours triage nursing, specialist medical and nursing expertise and A&E Consultants.

Treatment and discharge of patients with minor illness or injury
It was apparent from the site visits that, in the absence of dedicated staff and space for treatment of minor injuries or illnesses, patients in these categories have to wait for long periods in the A&E Departments. Waiting times to assessment range from 30 minutes to over 4 hours in some cases.

Treatment of patients with major trauma and critically ill non-trauma patients.
Hospitals stated that they did have good access to diagnostic facilities, however, some emergency tests were not available on a 24 hour basis. On the basis of international norms, there are insufficient Consultants in the system for the volume of activity.

BED MANAGEMENT
For the year 2000 there was a total of 119,134 admissions to hospitals. Of these admissions 57% were A&E admissions and 15% were other emergency admissions, making emergency admissions a total of 72% of all hospital admissions. 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 this was the main reason for patients having to wait for long periods on trolleys. For the year 2000, the number of patients waiting on trolleys for > 6 hours averaged 62 patients per day – an increase of 15% on 1999.
Most hospitals agree that the problem is partly one of bed shortage. The ERHA findings from its bed capacity study supports this analysis. However, the team also identified both internal and external factors that contributed to delays in discharge.

- **Internal delays**

Failure to schedule pre-operative tests and assessments appropriately resulted in delays in treatment and discharge. Other internal delays included:
- waiting for test results
- waiting for transport
- social reasons

- **External factors**

The team also recognised that the following issues need to be addressed with regard to the delayed discharge of patients:
- The lack of step-down facilities for elderly patients

- The lack of step-down facilities for the young chronic sick

KEY RECOMMENDATIONS AND ACTIONS TO DATE:

The following are the recommendations of the review group and actions to date in relation to

1) Processes and structures in A&E departments
2) Bed management.
3) Other recommendations

Processes and structures in A&E departments

The physical environment of the A&E department

Recommendations:

- Improve security systems to provide 24 hour security in all A&E departments.
- Improve information systems within A&E departments
- Improve facilities provided in the waiting area of all A&E departments.
- Improve bereavement facilities within A&E departments.

Actions:

- Funding of £300,000 was provided in 2000 for improvements in security systems in hospitals. Additional funding of £270,000 has been made available in 2001.
- The Authority has included the requirement for appropriate bereavement facilities in its package of proposals to the Department of Health and Children for additional funding of A&E services.
- A&E Departments which did not have a computerised A&E information system in place have been prioritised for IT funding in 2001 .

Assessment of A&E Patients

Recommendations:

Availability of decision-makers within A&E departments is crucial to improving waiting times for treatment and admission.

Actions:

- Arising from the review, the DOHC has approved 10 additional A&E Consultants for the Eastern region. Locum posts have already been advertised.
- An application for the creation of the post of A&E Manager in the major A&E departments is being submitted as part of a package of proposals to the Dept. of Health and Children. It is intended that this appointment will improve co-ordination and management of patient flows, facilitate better communication with patients and develop management processes within A&E.

Treatment and discharge of patients with minor illness or injury

Recommendations:

- Development of dedicated minor injuries areas with dedicated space and dedicated personnel to ensure appropriate treatment and timely discharge of patients.

Action:

- It has been decided to establish dedicated Minor injuries space and staffing in five of the acute Hospitals in the Eastern region. Funding was provided in 2000 for this purpose.

Treatment of patients with major trauma and critically ill non-trauma patients.

Recommendations:

- The need for decision-makers at medical and nursing level. Specifically there is a need for more A&E consultants to take the lead role in supervision, training and setting of standards.
- To ensure access to out of hours diagnostic facilities.
- That A&E consultants work collaboratively in drawing up agreed protocols for appropriate management of major conditions that present in A&E.
- Active streaming of the patient's journey of care upon their arrival at the A&E.

Action:

- Establish the following facilities, in a limited number of hospitals, to evaluate their impact on improved access to treatment and outcomes.

  - Chest pain Unit – St James Hospital
  - DVT service – Beaumont Hospital
  - Respiratory Unit – Mater Hospital
  - Medical admissions Unit – St James Hospital

- It has been agreed that one of the functions of A&E Co-ordination Group would be to facilitate collaborative working on clinical protocol..

Bed Management

Internal delays

Recommendations:

- There is a need to focus on planning a patient's course of treatment and discharge date from the time they are admitted to a hospital, and to evaluate the use of a discharge lounge.

Actions:

- The employment of discharge co-ordinators has been approved for all 9 acute hospitals in the Eastern region in order to support the timely discharge of patients to the most appropriate setting.

- Funding was made available in December 2000 in order that a pilot project could be undertaken to evaluate the use of a discharge lounge in a large acute hospital in the Eastern region.

External delays

Initiatives by the ERHA are already underway to address external delays as follows:

Elderly patients

- Pilot projects are currently being undertaken by the ERHA to establish how services can be most effectively developed to maintain older people at home.
- Pilot projects are being developed to examine what strategies should be developed to prevent re-admission, or admission to an acute hospital in the first place.

