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Creating More Responsive Accident And Emergency Services

The Future

of Glasgow's

Hospital Services

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GREATER GLASGOW
HEALTH BOARD

in partnership with
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in Glasgow

Creating More Responsive Accident And Emergency Services

Glasgow currently has four Accident and Emergency Departments (Glasgow Royal Infirmary (GRI), Western Infirmary, Southern General and Victoria Infirmary) and one "Casualty" (Stobhill).

The Chief Medical Officer's 'Acute Services Review' sought a strengthening of trauma services in Glasgow, Edinburgh, Dundee and Aberdeen for the management of patients with multiple injuries and complex single injury. Although the number of such cases is relatively small, readiness to respond quickly requires dedicated trauma teams.

The Senate of Surgery of Great Britain and Ireland recommends that an A&E Department serving 450,000 people would need 4 A&E consultants. Arguably there should be 5 (or even 6) consultants if acceptable extended hours cover is provided. Glasgow currently has 10.3 consultants but they are spread too thinly between four Departments.

Our aim is to create two adult Accident and Emergency Departments/Trauma Centres - at the GRI and on the Southside - which:

(a) each have at least 5 A&E consultants.
(b) are each supported by a dedicated orthopaedic trauma team.
(c) are each strategically accessible for ambulances, close to the M8 motorway and main feeder routes (M80, M77, Dumbarton Road/ Clyde Expressway/Crow Road/ Clyde Tunnel).

(d) have internal triage - and nurse practitioners - to allow quick and reliable treatment of minor injuries/illnesses without those patients being delayed by the priority necessarily given by A&E consultants to seriously injured or ill patients.

The unit on the Southside will have the added strength of being on the same site as neurosurgery and maxillo-facial services (for serious head and facial injuries).
The GRI will have the benefit of the burns unit being on site.

In addition, we would propose to provide Minor Injuries Units at Stobhill, the Victoria Infirmary and the New Western Infirmary. The concept of Minor Injuries Units is recent but has been developing quickly. There is no single model. Sometimes they are stand-alone, sometimes they are part of a larger A&E Department. Sometimes they are staffed wholly by nurse practitioners. Sometimes there is a doctor present.

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

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

* *Lancet article 'Care of minor injuries by emergency nurse practitioners or junior doctors: a randomised controlled trial'. Vol. 354, October, 16th, Trial covered 704 patients assigned randomly to nurse practitioners and 749 to junior doctors.*

"At Southend, one quarter of all A&E patients are treated solely by nurses, and most are discharged within 15 minutes of arrival."
'By Accident or Design' - Audit Commission 1996

What impact would such units have on the present patterns of need and local access in Glasgow? The bald statistics of A&E attendances for a year are:

Glasgow Royal Infirmary	68,000
Southern General	40,000
Stobhill Hospital	45,000
Victoria Infirmary	75,000
Western Infirmary	55,000

(1996/97 figures)

The proposals now being made do not alter local access to the GRI, Southern General or Stobhill.

In the case of the Victoria Infirmary and the Western Infirmary the first point to make is that the statistics include GP emergency referrals (principally to general medicine, general surgery and orthopaedics). In all of these cases the GP determines the destination hospital. In future such cases will be received direct by the

appropriate medical or surgical receiving team and so would not inappropriately be directed to a Minor Injuries Unit.

The second key point to make is that another substantial number of patients currently arrive at the Victoria Infirmary and Western Infirmary A&E Departments as a result of 999 ambulance calls. In future the ambulance service would automatically take such cases to the two A&E Departments and they would not therefore inappropriately arrive at the Minor Injuries Unit.

The effect of these two realities is:

	Victoria Infirmary	Western Infirmary
Current total A&E attendances	70,000	55,000
Less GP referrals	(8,320)	(12,012)
Less 999 ambulance cases	(8,268)	(8,684)
Net attendances	53,412	34,304

(Data derived from 1998 one week survey)

In understanding how adequately Minor Injuries Units would meet the remaining local access patterns at the Victoria Infirmary and in West Glasgow there are some helpful pointers from current experience:

The Western Infirmary experience

1,009 attendances (of which 250 were GP referrals).
662 went home after treatment (equates to 34,424 per year)
337 were admitted as in-patients (equates to 17,524 per year)
(187 were GP referrals
150 were self-referrals - many of whom via 999 ambulance)
7 were transferred.
3 died.

One week survey : February, 1999

The Victoria Infirmary experience

1,377	attendances (of which 160 were GP referrals).
	(917 classed on arrival as “walking wounded”).
267	admitted.
21	transferred.
3	died.
1,086	went home.

