Northern Ireland Assembly

Research and Information Service Briefing Paper

Paper 84/11 15 August 2011 NIAR 437-11

Dr Lesley-Ann Black

Belfast City Hospital A&E

1 Introduction

The Belfast Health and Social Care (HSC) Trust has Accident and Emergency (A&E) services at the Mater Hospital, the City Hospital and two at the Royal Hospital site (one being for children). At a meeting with the Northern Ireland Health Committee on the 20th July 2011, the Minister for Health (HSSPS) Mr Edwin Poots indicated that changes to the A&E unit at Belfast City hospital are needed which would "not be the type of A&E service that is currently provided".[1] This is the first major A&E department that has come under threat of being restructured or closed as part of wider reform measures in recent years. This paper discusses the implications of these changes and the impact it may have on waiting times, and other A&E departments.

2. Background

Hospital Accident and Emergency (A&E) departments serve as a critical point of entry to the healthcare system for many people. They specialise in the acute care of patients who present without prior appointment - either by their own means or by ambulance. Significant changes have been witnessed in A&E departments over the past decade as a result of the changing demographics of our ageing population, clinical and technological developments, and resource issues to name a few. A&E departments

[1] Committee for Health, Social Services and Public Safety Official Report (Hansard) Available online at www.niassembly.gov.uk/record/committees2011/HSSPS/110720_CPD2011&draftCP2011-12.htm

are classed as 'emergency care'. They are highly skilled environments that depend on a wide range of technical supports and other parts of the health care system.

2.1 Developing Better Services (2002) Report

The need to modernise hospital services stems from a range of reviews and reports.[2] In 2002 the Department of Health, Social Services and Public Safety (DHSSPS) published *Developing Better Services* which recommended that reform and modernisation of hospital services across Northern Ireland was necessary.[3] Reasons for change included rising care demands, a lack of resources and funding, risks to patient safety and the need for 'fit for purpose' quality healthcare. The new model of hospital provision included:

- a reduction in the number of acute hospitals (from 15 to 9)
- acute hospitals to be supported by local hospitals, namely Mid Ulster, South Tyrone, Whiteabbey, Downe, Lagan Valley, Mater and Tyrone County.

The aim was that most of the population would have timely access to emergency care; the majority of people living within 45 minutes, and almost all within one hour of emergency care and consultant-led maternity services.

2.2 Review of Unscheduled Care

Due to the unplanned and unpredictable nature of emergency care, A&E services must provide initial treatment for a broad spectrum of illnesses and injuries, some of which may be life-threatening. These services have to be equipped to deal with the sudden onset of patients (as is typically witnessed for example during the winter months). However, an independent review of A&E activity commissioned by the DHSSPS (2007) highlighted that nearly one quarter (24%) of attendances to A&Es in Northern Ireland were "inappropriate" and could have been addressed by alternative healthcare services - such as minor injuries units.[4] There is also evidence that some people attend an A&E when they cannot get an appointment quickly enough with their GP.[5]

A further review of unscheduled care conducted by the NIAO (2008) indicated that attendances at A&E in Northern Ireland were 20-30% higher than in the rest of the UK.[6] In part, this may be due to the lack of development of other types of unscheduled care services. For example, out-of-hours centres require an appointment and there are no 'walk-in' primary care health facilities (except for A&Es) like there are in other parts of the UK.