Winter Beds Initiative

- Funding of the order of £5m has been allocated by the Department to the Authority to contract an additional 495 step down beds for the winter 2000/2001. An additional, 20 contract beds for the young chronic sick are due to come on stream shortly which should also help alleviate pressures in A&E Departments for beds. Co-ordination arrangements have also been put in place at Area Health Board level to facilitate improved planning and co-ordination of the winter beds initiative.

Other Recommendations:

Project Manager at ambulance headquarters

Recommendation:

- In order to co-ordinate the availability of beds for emergency admissions, it was proposed that a post of a project manager based at ambulance headquarters needed to be established.

Action:

- The post of A&E manager at ambulance headquarters is currently being advertised.

A&E Steering Group

Recommendation:

- There is a need to set up an A&E Co-ordination Group comprising of A&E consultants and Nurse managers, and Chief Executive Officers (CEOs) to :

1. Co-ordinate and plan emergency patient flows across the region.
2. Facilitate collaboration and joint working by Consultants and Nurse managers on development of clinical protocols for management of patients.

Action:

- This group has been re-convened under the chairmanship of a senior commissioner for Planning and Commissioning at the ERHA. The first meeting was held on 24th January 2001

NEXT STEPS:

In addition to those areas where actions are being implemented the Authority plans to pursue the following:

- **GP Out of hours services**
  A review of out of hours co-operatives will be undertaken by the Authority in 2001. To assess how such facilities can complement such existing A&E services.

- **Clinical protocols**
  The Authority is anxious to facilitate the A&E Consultants recommendations for collaborative working on clinical protocols. It has recommended that it should be one of the key functions of the new A&E Co-ordination Group.

  Issues such as the use of observations wards and near patient testing were examined by the review group but the findings were inconclusive. It has been decided that these matters would be appropriate for further consideration by a sub-group of the A&E Co-ordination Group.

- **Psychiatric services provided by A&E departments**
  The group considered that this is an area which warrants further review. It has been decided that this matter would be appropriate for consideration by a sub-group of the recently convened A&E Co-ordination Group.

- **Profile of patients attending A&E departments**
  Work on profiling patients attending A&E departments has commenced. When the results are available the Authority will have, for the first time, a broad region-wide profile of those attending A/E during a particular time period.

- **A&E Statistics**
  The Authority has developed a more comprehensive set of A&E statistics in 2001. It will be function of the new A&E Project Manager to collect, analysis and disseminate this information and to make it available to the new A&E Co-ordination Group for appropriate action.

- **Future arrangements involving the ambulance service**

The role of the Ambulance services was not considered by the review group, however, the Authority is aware that this is an area that will need further review.

CHAPTER 1

INTRODUCTION & METHODOLOGY:

1. INTRODUCTION

Following the submission of a report to the Board on problems with A&E services in the Eastern Region, in May 2000, it was proposed and agreed that an A&E review group be set up with the following aim:

To examine in detail the existing A&E services and to bring forward a comprehensive policy on A&E services which will improve access and reduce waiting times for treatment and admission.

In determining the membership, the Authority's aim was to ensure that the membership was representative of the complex issues that affect A&E services, but also to ensure that it was a cohesive team that could work effectively.

The group consisted of:

Chairperson:	The Director of Monitoring and Evaluation at the ERHA
Members:	1 A&E consultant;
	1 nurse manager;
	1 GP;
	2 public health specialists;
	The monitoring and evaluation manager;
	2 ERHA researchers
	2 ERHA information analysts.

(Ref. Also Appendix 1).

1.1 Terms of reference agreed by the group were as follows

1. To conduct a critical analysis of existing A&E Services in the region.

2. To review management and organisational structures within A&E departments

3. To examine the physical and human resource capacity within individual hospitals to deliver A&E services.

4. To review policies procedures and protocols for emergency services

5. To review alternative/complementary options for care

2. METHODOLOGY

2.1 Objectives

The following objectives were agreed upon by the review team:

a) Outline current demand for A&E services

b) Outline current provision of A&E services

c) Look at best practice, and/or sum up consensus views with regard to:

(i) processes and structures in A&E departments
(ii) staffing levels recommended for A&E departments
(iii) Procedures and protocols in relation to managing patient flows.

d) Clarify and agree arrangements for monitoring A&E performance such as clinical and organisational outcomes, process measures, clinical standards and audit mechanisms.

e) Make recommendations in relation to the future organisation of A&E departments

f) Outline the issues and steps needed to move from the current position to the recommended position.

2.2 Methods

It was deemed that the development of a comprehensive policy on A&E services would require different stages.

Stage 1

- Profile and analyse activity for the current year and previous years in order to ascertain demand for A&E services.
- Conduct site visits for the nine adult acute hospitals in the Eastern region, in order to gain a better understanding of the current provision of A&E services and immediate pressures on staff and facilities. The site visits also aimed at understanding A&E services from the perspective of the patient.

