

REVIEW OF ACCIDENT AND EMERGENCY SERVICES Service Profile, Activity Analysis and Cross Boundary Flow

Introduction

This appendix is presented in three parts:

- Part 1 outlines the current acute hospital services across NHS Lanarkshire
- Part 2 provides a high level commentary (with attached activity analysis) on accident and emergency activity in NHS Lanarkshire - and a comparison with services across Scotland
- Part 3 presents an update to A Picture of Health consultation document on cross boundary flow published in April 2006.

Part 1 - Current Acute Hospital Services across NHS Lanarkshire

The services currently provided at each of the acute hospitals in Lanarkshire are outlined below:

Monklands	Hairmyres	Wishaw
A&E Service & GP out of hours service	A&E Service & GP out of hours service	A&E Service & GP out of hours service
Outpatients - including Renal Dialysis	Outpatients	Outpatients
Day cases	Day cases	Day cases
Inpatient services Renal Inpatients Acute Medicine Acute Surgery/Trauma Infectious Diseases Psychiatry Acute geriatric assessment and rehabilitation Critical Care services Dermatology Urology ENT Oral Max Orthopaedics	Inpatient services Acute Medicine Acute Surgery/Trauma Acute Vascular Surgery Psychiatry Critical Care services Interventional cardiology Acute geriatric assessment and rehabilitation, including stroke Ophthalmology Adult Thoracic Surgery - will transfer to the GJNH in 2007	Inpatient services Acute Medicine Acute Surgery/Trauma Acute Vascular Surgery Psychiatry Critical Care services Maternity Gynaecology Paediatrics Acute geriatric assessment and rehabilitation, including stroke

Part 2 - Activity Analysis

In 2006/07, there were circa 184,000 A&E attendances in NHS Lanarkshire, approximately 66,000 at Wishaw, 63,000 at Monklands and 55,000 at Hairmyres.

The following list of attached schedules provides further details of the A&E activity and is underpinned by a brief explanatory commentary on each. Also, a comparison of services in other Scottish Health Boards is presented in annex 1.

<u>Annex/Schedule</u>	<u>Contents</u>	<u>Dataset</u>
Annex 1	A&E Services in Other Scottish Health Boards	SEHD ISD Data
Schedule 1	Attendances by: Referral Source	EDIS A&E system
	Self Referrals & Mode of Transport	
Schedule 2	Attendances by Flow Group	EDIS A&E system
Chart 1	Attendances by Time of the Day	EDIS A&E system
Chart 2a	Attendances by Time of the Day & Flow Group	EDIS A&E system
Chart 2b	As Chart 2a - % Distribution by Flow Group	EDIS A&E system
Schedule 3a	Estimated Attendances by Scenarios A to D	EDIS A&E system
Schedule 3b	Estimated Attendances by Scenarios E to G	EDIS A&E system
Schedule 4	Delay Reason Summary	EDIS A&E system
Schedule 5	A&E Attendances & Rates across Scotland	SEHD & GROS
Schedule 6	Main Diagnosis Discharges for NHSL Residents	Hospital Discharges

Annex 1 was produced by the Scottish Executive Health Department (SEHD) and the activity numbers for the Scottish Health Boards is based on ISD Scotland data.

Schedules 1 to 4 and charts 1 and 2 are sourced from NHSL hospitals EDIS A&E system. Schedule 5 A&E attendances are sourced directly from the SEHD and Health Board populations are the 2006 (latest) mid year estimates produced by the General Register Office for Scotland (GROS). Schedule 6 is sourced directly from the ISD Scotland website and is SMR01 based.

A brief explanatory commentary on the annex and each of the schedules and charts follows:

Annex 1

Annex 1 provides a snapshot comparison of hospitals (excluding dedicated Sick Children hospitals) that provide Accident and Emergency Services in NHS Scotland with new A&E attendances >40,000 for 2006. In addition, the profile of 3 hospitals providing <40,000 attendances is also shown. The SEHD have noted that the ISD numbers that they have provided us with differ from local NHSL count of A&E attendances. Our understanding is that the ISD data may possibly be understated.