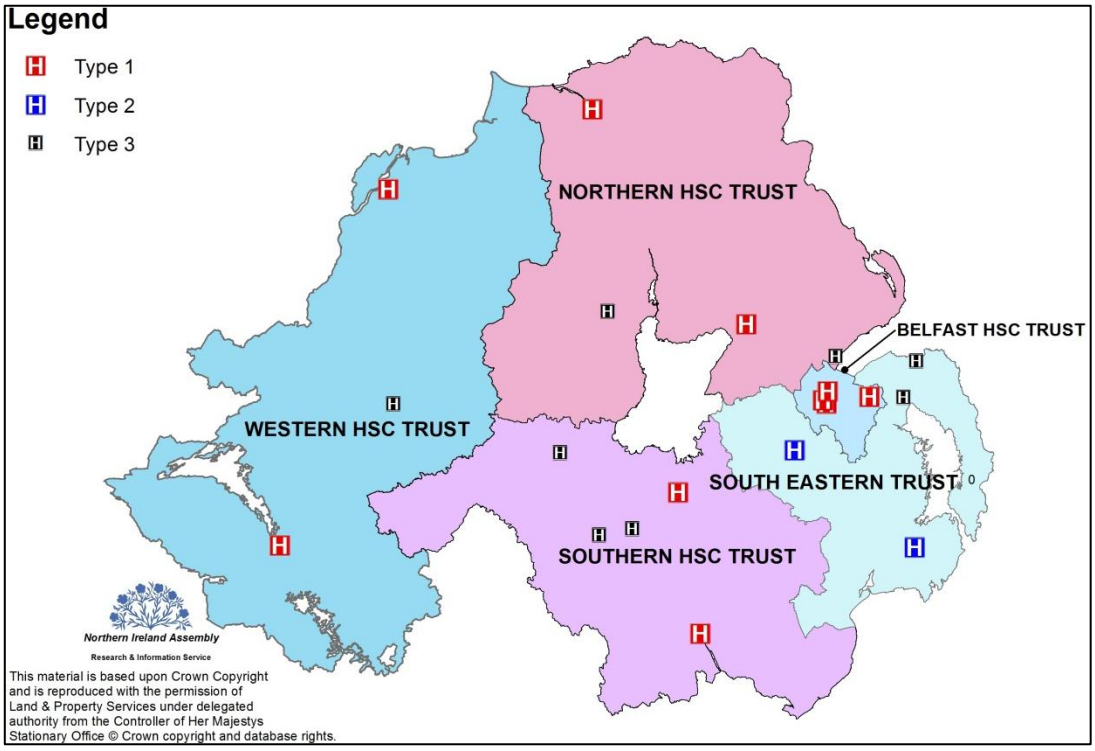
[2] See for example the Hayes Report (2001): A Review of Acute Services in Northern Ireland
[3] Developing Better Services DHSSPS (2002) http://www.setrust.hscni.net/involving/involving/Developing%20Better%20Services.pdf
[4] DHSSPS (2007) Audit of Accident and Emergency Activity: Final Report: PwC
[5] Belfast Telegraph A&E Services Belfast (1 August 2011)
[6] http://www.niauditoffice.gov.uk/pubs/TransformingEmergencyCare/fullreport.pdf; see also Appleby report Independent Review of Health and Social Care in Northern Ireland (2005)

3 Emergency Care: Northern Ireland

In Northern Ireland, the first phase of the Review of Public Administration (RPA) established five new integrated HSC Trusts and the retention of the NI Ambulance Trust with effect from 1 April 2007.[7] A number of sites (21 in total) deal with accidents or emergencies. These are shown in Table 1 and located on the map below.

Health & Social Care (HSC)Trust	Type 1	Type 2	Type 3
Western HSC Trust	• Altnagelvin Area • Erne		• Tyrone County
Northern HSC Trust	• Antrim Area • Causeway		• Whiteabbey[8] • Mid Ulster
Southern HSC Trust	• Craigavon Area • Daisy Hill		• South Tyrone • Armagh • Mullinure
Belfast HSC Trust	• Belfast City • Royal Victoria • Mater Hospital • RBHSC		
South Eastern HSC Trust	• Ulster	• Lagan Valley[9] • Downe	• Ards • Bangor

Table 1 DHSSPS emergency care sites 2010/11 (and mapped out below)



[7] Department of Health, Social Services and Public Safety: RPA Background. Available Online at: www.dhsspsni.gov.uk/index/hss/rpa-home/what-changes.htm
[8] Whiteabbey and Mid Ulster hospitals reclassified from Type 2 to Type 3 as of 24 May 2010
[9] Lagan Valley hours reduced 1 August 2011

The 3 'types' of emergency care units are described as follows:

Type 1: Consultant-led service with designated accommodation for emergency care patients; providing emergency medicine and surgical services on a 24 hour basis.

- Eleven across Northern Ireland

Type 2: Consultant-led service with designated accommodation for emergency care patients; does not provide both emergency medicine and emergency surgical services and/or has time-limited opening hours.