Stage 2

- Set up sub-groups within the team to conduct an overview of international findings on best practice for

(i) processes and structures in A&E departments
(ii) staffing levels
(iii) bed management

- Conduct small scale studies to gather information on issues not currently documented on A&E services in the Eastern region
- Make recommendations towards changes that could be implemented in the short term.

Stage 3

- Produce an interim report for the Board setting out preliminary findings and key areas for action
- Conduct facilitated workshops with key stakeholders in order to discuss recommendations and proposals for implementation of change

Stage 4

- Put in place structures to drive forward recommendations
- Prepare progress report setting out short and medium term actions
- Outline issues which need further consideration

In the course of its review the group consulted with all the stakeholders. This included discussion with the Adult Acute Hospitals, representatives of the Area Health Boards and Ambulance services.

CHAPTER 2

ANALYSIS OF CURRENT SITUATION:

2.1 Profile and analysis of current activity

For the year 2000 a total of 410,039 patients attended the nine A&E departments reviewed in this study. Of these 359,003 (88%) were new patients, and 46,330 (12%) were return patients.

Approximately 17% of all patients attending presenting at A&E Departments were admitted, still yielding a total of 342,211 patients that had to be treated before discharge by the A&E department.
These figures indicate the considerable demand placed on A&E resources.

2.2 Site visits

The team visited all adult A&E departments of the voluntary and health board hospitals in the Eastern Region, amounting to 9 initial site visits.

Site visits were very much a collaborative effort between the ERHA team and the A&E staff at each of the hospitals. Having agreed with each hospital to visit their A&E department, visits were conducted with the primary objective of the team becoming informed of the main problems in each of the A&E departments. During the visits there was considerable discussion and consultation with A&E medical and nursing staff at all levels, and where possible on occasion with related staff such as GP liaison and health board staff in an effort to identify the key factors contributing to the problems in casualty departments.

The team found considerable variation between A&E departments in their attempts to deal with this demand. These differences can be grouped as follows:

- Variation in adequacy of resources for the physical comfort of patients and general physical environment e.g. the availability of cubicles for privacy during assessment and treatment.
- Variation in the processes and procedures for the assessment, treatment and admission or discharge of patients presenting to the A&E department e.g. dedicated areas and resources for minor injuries.
- Variation in staff availability - in terms of dedicated staff for A&E services, and the availability of on-call teams

It became evident during the site visits that there are two distinct sets of issues to be addressed in relation to the provision to A&E services in the region as follows

- Issues relating to the processes and structures within the A&E department itself
- Issues relating to bed management in the context of the wider hospital operation.

Both of these issues have been considered and addressed over the course of the review.

CHAPTER 3

KEY FINDINGS:

3.1 Processes within the A&E are documented under the following categories;

a) Physical environment
b) Assessment
c) Treatment and discharge of patients with minor illness or injury
d) Treatment and discharge of patients with major trauma and critically ill non-trauma patients

Each category is set out in the context of the team and sub-group findings on the literature for A&E services in that particular category. Recommendations arising from the site visits are set out in Chapter 4.

3.1.a. Physical environment of A&E and waiting facilities

Overview
This section is mainly concerned with the facilities available for patients and their relatives in the waiting area of the A&E department. Clinical facilities are dealt with in subsequent sections. Recommendations (1) with regard to waiting areas emphasise the importance of comfort and privacy for patients. In particular the Irish Accident and Emergency Association (IAEA) highlight the importance of signage and communication (especially on waiting times) to ensure that violence and aggression is minimised. The following is an example of the different categories of facilities that should be available to all A&E departments:

- General waiting room facilities (e.g. toilets, beverage machines, signage)
- Security arrangements
- Appropriate number of beds/trolleys/chairs for patients
- Appropriate number of cubicles
- Mortuary arrangements and facilities for relatives

Site visits
It became apparent that some sites 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 concerned about the lack of appropriate facilities available to deal with psychiatric patients.

3.1.b Assessment of A&E Patients

Overview
Our review of best practice for A&E services highlighted the importance of good initial assessment. The ideal standard is that seriously ill patients are taken to an appropriate treatment area within 5 minutes, and all others assessed (or triaged) within 15 minutes so that they can be allocated a priority category for the urgency of their care (2,3). The importance of how well initial assessment is meeting patients needs (rather than just how fast it is) however must also be considered (4). Within this context the following have been highlighted:

- The availability of the triage system and dedicated triage staff (1,2,5,6)
- The availability of senior clinical decision making and specialised medical expertise: Increased attendances are considered to merit more consultant posts, and the general consensus is that there should be 3 consultants posts where attendances are 50,000 or more per annum (1,7)
- Specialised nursing: Studies have shown (5,6,8,9) that having A&E departments avail of specialised nursing posts - namely the Triage nurse, and emergency nurse practitioner (ENP) achieves the following:

1. Gives added flexibility
2. Eases pressure on doctors
3. Speeds up flow of patients

It has also been shown that the time spent in A&E was reduced by 30 minutes when ENPs and triage nurses were allowed to request x-rays.

