

Shifting the Balance of Care Audit Report

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Introduction

As part of the Remote and Rural Project process to define the framework for remote Primary Care a series of focus groups were undertaken during the summer of 2006. The majority of participants from the Focus Groups identified that they could care for more patients locally if there were greater investment in locally available diagnostics. One positive aspect of increased local care would be to reduce multiple visits to secondary care. There was, however minimal evidence to underpin this proposal. Whilst the aspirations to expand the range of care available locally are laudable and in line with the principles in Delivering for Health¹, there is a need to base such assumptions upon robust evidence. It was therefore agreed to test increased local care provision, and in so doing, test the viability of the emerging model of care. An enthusiastic General Practitioner (GP) from the Western Isles suggested piloting this work through analysis of referrals of patients from the Western Isles to Glasgow Hospitals and through discussions between clinicians to identify which patients could have safely and appropriately been cared for locally. This project was known as 'shifting the balance of care'.

The objectives of the Shifting the Balance of Care Project were to;

1. Establish baseline data on Outpatients and Inpatients with Western Isles Post Code who have been referred to Glasgow Hospitals;
2. Analyse data to identify which of those patients could have had that care provided locally;
3. Negotiate with primary, secondary and tertiary care clinicians to agree future care pathways;
4. Implement agreed care pathways;
5. Evaluate the impact of the project on numbers of secondary care visits and quality of care provided; and
6. Identify the transferability of the project to other locations.

This report outlines the findings of phase 1 of this project, which covers objectives 1 and 2 above, as objectives 3-5 were felt to be actions for the local NHS Board, and Object 6 to be considered following completion of the Project.

¹ (2005) Ibid

Methodology

Approval to proceed with the project was gained from the Remote and Rural Steering Group. Retrospective consideration of the guidelines detailed in the National Patient Safety Agency's "National Research Ethics Service"² suggested that the project fitted with the criteria for 'Service Evaluation' and as such review by an Ethics Committee was not required. The data was obtained via the North of Scotland Public Health Network (NoSPHN).

Data were obtained on all referrals from all GP practices in the Western Isles to any hospital in Glasgow for the 4 year period from April 2002 to March 2006. Of the 14 General Practices in NHSWI 4 were selected from 3 different geographical areas because of their differing levels of access to healthcare support locally, a variety of GPs with different career backgrounds and referral patterns, and the different social and cultural backgrounds of their patients. To illustrate, The Group Practice in Stornoway has a Rural General Hospital (Western Isles Hospital) on its doorstep; the Benbecula and North Uist Medical Practices have a 29 bedded GP run Community Hospital (Uist and Barra Hospital) (UBH) in their locality: the Barra GPs run and can admit to a two bedded intermediate care facility (St.Brendan's Nursing Home).

The data was split into categories of Inpatient and Day Case admissions and Outpatient clinic attendances. The period for analysis was narrowed down to the year April 05 to March 06 due to the finite amount of time both the authors and the other GPs had to dedicate to this project and a wish for the most current data to be utilised. The data initially included; the patient's date of birth, sex, CHI number, postcode; the General Medical Council (GMC) number and speciality of the Consultant involved; the date of the admission/clinic attendance and whether it was a "new" or "return" visit and whether the referrer was a "GP" or a "Consultant within the same provider unit" or a "Consultant from a different provider unit". The vital information that was missing was the clinical reason for the referral, exactly why that hospital and Consultant were chosen for the referral and what the patients actually had done to them on that visit. It was concluded that the answers to these vital questions were all contained within the patient's primary care records in the form of their discharge/out patient clinic letters. Access to and discussion with the patients GP would also provide information on the GPs own personal background and the situation he practices within, his preference for referrals and for what reasons and the social influences affecting their referrals and the medical preferences of their patients.

² (2007) 'Defining Research': National Research Ethics Service, 2007, National Patient Safety Agency www.nres.npsa.nhs.uk

Therefore it was decided that if we could get access to the patients GP and their primary care records the data could be made much more manageable by being filtered down to include only the following fields:

Outpatient Data

Hospital Attended
CHI (Community Health Index)
Postcode
Date of Birth
Referral Type
Date of Clinic

Inpatient Data

Hospital Attended
CHI (Community Health Index)
Postcode
Date of Birth
Referral Type
Patient type (Inpatient/Day case)
Date of Discharge

This data set was then produced for every single Glasgow hospital for the year 05/06 with the exception of the Glasgow Dental Hospital. No dental procedures were analysed because Dental Practitioners do not routinely communicate with Medical Practitioners regarding details of patients' dental treatment. In Benbecula, North Uist and Barra the GPs use EMIS (Egton Medical Information Systems) for their primary care records and given a patients CHI number it was extremely easy in most cases (although time consuming) to extrapolate the following data and to match it with the data set we already had above to confirm its factual correctness.