- Two services - both in the South Eastern Trust

Type 3: A minor injury unit (MIU) with designated accommodation for patients with a minor injury and/or illness which may be doctor-led or nurse-led.

- Eight MIUs across Northern Ireland

However, there are some key limitations to minor injuries (Type 3) services. Firstly, children under certain ages are not eligible for treatment. Instead, these patients are required to attend an A&E department. Secondly, opening times are restricted, some are open 9am-5pm and others 9am-9pm, and not all are open on public holidays, nor weekends. This is in comparison to Type 1 A&E departments that are open to all ages, 24 hours per day.

3.1 Emergency Care Statistics Northern Ireland

Over the last 4 years, the total number of attendances at emergency care departments in Northern Ireland has increased by around 3%. There were a total of around **731,000** attendances at A&Es in recorded in 2010/11.[10] Approximate attendances for each Trust area are as follows:

- **Belfast Trust: 27%**
- S. Eastern Trust: 21%
- Southern Trust: 20%
- Northern Trust: 19%
- Western Trust: 14%

Across all Trusts, the most accessed A&E sites were Craigavon, the Ulster (Dundonald) and the Royal Hospital (Belfast); each experiencing over 75,000 attendances in 2010/11 (see Appendix 1).[11]

3.2 A&E care in Belfast

Belfast is fortunate to have three A&E sites at the Royal, the Mater and City hospital. Figure 1 shows these A&E sites across Belfast; all located within 2 miles of each other.

[10] DHSSPS NI Hospital Statistics Emergency Care 2010-11 www.dhsspsni.gov.uk/a_e_annual_report_2010-11_final.pdf page 6 Website accessed 1.8.2011
[11] As above DHSSPS page 16.

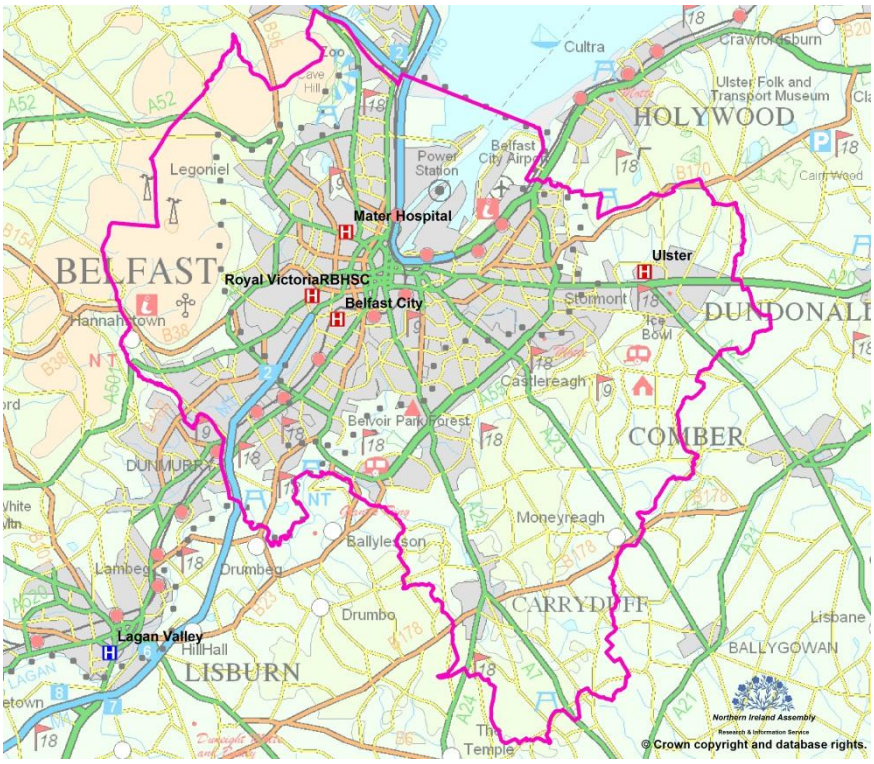


Figure 1 A&E care sites in Belfast

However, the 3 site locations also means that specialisms are spread or perhaps duplicated across sites, and it has been argued that it would be more effective to have them centralised in one area.

