

**North of Scotland Public Health Network (NoSPHN)  
Review of the Rural General Hospital Rapid Needs Assessment**

Roger Gibbins as Chair of the Remote and Rural Implementation Group indicated a need to review the Needs Assessment, undertaken by the North of Scotland Public Health Network (NoSPHN) which was conducted in the preparation of the Delivering for Remote and Rural Healthcare Framework.

The purpose of the review was to:

- Assess the degree to which the findings of the needs assessment<sup>1</sup> had been used by Rural General Hospitals as part of their implementation of the delivering for Remote and Rural Healthcare Framework and
- Assess whether and in what ways the sustainability of fragile services due to workforce issues was relevant.

The needs assessment conducted was a rapid needs appraisal undertaken by NoSPHN to determine to what degree the healthcare needs of the catchment populations around Rural General Hospitals (RGHs) were being met and to inform whether the proposed RGH model would help meet them. The following was undertaken to achieve this and the findings are noted briefly below:

- (1) A literature review to provide graded evidence relevant to remote and rural hospital healthcare. The findings indicated there was an absence of hard evidence to contraindicate specific service delivery by rural hospitals except in 4 key areas (intrapartum care, defined levels of diagnostics, outcomes for cancer care, and recruitment).
- (2) Analysis of catchment population-based and RGH-based inpatient and daycase hospital activity to provide (i) population-based intervention rates; (ii) the proportion of these provided at the local RGH and (iii) the range in procedures undertaken in the RGHs. The findings indicated that there was wide variations in the hospitalisation rates between the RGHs and compared to national rates, that there was limited commonality in daycase procedures, that some procedures were carried out in small volumes and that there were wide variations in average consultant episodes per patient ratios for medical specialities undertaken in the RGHs.

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<sup>1</sup> A full copy of the report is available via <http://www.scotland.gov.uk/Publications/2008/05/06084423/0> in Annexe 2, a summary of the needs assessment is given in the main body of the Delivering for Remote and Rural Healthcare Framework report – also on the same website.

It was not possible to determine whether the variations described above were appropriate or inappropriate and there were concerns highlighted that the data used was inaccurate (thought to be due to different coding practices etc). The main recommendation of the needs assessment was therefore that work to understand the variations should be progressed by RGHs principally by exploring the local care pathways and thereby providing some understanding of the variations and whether they were explicable and/or appropriate or not appropriate and required change.

A review of the needs assessment was conducted during July/August 2010 by issuing a questionnaire and supporting documentation to each RGH through the Directors of Public Health in each of the relevant Boards (See Appendix 1 and 2). Responses were received from each of the 6 RGHs (in 3 NHS Boards). Further follow up was conducted by some of the RGHs to understand local issues.

The findings indicate that:

- Although some RGH staff replying to the questionnaire were aware of the initial work not all staff contacted were aware of the initial needs assessment and findings.
- The needs assessment had been used to varying degrees in each Board / RGH (and was continuing to be used in some for example where redesign work was ongoing eg for anticipatory care).
- There was no evidence that the needs assessment findings had directly influenced change but evidence to show that some of the questions raised by the needs assessment had been addressed in the intervening period eg low volume activity which had been stopped, improvements in shared cancer care and a better understanding of the drivers for local service provision eg endoscopy services.
- There was evidence of understanding of some of the variations initially described although a large number of the findings were considered inexplicable (there may be a number of reasons for this eg further work was required to explore the variations / care pathways, the findings were based on 2004 – 2006 data which no longer reflected the current service provision, concerns over the initial data remained eg diagnostic and procedure coding). For further details see Appendices for RGH assessments.
- Responses indicated that workforce issues were relevant to the issues highlighted by the needs assessment including recruitment generally (eg recruitment to surgical services, radiographers and specialist nurses) and due to changes in the junior doctor workforce. Local workforce models were highlighted as being particularly relevant to the variations and the sustainability of services eg sub specialisms within the Consultant workforce and the sustainability of the provision of out of hours services without impact on the within hours service delivery.

A summary report was submitted to the Remote and Rural Implementation Group in August who further recommended that once available the findings of the review be shared with remote and Rural Boards with RGHs to support local redesign. Appendices 3 to 8 detail the responses from each RGH.

## **Appendices**

Appendix 1: Supporting information sent to all RGHS (page 4)

Appendix 2: The Rural General Hospital Model: A Rapid appraisal to inform it's development and implementation in Scotland (a summary) (page 9)

Appendix 3: Lorne and Isles - NHS Highland (page 19)

Appendix 4: Belford hospital - NHS Highland (page 26)

Appendix 5: Wick Hospital - NHS Highland (page 32)

Appendix 6: Balfour Hospital - NHS Orkney (page 38)

Appendix 7: Gilbert Bain Hospital - NHS Shetland (page 44)

Appendix 8: Western Isles Hospital - NHS Western Isles (page 54)

**Delivering for Remote and Rural Healthcare:  
The Sustainability of the Rural General Hospital Model /  
Review of the NoSPHN Needs Assessment**

## **Introduction**

Roger Gibbins as Chair of the Remote and Rural Implementation Group has recently indicated a need to review the Needs Assessment, undertaken by the North of Scotland Public Health Network (NoSPHN) which was conducted in the preparation of the Delivering for Remote and Rural Healthcare Framework.

The purpose of the review is to:

- Assess the degree to which the findings of the needs assessment<sup>2</sup> (summarised in the attached documents) have been used by Rural General Hospitals as part of their implementation of the delivering for Remote and Rural Healthcare Framework and
- Assess whether and in what ways the sustainability of fragile services due to workforce issues is relevant (this is also the focus of a Remote and Rural Healthcare summit meeting being held on the 6<sup>th</sup> July).