Site visits
In examining A&E Departments capacity to deliver on this objective therefore, issues considered were.

- Grade of staff conducting initial assessment
- Status/decision making ability of staff conducting initial assessment. Access to radiographs and other investigations.
- Evidence of active streaming of the patient's journey of care.

One of the key findings at this stage of the review was the need for good communications with patients, particularly patients with special needs.

Almost all hospitals have a triage system in place. However, not all have dedicated triage nurses or dedicated triage nurses available over 24 hours. Some hospitals do not have adequate cover in the form of specialist medical and nursing expertise or A&E Consultants. Waiting times to assessment ranges from 30 minutes to over 4 hours in some cases for minor injury patients.

3.1.c Treatment and discharge of patients with minor illness or injury

Overview
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. It is recommended however that patients with "less severe illness or injury should not have to routinely endure long waits because their clinical needs are less than others in the department." (2)

The A & E Modernisation Programme in the UK have recommended that minor illnesses and injury should be structured and resourced to deliver a separate service. This could be in the form of a minor injuries unit within the community, or a separate minor injuries area within an A&E department. It is felt that for the majority of minor injury patients, addressing the organisational and process issues will bring the greatest benefit to patients. Specifically, the main advantages of having a separate minor injuries area within the A&E department include:

- Decreased waiting times
- Maintaining the flow of patients even if the 'major' area of the department is busy

Site visits
In reviewing A&E departments on their minor injuries service the following were therefore considered:

- Access to minor injuries area
- Exclusiveness of staff to minor injuries
- Grade and professional training of staff in minor injuries area and access to advice from senior colleagues
- Access to radiology from minor injuries area
- Time spent waiting for treatment in minor injuries area.
- Length of time from point of entry to point of discharge for patients with minor injuries
- GP informed of treatment of minor injuries

All hospitals with the exception of one stated that clinical advice from senior colleagues was readily accessible.

It was apparent from the site visits that, in the absence of dedicated staff and space for treatment of minor injuries or illnesses, patients in these categories have to wait for long periods in the A&E Departments. These waits could vary from 30 minutes to several hours in some cases.

3.1.d Treatment of patients with major trauma and critically ill non-trauma patients.

Overview

The key concern of the review group was to ensure that critically ill patients who present in A&E Departments are treated at the right time, in the right place by the right personnel. Within this context the group was concerned with reviewing

- Staffing levels and skill mix
- Protocols and procedures for critical illness and trauma
- Development of clinical pathways
- Access to radiology and advanced imaging

The Audit Commission in England recommended that a hospital providing an A&E service for all categories of patients should provide a trauma team on site 24 hours a day with skills in A&E, anaesthetics, orthopaedics and general surgery (4). The IAEA categorise A&E departments into Comprehensive A&E facilities for all regional hospitals University Teaching Hospitals and large General hospitals, with smaller general hospitals seen to provide a general accident and emergency facility (1).

They recommend that comprehensive A&E facilities should have the following specialities on site:

- Acute Medicine
- Cardiology
- General surgery
- Orthopaedics
- Anaesthetics
- Intensive/Coronary care
- Radiology (with 24 hour access to a CT scanner)
- Pathology (with 24 hour access to Haematology, Chemical Pathology and blood transfusion)
- Gynaecology
- Paediatrics
- Psychiatry

General A&E facilities should have at least the following on site:

- General medicine
- General surgery
- Anaesthetics and x-ray facilities

Further it is widely recommended that there should be a staff member proficient in advanced cardiac life support (ACLS) present in the department at all times. An identified member of staff who has completed an advanced trauma life support (ATLS)

or trauma nursing course (TNC) should be present in the department for each working shift (1,4).

Some studies recommend ratios of staffing relative to numbers of patients presenting to an A&E department (1,8)(Appendix 2). The review team felt however that there is also need to take account of other issues such as nursing dependency - i.e. A&E departments attended by patients with high dependency needs (as found in inner city hospitals) would take up more nursing time and thus increase the numbers of nursing staff required. All literature on staffing in A&E departments however point to the importance of both large and small A&E services being under the direction of consultants in Accident and Emergency Medicine.

The importance of severely ill or injured patients being taken to a hospital or specialist unit with appropriate facilities has also been emphasised (4). In this context co-operation between hospitals and establishing multi-disciplinary care pathways for the major presenting symptoms or conditions (2,4).

Site visits

Factors therefore taken into account on site visits included the following:

- Grade of staff initially assessing and investigating major cases
- Level of involvement of senior medical staff and/or availability of experienced clinical staff (including specialities on site and their availability for 24 hour cover).
- Use of observation ward
- Reasons for any delay in admission e.g. bed unavailability/problems with access to radiology etc.
- Standard of facilities and equipment and safety issues.
- Requirements for diagnosis:
    - 24 hour access to plain radiology and advanced imaging
    - Availability of emergency biochemistry, haematology and microbiology services
    - Length of time taken for radiology report
- Length of time to hospital admission
- Type of bed management system in place.

