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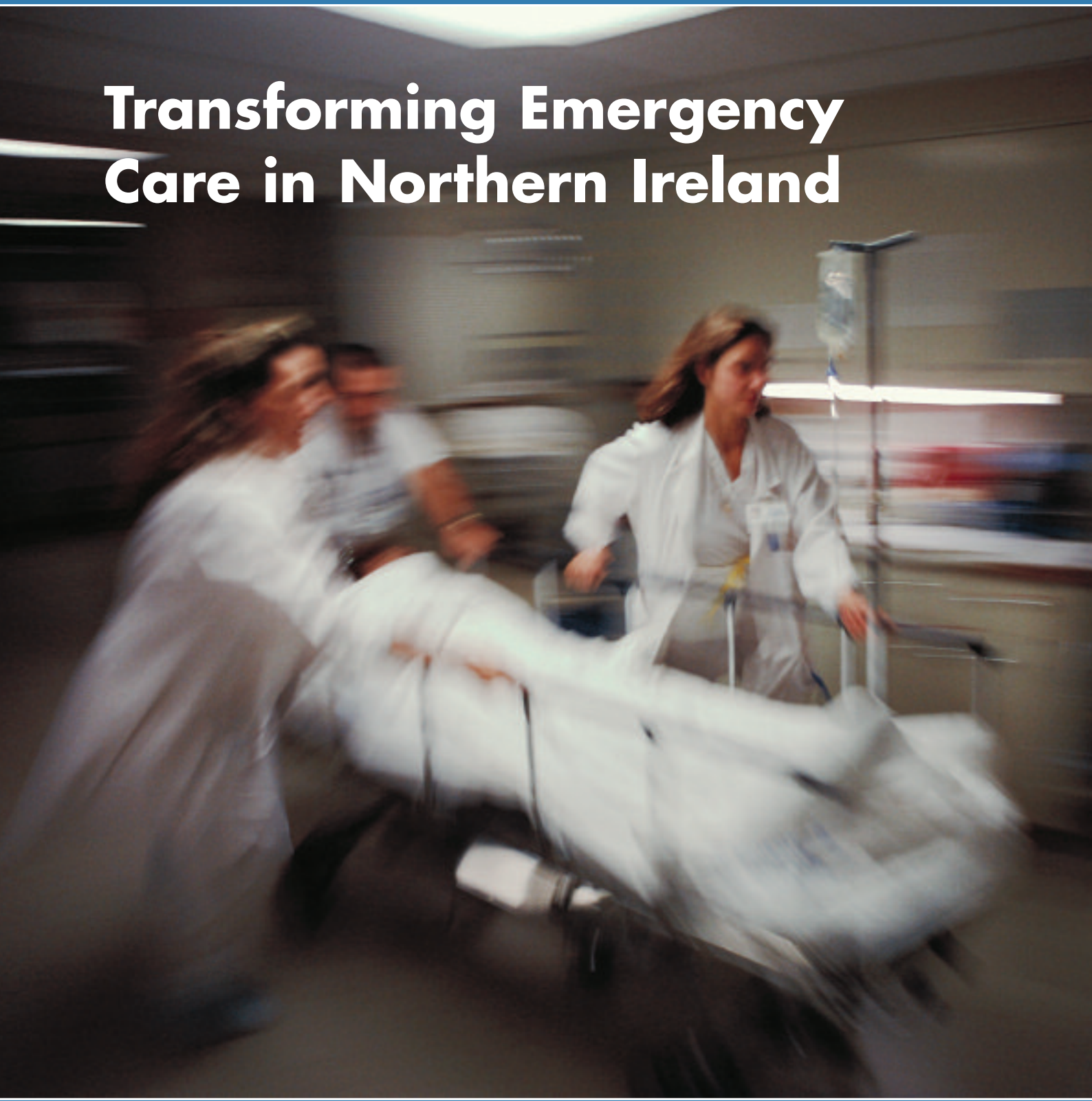
Transforming Emergency Care in Northern Ireland