A full copy of the Needs Assessment including data is available via <http://www.scotland.gov.uk/Publications/2008/05/06084423/0> in Annexe 2, a summary of the needs assessment is given in the main body of the Delivering for Remote and Rural Healthcare Framework report – also on the same website.

## **Summary of what the original Needs Assessment covered**

The needs assessment was a rapid needs appraisal undertaken by NoSPHN to determine to what degree the healthcare needs of the catchment populations around Rural General Hospitals (RGHs) were currently being met and to inform whether the RGH model would help meet them. The following was undertaken to achieve this:

- (1) A literature review to provide graded evidence relevant to remote and rural hospital healthcare
- (2) Analysis of catchment population-based and RGH-based inpatient and daycase hospital activity to provide (i) population-based intervention rates; (ii) the proportion of these provided at the local RGH and (iii) the range in procedures undertaken in the RGHs.

## **Review process**

The following paper summarises the key findings of the needs assessment in both of the above areas (Part 1 from the findings of the Literature Review and Part 2 from the findings of the hospital activity data) and poses

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<sup>2</sup> Rural General Hospital Needs Assessment. North of Scotland Public Health Network March 2007 (Unpublished).

questions for each Rural General Hospital to answer within these. Responses should be completed on the attached template.

### **Part 1 The Literature Review**

The aims of the literature review were to determine:

(1) The evidence base for healthcare services in Rural General Hospitals (2) how quality & safety can be assured in an RGH and (3) the sustainability issues & how they can be addressed.

In summary the literature review revealed the strongest evidence for (level of evidence given in brackets):

- (i) Intrapartum care should be provided only for low risk women with no identified risk markers at the time of birth and who have normal weight babies. (Level 2-)
- (ii) RGHs should have a defined level of diagnostic capability. (Level 3)
- (iii) Better outcomes for many of cancers are associated with specialised care and if cancer care is to be delivered locally, it should involve shared care with outreach clinics and deliver the same outcomes. (Level 2+)
- (iv) Recruitment should take account of both nature and nurture factors i.e. rural backgrounds not necessarily Scottish-based and involvement in training programmes designed to promote rural healthcare. Although multiple barriers to retention exist, access to flexible continuous medical education including maintenance of advanced procedural skills is an important requirement. (Levels 2++ to 3)

(NB There was an absence of hard evidence to contraindicate specific service delivery by rural hospitals except in the areas highlighted above).

**Review questions:** Between 2008 when these findings were disseminated and now, **each** RGH is asked:

- 1. To what degree do the individual evidence items as per (i) to (iv) above now apply to the current RGH situation?**
- 2. How is the current situation in respect of (i) to (iv) affected by workforce issues?**
- 3. What could change the situation in relation to (i) to (iv)?**

*Please use the attached Part 1 template to record the response on behalf of each RGH.*

**Part 2 Analysis of catchment population-based and RGH-based inpatient and daycase hospital activity**

The analysis was undertaken using hospital activity relating to the Financial Year Ending (FYE) period 2004 to 2006. The main findings were:

- Based on all activity i.e. medical and surgical, elective and emergency, daycase and inpatients, the catchment populations of each of the RGHs experienced a wide variation in their hospitalisation rates.
- Elective hospitalisation rates in both surgical and medical specialties experienced by the catchment populations of each of the RGHs were statistically significantly higher than the national average rate.
- The proportions of the total hospitalisation rates experienced by the RGH catchment populations which were accounted for by uptake at the local RGH varied considerably and in all cases only the minority of elective activity was undertaken at the local RGH.
- There was little commonality in the daycase procedures undertaken at RGHs.
- Some major procedures were carried out in small volumes e.g. mastectomies in certain RGHs.
- There was a high and wide range in the average consultant episode per patient ratio for medical specialty activity undertaken in the RGHs.

Whilst some of these variations could be explained on the basis of hospital activity coding differences e.g. procedures undertaken and the type of admission (i.e. elective versus emergency), some will have been due to differences in patient care pathways. These may not always be the best in meeting the needs of patients. Furthermore some of the variations may have been based on individual clinician preferences whilst others may be determined by workforce factors.

The tables below detail some of the above variations. RGHs are asked to consider these variations in terms of the questions posed at the end of this section (page 4).

**Table 1: Variations in the hospitalisation (inpatient) rates of catchment population Relative to the Scottish average hospital rate:**

	Medical Specialities*	Surgical Specialities
Elective Uptake	1.2 – 3.2 higher	1.3 – 1.7 higher
Emergency Uptake	Significantly higher in 3 hospitals	Significantly higher in 4 hospitals
Transfers	All lower except 1 hospital	All lower except for 2 hospitals

\* includes activity within GP other than obstetrics

**Table 2: Contribution of local RGH to the populations overall hospitalisation (inpatient rate):**

	Medical Specialities*	Surgical Specialities
Elective Uptake	5 – 49%	30 – 65%
Emergency Uptake	50 – 90%	55 – 90%

\* includes activity within GP other than obstetrics

The little commonality in procedures between hospitals is demonstrated by:

**Table 3: Top 10 Primary procedures over all specialities for both daycase and inpatient activity in RGHS:**

	RANK						
	All hosp	L&IH	CGH	Belford	Balfour	WIH	GBH
Fibreoptic Endo. Exam. Upper G.I. Tract & Biopsy Lesion Upper G.I. Tract	1	1	4	3	2	1	1
Intravenous Chemotherapy	2	8	1	2	10	3	17
Other Specified Continuous Infusion Of Therapeutic Substance	3	2	2	5	1	12	3
Unspecified Diagnostic Endoscopic Examination Of Colon	4	6	9	7	4	7	2
Unspecified Continuous Infusion Of Therapeutic Substance	5	3	5	51	46	5	19
Other Specified Operations On Unspecified Organ	6	4	7	6	16	11	4
Unspec. Diagnostic Fibreoptic Endo. Exam. Of Upper G.I. Tract	7	13	3	4	5	13	11
Unspecified Diagnostic Endoscopic Examination Of Bladder	8	9	45	1	7	8	7
Unspecified Excision Of Lesion Of Skin	9	13	10	9	9	6	5
Insertion Of Prosthetic Replacement For Lens	10	ND	ND*	ND	3	2	10

Data Source: SMR01 linked activity FYE 2004-06

ND = not done; ND\* this service is now available in this hospital

L&IH = Lorn & Isles Hospital; CGH = Caithness General Hospital; Bel = Belford Hospital; Bal = Balfour Hospital;

WIH = Western Isles Hospital; GBH = Gilbert Bain Hospital

The following were noted in particular:

- Some major procedures are carried out in very small volumes (e.g. mastectomies) in certain RGHS
- In the medical specialties, the average elective consultant episodes per patient varied between RGHS from 1.1 to 4.0 (Table 4).

**Table 4: Average ratio of consultant episodes per patient admitted into medical specialities\***

Hospital	CEs:Pats	
	Elective	Emergency
L&IH	2.8	1.5
CGH	2.1	1.6
Belford	1.1	1.6
Balfour	4.0	1.6
WIH	1.5	1.7
GBH	3.4	1.6
<b>Overall</b>	<b>2.2</b>	<b>1.6</b>

Data source: SMR01 linked activity FYE 2004-06

\* includes activity within GP other than obstetrics

L&IH = Lorn & Isles Hospital; CGH = Caithness General Hospital; Bel = Belford Hospital; Bal = Balfour Hospital;

WIH = Western Isles Hospital; GBH = Gilbert Bain Hospital

**Review questions:** Between 2008 when these findings were disseminated and now, **each** RGH is asked:

<ol style="list-style-type: none"><li><b>1. To what extent do RGHs (individually/ collectively) now understand these variations?</b></li><li><b>2. What has been done to address any variations (thought to be inappropriate / inexplicable) and</b></li><li><b>3. What if any, have been the workforce implications (to either of the above)?</b></li></ol>

*Please use the attached Part 2 template to record the response on behalf of each RGH.*

**Please return your completed form to Pip Farman, North of Scotland Public Health Network Coordinator, C/O Assynt House, Beechwood Park, Inverness, IV2 3BW or to [pip.farman@nhs.net](mailto:pip.farman@nhs.net) by the 30<sup>th</sup> July 2010.**



**The Rural General Hospital Model:  
A rapid needs appraisal to inform it's development and  
implementation in Scotland  
(a summary)**

**Susan Vaughan, Epidemiologist, NHS Highland**

## BACKGROUND

The Rural General Hospital model was described by a report of the National Remote & Rural Workstream as:

*"The RGH undertakes the management of acute medical, surgical emergencies & is the centre for the community, including the place of safety for mental health emergencies. It is characterised by more advanced level of diagnostic services than a Community Hospital & will provide a range of outpatient, daycase, inpatient & rehabilitation services."*

Six hospitals in Scotland were identified as Rural General Hospitals:



- The model was described using hospital-based activity non-standardised for age and not informed by external evidence-base which did not ask or assess whether current activity was proportionate to healthcare need
- The North of Scotland Public Health Network was approached to assess what the model would mean in terms of meeting the populations healthcare needs i.e. could/should one model fulfil the healthcare needs of the rural populations around the six hospitals?
- Time & resource constraints meant that a full health needs assessment could not be carried out.

## OBJECTIVES

A rapid needs assessment was undertaken to establish:

1. the evidence base for healthcare services in Rural General Hospital
2. how quality & safety can be assured in RGH
3. the sustainability issues & how they can be addressed
4. to what degree the needs of the catchment populations around RGHs are currently being met.

## METHODOLOGY

Methods used were:

- A literature review [to address (1) to (3) above]
- Analysis of population-based hospital activity data that was routinely available [to address (4) above]

### Literature Review

#### *Method*

- Systematically retrieved from both electronic databases and from the grey literature.
- Search was limited to English language, and studies carried out in the UK, Australia, New Zealand, Canada, the United States and Western Europe
- Two reviewers with an iterative approach.
- Thematic content analysis used i.e. recording the aspect of remote and rural health addressed in the paper
- Evidence was graded according to hierarchy as per SIGN.

#### *Results*

1. The majority of findings were from grade 3 evidence
2. Review indicated that there could be diversity between the modes of delivery between RGHs
3. There is great potential for surgical work; the decision that RGHs will not provide intensive care, limits appropriately, what can be done in them.
4. The findings associated with the stronger grades of evidence were:
  - i. Intrapartum care should be provided only for low risk women with no identified risk markers at the time of birth and who have normal weight babies. (Level 2-)
  - ii. RGHs should have a defined level of diagnostic capability. (Level 3)
  - iii. Better outcomes for many of the cancers are associated with specialised care and if cancer care is to be delivered locally, it should involve shared care with outreach clinics and deliver the same outcomes. (Level 2+)
  - iv. Recruitment should take account of both nature and nurture factors i.e. rural backgrounds not necessarily Scottish-based and involvement in training programmes designed to promote rural healthcare. Although multiple barriers to retention exist, access to flexible continuous medical education including maintenance of advanced procedural skills is an important requirement. (Levels 2++ to 3).