Hospitals stated that they did have good access to diagnostic facilities, however, some emergency tests were not available on a 24 hour basis and there was wide variation in the time it took to get test results back to A&E. It was also apparent on the basis of numbers attending at A&E that there were insufficient Consultants in attendance. The Irish A&E Association recommend 3 Consultants in larger A&E departments in metropolitan areas. In addition many hospitals indicated dissatisfaction with the facilities available for the assessment, treatment and accommodation of some psychiatric patients.

3.2 BED MANAGEMENT

Overview
It became apparent during the 9 site visits that the workings of the A&E department could not be examined in isolation from the wider hospital operation and also primary and step-down facilities. The report on bed management by the *NHS* executive *(10)* has highlighted the importance of good bed management within hospitals in order to ensure the speedy admission of emergency patients.

To put this into context, it is useful to look at a breakdown of admissions for the year 2000. For the year 2000 there was a total of 119,134 admissions.* Of these admissions 57% were A&E admissions and 15% were other emergency admissions, making emergency admissions a total of 72% of all hospital admissions. Thus elective patients represented only 28% of all hospital admissions. The demands that unplanned admissions place on the overall operation of a hospital cannot be over-stated particularly in the context of access to beds.(* end of year figure to be validated)

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.

However a sub-group within the team also investigated problems relating to the delays in availability of beds within the hospital for the admission of A&E patients.

The team identified both internal and external factors that contributed to delays in discharge.

Site visits
This sub-group re-visited each of the nine hospitals to consult with the bed managers and associated staff, to examine the reasons for the delay in patients getting from the A&E department to a bed in the hospital.

It became apparent that hospitals have the task of balancing the demands of admitting an unknown number of emergency patients on a daily basis alongside admitting scheduled elective patients. Difficulties with this can be seen in terms of the statistics for the nine hospitals in the Eastern region.

The key findings are set out below:

- **Internal delays**

Failure to schedule pre-operative tests and assessments appropriately resulted in delays in treatment and discharge. Other internal delays included:

- waiting for test results
- waiting for transport – this is particularly problematic for patients who have to be transported home outside the region; waiting for confirmation of discharge from senior member of medical staff
- social reasons – delays in discharge due to insufficient planning to ensure that community and domicilary support are in place for patients being discharged home.

The earlier findings of the A&E review that the lack of available beds within hospitals served as the main reason for patients having to wait for long periods on trolleys in A&E departments was confirmed.

- **External factors**

The Team also recognised that the following issues need to be addressed with regard to the delayed discharge of patients:

- **The lack of step-down facilities for elderly patients** – The number of acute beds inappropriately occupied by elderly patients >65 years in need of long term step down care averaged 160 per week for the year. This compared with an average of 141 for the previous year and constitutes an increase of 12%. However, it is worth noting that an analysis of the trends over the full year average:

    - The number of elderly patients awaiting placement each week for the first six months in 2000 increased by 24% over 1999 levels. However, the overall increase of 12% for the full year actually reflects a significant increase in the first half of the year but a reduction in the weekly average in the second half of the year. The reduction is most significant in the final quarter of the year. It is presumed that the winter beds initiative has had a positive impact in freeing up hospital beds.

- **The lack of step-down facilities for the young chronic sick** – The number of beds inappropriately occupied by the young chronic sick averaged 80 per week in 2000 compared to 81 per week in 1999. Overall, it would appear that there has been no marked change in the trend.

However, again when the figures for the first half of the year are compared with those for the second half of 2000 the following is noted.

In the first half of the year, there was an average of 76 young chronic patients awaiting placement compared to 86 for the previous year (i.e. 13% reduction on 1999 levels). However, in the second half of the year this trend had reversed. With the exception of September 2000, the numbers awaiting placement for each week were greater than those for 1999. This points to the need for increased availability of step down facilities for young chronic.

3.3 Confirmation of findings and facilitated workshops

Following the review and the site visits, the A&E team produced an interim report on their findings which was submitted to the acute and episodic care sub-committee of the Board of the Eastern Regional Health Authority in October 1999.

This was followed by two workshops to discuss the findings of the review team as follows:

- November: Workshop on processes and structure of A&E departments. Attendance invited by A&E Consultants and Nurse Managers of the 9 hospitals involved in review. Almost all attended or provided representation. The Workshop was facilitated by Dr Ronnie Pollock – medical expert from the UK.

- November: Workshop on access to beds. Invitations extended to all Bed Managers, CEOs of Hospitals, 2 representative consultants from the surgical and medical speciality of each hospital, and Area Health Board CEOs. There was good attendance from all groups.
  Workshop was facilitated by Dr Ronnie Pollock – medical expert from the UK. There were also guest presentations from:
  Dr Anne Wilson – currently co-ordinating ambulance service project in Belfast.
  Craig Adams – National Audit Office, UK, who had conducted a review of bed management.