- Date of episode
- Date of clinic/discharge letter
- Specialty/tertiary subspecialty
- Clinician grade
- Type of referral (new or follow-up)
- In-patient or Day case
- Elective or Emergency
- Presenting complaint/current condition
- Procedures carried out on visit
- Outcome: discharge, further review appointment, booked for surgery or other procedures booked (e.g. CT/MRI scan)

The Stornoway Group Practice uses GPASS which does not have the same capabilities as EMIS so the records were analysed manually which meant a much smaller number than we would have liked could be included in the project.

The criteria used to define what was an 'appropriate or inappropriate' referral was a combination of the professional opinions of a highly experienced group of GPs and a senior nurse, with an accumulation of well over a hundred years of experience in the NHS. When reviewing these referrals, the practitioners took into consideration a combination of factors facing the referring doctor in each case including clinical, contextual, transport and social issues.

Consent and Approval

Approval was sought from the GP Sub-Committee and Area Medical Committee to secure the co-operation of fellow clinicians. Approval was given in principle, but remuneration was felt to be necessary to allow administrative time for data collection. The remuneration was provided through the Scottish Executive's financial support to the Remote and Rural Project. Access to the patient record was obtained through a GP in the patient's own Practice.

The identity of a subset of patients registered in GP Practices was made possible by choosing certain Practice's postcode areas. The postcode system in the Western Isles means that all people with a HS9 postcode will be registered with the Barra Practice, HS7 with the Benbecula Practice, the vast majority of HS6 with the North Uist Practice and HS1 will be either one of the 2 practices in Stornoway.

As a pilot, Dr. Tierney began with his own practices HS7 (Benbecula) referrals to test the quality of the data held within that practice, and to find out how quickly these data could be retrieved. He then approached Dr Peter Keiller in North Uist who agreed to allow Dr Tierney to visit and to jointly analyse a sample of his HS6 patient referrals. This pilot formed stage 1 of the project.

For stage 2 Dr Tierney approached Dr Brian Michie of the Group Practice in Stornoway who after consulting his partners agreed to do the same analysis for the first 50 patients from his own HS1 patients beginning 1st April 2005 to ensure randomness of selection and to send Dr Tierney the results by email.

For stage 3 Dr Tierney approached Dr David Bickle in Barra who agreed that he could have access to his records and Dr Tierney paid a visit to Barra and extracted all the data himself.

He also had the opportunity to discuss referral issues with Dr Ahmed and other members of the practice staff and to visit St Brendan's Hospital and talk to one of the Staff Nurses there.

Stage 1 – Benbecula and North Uist Patients

Contextual Issues

The Benbecula Medical Practice (BMP) has a list size of 2450 and the North Uist Medical Practice (NUMP) has a list size of 1472. These practices provide the medical cover both in and out of hours to and have direct admitting rights to the local community hospital (UBH). Between them they have a total of 6 full time and 2 part time very experienced GPs, some of whom had extensive hospital experiences before they entered General Practice.

UBH has a mixture of acute, rehabilitation and long stay beds and a labour suite and neonatal resuscitation room. It has a well-equipped theatre suite that allows for elective (mainly day case) surgery for both general and local anaesthetic cases and for both upper and lower GI endoscopies under sedation. It also contains a very well equipped resuscitation room, a minor injuries room, 24/7 radiographer cover for plain x-rays, digitised imaging utilising the PACS system and an ultrasound scanner. It has a well-stocked pharmacy and a videoconferencing facility.

It also has a "minilab" which allows on site 24/7 testing for; Urea/Creatinine/Amylase/Creatinine Kinase, Full Blood Count, Arterial Blood Gases, Sodium and Potassium, Troponin T, D Dimer and INR. During the period of this study there was a permanent stock of 8 units of blood (4 each O negative and O positive) for emergency transfusion. Equipment also includes ventilators, cardiac arrest trolleys, modern bedside monitors and infusion pumps.