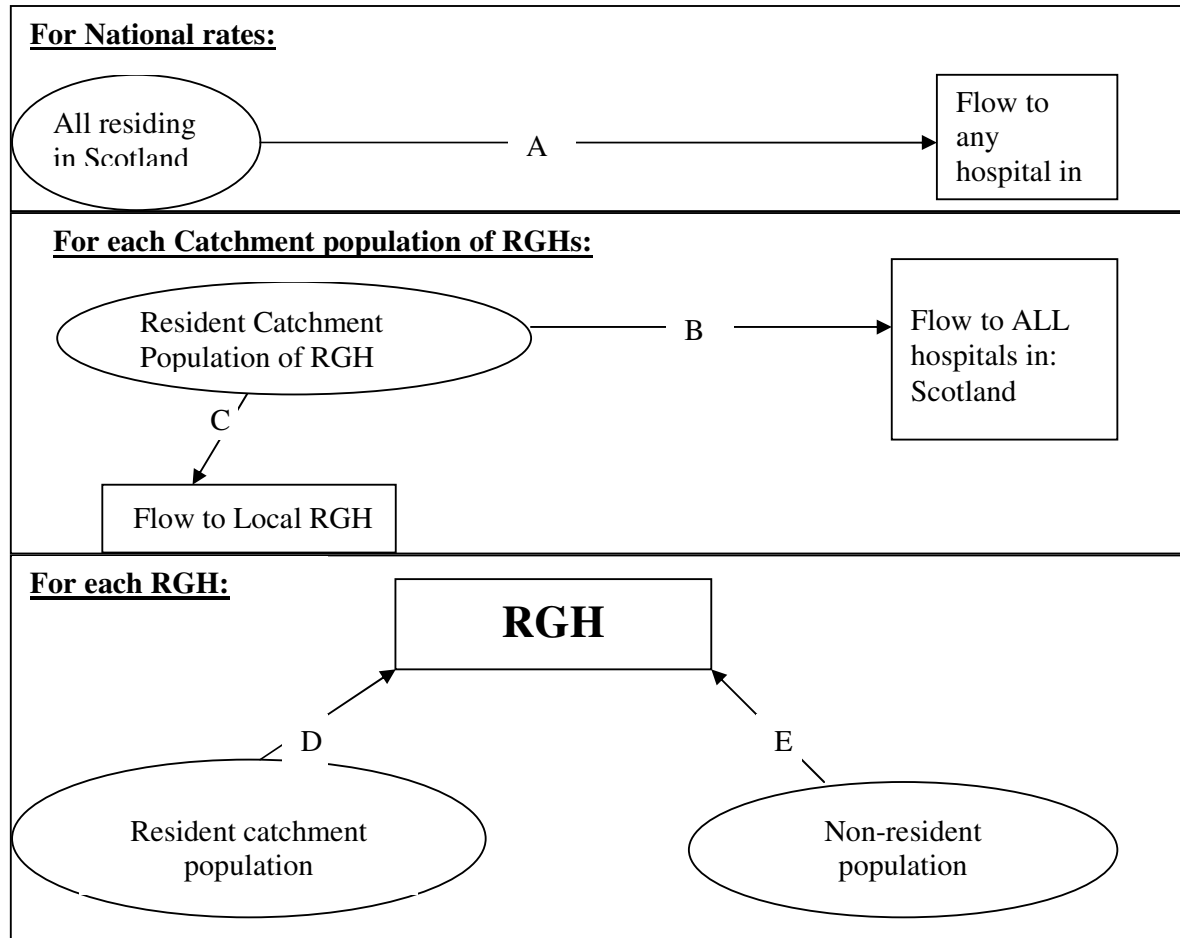
2++	High quality systematic reviews of case control/cohort studies or high quality case or cohort studies with very low risk of confounding, bias or chance;	11
2+	Well conducted case control or cohort studies with low risk of confounding, bias or chance;	
2-	Case control or cohort studies with high risk of confounding, bias or chance;	
3	Non-analytic studies e.g. case reports, case series	

## ANALYSIS OF ROUTINELY AVAILABLE HOSPITAL DATA

### Specifications

- SMR01 data (inpatients with or without procedure and daycases only with a primary procedure) covering the resident population in Scotland FYE 2004 to 2006 (3 years).
- Relative uptake based on expected as per the national age/sex specific rates and the observed for each catchment population
- Specialties inclusive of all acute medical and acute surgical. GP other than obstetrics care provided in hospitals was included in the acute medical activity but also described separately.
- Catchment populations estimated from general medical uptake by data zone for mainland RGHs.

### Methodology



### 3 Types of Analysis:

- (1) Compare the hospitalisation rates of the catchment population (B) with the national average (A) by indirect standardisation method
- (2) Proportion of catchment populations hospitalisation rate taken up at local RGH (C as a % of B)
- (3) Profile of uptake within each RGH from local or non-local flow (D + E) by main diagnosis and procedure.