One week survey 1998

Four common minor conditions = 25% of all attendances

In a one week survey of all Glasgow’s A&E Departments there were around 5,700 attendances. Of these:

872	(15%) were sprains.
393	(7%) were superficial injuries or cuts.
133	(2%) were abscesses.
70	(1%) were foreign body in the eye (not eye injuries).

These four alone amount to a quarter of all attendances and are equivalent to around 76,000 attendances in a full year.

Experience elsewhere in UK suggests that:

(a) Nurse practitioners can treat a significant range of conditions.

(b) Clinical protocols and telemedicine links add further assurance of sound clinical practice, including clear criteria identifying those circumstances in which patients who self-present to a Minor Injuries Unit should be transferred by ambulance to an A&E Department.

(c) the public themselves are quick to understand the different roles. Inappropriate self-presentation to Minor Injuries Units necessitating ambulance transfer to an A&E Department soon becomes negligible (as the experience in London of the Minor Injuries Units at the Brook Hospital in Woolwich and Barts in the City demonstrated).

Concerns about the pattern we are proposing tend to quote heart attack victims and those involved in serious accidents and access routes to hospitals being blocked by football traffic - especially around Ibrox.

Heart Attacks:

Two thirds of deaths from heart attacks already happen before the patient reaches any hospital. This is usually because a) the death is sudden and there is no opportunity to call for medical help or b) no bystander has initiated resuscitation measures or c) there has been a delay in seeking medical help.

Of the most effective therapies early in the course of a heart attack the first is having rapid access to a defibrillator so that if the heart stops it has a good chance of being started with an electric shock. All emergency ambulances carry these machines and so calling '999' rapidly when a heart attack is suspected is crucially important.

A second key intervention if a heart attack happens is that a bystander carries out cardiac resuscitation - heart massage and mouth to mouth breathing - until the ambulance arrives. Neither of these two interventions is affected by the proximity of a hospital. The third intervention is the giving of thrombolysis - "clot busting" - drugs. This dissolves the clot in the artery and allows blood and thus oxygen to flow again to the damaged area of heart muscle. The sooner this is given the better to minimise the damage to the heart muscle. The few minutes extra that would be required to transport a patient to a site two or three miles away would not be significant in mortality terms in comparison with the common delay time in calling for medical help at the outset and administering the first two interventions.

Thus the first two important factors in survival are not affected by the proximity of a hospital and the third, in the scenario, say, of having a patient with a heart attack from parts of South-East Glasgow and East Renfrewshire being transported to the Southern General instead of the Victoria Infirmary, would not be material. Indeed, now that the M77 extends to Newton Mearns, the Southern General Hospital can be as readily accessed by ambulance from much of East Renfrewshire as the Victoria Infirmary.

Serious accidents:

Survival in such cases is improved by:

(a) on-site (the site of the accident) maintenance of an airway. This is the role principally of ambulance personnel, although others early on the scene can establish the position if they have had previous experience or training.

(b) early action on-site and in the ambulance to stop or reduce bleeding or to administer saline.

(c) treatment in a hospital where a comprehensive range of surgical skills is available at a very early stage after arrival at the hospital.

Effective intervention at stages (a) and (b) is not dependent on the location of hospitals. As long as (a) and (b) are addressed quickly, the published evidence indicates that the difference of a few minutes in reaching a hospital staffed and organised to deal with (c) is not material. Indeed the published evidence indicates that what is important is early intervention by consultants. Grouping consultants into larger clinical teams offers a much surer early availability of consultants in a range of specialties at the front door of the hospital.

Football Traffic

Some people are anxious that congestion around the Ibrox Stadium area would cause delays to emergency ambulances. The police monitor and control what they call "Emergency Corridors" before and after matches to ensure that access for emergency vehicles is maintained. Haggs Road which links the route from South-East Glasgow to the Southern General is designated as an emergency corridor, and Paisley Road West provides an alternative to using Edmiston Drive. Traffic through the Clyde Tunnel before matches (going from North to South) is heavy, but keeps moving satisfactorily.

In any event ambulances, with blue lights and sirens, make much faster progress through traffic than the ordinary private motorist experiences.

We have looked at the number of ambulance journeys made to all Glasgow A&E Departments before and after match times to see how significant an issue this is.

Creating More Responsive Accident And Emergency Services

Based on a one week survey in winter the number of ambulance arrivals at key times was:

	Saturday	Sunday	Weekdays (per day)
14.30 - 15.00	0	1	0.4
16.40 - 17.00	1	0	0.4
19.15 - 19.30	0	0	0
21.00 - 21.30	2	6	2.6

Looked at another way, the number of ambulance arrivals at the Victoria, Southern General and Western Infirmary A&E Departments, in the same one week survey, was 278, 168 and 311 respectively, which equates to a daily rate of 40, 24 and 44 for each.