The out patient suite has 2 large consulting rooms used by a number of regular visiting Consultants in General Medicine and Surgery, Orthopaedics, Obstetrics and Gynaecology, Psychiatry, ENT and Ophthalmology. There is a regular Dermatology clinic run by one of the local GPs who is a Hospital Practitioner in Dermatology. There is a monthly visit by ultrasonographers for an elective scan clinic. There is on site Allied Health Professional support from Physiotherapists, Occupational Therapists, Podiatrists and a visiting Speech and Language Therapist and Dietician service.

Patient Journey Times

Travel times for patients to fly from Benbecula to Stornoway involve a 30-minute flight and a connecting 30-minute flight from Stornoway to Inverness. There is a direct 60-minute flight from Benbecula to Glasgow. Road travel to these locations all involves several hours of car and ferry transport. Patient travel costs and subsistence are met by the Highlands and Islands Travel Scheme, which is funded by Central Government.

Cultural Issues

There are number of cultural issues that affect GP referral choices. On the whole patients do not wish to travel off island for access to health care if it can be provided locally. If they do go off island they prefer to go to locations where they have family resident if possible whom they can stay with or who can visit them in hospital. The majority prefer flying rather than driving. Both GPs and patients have various attitudes towards and experiences of the many hospitals and clinicians to whom they may refer or be referred to.

Referral Summary

The data analysed and included in the final document represents all out-patient visits made to any Glasgow hospital by patients from Benbecula Medical Practice with a HS7 postcode during the year April 2005 to March 2006 (n=123), and a random selection of out-patients from North Uist Medical Practice attending The Western Infirmary, Gartnavel General Hospital and Glasgow Royal Infirmary during the first half of that year (n=25), and in-patient/day cases in any Glasgow hospital for any patient of Benbecula Medical Practice with an HS7 postcode, during the year April 2005 to March 2006 (n=39), and a random sample of in-patient/day cases from North Uist Medical Practice attending the Western Infirmary, Gartnavel General Hospital and Glasgow Royal Infirmary during the first half of that year (n=14). In total 201 attendances were analysed.

A summary of the patient referrals to Glasgow Hospitals from Benbecula and North Uist is provided in Tables 1 and 2 below. The breakdown of referrals by attendance type, reason for attendance and number of referrals have not been included in this report due to the fact that small numbers may lead to inadvertent patient identification.

Hospital	Out patient Episodes
Western and Gartnavel Hospitals	101
Glasgow Royal Infirmary	19
Southern General Hospital	5
Canniesburn	15
Yorkhill Hospital	3
Victoria Infirmary	2
Stobhill Hospital	1
Queen Mother	2

Table 1: Outpatient attendances by Benbecula and North Uist patients to Glasgow Hospitals April 2005 to March 2006.

Source – Patient Records from BMP+NUMP

Hospital	In-patient Stays/Day Cases
Western and Gartnavel Hospitals	30
Glasgow Royal Infirmary	10
Southern General Hospital	3
Canniesburn Hospital	5
Yorkhill Hospital	5

Table 2: Inpatient/day case attendances by Benbecula and North Uist patients to Glasgow Hospitals April 2005 to March 2006.

Source – Patient Records from BMP+NUMP

Results

Of the 197 attendances analysed, it was felt that approximately (70%) of patients were correctly referred to a tertiary service. The 30% which were categorised as inappropriate referrals breakdown as follows: 10% could have been treated by a nurse-led service, for example Practice Nurse monitoring of diabetic patients; 7% of patients could have been seen by a Western Isles Hospital Consultant locally in an outreach service to Benbecula; 6% of patients could have had their diagnostic tests undertaken locally and sent electronically for a specialist opinion; 4% were referred purely on the grounds of patient choice and 3% could have been undertaken utilising telemedicine technology.

It should be noted that patients undergoing chemotherapy treatment have been discounted in the percentages of those who could be treated locally. There are two reasons for this. One is that it was difficult to discern which chemotherapy regimes were appropriate for local administration and secondly, the author is aware that there are discussions underway within the Cancer Network and the Western Isles to increase local chemotherapy service provision.