REPORT BY THE COMPTROLLER AND AUDITOR GENERAL
NIA 126/07-08, 23 April 2008

Report by the Comptroller and Auditor General for Northern Ireland

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Transforming Emergency Care in Northern Ireland

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J M Dowdall CB
Comptroller and Auditor General

Northern Ireland Audit Office
23 April 2008

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List of Abbreviations

A&E	Accident and Emergency
GP	General Practitioner
MIU	Minor Injuries Unit
NHS	National Health Service
NIAS	Northern Ireland Ambulance Service
RPA	Review of Public Administration
SDU	Service Delivery Unit

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Background

1.1 Accident and Emergency (A&E) departments are a critical point of access to the health care system in Northern Ireland and offer an essential service to the general population. They are important hubs that interact directly with primary care, in-hospital care and community care services. There are 21 A&E departments and minor injuries units throughout Northern Ireland. These departments are the main pathway to hospitals for emergency inpatients and the demand for their services is unpredictable and varied. In 2005-06, A&E services cost almost £68 million.

Accident and Emergency activity levels

1.2 In 2006-07 there were 709,326 attendances at A&E departments in Northern Ireland. This represents a five per cent increase in demand from an attendance level of 675,589 in 1999-2000. These statistics reflect the fact that a significant proportion of the population of Northern Ireland used A&E services during 2006-07 demonstrating that the community is heavily reliant on secondary care. It has been noted, also, that A&E attendances are higher in Northern Ireland than in the rest of the United Kingdom. The Appleby Report[1] states that:
'…as far as this Review has been able to ascertain there has been little or no thorough analysis in or outside the Department of Health, Social Services and Public Safety (Department) of reasons why A&E attendance rates in Northern Ireland are so high (around 31 per cent higher than in England, in 2003/04).'

1.3 In recognition of the increasing focus being given to emergency care, the Department commissioned an examination[2] of the provision of A&E and other emergency services, for example, minor injury units, GP out-of-hours services and the interface with the Northern Ireland Ambulance Service. An A&E attendance exercise carried out as part of this review found that 24 per cent of patient attendances were regarded by A&E staff as "inappropriate", highlighting those patients who may have been as well served by an alternative service to A&E. The review produced a range of recommendations to address this situation, for example, looking at the level and type of clinics held in A&E; increasing primary care gate-keeping; and promoting the role of other health and social care professionals. Appendix 1 provides an overview of the main recommendations made.

1 *Independent Review of Health and Social Care in Northern Ireland*, Professor John Appleby, August 2005
2 *Audit of Accident and Emergency Activity*, PricewaterhouseCoopers for the Department, Draft Report for Discussion, February 2007.

Lengthy waits are not appropriate for emergency patients

1.4 As patients flow through the various components of the healthcare system a number of obstacles prevent timely access to care. In particular, hospitals have struggled to reduce the delays patients face in A&E departments either waiting on trolleys to be admitted to a bed or to be treated and discharged. Pragmatic and common-sense solutions within A&E departments can have substantial and hopefully sustainable impacts on improved waiting times. This report examines the progress the Department and Trusts have made in moving towards the achievement of the ambitious new A&E waiting time targets established in June 2006, that:

From April 2007, no patient should wait longer than 12 hours in A&E until they are either admitted, or treated and discharged home; and

By March 2008, 95 per cent of patients who attend A&E should be either treated and discharged home, or admitted within four hours of their arrival in the department.

1.5 Developing solutions to the problem of delays in access to emergency care is extremely challenging because it is not one that has its primary causes simply concentrated within the A&E department itself. Rather, it is multi-factorial, complex and systemic in nature and requires system-wide solutions. Recent research[3] has found also that frustration with long waiting times can be a key motivation in violent incidents in A&E departments and in June 2007 the Department launched a Zero Tolerance Campaign.

Performance measurement and target-setting for A&E services has until recently been poor in Northern Ireland

1.6 In order to effectively define the extent to which patients wait for care and treatment in A&E departments on a Trust, Board or regional basis, and to effectively evaluate the impact of any interventions to improve access to care, an appropriate standard numerical performance target such as "the four hour wait" is needed. Such a target is easily measurable and can be linked to the collection of reliable, complete, accurate, timely, usable – in a word, quality – data. However, we found that until recently in the Northern Ireland health service there have been no consistent measures of time spent waiting in A&E departments and target setting has been somewhat erratic.