During 2010/11, the Belfast Trust had the greatest number of A&E attendances (196,106). One in four visits to an A&E in Northern Ireland is treated in a Belfast Trust A&E unit. This is reflective of the population as the *wider Belfast Metropolitan Area* represents about one third of Northern Ireland's total population.[12] As can be seen in Table 2, the Royal hospital had far greater numbers of patient attending than either the City or Mater hospitals.

Hospital	Total number of A&E attendances 2010/11
Royal Victoria RBHSC[13]	75,652 31,645
Belfast City	45,008
Mater	43,801
Total	**196,106**

Table 2 Number of attendances at A&E sites across Belfast 2010/11

[12] http://www.belfastcity.gov.uk/factsandfigures/demographics.asp
[13] Acronym for Royal Belfast Hospital for Sick Children

Any change to the current A&E provision at the City hospital will need to take account of the **45,000** people who visited during the last 12 months. This is likely to exacerbate the current pressures (overcrowding and long waiting lists) faced at the Royal, the Mater and possibly further afield.

The costs for each A&E in Belfast are presented below in Table 3. The Royal Hospital (including the RBHSC) has the highest indirect and direct costs and overheads.

	Direct £'000	**Indirect £'000**	**Overheads £'000**	**Total £'000**
Royal Victoria	4,568	2,139	2,172	**8,880**
RBHSC	2,044	677	951	**3,672**
Belfast City	3,226	1,256	867	**5,349**
Mater	2,876	1,247	1,418	**5,541**
TOTAL	12,715	5,320	5,408	**23,443**

Table 3 A&E Costs and overheads 2010/11

3.3 A&E Waiting Times

Trusts have targets regarding A&E waiting times as outlined in the Priorities for Action publication (DHSSPS).[14] This states that *'from April 2010, HSC Board and Trusts should ensure 95% of patients attending any A&E department are either treated and discharged home, or admitted within four hours of their arrival in the department. No patient should wait longer than 12 hours.'*

- In 2010/11, the Belfast Trust performed **the least well** in terms of waiting times. It had the lowest number of patients attending A&E being seen within the 4 hour waiting time target. It also had the highest number of patients waiting 'between 4-12 hours', and 'over 12 hours', when compared with all other Trusts (Appendix 2).

Hospital:	**City**	**Mater**	**Royal**	**Antrim**	**Ulster**
No. of patients waiting more than 12 hours at A&E between April-June 2011[15]	49	285	389	1,196	296

- The previous table shows the number of patients waiting over 12 hours in Belfast A&Es when compared to Antrim and the Ulster hospitals during the last three months. (Note the high volume of patients waiting over 12 hours in Antrim hospital which has had to deal with the influx of patients from Whiteabbey and Mid Ulster A&Es when they were reconfigured to minor injuries units in May 2010).

- More generally, the total number of patients waiting over 12 hours across all **A&E sites in 2010/11 was 7,379, seven times more than in 2007.**[16]

[14] http://www.dhsspsni.gov.uk/microsoft_word_-_priorities_for_action_2010-11.pdf page 20
[15] http://www.dhsspsni.gov.uk/ec1_june11.pdf page 7
[16] DHSSPS http://www.dhsspsni.gov.uk/a_e_annual_report__2010-11_final.pdf page 8