Stage 2 – Stornoway Patients

Contextual Issues

The Stornoway Group Practice list size is 7052. The practice has 8 full time and 2 part time GPs. Apart from one GP who has a contract as a Hospital Practitioner in Dermatology none of the GPs are involved in the services provided by the Western Isles Hospital (WIH) in Stornoway.

WIH is classed as a Rural General Hospital and provides Consultant based secondary care services in General Surgery (including urology), Orthopaedics, General Medicine, Obstetrics and Gynaecology, Medical Paediatrics, Psychiatry and visiting Consultant services for ENT and Ophthalmology, Chest Medicine, Neurology, Rheumatology, Dermatology and Oncology. It has most of the same diagnostic services as an average District General Hospital including a CT scanner.

Patient Journey Times

Travel time for patients referred to Inverness is a 30 minute flight and to Glasgow a 65 minute flight. Road travel to both locations involves several hours of car and ferry transport.

Tertiary services are obtained historically mainly from Glasgow Hospitals and Raigmore Hospital in Inverness.

Cultural Issues

The same cultural issues apply as mentioned above in the Benbecula/North Uist section.

Referral Summary

The sample was selected in a random fashion with no selection bias based on the first 50 chronological episodes from 1st April 2005 and included a mixture of outpatient referrals from the Stornoway Group Practice to Glasgow Hospitals (n = 41) and inpatient referrals from the Stornoway Group Practice to Glasgow Hospitals (n = 7). Total referrals analysed were 48.

A summary of referrals for patient referrals to Glasgow Hospitals from Stornoway is provided in Tables 3 and 4 below.

Hospital	Out patient Episodes
Glasgow Royal Infirmary	23
Southern General Hospital	2
Yorkhill Hospital	16

Table 3: Randomly generated selection of outpatient attendances by Stornoway patients to Glasgow Hospitals April 2005 to March 2006.

Source – Patient Records from Stornoway Group Practice

Hospital	In-patient Stays/Day Cases
Western and Gartnavel Hospitals	1
Glasgow Royal Infirmary	2
Southern General Hospital	1
Golden Jubilee National Hospital	1
Yorkhill Hospital	2

Table 4: Randomly generated selection of inpatient/day case attendances by Stornoway patients to Glasgow Hospitals April 2005 to March 2006.

Source – Patient Records from Stornoway Group Practice

Results

100% of the referrals to tertiary hospital are categorised as appropriate. It is probable that the reason for no inappropriate referrals is because Stornoway has a Rural General Hospital providing secondary care services locally but does not have some of the facilities and sub-specialities available in a tertiary centre. Some issues within the data are worthy of special mention. One such issue is the number of patients who receive follow up appointments in

the Western Isles. Further exploration reveals that this is due to the relationships that have been built up between clinicians in the Western Isles and the Glasgow Hospitals and the knowledge of what local services can deliver. However, some of the GPs have been proactive in this area by writing to Glasgow to prevent unnecessary follow up appointments. A further example of good practice, which could be transferable to other specialties, is where the specialist has undertaken a telephone consultation with the mother of a child with epilepsy to determine whether further assessment in Glasgow was in fact necessary.

Stage 3 – Barra Patients

Contextual Issues

The Barra Medical Practice List size is 1209 registered patients. It has 2 GPs who are both experienced doctors. There is no airstrip on Barra other than the beach, which, of course, is tide and daylight dependent. Therefore, most emergency retrievals from Barra have to be made by helicopter. Emergency patients from Barra have been traditionally referred to the Southern General Hospital (SGH) due to the fact that this hospital is a tertiary centre, has a helipad and is within an hour's flight time of Barra.

There is a limited intermediate care facility on Barra. Two GP managed beds are designated within the St Brendan's Local Authority Nursing Home, which is a very old building. These beds, however, have a high occupancy rate and are therefore often not available for admission. The designated health beds have one Registered Nurse and one Nursing Auxiliary per shift. Diagnostic facilities available on-site are limited to; a blood gas machine (includes Haemoglobin, but not White Blood Count capability); urea, creatinine, creatinine kinase and amylase; INR and a very poor quality ultrasound scanner. There is limited physical space within St Brendan's for any expansion (for example for outreach clinics) and the existing space is already highly utilised. Dr Chatterji and Dr Achar, Consultant Physicians from Stornoway, respectively visit once every three months to undertake a General Medical Clinic and a Diabetic Clinic. They are the only outreach clinics provided on Barra.