1.7 Like England, the Department has used "the four hour wait" to measure waiting times in the past. For instance, a review in 2002[4] showed that there was a range of 52.2 per cent to 99.61 per cent of patients being admitted within 4 hours of time of arrival at an A&E

3 *Violence in the workplace: The experience of doctors in Northern Ireland,* Health Policy and Economic Research Unit, British Medical Association (NI), November 2006.
4 *Acute hospital portfolio year 3: regional report,* Performance Review Unit, DHSSPS, 2003

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department across Northern Ireland with a mean value of 83 per cent. This compared, at that time, to an average in England and Wales of 75 per cent.

1.8 However, the "four hour wait" was not adopted by the Department at that time as an official target. Rather, the next time A&E waiting times features in Departmental priorities is in 2004-05 when the Department missed a target that *"the number of patients waiting more than two hours in A&E between a decision to admit and admission to a ward was to be reduced by one third compared to 2003-04 levels"*. Indeed, against this "trolley wait" indicator, the performance of Northern Ireland Trusts has steadily deteriorated over the years. In November 2005, the Secretary of State was asked a Parliamentary question on the extent of "trolley waits" in Northern Ireland. The data supplied in response shows a large increase between 1998-99 and 2004-05, as shown at Figure 1. The Department told us that 33,547 patients waited more than two hours in A&E departments for a hospital bed in 2005-06 and 32,545 in 2006-07.

Figure 1: Patients waiting more than two hours in A&E departments for a hospital bed

1998-99	3,943
1999-00	6,040
2000-01	10,346
2001-02	15,041
2002-03	25,131
2003-04	29,978
2004-05	35,056

Source: Department Information Return CH10

1.9 While the evidence of the Departmental review in 2002 (see footnote 4) showed that Northern Ireland was outperforming England and Wales on the "four hour wait" indicator in 2001-02, the Department failed to capitalise on this and establish it as a performance target.

What the NHS has done to improve access to A&E

1.10 England has achieved remarkable success in decreasing A&E waiting times as a result of changes at all levels of the healthcare system[5]. Success in England highlights the importance of developing integrated, system-wide solutions in response to the underlying problems driving A&E department waiting times.

5 *Once Upon a Time in the Emergency Department: A Cautionary Tale*, D. Cass, Ann Emerg Med 2005; 46: 541-3

1.11 In 2000, an ambitious target for emergency care was established for England: the goal by the end of 2004 was admission, discharge or transfer of 98 per cent of patients within four hours of arrival at an A&E department. This was coupled with a comprehensive emergency care reform strategy, and a government commitment to funding. In the second quarter of 2002-03, only 77 per cent of patients spent four hours or less in A&E in England. By the first quarter of 2004-05 this had gone up to 94.7 per cent. Since then the trend has continued to improve, and is now over 97 per cent. Changes in emergency care have also led to improvements in the patient experience, an expanded workforce and skill-mix, and improved ambulance performance.

1.12 Based on the recognition that causes of A&E department pressures may not be identical in different communities, the first step in developing strategies to improve A&E waiting times involved the identification of problems at a local level. A diagnostic tool allowed trusts to break down delays in A&E into seven main causes, the four most common being: waiting for assessment; waiting to see a specialist; waiting for a bed; and waiting for diagnostic tests. This analysis allowed Trusts to pinpoint the main causes of delays in each A&E department and results were used to help health communities better understand where they needed to focus their efforts in service improvement[6].