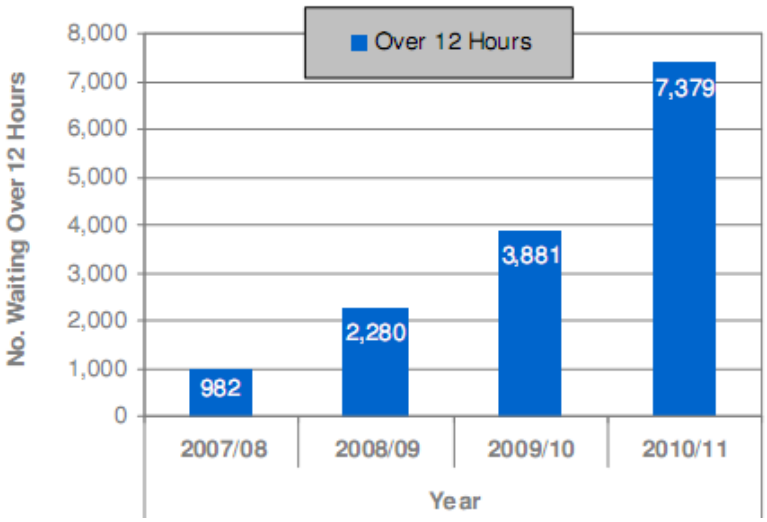


Figure 2. Number of A&E patients waiting over 12 hours across all A&Es

4. Changes to the City Hospital

At the Meeting of the Health Committee on 20th July 2011, the Health Minister indicated that there would need to be changes to the existing A&E services provided by the City hospital.[17] The intention is to reduce duplication and enable the health service to focus on specialisms.

"*I think that we will end up going down from three hospitals to two providing A&E services [in Belfast]… Belfast City Hospital has been moving more and more towards planned surgeries and procedures. Ultimately, that is probably where we see the City Hospital. The Belfast Trust is working on this issue at the minute, so the proposal has not been put to me. The trust is working towards the position that more elective surgery will take place at the City Hospital and that more emergency procedures will take place at the Royal Victoria Hospital. Therefore, a different kind of service would be provided; It will be a service that meets the skills of a hospital that provides specialist care*."

In his comments, the Minister indicated that changes to the City hospital are being considered because responsibility for patient decisions was, on some occasions, left to junior doctors rather than consultants. According reports, only two junior doctors with less than two years' experience cover the A&E between 2am and 8am and the lack of consultant supervision has heightened fears about patient safety.[18] Critics, including trade unionists and patients, have opposed the proposed changes to the City hospital, insisting that these are driven by financial reasons in order to meet budget constraints.

The Belfast Trust has further commented that three A&Es in Belfast is not sustainable, given the relatively small population served and the need for more efficient resource uptake. Recently it advised that the A&E at the City Hospital site would close

[17] Committee for Health, Social Services and Public Safety Official Report (Hansard) Available online at www.niassembly.gov.uk/record/committees2011/HSSPS/110720_CPD2011&draftCP2011-12.htm
[18] Irish News, July 22 Belfast Trust A&E services unsustainable. Lack of senior doctors putting patients at risk.

temporarily in September 2011, but now this decision may be postponed due to the overspill of patients to other hospitals.

As part of this research paper, the DHSSPS was also contacted to provide clarity on what the future may hold for the A&E at the City hospital. They responded:

"Work is on-going on enhancing training and supervision of junior staff, the securing of locums, and enhancement of consultant cover. Changes are required post October 2011 for patient safety reasons, but longer term changes are also required to secure the best outcomes for patients. Any changes will be subject to a period of public consultation.

The current view is that the Trust should sustain a full 24/7 Emergency Department on two sites with a ***complementary Acute Assessment and Admission arrangement on the third site which is likely to be the Belfast City Hospital (BCH).*** *Another option under consideration is the* ***restriction of hours in the BCH Accident and Emergency Department****."*

4.1 Why is reconfiguration necessary?

The City hospital is not the only site to be experiencing changes to its emergency care provision. Several sites in Northern Ireland have been reconfigured. In addition to factors such as safety and cost, other issues have been attributed to:

- Problems in recruiting appropriate levels of staff, especially consultants and junior doctors.
- Trusts are not always able to meet the requirements of the European Working Time Directive (EWTD). The EWTD is enshrined in law and means that medical staff should, on average, work no longer than 48 hours per week. This protects the health and safety of workers enabling adequate rest and a better work/life balance.
- Local hospitals in smaller towns may have limited or no access to specific acute services e.g. surgical inpatient services or intensive care units (ICU).
- Senior doctors/specialists are often under increased pressure to provide cover across multiple sites.
- Smaller hospitals have restricted training status and cannot provide a full training environment for junior doctors. Medical staff are therefore not able to develop their skills and it becomes difficult to attract appropriately trained staff to permanent positions, especially in more rural hospitals. Locum doctors are providing cover, but at significant cost. Therefore, staff are more likely to progress career opportunities in specialised medical centres in urban locations.

The table overleaf highlights a number of hospitals that have or are about to experience changes to their emergency care services, and the likely knock-on effect to other hospitals for patients presenting with serious injuries.