Schedule 1

Table 1 presents the number of A&E attendances by NHSL hospital and referral source in 2006/07. The distribution by referral source shows that 68% were self referred across all NHSL hospital sites.

Table 2 identifies how patients arrive at the A&E department by mode of transport - 77% arrived by "own transport".

Table 3, by brought, referred or directed is based on a combination of referral source and mode of transport to the A&E unit. This is further explained as follows:

Patients "referred" and "directed" would arrive at A&E following contact with GPs, OOH, NHS24, other clinical services and perhaps Local authority partners e.g. social work, regardless of what mode of transport they used to arrive at A&E.

Patients "brought" includes those patients who arrive at A&E by ambulance or police transport who didn't have contact with their GP, NHS24 etc but took it upon themselves to call an ambulance. The assumption being that the emergency services could take the patient to the most appropriate location based on their own evaluation and guidance provided i.e. it is a self referral but directable.

Schedule 2

Table 4 in Schedule 2, is presented by Unscheduled Care Collaborative Programme (UCCP) flow group. The flow groups are:

<u>Flow Group</u>	<u>Description</u>
1	Minor Injury and Illness
2	Acute Assessment
3	Medical Admission
4	Surgical Admission

A majority of 63% attend for a minor injury and illness - across all NHSL hospitals.

The remaining tables in schedule 2 - 5 and 6 are again based on a combination of referral source and mode of transport to the A&E unit i.e. by brought, referred or directed.

Chart 1

Chart 1 presents total annual A&E attendances for 2006/07 collectively across all 3 NHSL acute sites by attendance time of the day.

Chart 2a

Chart 2 presents total annual A&E attendances for 2006/07 collectively across all 3 NHSL acute sites by attendance time of the day and flow group. This reinforces the point made above, over a 24 hour distribution period, that the majority of attendances are for a minor injury and illness.

Chart 2b

As per Chart 2a, except the % distribution by flow group is presented. Again, this reinforces that, over a 24 hour distribution period, the majority of attendances are for a minor injury and illness. This distribution is consistent across NHS Scotland.

Schedules 3a and 3b

Estimated A&E attendances under scenarios A to D are presented in schedule 3a and scenarios E to G in 3b. As with section 3 in schedule 1, this is presented by UCCP flow group. The planning assumption for each scenario is shown as a heading for the activity profile under individual scenarios A to G. The consequent knock on effect of each scenario activity change at Monklands is shown as a reciprocal change at the other acute sites.

It can be seen that as you move along the spectrum of the scenarios from A to F at Monklands, there is increasing levels of A&E activity planned.

Schedule 4

Schedule 4 presents the delay reason at Monklands A&E unit by month from August 2006 to August 2007. The consistent main reason for a delay is - wait for a specialist.

Schedule 5

Schedule 5 presents a comparison of crude attendance rates across selected NHS Scotland Boards. This highlights that NHSL is ranked the second highest in terms of attendances per 1,000 resident population. The aggregate population of the Boards compared covers 65% of the total for Scotland.

Schedule 6

Hospital discharges for NHSL residents is shown by broad diagnosis group in schedule 6. This is ranked in descending activity order and shows the trends in numbers and rates per 100,000 population over the last 5 years. This is presented (by ISD Scotland) for all admission types - not just emergencies.

This is shown as a proxy for presenting diagnosis at the front door A&E unit as this information is not routinely accessible from the EDIS A&E system.

Part 3 - Cross Boundary Flow (across NHS Board boundaries)

Summary

1. Consideration has taken place of cross boundary flow emergency inpatient bed capacity implications for neighbouring Boards following the decision by the Cabinet Secretary for Health and Wellbeing to reverse the previous Administration's decision regarding Accident and Emergency services at Monklands Hospital.
2. NHSL have shared the impact of seven clinical scenarios to provide A&E Services at Monklands Hospital with NHS Forth Valley and NHS Greater Glasgow and Clyde.
3. Both Boards have agreed in principle to the outcome of this update subject to further work following the Ministerial decision on future service provision in February 2008.
4. The **main impact** for both Boards is that there should be **less risk** than the original APoH option. This is because the scenarios progressively have a fuller service at Monklands Hospital.