## RESULTS

### Analysis (1) Relative hospitalisation rates of catchment populations (activity in any hospital in Scotland)

For each hospital activity as per consultant episodes or number of patients-an example:

Standardised hospitalisation ratio\* for catchment populations<sup>1</sup> and proportion of activity taken up at RGH

Consultant episodes-based		Acute Surgical Admission type			Acute Medical <sup>2</sup> Admission type			GP Other than Obstetrics Admission type		
		Emergency	Elective	Transfers	Emergency	Elective	Transfers	Emergency	Elective	Transfers
All ages	SHR* ± confidence interval	128.4 ± 4.4	134.2 ± 4.6	116.0 ± 6.8	115.3 ± 3.0	158.2 ± 9.7	152.0 ± 6.4	155.8 ± 16.3	319.0 ± 55.9	176.2 ± 30.4
	Nos. of admissions	3312	3300	1118	5487	1026	2175	350	125	129
	Proportion of activity at RGH	57.7%	29.0%	33.6%	76.7%	28.0%	71.8%	0.0%	0.0%	0.0%
0-14 years old	SHR* ± confidence interval	94.2 ± 12.6	138.0 ± 19.9	75.1 ± 25.6	94.9 ± 7.6	87.0 ± 24.6	126.3 ± 38.7	213.8 ± 187.4	n/a	n/a
	Nos. of admissions	214	185	33	605	48	41	5	-	-
	Proportion of activity at RGH	61.7%	-	-	7.8%	2.1%	9.8%	0.0%	0.0%	0.0%
Aged 65 & over	SHR* ± confidence interval	135.4 ± 7.7	133.3 ± 7.2	109.8 ± 9.2	116.4 ± 4.5	166.0 ± 15.3	163.4 ± 8.6	149.6 ± 18.8	318.6 ± 62.4	179.3 ± 32.8
	Nos. of admissions	1176	1331	545	2567	453	1398	243	100	115
	Proportion of activity at RGH	74.3%	24.8%	24.4%	84.7%	36.0%	77.1%	0.0%	0.0%	0.0%
All ages with cancer diagnosis <sup>3,4</sup>	SHR* ± confidence interval	115.1 ± 20.5	211.1 ± 12.8	113.2 ± 14.6	90.8 ± 12.8	36.6 ± 3.8	104.3 ± 19.1	199.5 ± 69.1	13.7 ± 26.8	282.5 ± 99.4
	Nos. of admissions	121	1037	230	194	359	115	32	1	31
	Proportion of activity at RGH	48.8%	68.4%	28.7%	61.3%	42.9%	33.0%	0.0%	0.0%	0.0%
Daycases with a procedure <sup>5</sup> (all ages)	SHR* ± confidence interval	n/a	125.7 ± 4.1	n/a	10.1 ± 19.7	95.0 ± 4.4	4.0 ± 3.9	n/a	n/a	n/a
	Nos. of admissions	-	3606	-	1	1828	4	-	-	-
	Proportion of activity at RGH	-	73.3%	-	-	78.3%	-	-	-	-

<sup>1</sup> Catchment populations are based on Postcode Area

<sup>2</sup> Includes activity within GP Other than Obstetrics

<sup>3</sup> SMR01 has provision for recording up to 6 diagnoses (1 main and up to 5 secondary diagnoses). Only the main diagnosis has been used to select cancer patient episodes

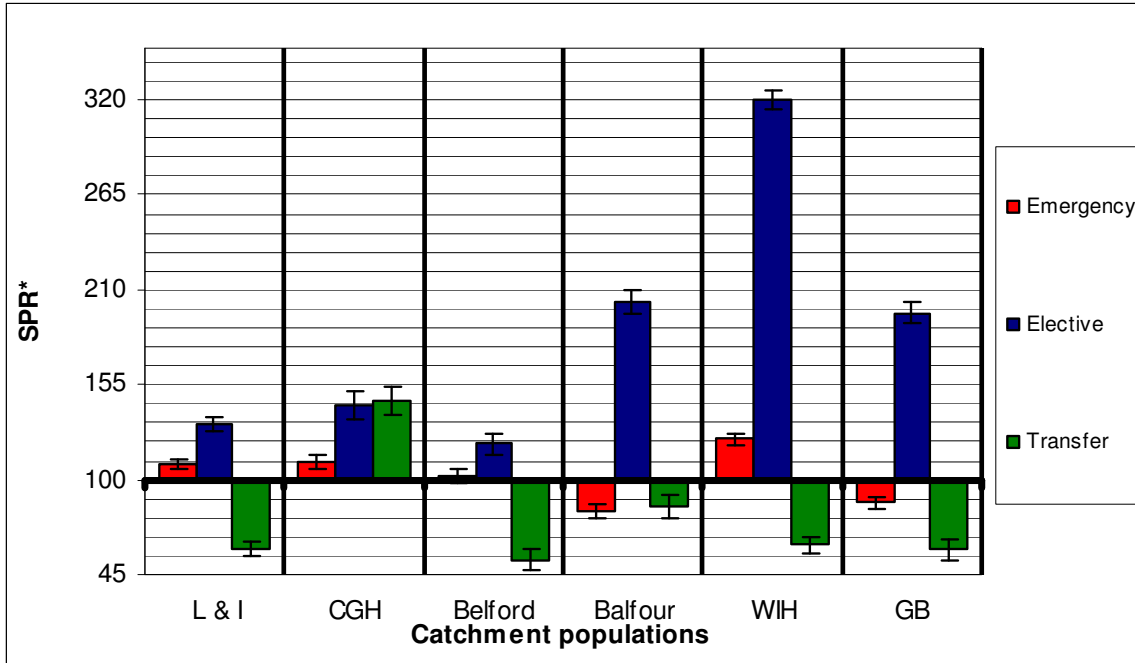
<sup>4</sup> Cancer diagnosis was identified using the International Classification of Diseases (10th revision) codes C00 - C97 (malignant neoplasms).