6 Transforming Emergency Care in England; 2004 October, Department of Health. **http://www.dh.gov.uk/assetRoot/04/09/17/81/04091781.pdf** (accessed February 10, 2006)

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Improving the flow of emergency admissions

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Problems in emergency care

2.1 Efforts to improve performance in A&E departments in Northern Ireland had only a limited impact prior to 2006. For instance, as part of its "Regional Emergency Pressures Programme", in July 2004 the Department required Boards and Trusts to develop and submit plans to streamline emergency admissions processes. However, as noted at paragraph 1.8, the 2 hour wait target for March 2005 was not achieved. The clear targets set by the Minister in 2006 to ensure all patients could have access to high quality, prompt health care in or out of hours appear to mark a new emphasis on the performance management of emergency care services in Northern Ireland. This has been based on extensive research within the Department and Trusts aimed at pin-pointing where improvements within existing emergency care systems could be brought about. Some of the main "common themes" identified for improvement were:

Information: the need for robust information systems and the consistent collection of standardised data on A&E waiting times was a manifest problem across the Trusts. The lack of adequate systems meant that many Trusts did not have access to the right information to plan for changes in demand and consequent changes in capacity;

Matching systems to patients' needs: Because interfaces between A&E departments and community/primary care facilities have been under-developed, many patients have been missing out in not being cared for in more appropriate settings. It is understood that this issue is being addressed through a separate review being carried out for the Department (see paragraph 1.3). Working in new ways to provide different, and more appropriate levels of care to meet patient's needs can mean that unnecessary attendance at A&E can be avoided for some patients;

Lack of senior clinical decision makers: clinical staff capacity in many A&E departments is stretched as demand for emergency services has increased dramatically over recent years. As a result, we understand from the Department that in the absence of consultant input, junior doctors may err on the side of caution and admit patients who may not have been admitted by more senior staff. The involvement of senior clinical staff in A&E in a patient's assessment from an early stage minimises waiting and helps to ensure appropriate care. Research shows that this can reduce the number of patients with emergency needs who require admission to hospital by between ten and 20 per cent.[7]

7 *Reforming emergency care*, Department of Health, 2001.

Implementing change

2.2 The themes outlined above and a range of other obstacles, therefore combined to produce a disjointed and uncoordinated emergency care system which has been manifested in patients waiting too long in A&E and experiencing difficulty in getting the right service. The Department's Service Delivery Unit (SDU) introduced a Reform Programme to improve access to unscheduled care in late 2006. A lead Director for Unscheduled Care Reform was appointed to the SDU to lead this programme of work and an Improvement Manager was appointed to each Trust to provide support in driving forward the reform and modernisation agenda. Supporting the reform and modernisation programme is a Clinical Reference Group which was established to provide ongoing advice and support on a range of clinical issues. Clinical support is also provided to the programme by an Emergency Care Consultant for one session per week.

2.3 A detailed analysis has been carried out of patient flows at every A&E department including minor injuries units over the past two years. This work identified peaks in demand and linkages between elective and unscheduled care which will allow for the improved management of patient flow and more effective utilisation of minor injuries units. In the period January 2007 to June 2007, the Department required Trusts to implement a number of actions to improve A&E waiting times. These include:

- having a consultant admission vetting system in the A&E department for all admissions at least 12 hours per day;
- scheduling clinical ward rounds to facilitate twice daily senior decision making and appropriate discharge of patients;
- scheduling all investigations to ensure patients do not remain in hospital whilst awaiting tests;
- ensuring all investigations for inpatients are prioritised to ensure effective flows;
- ensuring bed managers focus primarily on expediting patients through the care system;
- ensuring all patients have a discharge-focused treatment plan within 24 hours of admission, including an expected date of discharge; and
- introducing nurse-led discharge.

Where are we now?

2.4 If achieved, the targets set for A&E in June 2006 (see paragraph 1.4) would represent a very large reduction in the prevalence of long A&E waiting times. We acknowledge the significant progress made in meeting the interim milestone that admissions to a ward