A series of post-workshop meetings was held at the ERHA, Canal House to discuss issues arising out of the workshops. These were attended by members of the Review Team and also in Planning and Commissioning team.

CHAPTER 4

KEY RECOMMENDATIONS AND ACTIONS TO DATE:

This chapter outlines the recommendations of the review group in relation to

1) Processes and structures in A&E departments
2) Bed management.
3) Other recommendations

It concludes with a summary of actions to date.

4.1 Processes and structures in A&E departments

4.1.a. The physical environment of the A&E department

Recommendations:

- Improve security systems to include cctv, staff trained in de-escalation techniques, and 24 hour security in all A&E departments.

- Improve information systems to ensure that all data is computerised within A&E departments

- Improve facilities provided in the waiting area of all A&E departments. Specifically, it was recognised that not only physical facilities be improved, but that there needed to be a liaison person to inform and attend to the needs of patients experiencing long delays in A&E departments.

- Improve bereavement facilities within A&E departments. Specifically the comfort and design of relatives rooms, temporary mortuary facilities, and counselling services for bereaved relatives should be targeted for immediate improvement

Actions:

- A&E Departments which did not have a computerised A&E information system in place have been prioritised for IT funding in 2001 for the provision of such a system. Funding was also been provided in December 2000 for the funding of a triage computer required by one of the A&E Departments.

- Funding of £300,000 was made available to the hospitals to improve security cover in A&E Departments in 2000. Additional funding of £270,000 has been made available in 2001 for these purposes.

- The Authority has included the requirement for appropriate bereavement facilities to the Department of Health and Children for additional funding for A&E services.

4.1.b. Assessment of A&E Patients

Recommendations:

- Availability of decision-makers within A&E departments is crucial to improving waiting times for treatment and admission. Of critical importance in this context are the following:
  - Appointment of A&E consultant or senior registrar particularly at out of hours period to facilitate improved decision making, training and development of protocols.
  - Availability of senior nursing personnel. In this context priority should be given to the recruitment of emergency nurse practitioners.
  - The need for the appointment of an A&E Manager/Co-ordinator.
  - Timely access to the on-call teams as part of the decision making process
  - The implementation of existing policies on triage will only be truly effective if accompanied by appropriate streaming of patients beyond triage (i.e. the availability of dedicated personnel and resources to manage different categories of patients).
  - Monitor the progress on specialised nursing roles for A&E departments

Actions:

- Appointment of A&E Consultants
  Arising from the review the DOHC has approved 10 additional A&E Consultants for the Eastern region. Locum posts have already been advertised. The permanent posts are currently under discussion between the DOHC and Comhairle na nOspideal.

- Appointment of A&E Manager
  An application for the creation of this post in the major A&E departments is being submitted as part of a package of proposals to the Dept. of Health and Children. It is anticipated that this post will ensure better care of the patient during their time spent waiting at the A&E department by monitoring and attending to any special needs. In particular, it is hoped that this appointment could facilitate better communication with patients and improve operational processes within A&E Departments.

4.1.c. Treatment and discharge of patients with minor illness or injury

Recommendations:

- Development of dedicated minor injuries areas with dedicated space and dedicated personnel is a priority to facilitate improved throughput of patients with minor conditions. To ensure appropriate treatment and timely discharge of patients.

Action:

- Following the A&E review, it has been decided to establish dedicated Minor injuries space and staffing in five of the major acute Hospitals in the Eastern region (St. Vincent's hospital already has a dedicated minor injuries unit in place). Funding was made available in December 2000 for this purpose.

4.1.d. Treatment of patients with major trauma and critically ill non-trauma patients.

Recommendations:

- The need for more decision-makers at medical and nursing level. Specifically, the need for more A&E consultants to take the lead role in supervision, training and setting of standards.

- That there is guaranteed access to out of hours diagnostic facilities to reduce overall waiting times for assessment and treatment.

- That A&E consultants work collaboratively in drawing up agreed protocols for major conditions that present in A&E e.g. chest pain, respiratory conditions and DVT.

- That there is acute streaming of patients to ensure that are prioritised for action. To ensure that patients with major illness receive a high quality of care.

Action:

- Arising from the review it has been establish the following facilities, in a limited number of hospitals and to evaluate their impact on improved access to treatment and outcomes.

    - Chest pain Unit – St James Hospital
    - DVT service – Beaumont Hospital
    - Respiratory Unit – Mater Hospital
    - Medical admissions Unit – St James Hospital

- It has been agreed that one of the functions of the A&E Co-ordination Group would be to facilitate collaborative working on protocols on relation to above.

Funding was made available in December 2000 for the above facilities.