Hospital	Date of change	Type of change	Opening times	Knock-on effect to other sites for patients with serious A&E injuries
Tyrone County (Western Trust)	March 2009	Reconfigured from consultant-led treatment service (Type 2 - emergency care department) to a minor injury unit	9am - 9pm, 365 days per year	There two A&E hospitals west of the Bann, Erne hospital (Enniskillen) or Altnagelvin (L/Derry). For some, the drive may be far longer than the one hour standard.[19]
Whiteabbey hospital (Northern Trust)	May 2010	Reconfigured from a consultant-led service (Type 2 - emergency care department) to a minor injury unit	9am-5pm Monday to Friday. Not open weekends or public holidays.	Serious injuries are likely to be re-directed to Belfast or Antrim. These alternative sites are already overstretched in terms of capacity. This has intensified pressure on resources, waiting times and waiting time targets.
Mid Ulster hospital (Northern Trust)	May 2010	Reconfigured from a consultant-led service (Type 2 - emergency care department) to a minor injury unit	9am-5pm Monday to Friday. Not open weekends or public holidays.	Serious injuries are most likely redirected to either Antrim or Causeway Hospital,[20] Coleraine. Overflow to Antrim will again impact on their overstretched capacity.
Downe Hospital (S.Eastern Trust)	April 2011	Change in staffing patterns	8am - 10pm with hospital doctors; 10pm - 8am with GPs supported by hospital nursing staff.	Likely to attend Belfast, Newry or Craigavon.
Lagan Valley Hospital (S. Eastern Trust)	August 2011	Temporary reduction in emergency medical hours announced.	Removal of 24 hr access. Open 9am-8pm daily.	Serious injury patients needing treatment during 8pm-9am would be more likely to be re-directed to Craigavon, or Belfast (Mater or Royal).
Belfast City Hospital	October 2011	Proposals not finalised but likely to involve more specialist care	Unknown	Likely knock on effect to all other hospitals in the greater Belfast area (Royal, Mater, Ulster and Antrim).

Table 4 Summary of emergency care reconfiguration in NI 2009-2011

As can be seen, there are possible implications in terms of capacity for people presenting with serious A&E injuries and illnesses, especially for the Royal and Antrim hospitals.

A Director in the Belfast Trust recently stated that the Royal hospital has “enough capacity” to deal with patient overflow from the City hospital.[21] However, when considering overflow from other areas (perhaps from Whiteabbey, Lagan Valley and Downe hospital), it will not only be City hospital’s A&E patients seeking treatment in the Royal or the Mater hospitals. With no valid measure to know what the influx to other sites will be, this leads to uncertainty and capacity issues - as already witnessed in

[19] Irish News July 22, 2011. Patients west of Bann face up to 2 hour drive for care.
[20] Assembly Question AQO 1047/11 (February 2011), the Health Minister has no plans to reduce services at the Causeway hospital.
[21] Irish News (22 July 2011) NHS Reorganisation – Belfast Trust Services unsustainable, Director Warns.

Antrim hospital. This has a detrimental knock-on effect on bed availability, ambulance response times, staff workload and morale, to name but a few. There will need to be contingency planning measures in place to address these types of issues.

Conclusion

Emergency care in Northern Ireland is under intense pressure due to increasing patient demands and reduced resources. It remains unknown what changes to the A&E at the City hospital will be agreed long-term, however should there be closure or a reduction in service, the sheer volume of patients (45,000) that attended the site last year is likely have a huge knock-on effect to other A&E sites in the greater Belfast area. This will also impact upon a range of issues, such as increasing rising waiting time levels, and limiting bed capacity and ambulance response times. In addition, the wider reconfiguration of emergency care services across Northern Ireland has been especially challenging for those living in rural communities and other models of care delivery for this population will need to be explored.