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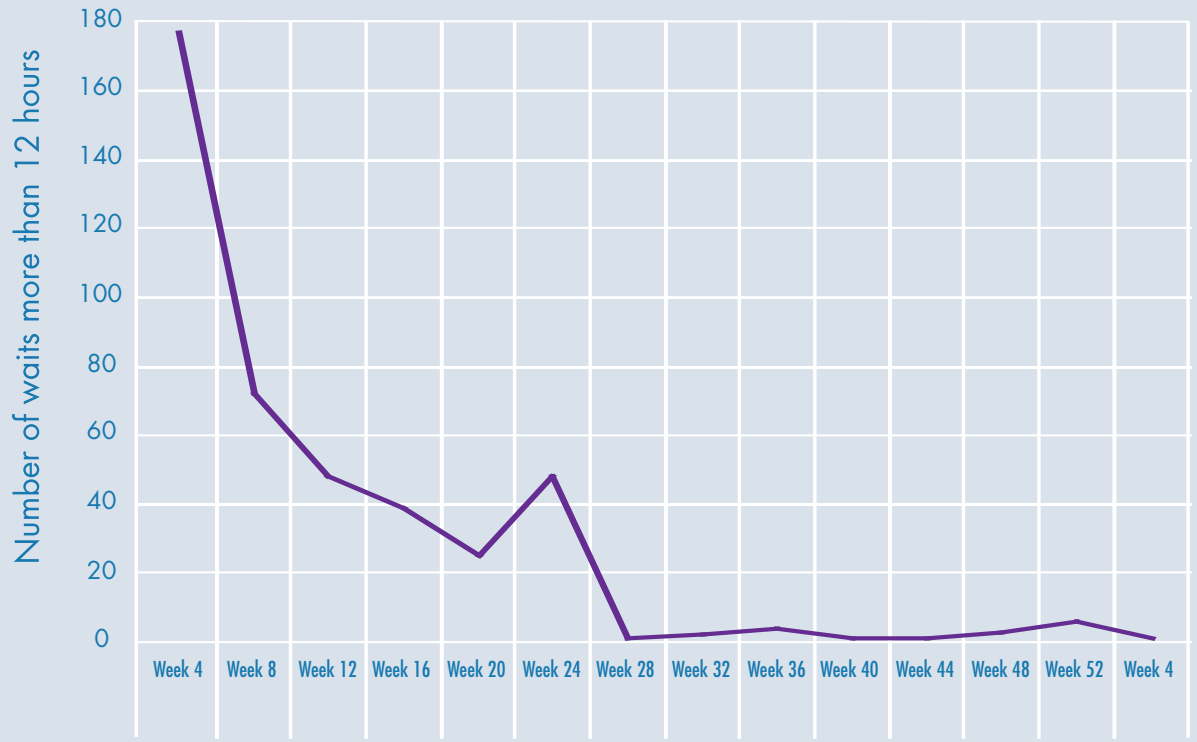
Figure 2: Number of completed waits >12 Hours – Regional Position



Source: Department Performance Management Information

should take place within 12 hours of a patient arriving in A&E. This had the effect of reducing the numbers missing the 12 hour deadline from around 200 a week in February 2007 to almost zero since July 2007 (Figure 2). The Department's active management of performance and support for Trusts has been instrumental in this achievement. As an indication of the importance the Department attaches to achievement of the 12 hour target, it now requires Trusts to report weekly on any failure to achieve this level and to provide details of the plans in place to reach it. Current progress on the March 2008 target that 95 per cent of patients will be either treated and discharged home, or admitted within four hours of their arrival in the department shows that this is running at just over 90 per cent. The Department told us it is confident that the 95 per cent target will be achieved by March 2008. As a benchmark, the NHS in England has had a target since 2000 that by the end of 2004, 98 per cent of patients would be admitted, discharged or transferred within four

hours of arrival in A&E. Statistics show that performance against this target has been just over 97 per cent for the three years 2004-05 to 2006-07[8].

Collecting data

2.5 In order to improve performance it is important to have good management information. Historically, lack of accurate data has blighted the management of A&E services within the health service. For instance, a review commissioned by the Department in 2001[9] showed that only 69 per cent of hospitals had computerised information systems and only 44 per cent were able to produce requested information routinely. All hospital sites now have an IT system in place and no longer rely on manual records. In addition data quality issues have been addressed. Moreover, the development of real-time data on length of stay in A&E departments will allow the Department to closely monitor performance on an ongoing basis.