Patient Journey Times

A visit from Barra to an outpatient clinic in Benbecula involves one ferry journey (1.25 hours) followed by one car journey (1.25 hours). In comparison the flight time from Barra to Glasgow is 50 minutes.

If a patient from Barra is referred to Raigmore Hospital in Inverness the travel pathway is as follows. Firstly there is a ferry journey from Barra to the Uists (1.25 hours), followed by a car journey (1.25 hours) to Benbecula. Thereafter the patient has to stay in Benbecula overnight because of flight times. They then fly to Inverness the next day to attend the clinic, stay overnight in Inverness and return home via Benbecula the following day. A similar very complex journey of connecting flights and overnight stays is also involved in any referral to Stornoway.

Cultural Issues

As well as the same issues mentioned in the Benbecula/North Uist section there are also issues of patient and doctor perception of services provided in the Western Isles Hospital as compared to that provided from Glasgow Hospitals, which need to be explored. Traditional perceptions include those that the patient will obtain a "superior" service from the "real" hospital in Glasgow. Custom and practice by clinicians in the SGH has developed a service sensitive to the needs of remote patients. Examples have been provided of Consultants not providing routine follow-up appointments for patients, but informing the GP of the relevant data for ongoing management. Another example is of a consultant phoning a patient to discuss her concerns rather than making the patients travel to Glasgow for the consultation. In contrast, examples have been provided where patients have been discharged from the Western Isles Hospital at times that are not conducive to ongoing travel to Barra, and having to be admitted to the UBH overnight until transportation can be obtained.

The discussion points around travel times and patient perception should be borne in mind when considering all referrals off island, which follow in this report.

Referral Summary

Outpatient referrals from Barra to Glasgow Hospitals from September 2005 to March 2006 were analysed (n = 73). This period was chosen as the records were easier to analyse than the first half of the year as this was the date the practice started to go paperlight and scan all secondary care letters in to their patient records. In-patient records were also analysed for the same period (n = 40). Therefore a total of 113 patients were analysed between September 2005 and March 2006.

A summary of referrals for patient referrals to Glasgow Hospitals from Barra is provided in Tables 5 and 6 below.

Hospital	Out patient Episodes
Southern General Hospital	69
Yorkhill Hospital	4

Table 5: Outpatient attendances by Barra patients to Glasgow Hospitals September 2005 to March 2006.

Source – Patient Records Barra Medical Practice

Hospital	In-patient Stays/Day Cases
Southern General Hospital	35
Yorkhill Hospital	5

Table 6: Inpatient attendances by Barra patients to Glasgow Hospitals September 2005 to March 2006.

Source – Patient Records Barra Medical Practice

Results

Patients from Barra are referred predominantly to the Southern General Hospital in Glasgow. 100% of these referrals are categorized as appropriate in light of the limited infrastructure available locally and the significant travel times and costs involved in patients visiting Benbecula, Stornoway or Inverness.

However, if one discounts the patient travel times and costs, then clinically 37% of outpatients could have been seen in UBH in Benbecula. In addition 11% of outpatients could have been reviewed via telemedicine clinics.

Increased local capacity in terms of intermediate care and diagnostics would have resulted in 12.5% of patients referred off-island for an in-patient episode to be cared for locally. Again if we discount patient travel times and costs 12.5% of patients referred off island for an inpatient episode in a Glasgow hospital could also have had that care undertaken in the Western Isles Hospital

Discussion

Of the 254 outpatient referrals analysed within the study, results showed that 47% of those patients could have been cared for locally either by increased nurse-led services, by further utilisation of the Rural General Hospital Consultants on an outreach basis and by implementing telemedicine clinics. There are, however the issues of patient and consultant travel times and cost which would have to be taken into consideration.

There are marked differences in off island referral rates and reasons for these between the three geographical areas within this study which show a direct correlation to the both the healthcare facilities available locally and the patient travel times involved to access services. To illustrate, it can be seen that none of the Stornoway outpatient referrals were categorized as inappropriate. It is probable that the reason for this is due to having the RGH within the locality. Local follow up after tertiary referral appears to be standard practice in Stornoway. This supports proposals for formalised networks with larger centres. In direct contrast, off island referral numbers from Barra are significant. It would appear that the majority of those are due to lengthy patient travel times to Benbecula, Stornoway and Inverness as compared to Glasgow Hospitals. An alternative would be to provide outreach services by the RGH consultants on Barra itself. This would require a Needs Assessment coupled with an investment in the physical infrastructure on Barra. The relatively small numbers of inappropriate referrals off island from Benbecula and North Uist would also indicate that the availability of diagnostics and infrastructure locally has a direct impact on the level of care provided.