Appendix 1 Total attendances at emergency care departments by HSC Trust / hospital 2010/11

HSC Trust / Hospital	New Attendances		Review Attendances		Total Attendances
	Number	%	Number	%	
Belfast City	42,356	94.1%	2,652	5.9%	45,008
Mater Infirmorum	39,677	90.6%	4,124	9.4%	43,801
RBHSC	28,473	90.0%	3,172	10.0%	31,645
Royal Victoria	71,956	95.1%	3,696	4.9%	75,652
Belfast HSCT	**182,462**	**93.0%**	**13,644**	**7.0%**	**196,106**
Causeway	40,647	91.8%	3,654	8.2%	44,301
Antrim	64,782	89.7%	7,434	10.3%	72,216
Mid Ulster	7,253	90.9%	728	9.1%	7,981
Whiteabbey	9,532	91.3%	914	8.7%	10,446
Northern HSCT	**122,214**	**90.6%**	**12,730**	**9.4%**	**134,944**
Ards	8,727	91.7%	793	8.3%	9,520
Bangor	11,545	86.9%	1,733	13.1%	13,278
Downe	20,420	88.9%	2,543	11.1%	22,963
Lagan Valley	30,226	88.5%	3,934	11.5%	34,160
Ulster	71,587	94.2%	4,426	5.8%	76,013
South Eastern HSCT	**142,505**	**91.4%**	**13,429**	**8.6%**	**155,934**
Armagh Community	5,654	87.9%	777	12.1%	6,431
Mullinure	2,109	88.0%	287	12.0%	2,396
Craigavon Area	71,533	93.2%	5,199	6.8%	76,732
Daisy Hill	36,468	93.3%	2,637	6.7%	39,105
South Tyrone	17,159	91.3%	1,632	8.7%	18,791
Southern HSCT	**132,923**	**92.7%**	**10,532**	**7.3%**	**143,455**
Altnagelvin Area	53,570	94.2%	3,292	5.8%	56,862
Erne	26,806	96.0%	1,123	4.0%	27,929
Tyrone County	13,920	88.2%	1,859	11.8%	15,779
Western HSCT	**94,296**	**93.8%**	**6,274**	**6.2%**	**100,570**
Northern Ireland	**674,400**	**92.3%**	**56,609**	**7.7%**	**731,009**

Source: KH09 (ii) Departmental Return

Appendix 2 New & Unplanned Review Attendances waiting over 12 hours by HSC Trust / Hospital (2008/09 - 2010/11)

HSC Trust / Hospital	Number Waiting Over 12 Hours		
	2008/09	2009/10	2010/11
Belfast City	316	293	615
Mater Infirmorum	239	446	1,428
RBHSC	4	3	13
Royal Victoria	336	601	1,216
Belfast HSCT	**895**	**1,343**	**3,272**
Causeway	95	99	319
Antrim	417	720	2,440
Mid Ulster	0	0	0
Whiteabbey	0	0	0
Northern HSCT	**512**	**819**	**2,759**
Ards	0	0	0
Bangor	0	0	0
Downe	7	30	147
Lagan Valley	67	270	309
Ulster	778	1,337	829
South Eastern HSCT	**852**	**1,637**	**1,285**
Armagh / Mullinure	0	0	0
Craigavon Area	1	4	7
Daisy Hill	0	0	0
South Tyrone	0	0	0
Southern HSCT	**1**	**4**	**7**
Altnagelvin Area	15	76	51
Erne	4	2	5
Tyrone County	1	0	0
Western HSCT	**20**	**78**	**56**
Northern Ireland	**2,280**	**3,881**	**7,379**

Source: EC1 Departmental Return

Appendix 3 Distance to nearest accident and emergency in miles

Parliamentary Constituency	Distance to nearest Type 1 or Type 2 accident and emergency (miles)		
	Min	Max	Average no of miles
Belfast East	0.44	4.12	2.53
Belfast North	0.28	4.37	1.46
Belfast South	0.02	4.91	2.07
Belfast West	0.05	4.94	2.07
East Antrim	0.38	25	9.43
South Antrim	1.16	11.8	4.79
North Antrim	3.92	29.2	12.7
East Londonderry	0.41	19.68	7.97
Fermanagh & South Tyrone	0.16	25.05	8.35
Foyle	0.16	25.05	8.35
Lagan Valley	0.18	13.57	4.12
Mid-Ulster	0.27	17.97	7.32
Newry & Armagh	0.08	17.65	4.92
North Down	0.12	7.87	2.61
South Down	0.26	22.71	9.88
Strangford	0.18	20.77	5.08
Upper Bann	0.35	12.39	5.41
West Tyrone	0.43	19.07	7.23