Background

5. Since late 2005 the West of Scotland Boards, and in particular NHSL, NHSGGC and NHSFV, have been working together to assess the impact of patient flows across, and within, Health Board administrative boundaries.
6. From an NHSL perspective, with regard to A Picture of Health, this concluded in April 2006 when NHSL issued for consultation a detailed paper on the impact of cross boundary flow. This was produced in conjunction with, and took full cognisance of, other Boards strategies for future service provision.
7. In August 2006 the then Deputy Minister of Health approved Lanarkshire NHS Board's proposals for the future direction of health services. This confirmed that Monklands hospital would be a Level 2 service provider hospital in the future. Based on this decision, Boards have been working together to take forward the impact of expected changes in cross boundary flows.

Impact on NHS Forth Valley

8. The original APoH planning assumption, as set out in the consultation paper referred to earlier, presented a best and worse case scenario of a need to either provide an additional 44 or 75 beds at Larbert. The best case assumed that NHSL direct all patients except self referrals to either Wishaw or Hairmyres and the worse case assumed that would be no patients directed internally within NHSL i.e. the patients would flow in line with a proximity and access analysis.
9. The worse case scenario of 75 was subsequently reduced to 50 beds on the basis of a jointly agreed model of care that provides rehabilitation closer to peoples' homes following their acute care episode. NHSL patients having their acute care in NHSFV would thereafter rehabilitate to Lanarkshire. This resulted in assessed bed capacity for cross boundary flow in NHSFV being reduced by 25 beds.

10. The update to this, across the seven scenarios, shows no material change in scenarios A to C, a reduction to 26/27 for the best and worse case in scenario D, 21/21 in E and 19/19 in both F and G. In F and G no patients would flow from Monklands, however, it is assumed that NHSL residents who are currently admitted to Stobhill as emergencies would flow to Larbert in the future.

Impact on NHS Greater Glasgow & Clyde

11. The initial APoH planning assumption for NHSGGC was that there was a potential for an additional 117 beds at Glasgow Royal Infirmary (GRI), based solely on the proximity and access analysis. This was then revised to 67 beds assuming that all self referrals would flow to GRI and that “directable” referrals by general practitioners, out of hours services, NHS24 and the Scottish Ambulance Service would remain within NHSL boundaries. As a final revision, for planning purposes, NHSL suggested that cross boundary flow be calculated based on 95% of “directable” patients and 50% of self referrals being admitted to an alternative hospital within NHSL. This resulted in 37 beds potentially required at GRI - as set out in the consultation paper. NHSGGC have commented on this by highlighting that we did not conclude on this lower number of 37 beds and that the level of risk may well be in the range of 37 to 67 beds being required at GRI. It is accepted by NHSL that this is work in progress at this stage and that the planning assumptions will be revisited following the Ministerial decision in February 2008.
12. In terms of the update and using 37 beds as a baseline, there would be no planned change in scenarios A to C as with Forth Valley, a reduction to 10 in D, 2 in E and zero in both scenarios F and G.

Joe Clancy
Change & Innovation Manager (Catchment Management)
NHS Lanarkshire
14 September 2007

Comparison Information on Accident and Emergency Services in Scottish Health Boards

NHS LANARKSHIRE (population 558,139)

1. **Monklands Hospital**

During 2006 it had 58,520 new A&E attendances. The hospital provides Intensive Care, Anaesthetics, Acute Medicine, General Surgery, Orthopaedic Trauma, 24-hour Imaging (including CT scanning), Laboratory services and 24-hour A&E consultant cover. The hospital does not provide in-patient Paediatrics.