4.2 Bed Management

4.2.a. Internal delays

Recommendations:

- There is a need to focus on planning a patient's course of treatment and discharge date from the time they are admitted to a hospital, and to evaluate the use of a discharge lounge. It was agreed that the appointment of discharge co-ordinators to the acute hospitals and the use of discharge lounges needs to be considered

Actions:

- The employment of discharge co-ordinators has been approved for all 9 acute hospitals in the Eastern region. The co-ordinator will work closely with the hospital bed manager to facilitate improved discharge planning. The co-ordinator will also liaise with administrative staff managing contract bed availability in each area health board, in order to support the timely discharge of patients to the most appropriate setting.

  The Authority has agreed to develop agreed protocols and procedures with the Discharge Co-ordinators in order to have standards across the region for discharge planning.

- It was confirmed through consultations with A&E and other staff that the use of a discharge lounge as a place where patients can wait following discharge can free up beds needed for acute admissions. Funding was made available in December 2000 in order that a pilot project could be undertaken to evaluate the use of a discharge lounge in a large acute hospital in the Eastern region.

4.2.b. External delays

Initiatives by the ERHA are already underway to address difficulties with regard to external delays as follows:

Elderly patients

- Pilot projects are currently being undertaken by the ERHA to establish how services can be most effectively developed to maintain older people at home. One site currently being piloted is Beaumont hospital where the aim is to provide the necessary services within the community to facilitate older people to return home after discharge from an acute hospital.
- Pilot projects are also being developed to examine what strategies should 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 is the preferred choice of

the patient.

Winter Beds Initiative

- The Winter Beds Initiative was drawn up by the Authority in an effort to offer more appropriate convalescent care for elderly patients and at the same time to facilitate A&E Departments by freeing up acute beds. Funding of the order of £5m has been allocated by the Department to the Authority to contract an additional 495 step down beds for the winter 2000/2001. To date, a total of 280 beds have been contracted and the weekly A&E statistics for November and December 2000 would suggest that this has had a positive impact on the number of elderly patients awaiting discharge for acute hospitals.
  An additional 20 contract beds for the young chronic sick are due to come on stream shortly which should also help alleviate pressures in A&E Departments for beds.
  Co-ordination arrangements have also been put in place at Area Health Board level to facilitate improved planning and co-ordination of the winter beds initiative and also to improve communication between the area health boards and the Acute hospitals in this regard. It is intended that the area health boards co-ordinators would work closely with the discharge planners in the acute hospitals to facilitate the discharge processes.

4.3 Other Recommendations:

4.3.a. Project Manager at ambulance headquarters

Recommendation:

- In order to co-ordinate the availability of beds for emergency admissions for acute hospitals in the Eastern region it was proposed that a pilot post of a project manager based at ambulance headquarters needed to be established. This would enable improved co-ordination and more appropriate allocation of emergency referrals between hospital sites, thus ensuring that any one site is not unduly overcrowded.
  The post will entail the project manager liasing with the discharge co-ordinators in each of the hospitals, with the Authority, the Department of Health and Children, and the A&E working group. It is anticipated that this will contribute to achieving the successful outcome of less over-crowding at A&E departments in the Eastern region.

Action:

- A Project Manager post to be based at Ambulance Head Quarters .

4.3.b. A&E Co-ordination Group

Recommendation:

- It was also felt that there was a need to set up an A&E co-ordination group composed of A&E consultants and Nurse managers, and Chief Executive Officers (CEOs)

which would give priority to achieving the best possible quality of care for patients upon their arrival at A&E. It was felt that the A&E co-ordination group would have two key functions:

1. Co-ordination and planning of emergency patient flows across the region to minimise pressures on individual hospitals and to ensure appropriateness of referrals to individual hospitals.

2. Facilitation of collaboration and joint working by Consultants and Nurse managers on key issues such as development of clinical protocols for management of patients. A number of issues have been identified by the A&E Review Team as being appropriate for further consideration by this A&E Co-ordination Group.

Action:

- This group is being convened under the chairmanship of a senior commissioner for Planning and Commissioning at the ERHA. The first meeting took place on Wednesday 24, January 2001.

CHAPTER 5.

NEXT STEPS:

While a number of actions are currently being implemented on foot of the work of the Review group to date as outlined in Chapter 4, the Group recognises that there is still further work to be done to improve A&E services in the region. In this regard the Authority is preparing an application to the Dept of Health and Children requesting additional revenue and capital to pursue the recommendations of the review team which have not been funded to date. In addition to the areas where there is consensus on the developments required it was recognised during the A&E review that there are still a number of areas that warrant further analysis before conclusion can be reached on the way forward.

In this regard the Authority plans to pursue the following:

- **GP Out of hours services**
  The interface between A&E and primary care was reviewed by the group. A review of GP out of hours co-operatives is proposed as part of the Authority's evaluations being conducted in 2001 under the provider plan agreements in order to assess the most effective way possible of delivering out of hours services. This review will be undertaken in the context of the framework principles drawn up recently by the Department of Health and Children.