Bed availability

2.6 In setting A&E patient throughput performance measures, the Department's strategy recognised also that the effective management of beds was crucial to the improvement process. Efficient use of beds is essential in order to ensure that among other things, emergency admissions can be made in a timely manner. Lack of inpatient bed availability is one of the fundamental underlying causes of emergency department waiting. It may be either relative or absolute; that is, it may be due to a relative inefficiency in the management of an existing number of beds or to an absolute shortage in the number of inpatient beds. In one case, process improvements have the potential to make a substantial difference; in the other, there is no viable solution to the problem without funding of additional beds.

2.7 The interdependent relationship between the bed management function of a Trust, other departments within a Trust and health care provision outside the control of a Trust, can strongly influence patient outcomes. If, for instance, there are insufficient community facilities to provide the necessary care for a patient outside an acute hospital setting, a delayed discharge may occur. This can affect the number of beds available within a hospital for emergency admissions. Once a patient has been admitted, either as an emergency or as an elective, Trusts will seek to discharge the patient at the earliest practicable date. Reducing lengths of stay should make more beds available, potentially reducing the length of waits for patients being admitted from A&E.

2.8 Getting patients home more speedily creates capacity on wards enabling ward staff to actively place patients from

8 *Hospital Episode Statistics,* Department of Health
9 *Accident and Emergency in Northern Ireland: Regional Summary:* Performance Review Unit, DHSSPS, 2002

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A&E. "Pulling" patients through the system in this way should mean markedly fewer delays for patients than the traditional approach of A&E trying to "push" patients on to wards. This approach is reflected in the Department's principal target that:

By March 2008, all complex discharges from an acute setting will take place within 72 hours of the patient being declared medically fit and all other discharges within 6 hours of the patient being pronounced medically fit.

As an interim measure, the Department set a target that:

By March 2007, 50 per cent of all complex discharges from an acute setting will take place within 72 hours of the patient being declared medically fit and all other discharges within 12 hours of the patient being pronounced medically fit.

2.9 The latest information on discharges supplied by the Department shows that Trusts have made substantial headway in the timely discharge of "non- complex" cases from acute settings. While not all cases had been discharged within the 12 hour target, available data shows that this had been achieved in 99 per cent of cases. In relation to progress towards the 6 hour target, on average 97 per cent of non-complex discharges have taken place within this timescale. Figure 3 demonstrates that, regionally, good progress has been made towards the March 2008 target, with 75 per cent of all complex cases taking place within 72 hours. Appendix 2 provides a breakdown of performance across Trusts.

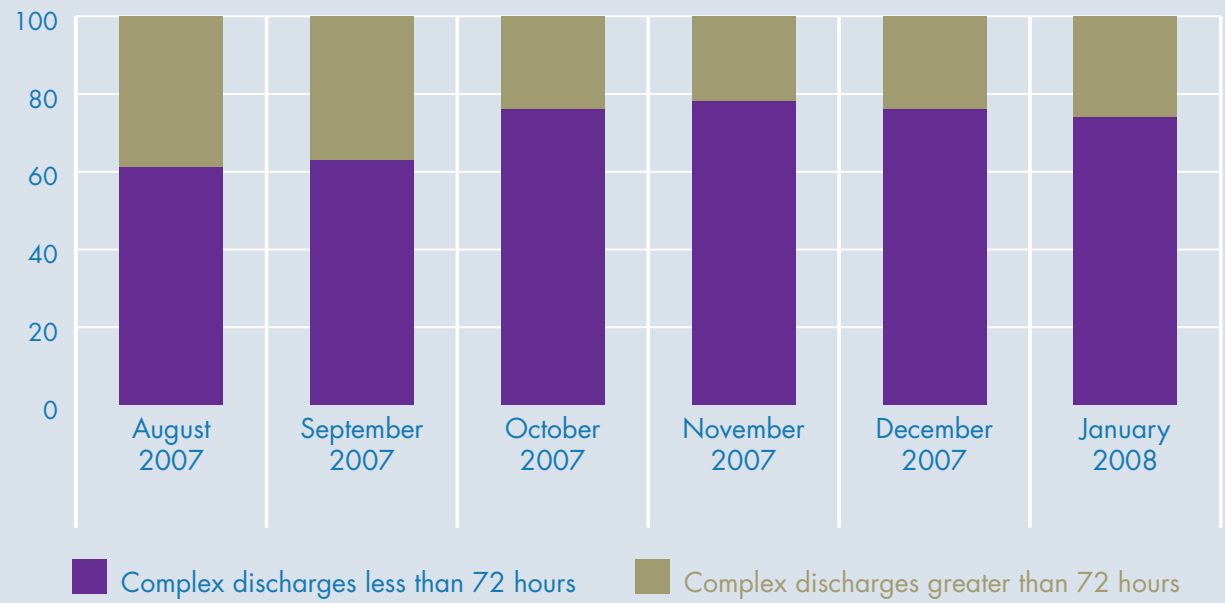
2.10 The Department told us that the improvement in discharge rates has been achieved as a result of a more proactive approach to bed management. In particular:

