

Working model of surgical service in a Rural General Hospital

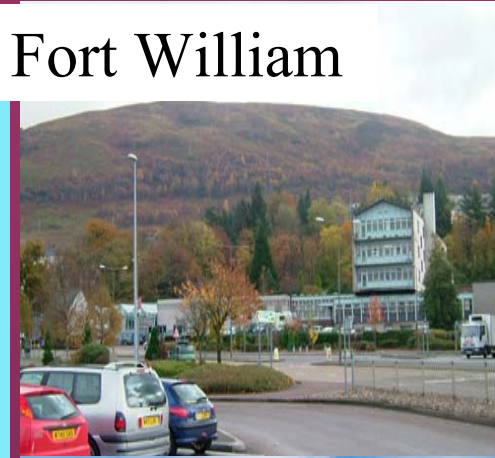
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Background

- Acute Services Review 1998
 - Description of Managed Clinical Network [MCN]
- W. Highland Solutions Group Report 2005
 - Definition of Rural General Hospital [RGH]

Background

- Kerr Report (May 2005) - Building a Health Service Fit for the Future
- Delivering for Remote and Rural Healthcare (Nov 2007)
 - Consultant-led Surgical and Anaesthetic Services
 - Workload of RGH surgeon
 - Curriculum for training



Fort William

Wick

Lerwick

Stornoway

Kirkwall

Oban

Aim of Study

- To demonstrate some of the positive quantitative and qualitative benefits of the consultant led RGH service.

Methods 1

- Description of MCN's - GI Cancers and Urology
- Data taken from theatre logs at Belford Hospital, Fort William and MacKinnon Memorial Hospital, Broadford.
- Retrospective personal audit of Colorectal Cancer management at the Belford Hospital for 10 years, Jan 1993- Dec 2002

Methods 2

- Retrospective study of Urological Procedures and Joint operating for 10 years
Oct 1996 - April 2006

GI Managed Clinical Network [MCN]

- Video-conferencing for Multi-disciplinary Team Meetings
- All GI cancers discussed
- Joint operating in remote hospital or tertiary centre
- Teleradiology (Staging CT)
- Audit data collated centrally to monitor quality of care and results

The Network



Use Technology





Weekly GI MDT

Raigmore
Wick
Stornoway
Fort William



Belford Multidisciplinary team

- Stoma nurse (regular ward & home visits and monthly joint clinic)
- Visiting Oncology service
- Nurses including MacMillan
- Gastroenterologist
- GI Radiologist (Based in Raigmore)
- Dietician
- Physiotherapists

GI MCN Results of RGH Surgery

10 Years of Colorectal Practice in a Viking Hospital -(1993-2002)

350 Patients undergoing surgery

- 168 Non-resectional surgery
- 182 Patients resection/anastomosis
 - 3 anastomotic leaks(1.9%)
 - 98 for malignant disease
 - 2 anastomotic leaks(2.3%)

How do we compare with others?

Colorectal surgery in Rural Australia.

- 69 rural surgeons sent Questionnaires
- 62 surgeons completed questionnaires for 877 patients over 12 months
- 3.3% anastomotic leak rate in 675 patients
- 4.6% peri-operative mortality.

Birks et al. 2001

Colorectal Cancer care: How do we compare with others?

[McArdle, BMJ, 2000;321:1121-3]

| | Belford (%) | Published range(%) |
|---------------------|-------------|--------------------|
| Anastomotic leak | 2.3 | 0-25 |
| Local recurrence | 4.6 | 0-21 |
| Post op mortality | 2.0 | 0-20 |
| Survival (10 years) | 45.8 | 20-63 |

Urology MCN

Close link with Urology Department,
Raigmore Hospital, Inverness

3 monthly joint operating in RGH

Urodynamics, Intermittent Self-
catheterisation and self-dilatation
instruction service at Raigmore

Urology MCN

Results : 10 years 1996 - 2006

| | |
|-----------------------------|------|
| Total Urological Operations | 2176 |
|-----------------------------|------|

| | |
|--------------------|-----|
| Joint Urology List | 304 |
|--------------------|-----|

| | |
|------------------------------|------|
| RGH Surgeons Urological Ops. | 1872 |
|------------------------------|------|

Urology MCN - results

| Procedure | Joint Urology | RGH surgeon |
|---------------------|---------------|-------------|
| Flex Cystoscopy | 53 | 1269 |
| Rigid Cystoscopy | 78 | 280 |
| Optical Urethrotomy | 8 | 69 |
| Nephrectomy | 6 | 0 |
| Lap Nephrect. | 3 | 0 |

Urology MCN - results

| Procedure | Joint Urology | RGH surgeon |
|------------|---------------|-------------|
| TURP | 68 | 40 |
| TURBT | 13 | 23 |
| TUBNI | 10 | 16 |
| TVT | 7 | 7 |
| Cystectomy | 2 | 0 |

Outreach to Isle of Skye (80 miles away)

2 day visit (O/N stay)

Day case and overnight stay operating list.

Ward round.

Endoscopy list.

OP clinic (new and review).

Outreach to Isle of Skye

New General Surgical Outpatients

| | |
|------|-----|
| 2004 | 504 |
|------|-----|

| | |
|------|-----|
| 2005 | 673 |
|------|-----|

| | |
|------|-----|
| 2006 | 612 |
|------|-----|

Outreach to Isle of Skye

(Operative Procedures – Personal series)

| Procedure | 2004 | 2005 | 2006 |
|-----------------|------|------|------|
| Gastroscopy | 48 | 43 | 52 |
| PEG Insertion | 2 | 2 | 2 |
| Flex Sigmoid. | 45 | 40 | 28 |
| Colonoscopy | 60 | 66 | 55 |
| Flex Cystoscopy | 35 | 50 | 55 |

Outreach to Isle of Skye

(Operative Procedures – Personal series)

| Procedure | 2004 | 2005 | 2006 |
|-------------------|------|------|------|
| Ing Hernia Repair | 3 | 6 | 9 |
| Epig/Umb Hernia | 5 | 1 | 1 |
| Vasectomy | 7 | 5 | 6 |
| Carpal Tunnel | 7 | 13 | 0 |
| | | | |

Teleradiology



Solutions.....

Teleradiology

Fractures can be discussed with
Orthopaedic Surgeons.

- Obviates or delays transfer in 50% cases.
- Downscales the urgency of transfers.
- Planned transfer for planned surgery.

Personal communication Mr D Finlayson, 1999

Summary

- Significant workload
- MCN's enables significant numbers of patients to be treated closer to home
- Joint operating valuable asset
- Visiting service makes ecological sense!
- Appropriate support mechanisms are available – Teleradiology + weekly MDT

The Challenge

- Implement the training curriculum
- Encourage the DGH's and Teaching hospital units to give appropriate training
- Ensure that the MCN's are established



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