104 patients in total within the study were referred to Glasgow Hospitals for an in-patient episode. 12% of those patients could have been care for locally, the majority of which could have been treated with minimal increase in local diagnostics and intermediate care facilities. Specifically, investment in available White Blood Cell Testing, robust ultrasound and digitalised imaging links, coupled with increased intermediate care beds and/or more outreach outpatient clinics would increase local care provision. Similarly to the outpatient referrals analysed, there are marked differences between geographical areas in the study with Stornoway having no referrals categorized as inappropriate, Benbecula and North Uist showing only 10% and Barra with only 2%. Again there is a direct correlation to the level of diagnostics and intermediate care facilities available locally.

There is a debate to be had on whether those patients who do require treatment elsewhere should be referred north to Benbecula or Stornoway or south to Glasgow. Issues of travel times and costs, particularly for patients from Barra, patient (and sometimes doctor) perceptions of services within the Western Isles Hospital and patient choice must also be considered.

The issue of patient choice is relevant to the discussion. On commencement of this study there were widely held perceptions that patients chose to be referred to Glasgow Hospitals for non clinical reasons such as the much quoted "free shopping trip". This study does not support these assumptions. Whilst the overall percentages for patient choice were 4%, some of those choices were made on the grounds of knowing or being related to local hospital staff and therefore preferring to have their consultation/procedure outwith the locality.

Conclusions

The objectives of this study were to establish baseline data on Outpatients and Inpatients referrals from NHSWI to Glasgow Hospitals and to analyse that data to identify which of those patients could have had that care provided locally, and so reduce unnecessary visits to tertiary hospitals in Glasgow. One of the aims of the study was to provide evidence that would either underpin or challenge the model that is emerging for remote primary care practice within the Remote and Rural Project. The study supports the emerging model in that if resource is invested in the increased provision of diagnostics, the enhancement of intermediate care facilities and coupled with the use of new technology then the balance of care could be shifted more from secondary and tertiary care to primary care.

Some future arrangements that would allow more patients to be seen locally are:

- Increase of locally available diagnostic tests. For example White Blood Cell Count measurement on Barra or portable dxa scanner that could be shared between the islands;
- Increase of locally available intermediate care facilities on Barra to prevent patient transfer for <24hour observation, or for end of life care;
- Increase of GP pre-hospital referral diagnostics and post procedure local follow up.
- Expansion of Managed Clinical Networks with larger centres;
- Expansion of e-health solutions would negate need for some patients to travel, for example, dermatology telemedicine clinics;
- Negotiation with Cancer Units to increase local chemotherapy provision;

- Enhanced skills of nursing staff, for example better organisation of urological services to allow specialist nurses to carry out procedures such as urodynamics; and
- Assessment of need to justify more local outreach clinics, especially to areas such as Benbecula and Barra.

Off island referrals to tertiary care will always be required and it is appropriate that many patients should have to travel for tertiary services and this study has shown that the majority of patients in this data set were referred onto tertiary care appropriately given the complex clinical and social needs of some patients and the facilities currently available to the local clinicians. However, the number of these could be significantly altered with some service redesign including increased local diagnostics and the provision of intermediate care facilities, the establishment of managed clinical networks with larger centres, some expansion in nurse-led services and an increase in outreach services.

This study has also demonstrates for the first time according to the authors experience that it is possible not only for Health Boards to acquire data on how many of their patients are seen in which hospitals but also the exact clinical or social reasons WHY they are being seen in those particular hospitals. This is vital information whenever a Health Board wishes to consider redesigning the services they provide or influence their cross boundary flow patterns. Due to time constraints imposed by the authors having full time "day jobs" the study was deliberately limited to a selection of patients (chosen without bias) from 4 GP practices within one Health Board attending one city's hospitals in one year. We have demonstrated that this study could be extended within the Western Isles Health Board to include many more GP practices, and/or over a longer time period and/or include other referral pathways such as to Inverness or Edinburgh. The study is also transferable to any other Health Board in Scotland where data is required to inform forward planning of service provision.