- discharge-focused treatment plans are being established for all patients within 24 hours of admission as is an expected date of discharge;
- efforts are being made to ensure that discharge rates remain constant and are not reduced over week-ends or bank holidays;
- the aim is to ensure that the majority of patients are discharged before twelve o'clock mid-day; and
- nurses are given greater freedom to take the lead in discharging patients.

Sustaining improvement in A&E services

2.11 We recognize that the Department and Trusts have demonstrated a substantial focus on eliminating waiting lists in line with targets. We acknowledge, too, that its emergency care target for 2008 is challenging and, because of this,

Figure 3: Percentage of Complex Discharges August 2007 to January 2008



Source: Department Performance Management Information

achievement will require strong clinical and managerial leadership. Since November 2006, each Trust has designated an improvement manager for unscheduled care who must empower staff and facilitate positive, substantive change. They are responsible for ensuring the removal of any barriers that prevent people from getting on with the job. For instance, peaks and troughs in the availability of beds, waiting for specialist opinion and lack of access to diagnostic services are all features of A&E services which could potentially cause delays. Moreover, there will be a continuing need to balance capacity and demand, particularly if a reduction in A&E waiting times was to attract previously unmet public demand.

2.12 Given the success of the Department in managing Trusts' performance to achieve the interim 12 hour admission target and its confidence that the four hour throughput target will be achieved by March 2008, there is a risk that high level attention to performance in A&E departments could diminish in the longer term. To avoid this risk, it is important that the Department continues to monitor performance closely and provide support to Trusts/hospitals to identify bottlenecks in their systems and to help them develop practical solutions.

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2.13 The targets set by the Department are focused on reducing long waits in A&E. However, there is also a risk that, if attention is concentrated solely on meeting these targets, less focus is given to the timely completion of treatment for patients who could be properly managed in a shorter timescale than the target. Hospitals should monitor the processes within A&E departments and use any available benchmarking information to ensure that patients do not spend more time in A&E than is clinically essential.

Appendices

Appendix One:
(paragraph 1.3)

Recommendation	Chapter Reference
Nature & Range of A&E Services	
1. With the introduction of RPA changes regarding the configuration of Trusts and new commissioning arrangements, review 'whole system working' in the context of the number and location of current A&E and MIU departments. This should include the role of NIAS as part of the further development of a regional unscheduled care network.	4, 5, 7, 9
2. Review MIUs in terms of opening hours, future co-location, referral sources and availability of diagnostics.	4
Level and Use of Services	
3. Review the level and type of clinics held in A&E and determine if emergency departments are the most appropriate locations for such clinics.	4, 5
4. Review the benefits of further development of observation wards in A&E departments to promote early consultant review and discharge as appropriate.	4, 9
5. Increased promotion of primary care gate-keeping (including as appropriate cross-referral from A&E to out-of-hours services) to reduce demand on A&E, by for example piloting locating GPs in or adjacent to A&E departments.	5, 7, 9
Recommendation	
6. Review the consistency of information recorded across A&E departments and interpretation of definitions around planned and unplanned care, as well as consistency in the collation and reporting of out-of-hours GP activity.	5