<sup>5</sup> SMR01 has provision for recording up to 4 procedures (1 main and up to 3 secondary procedures). Only those day case records

\*SHR = 100, = equivalent with, >100 = higher, < 100 = lower than national average;

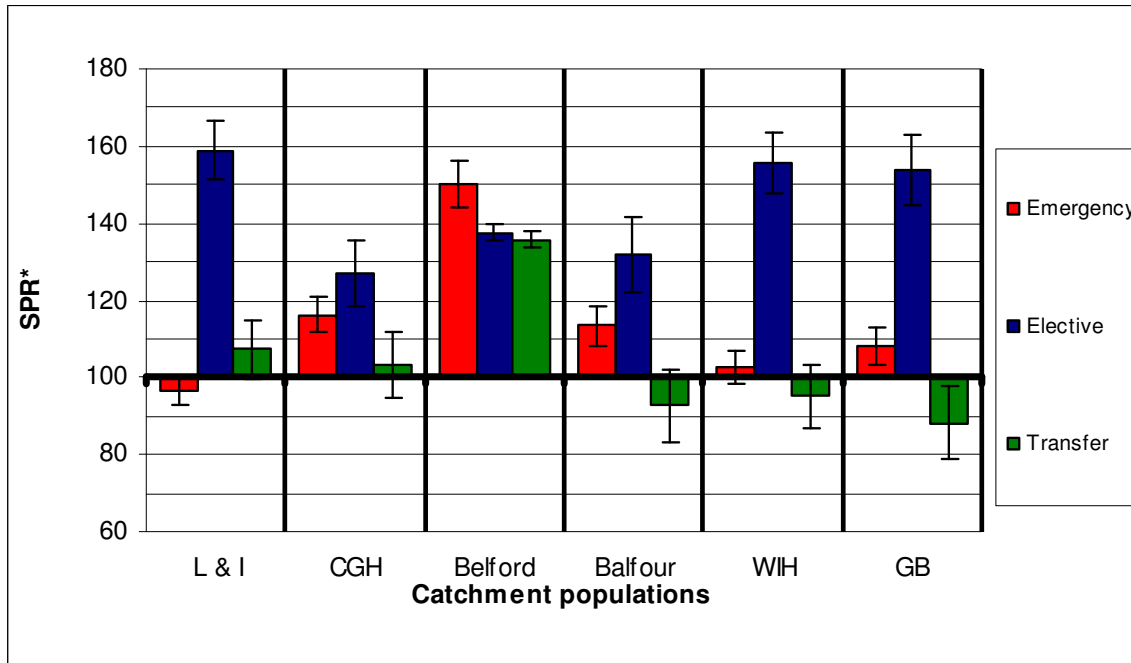
Source: ISD SMR01 Ref: ISD/HIG/IR2007-00484 Date: 16th March 2007

**Standardised patient ratios (SPRs\*): Inpatient all ages admitted to medical specialities (incl GP Other) by catchment populations: comparison with national average**



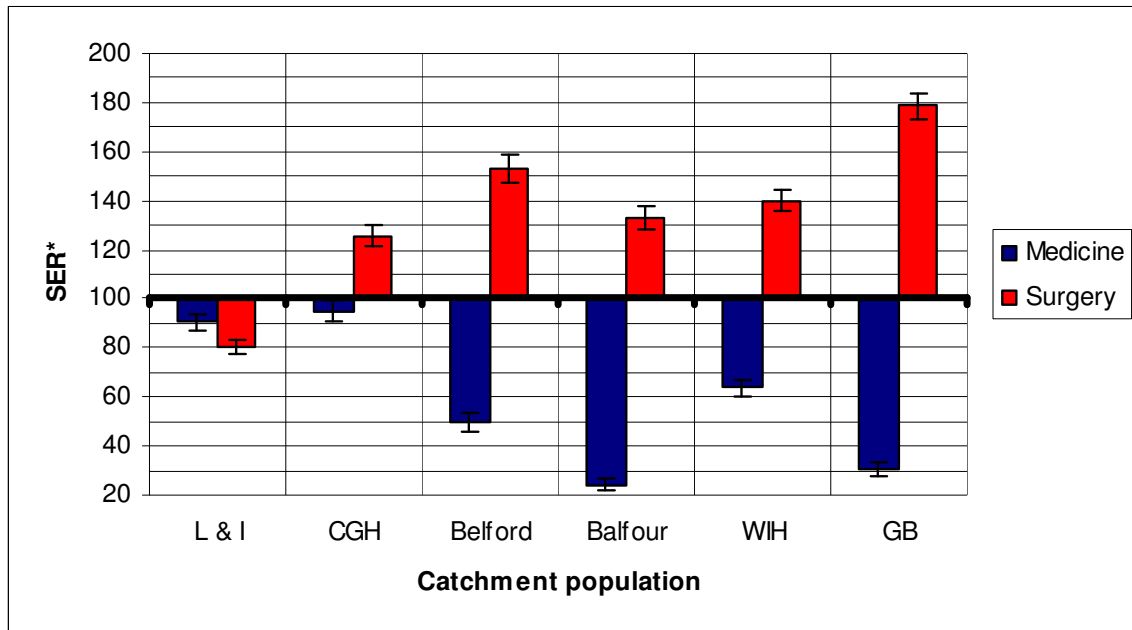
*\*SPR=100 means that the actual patient-based episode rates are those expected on the basis of the national average taking account of population structure. Data Source: SMR01 linked activity FYE 2004-06*

**Standardised patient ratios (SPRs\*): Inpatient all ages admitted to surgical specialities by catchment populations: Comparison with national average**