2. **Wishaw General Hospital**

During 2006 it had 60,224 new A&E attendances. The hospital provides Intensive Care, Anaesthetics, Acute Medicine, General Surgery, Orthopaedic Trauma, Paediatrics, 24-hour Imaging (including CT scanning), Laboratory services and 24-hour A&E consultant cover.

3. **Hairmyres Hospital**

During 2006 it had 48,004 new A&E attendances. The hospital provides Intensive Care, Anaesthetics, Acute Medicine, General Surgery, Orthopaedic Trauma, 24-hour Imaging (including CT scanning), Laboratory services and 24-hour A&E consultant cover. The hospital does not provide in-patient Paediatrics.

NHS Lothian (population 801,310)

1. **Royal Infirmary of Edinburgh**

During 2006 it had 91,085 new A&E attendances. The hospital provides Intensive Care, Anaesthetics, Acute Medicine, General Surgery, Orthopaedic Trauma, Paediatrics, 24-hour Imaging (including CT scanning), Laboratory services and 24-hour A&E consultant cover.

2. **St John's Hospital in Livingston**

During 2006 it had 43,257 new A&E attendances. The hospital provides Intensive Care, Anaesthetics, Acute Medicine, Paediatrics, 24-hour Imaging (including CT scanning), Laboratory services and 24-hour A&E consultant cover. The hospital does not provide General Surgery and Orthopaedic Trauma.

NHS Greater Glasgow and Clyde (population 1,191,584)

1. **Southern General Hospital in Glasgow**

During 2006 it had 48,076 new A&E attendances. The hospital provides Intensive Care, Anaesthetics, Acute Medicine, General Surgery, Orthopaedic Trauma, 24-hour Imaging (including CT scanning), Laboratory services and 24-hour A&E consultant cover. In-patient Paediatrics is provided via Royal Hospital for Sick Children in Glasgow.

2. **Glasgow Royal Infirmary**

During 2006 it had 69,586 new A&E attendances. The hospital provides Intensive Care, Anaesthetics, Acute Medicine, General Surgery, Orthopaedic Trauma, 24-hour Imaging (including CT scanning), Laboratory services and 24-hour A&E consultant cover. In-patient Paediatrics is provided via Royal Hospital for Sick Children in Glasgow.

3. **Victoria Infirmary in Glasgow**

During 2006 it had 68,576 new A&E attendances. The hospital provides Intensive Care, Anaesthetics, Acute Medicine, General Surgery, Orthopaedic Trauma, 24-hour Imaging (including CT scanning), Laboratory services and 24-hour A&E consultant cover. In-patient Paediatrics is provided via Royal Hospital for Sick Children in Glasgow.

4. **Western Infirmary & Gartnavel General in Glasgow**

During 2006 it had 68,492 new A&E attendances. The hospital provides Intensive Care, Anaesthetics, Acute Medicine, General Surgery, Orthopaedic Trauma, 24-hour Imaging (including CT scanning), Laboratory services and 24-hour A&E consultant cover. In-patient Paediatrics is provided via Royal Hospital for Sick Children in Glasgow.

5. **Stobhill Hospital in Glasgow**

During 2006 it had 42,683 new A&E attendances. The hospital provides Intensive Care, Anaesthetics, Acute Medicine, General Surgery, 24-hour Imaging (including CT scanning), Laboratory services and 24-hour A&E consultant cover. The hospital does not provide Orthopaedic Trauma. In-patient Paediatrics is provided via Royal Hospital for Sick Children in Glasgow.

6. **Royal Alexandra Hospital in Paisley**

During 2006 it had 59,924 new A&E attendances. The hospital provides Intensive Care, Anaesthetics, Acute Medicine, General Surgery, Orthopaedic Trauma, in patient Paediatrics, 24-hour Imaging (including CT scanning), Laboratory services and 24-hour A&E consultant cover.

NHS AYRSHIRE AND ARRAN (population 366,450)

1. **Crosshouse Hospital in Kilmarnock**

During 2006 it had 59,831 new A&E attendances. The hospital provides Intensive Care, Anaesthetics, Acute Medicine, General Surgery, Orthopaedic Trauma, in patient Paediatrics, 24-hour Imaging (including CT scanning), Laboratory services and 24-hour A&E consultant cover.