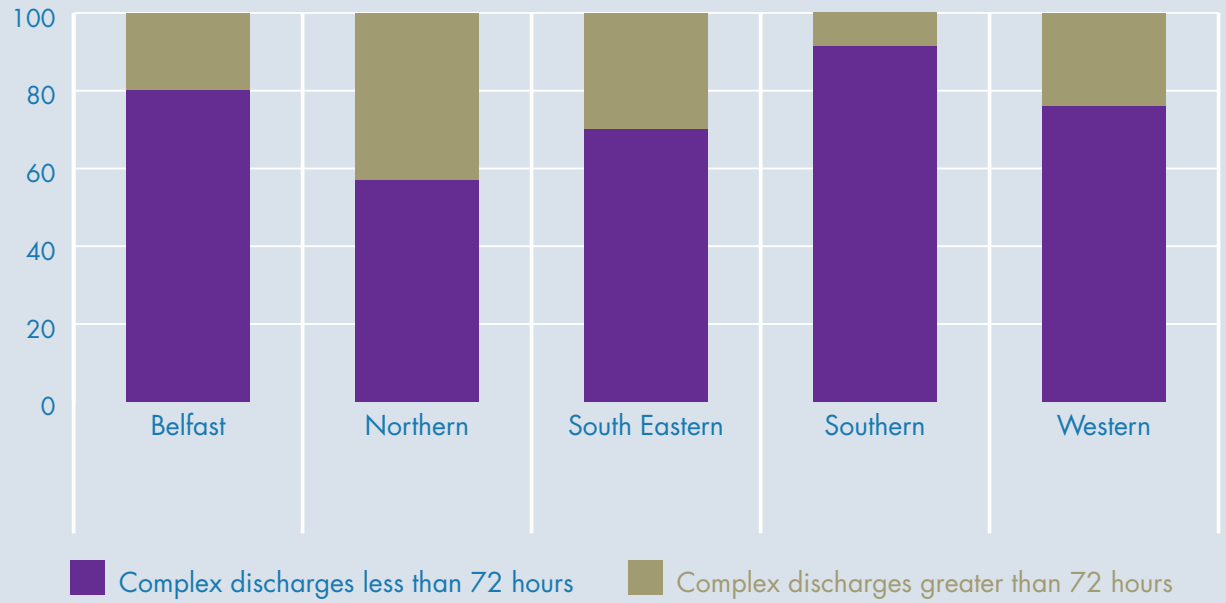
	Chapter Reference
Costs and Staffing	
7. Review the annual budget setting process for A&E and MIU departments to ensure it is reflective of actual expenditure incurred, and also that routine monitoring occurs.	6
8. Consider the promotion of the role of other health and social care professionals (physiotherapists, occupational therapists etc) in emergency departments and also their role in the community setting as a preventative measure.	6, 9
9. Review staff skill mix, role development and increased specialist nursing for emergency services provision. In line with this recommendation, undertake a review of patient arrival times and flows within A&E departments alongside the associated staffing requirements to ensure that staff (both in terms of numbers and skills) are available when regular peaks in demand are experienced.	5, 6, 9
10. Review the scope to increase the input of nursing staff in out-of-hours provision and also greater integration of such services alongside A&E departments.	6, 9
11. Review the role and resourcing of NIAS, including transport protocols and staff role development.	5, 6, 9
Alternatives to A&E	
12. Focus on initiatives for older people and those with chronic conditions who tend to have multiple attendances at A&E eg. Consider the result of the DoH Partnership for Older People Pilots (POPPs) when available.	7, 8, 9
13. Promote the effective use of existing technology on an NI regional basis to support and assist in 'whole system' working, including as appropriate the further development of community diagnostic services.	4,9

Appendix One:
(paragraph 1.3)

Alternatives to A&E (continued)	Chapter Reference
14. Consider a pilot to 'triage out' patients from the A&E department to an appropriate alternative to have a greater understanding of the safety implications of introducing such practices.	7, 8, 9
15. Consider the promotion of on-going public awareness campaigns regarding the role of A&E and alternative options such as MIUs via schools, community facilities, GP practices, media coverage etc.	8, 9

Appendix Two:
(paragraph 2.9)

Percentage of Complex Discharges by Trust January 2008



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