*\* SPR=100 means that the actual patient-based episode rates are those expected on the basis of the national average taking account of population structure  
Data Source: SMR01 linked activity FYE 2004-06*

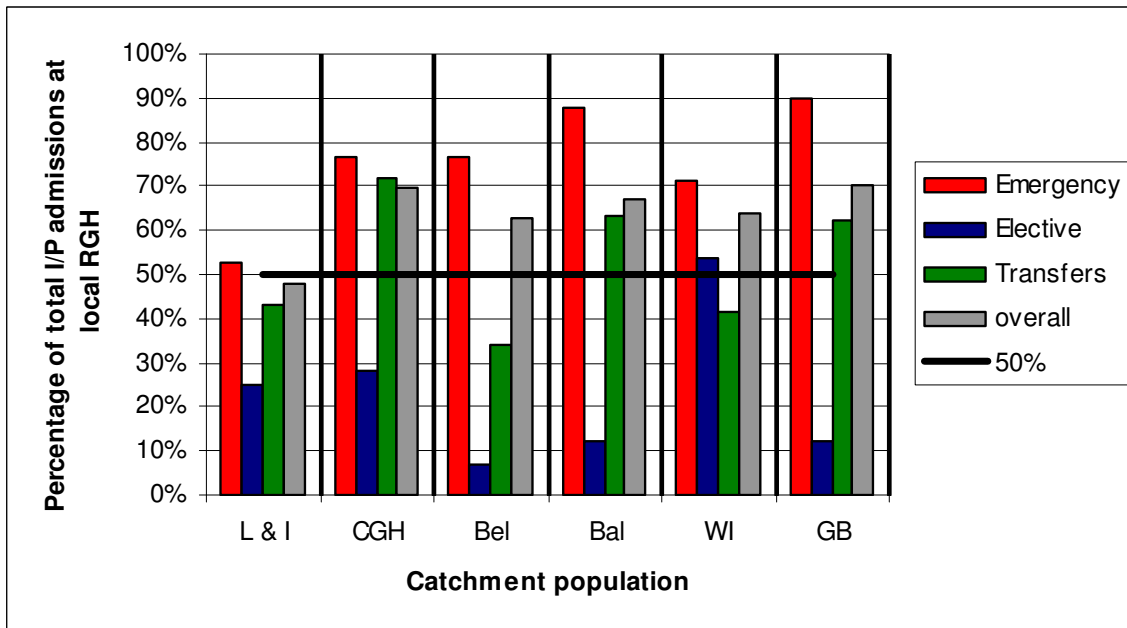
**Surgical and Medical Daycase activity relating to catchment populations: relative to national average**



\* SER=100 means that the actual consultant episode rates are those expected on the basis of the national average taking account of population structure  
 Data Source: SMR01 linked activity FYE 2004-06

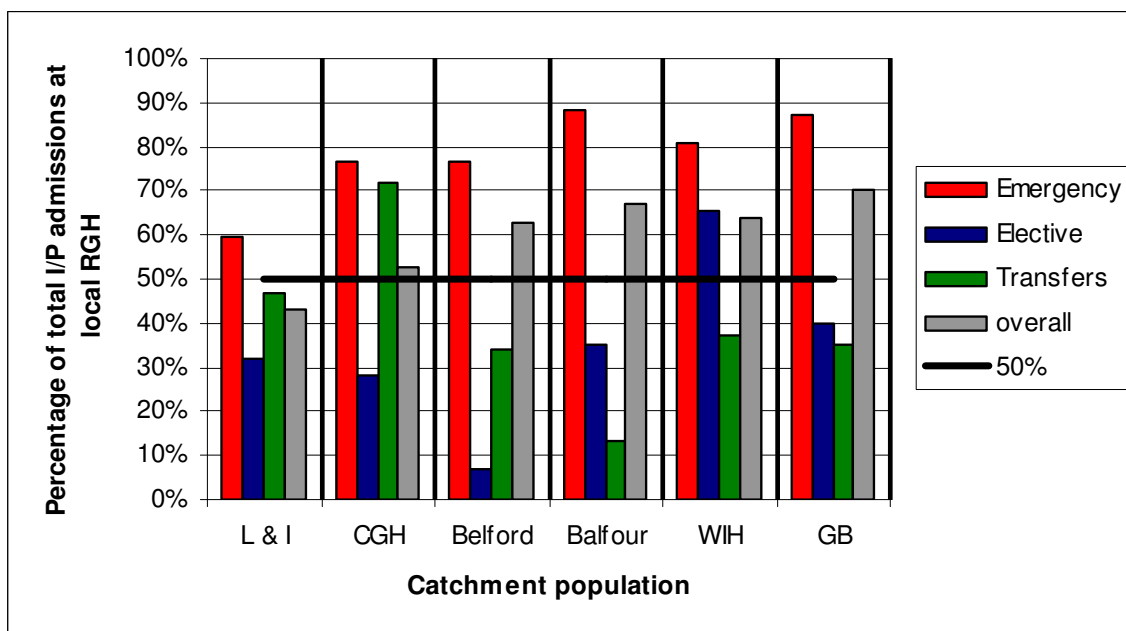
**Analysis (2) Proportion of total catchment population hospitalisations taken up at local RGHS**

**Percentage of all inpatient admissions to medical specialities taken up at the local RGH for each catchment population**



Data Source: SMR01 linked activity FYE 2004-06

**Percentage of all inpatient admissions to surgical specialities taken up at the local RGH for each catchment population**