2. **Ayr Hospital**

During 2006 it had 41,109 new A&E attendances. The hospital provides Intensive Care, Anaesthetics, Acute Medicine, General Surgery, Orthopaedic Trauma, 24-hour Imaging (including CT scanning), Laboratory services and 24-hour A&E consultant cover. The hospital does not provide in-patient Paediatrics.

NHS FORTH VALLEY (population 286,053)

1. Stirling Royal Infirmary

During 2006 it had 54,300 new A&E attendances. The hospital provides Intensive Care, Anaesthetics, Acute Medicine, General Surgery, Orthopaedic Trauma, in patient Paediatrics, 24-hour Imaging (including CT scanning), Laboratory services and 24-hour A&E consultant cover.

NHS FIFE (population 358,858)

1. Victoria Hospital in Kirkcaldy

During 2006 it had 41,456 new A&E attendances. The hospital provides Intensive Care, Anaesthetics, Acute Medicine, in-patient Paediatrics, 24-hour Imaging (including CT scanning), Laboratory services and 24-hour A&E consultant cover. The hospital does not provide General Surgery and Orthopaedic Trauma.

NHS TAYSIDE (population 391,639)

1. Ninewells Hospital in Dundee

During 2006 it had 49,736 new A&E attendances. The hospital provides Intensive Care, Anaesthetics, Acute Medicine, General Surgery, Orthopaedic Trauma, in patient Paediatrics, 24-hour Imaging (including CT scanning), Laboratory services and 24-hour A&E consultant cover.

NHS GRAMPIAN (population 529,889)

1. Aberdeen Royal Infirmary

During 2006 it had 57,292 new A&E attendances. The hospital provides Intensive Care, Anaesthetics, Acute Medicine, General Surgery, Orthopaedic Trauma, in patient Paediatrics, 24-hour Imaging (including CT scanning), Laboratory services and 24-hour A&E consultant cover.

The following is a snapshot of selected hospitals that provide Accident and Emergency Services in NHS Scotland with new A&E attendances <40,000 for 2006 (ISD data).

NHS FORTH VALLEY

1. Falkirk and District Royal Infirmary

During 2006 it had 19,219 new A&E attendances. The hospital provides Community Casualty Unit Services over a 24/7 period staffed by Nurse Practitioners. This service is supplemented by Day Surgery, Elective Inpatient and Rehabilitation Services, and a full range of Outpatient, Assessment and Diagnostic Services including MRI; CT and Endoscopy. A renal unit provides dialysis capacity for FV patients. Anaesthetics are provided 8:30am - 6pm Mon to Friday to cover elective and day surgery and some outpatient services (dental). Laboratory services - these are split across both sites and there is no out of hours service in Falkirk (on call only - to SRI).

NHS GREATER GLASGOW AND CLYDE

1. Inverclyde Royal Hospital in Greenock

During 2006 it had 30,571 new A&E attendances. The hospital provides Intensive Care, Anaesthetics, Acute Medicine, General Surgery, Orthopaedic Trauma, 24-hour Imaging (including CT scanning), Laboratory services and 24-hour A&E consultant cover on an integrated basis with the RAH Paisley. In-patient Paediatrics is provided via RAH, Paisley.

2. Vale of Leven General Hospital in Alexandria

During 2006 it had 14,303 new A&E attendances. The hospital provides Anaesthetics, Acute Medicine for the majority of patients (although the most acutely unwell patients are triaged directly to the RAH Paisley), 24-hour Imaging (including CT scanning), Laboratory services. Child Health is provided via RAH, Paisley. A&E, General Surgery, Orthopaedic Trauma services are provided from the RAH, Paisley. Front door services at the Vale of Leven are provided in a Minor Injuries Unit and a Medical Assessment Unit. The Medical Assessment Unit has 24-hour consultant physician cover but no A&E consultant cover.