- **Clinical protocols**
  The Authority is anxious to facilitate the A&E Consultants recommendations for collaborative working on clinical protocols. It has recommended that it should be one of the key functions of the new A&E Co-ordination Group.

  Issues such as the use of observations wards and near patient testing were examined by the review group but the findings were inconclusive. With regard to observation wards there were mixed results from the studies and the success of such wards seems to be dependent on adhering to specific protocols. With regard to near patient testing there were different views from the hospitals on the merits of this facility. Accordingly it has been decided that these matters would be appropriate for further consideration by a sub-group of the A&E Co-ordination Group.

- **Psychiatric services provided by A&E departments**
  A preliminary literature review of Psychiatric services provided by A&E departments was conducted as part of the review. However, the group considered that this is an area which warrants further review. It was acknowledged in the course of the review that facilities for the management of psychiatric patients presenting in A&E departments are less than adequate. It has been decided that this matter would be appropriate for consideration by a sub-group of the recently convened A&E Co-ordination Group.

- **Profile of patients attending A&E departments**
  Work on profiling patients attending A&E departments has commenced in order to look at the future role and function of A&E services. When the results are available, the Authority will have, for the first time, a broad comprehensive profile of those attending A/E Departments in the Region during a particular time period. This will enable the Authority to determine the numbers of those attending and describe key characteristics of patients such as age, sex, severity of injury and GMS entitlement (as a proxy for relative deprivation). The Authority will also be able to analyse patterns of attendance in relation to these variables. It is critical that the results are analysed as factors such as age, severity of injury and degree of social deprivation are important markers for service usage. It is the Authority's attention to use this information for Planning and Commissioning purposes. It is also vital that the information is actively considered and acted upon by the A&E Co-ordination Group.

- **A&E Statistics**
  The Authority has developed a more comprehensive set of A&E statistics in 2001. A draft A&E monitoring template has been circulated to the A&E departments for consideration. The Project Manager at Ambulance Head Quarters will be responsible for the collection and analysis and dissemination of this information and it is to be made available to new A&E Co-ordination Group for appropriate action.

- **Future arrangements involving the ambulance service**
  The role of the Ambulance services was not considered by the review group, however, the Authority is aware that this is an area that will need further review. It is envisaged that when the Project manager at ambulance headquarters is in place that they will be in a position to provide more comprehensive information on the issues of concern to the ambulance services.

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9. Small V. An evaluation of the role and scope of practice of an Emergency Nurse Practitioner in an Urban Teaching Hospital in Dublin. (Dissertation submitted to the University of Dublin, Trinity College in part fulfilment of the degree of Master of Science in Nursing. August 1999).

10. NHS Executive: Inpatient Admissions and Bed management in NHS acute hospitals. Report by the Comptroller and Auditor General, February 2000, London.

APPENDIX 1

LIST OF MEMBERS OF THE A&E REVIEW TEAM

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Angela Fitzgerald (CHAIR):	Director of monitoring and evaluation ERHA, Canal House
Fionnuala Duffy:	Evaluation Manager (Monitoring & Evaluation) ERHA, Canal House
Evelyn Jameson	Researcher (Monitoring & Evaluation) ERHA, Canal House
Derek McCormack	Information Analyst (Monitoring & Evaluation) ERHA, Canal House
Karen Ann McNeill	Information Analyst (Monitoring & Evaluation) ERHA, Canal House
Fidelma McHale	Researcher (Planning & Commissioning) ERHA, Canal House
Dr Siobhan Jennings	Public Health Specialist Dept Public Health, Dr Steevens' Hospital
Dr Howard Johnson	Public Health Specialist Dept Public Health, Dr Steevens' Hospital
Dr Paul McKewon	Public Health Specialist Dept Public Health, Dr Steevens' Hospital
Dr Aidan Gleeson	A&E Consultant, Beaumont Hospital
Derek Browne	Nurse Manager: Mater Hospital
Kevin O'Doherty	GP representative

APPENDIX 2

Accident and Emergency Staffing

Accident and Emergency Staffing

Refs:

1. Recommendations for Nurse Staffing (Ref: Regan G. Making a difference to A&E: analysis of the operational inefficiencies in A&E departments in major acute hospitals in Dublin. Accident & Emergency Nursing (2000) 8, 54-61.
2. Irish Accident & Emergency Association, February 1999. Accident & Emergency Services in Ireland – A standard for the new milennium.

Nurse Staffing

Triage:	1 trained nurse 24 hours per day
Resuscitation	2 trained nurses
Main area	1 trained nurse + 1 support worker per 5 active cubicles
Minor area	1 or 2 trained nurses + 1 or 2 support workers
Team co-ordinator	1 nursing sister/deputy in charge per shift
Specialised roles	e.g. Nurse practitioners

Clinics/call out teams to be staffed separately from above

Medical Staffing

2 consultants where attendances are 40 000 pa.

3 consultants where attendances are 50 000 pa.

3 subconsultants/staff specialists for 40 000 pa