Data Source: SMR01 linked activity FYE 2004-06

### Analysis (3) Total RGH-Based activity

#### Top 10 Diagnosis of admissions to medical specialities in RGHs: Ranked by activity based on Patient numbers vs. Consultant Episodes

Primary Diagnosis	Rank	
	CE-based	Patient-based
Pain in throat & chest	1	1
Mental & behav. disorders due to alcohol	2	3
Other COPD	3	10
Angina pectoris	4	5
Heart failure	5	6
Acute MI	6	7
Unsp. acute lower resp. infection	7	2
Atrial fibrillation and flutter	8	8
Syncope and collapse	9	4
Pneumonia, organism unspecified	10	9

Data Source: SMR01 linked activity FYE 2004-06

#### Top 10 Primary procedures ranked over all specialities in RGHs:

	RANK						
	All hosp	L&IH	CGH	Belford	Balfour	WIH	GBH
Fibreoptic Endo. Exam. Upper G.I. Tract & Biopsy Lesion Upper G.I. Tract	1	1	4	3	2	1	1
Intravenous Chemotherapy	2	8	1	2	10	3	17
Other Specified Continuous Infusion Of Therapeutic Substance	3	2	2	5	1	12	3
Unspecified Diagnostic Endoscopic Examination Of Colon	4	6	9	7	4	7	2
Unspecified Continuous Infusion Of Therapeutic Substance	5	3	5	51	46	5	19
Other Specified Operations On Unspecified Organ	6	4	7	6	16	11	4
Unspec. Diagnostic Fibreoptic Endo. Exam. Of Upper G.I. Tract	7	13	3	4	5	13	11
Unspecified Diagnostic Endoscopic Examination Of Bladder	8	9	45	1	7	8	7
Unspecified Excision Of Lesion Of Skin	9	13	10	9	9	6	5
Insertion Of Prosthetic Replacement For Lens	10	ND	ND*	ND	3	2	10

Data Source: SMR01 linked activity FYE 2004-06

ND = not done; ND\* this service is now available in this hospital



**Average ratios of consultant episodes per patient admitted into medical specialties**

Hospital	CEs:Pats	
	Elective	Emergency
L&IH	2.8	1.5
CGH	2.1	1.6
Belford	1.1	1.6
Balfour	4.0	1.6
WIH	1.5	1.7
GBH	3.4	1.6
<b>Overall</b>	<b>2.2</b>	<b>1.6</b>

Data Source: SMR01 linked activity FYE 2004-06

**Admissions to medical specialties: Proportion of total activity (Consultant Episode) by type of admission**

Hospital	Elective	Emergency	Transfers	All
L&IH	35.2%	59.1%	5.7%	6,776
CGH	23.4%	55.9%	20.7%	7,713
Belford	11.6%	84.4%	4.0%	3,425
Balfour	15.5%	71.7%	12.9%	3,730
WIH	23.3%	72.5%	4.2%	6,686
GBH	13.6%	78.3%	8.0%	3,904
<b>Overall</b>	<b>22.5%</b>	<b>67.6%</b>	<b>9.9%</b>	<b>32,234</b>

Data Source: SMR01 linked activity FYE 2004-06

## SUMMARY OF CONCLUSIONS

### From the literature review

- Very little high grade evidence other than around obstetric care, recruitment of medical staff and cancer care.

### From the analysis of routinely available data

#### *Catchment population based activity:*

##### *Relative to the Scottish average hospital rate:*

	Medical Specialities	Surgical Specialities
<b>Elective Uptake</b>	<b>1.2 – 3.2 higher</b>	<b>1.3 – 1.7 higher</b>
<b>Emergency Uptake</b>	<b>Significantly higher in 3 hospitals</b>	<b>Significantly higher in 4 hospitals</b>
<b>Transfers</b>	<b>All lower except 1 hospital</b>	<b>All lower except for 2 hospitals</b>

#### *Contribution of local RGH to the populations overall hospitalisation rate:*

	Medical Specialities	Surgical Specialities
<b>Elective Uptake</b>	<b>5 – 50%</b>	<b>30 – 65%</b>
<b>Emergency Uptake</b>	<b>50 – 90%</b>	<b>55 – 90%</b>

#### *RGH-based activity:*

- Little commonality in daycase procedures between hospitals
- Some major procedures are carried out in very small volumes (e.g. mastectomies) in certain RGHS
- In the medical specialties, the average consultant episodes per patient varied between RGHS from 1.1 to 4.0
- The percentage of acute medical activity by admission type varied between RGHS e.g. 56-85% emergency and 4-21% transfers.

### **LESSONS LEARNED WITH USING THE RAPID NEEDS APPRAISAL**

There were some key advantages in adopting it:

1. Could be carried out remotely i.e. no need to visit each hospital, just need a computer and access to the internet
2. Data was routinely available and standardised
3. Results can be presented in a standard way to all stakeholders
4. Using catchment-based population activity demonstrated large discrepancies from the national average and in all cases, the minority of elective need being met locally.

But the following would have improved its effectiveness:

1. Making it clear that this was not an end product in itself - consultation of the results with clinicians was to be an equally important part of the needs assessment e.g. the discrepancies with the national average and the variations between hospitals still need to be explained by mapping patient pathways-a process that can only be adequately done by RGH-based clinicians
2. Highlighting that the results do not provide the full activity profile of RGHS-outpatient activity was not captured basically because nationally this is inadequately coded for procedure or diagnosis
3. Flagging up that coding practices by the hospitals will have contributed to some of the variations found between hospitals
4. Appreciating that perceptions of hospital activity by clinicians do not necessarily match the definitions used to collect activity data e.g. definition of emergency admissions.