The numbers among these coinciding with the narrow time bands around football matches at Ibrox are therefore going to be small.

We are of course aware that the ambulance service in Glasgow currently has unsatisfactory response times to 999 calls. The changes we propose will result in slightly longer ambulance running times and we will need to work with the Ambulance Service to identify what increase in ambulance cover will be needed. The Scottish Executive has already committed itself to invest an extra £500,000 a year to increase ambulance crew staffing by 20 in order to tackle unsatisfactory performance.

Our firm conviction is that the pattern we are proposing:

(a) will greatly strengthen the capacity of our A&E service to deal quickly and successfully with the most serious cases.

(b) will, through Minor Injuries Units, provide local but quicker access to care for the many tens of thousands of patients who do not need the resources of a full A&E Department.

(c) will, through designed protocols, telemedicine, training and ambulance support, provide a safe way of triaging patients into the most appropriate clinical care quickly.

In addition the Glasgow Emergency Medical Service (GEMS) provides GP out-of-hours services, through its pattern of simple telephone access, nurse assessment/advice, GP telephone assessment, GP consultation in GEMS centres, GP home visits and, where necessary, referral to a hospital service. It is developing a user-friendly easily accessed service for the out-of-hours period (nights and weekends) which will increasingly complement the development of Minor Injuries Units backed up by the two hi-tec A&E Departments and by local access to acute medical and surgical receiving teams.

Above all, Minor Injuries Units will provide the same local access to care as is already enjoyed by thousands of Glasgow residents but it will be quicker.

Services for Children

We are currently considering a need to improve A&E services for children. At present Yorkhill provides the only dedicated A&E service for children but many children do go to adult A&E Departments which are not properly set up to provide for children. We are seeking advice on how to ensure that more children go to Yorkhill. Of course if all of Yorkhill's children's services were re-provided on the new Southside Hospital campus (at the Southern General), it would mean that one of Glasgow's two A&E Departments would have full on-site support for a comprehensive range of children's services - a vast improvement on the present rather erratic position in Glasgow. Like the present adult A&E Departments, Minor Injuries Units would not have all the necessary on-site support needed for hospital care of children. Either children with minor illness or injury should be taken to their GP or else to the designated children's A&E services where all the necessary hospital back-up is available (currently at Yorkhill, but proposed for the Southern General).

Want to know more? The Audit Commission Report 'By Accident or Design' (1996) goes into a lot of detail about organisational issues for A &E.

Comments on this issue or any other aspect of the proposals to modernise Glasgow's hospital services should be sent by June 30th, 2000 to

John C Hamilton
Head of Corporate Services
Greater Glasgow Health Board
Dalian House
350 St Vincent Street
Glasgow
G3 8YZ

Leaflet request form

Getting Informed

If you want to read up on any other issue please complete this leaflet request form. Tick the box ✓ next to the leaflets you want, provide your name and address in the space provided and send it to the Freepost address below (no stamp needed).

Acute Services Review
Greater Glasgow Health Board
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- ❑ 1. The Patient's Experience
- ❑ 2. Getting It Right For Patients: What It Means For Organising Services
- ❑ 3. Cancer Services: Specialisation In Action
- ❑ 4. Why Specialisation Matters - And What We Propose To Do To Make Its Benefits More Available
- ❑ 5. Creating More Responsive Accident And Emergency Services
- ❑ 6. Ambulatory Care: What Is It?
- ❑ 7. Minimally Invasive Technologies: Keyhole Surgery And The Like
- ❑ 8. The Overall Planning Challenge For Greater Glasgow - Acute Hospitals In A Wider Context
- ❑ 9. Some Recent Background History
- ❑ 10. Impact Of Regulations On Doctors' Working Hours
- ❑ 11. The Number Of Beds We Propose To Provide
- ❑ 12. Regional Services Provided By Glasgow Hospitals
- ❑ 13. Why Teaching And Research Matters
- ❑ 14. Staffing Matters
- ❑ 15. How The Finance Works
- ❑ 16. Detailed Analysis Of The Options For South Glasgow
- ❑ 17. Maternal And Child Health
- ❑ 18. Better Access For West Glasgow Residents
- ❑ 19. The GRI/Stobhill Partnership
- ❑ 20. Why Centralise Cardiothoracic Surgery?
- ❑ 21. Radiotherapy: Linear Accelerators - A Patient's Guide

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Greater Glasgow Health Board

Dalian House

350 St Vincent Street

Glasgow G3 8YZ

Tel: 0141 201 4444 Fax: 0141 201 4401

Textphone: 0141 201 4400

Web site: www.show.scot.nhs.uk/gghb

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