IMPROVING CARDIOLOGY REFERRALS FROM PRIMARY TO SECONDARY CARE
Project Report

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1. INTRODUCTION

1.1 The 26 week Referral to Treatment Time Target has focused attention on the whole patient pathway and has required a review of the processes and steps involved in a patient journey in order to make it as efficient as possible. The South East Wales Cardiac Network was aware that the numbers of patients being referred from primary to secondary care cardiology were increasing; but that not all those referred go on to receive definitive treatment in cardiology. It was hypothesised that an analysis of the data and subsequent qualitative interviews with GP practices might help to understand referral behaviours and identify areas for service improvement for the benefit of both patients and providers of services.

2. BACKGROUND

2.1 Cardiff & Vale Steering Group
In July 2009 a steering group was established under the auspices of the Cardiff and Vale NHS Trust Cardiac Strategic Planning Group including the following stakeholders:

- Cardiff & Vale NHS Trust Directorate Manager and Cardiologist
- Cardiff LHB and Vale of Glamorgan LHB Chronic Conditions leads
- Vale of Glamorgan Referral Management Centre Manager
- Health Commission Wales Cardiac Commissioner
- Cardiac Network Manager and Lead GP

2.2 Gaining buy-in
In order to ensure that there would be clinical and public health support for the project the Network leads had discussions with Sharon Hopkins, Director of Public Health at Vale of Glamorgan LHB, who had undertaken similar analyses of GP referrals, although not focusing on cardiology. The Network also met with Cardiff and Vale Local Medical Committee to explain the project. There was full support for the proposals.

3. PURPOSE OF PROJECT AND ANTICIPATED BENEFITS

The overall aim of the project was to:

- identify whether there are variations in referral practice between GP practices
- understand better the referral behaviours and patterns from primary to secondary care cardiology services
- through qualitative analysis to identify possible areas for service improvement

It was anticipated that the following potential benefits might be identified:

- Understanding the variations in referral numbers between GP practices
- Identifying whether current services and access to services meet the needs of both primary care and patients
- Ensuring that pathways and services are arranged so that patients are seen and managed by appropriately skilled clinicians in both primary and secondary care settings
- Providing data which allows primary care to reflect on and discuss the variation in GP referrals and how many go on to definitive cardiac treatment
• Identifying possible areas of need for training and CPD in primary care
• Identifying possible areas for service improvement and redesign
• Encouraging better communication between primary and secondary care to improve services for patients
• Increasing the number of appropriate referrals from GPs to secondary care cardiology

4. METHODOLOGY

4.1 Data sources and analysis
The South East Wales Cardiac Network commissioned the HCW Cardiac Commissioner to acquire and analyse cardiology referral data from Cardiff and Vale LHB practices to Cardiff and Vale NHS Trust. The objective of the analysis was to identify statistically significant variance in referral practice between GP practices. The following data sources were used for the analysis:

- Trust reported referrals from Cardiff and Vale LHB practices by practice to cardiology at Cardiff and Vale NHS Trust
- QOF reported CHD prevalence data by practice from Cardiff and The Vale LHBs
- GP List sizes from Cardiff and The Vale LHBs
- Disposal codes (502) by GP practice (i.e. return to GP no further action or additional diagnostic and/or proceed to intervention) from the COMS module, Cardiff and Vale NHS Trust

(Referral rates were adjusted for list size by practice for the Cardiff practices. 95% CI were constructed using Newcombe’s method (Stat. Med. (1998) 17 873-890) for the data available.)

4.2 Data presentation
Data analysis was undertaken confirming significant variation in CHD prevalence, referral rates and conversion of referrals to intervention, diagnostic tests or return to GP. Data were converted into the prescribing unit format, with which GPs are familiar, using:

- CHD prevalence
- Referral rates
- Numbers of patients referred back to GPs from secondary care with no cardiology action (code 502)

(see Appendix 1 for data charts for all Cardiff practices)

4.3 Selection of GP practices for qualitative interviews
All Cardiff GP practices were written to by the Network Lead GP to ask if they wished to participate in a practice wide review of primary to secondary care cardiology referrals and subsequent discharge patterns. GPs were sent a letter, a reply proforma and sae and followed up by email. 9 out of 53 GP practices volunteered to participate although only 8 were finally interviewed. Practices who agreed to participate were sent their own data covering prevalence, referral and discharge rates in a similar format to the way they currently receive prescribing data.

4.4 Semi structured interviews
One hour semi structured interviews were conducted with the GP practices using an experienced interviewer who is also a GP specialist nurse. All clinicians from that practice who refer to cardiology secondary care were invited. The spine of pre-determined questions was used to ensure consistency. Notes were taken by the interviewer and individual reports drafted. (see Appendix 2 for anonymised notes)
5 PROJECT KEY FINDINGS

5.1 LOOKING AT THEIR DATA

5.1.1 Generalisability
It should be acknowledged that it may not be possible to generalise the findings of this cohort to the other practices in Cardiff. Cardiology referral is not a high volume activity for an individual GP. There may be significant year to year variation in referral. This means that there is a wide confidence limit in one year data, which makes data interpretation more problematic. Although data has been analysed at practice level it is also recognised that there is large intra practice variation. However, although only a minority of Cardiff primary care clinicians were interviewed, many of the themes discussed were consistent across all clinicians and across all practices.

5.1.2 Trigger for reflection on practice
The study looked at the referral and discharge data of a small number of practices in Cardiff who volunteered to participate. The data served as a starting point for discussion and as a trigger for further investigation and reflection by the practices - e.g. whether all patients who needed to were being referred, and also as a means of learning by looking at the patient’s journey from the referral to cardiologist and back again.

5.2 INFLUENCES ON REFERRAL

5.2.1 Why do GPs refer to cardiologists and what influences referral?
The decision by a GP to refer to cardiology can be multi-factorial. Many pathways require a referral to access an investigation or intervention which may only be provided in secondary care. Many clinicians alluded to a lack of access to non-invasive cardiac investigations necessitating referral. Access to B-type Natriuretic Peptide (BNP) and echocardiography were commonly referred to during interviews. A clinician working in Cardiff, who had experience of working in Bridgend, where more investigations can be ordered by GPs, was able to contrast referral patterns in areas where there is more open access. Organisational changes such as the Quality and Outcome Framework of the GMS Contract have also made certain referrals more likely.

GPs may know the likely diagnosis but need investigations to confirm this and referral to a cardiologist is the only route to certain investigations such as echocardiogram, 24hr ECG or Exercise Tolerance Test. There may be an uncertainty of diagnosis. Some GPs felt that they needed the expertise of the cardiologist to reassure them that they were doing all they could for the patient.

Whereas secondary care physicians may view a referral in purely clinical terms, GPs are influenced to refer by other factors. Therefore the view that a referral is appropriate or not depends very much on the perspective. The influences on a GP to refer include:

- Clinical investigation and diagnosis
- Patient pressure anxiety, previous ‘bad’ experience
- Social e.g. wanting to fly or drive
- GP reassurance
- Waiting list anxiety weighing up time waiting and worsening symptoms

5.2.2 Confidence and competence
The decision to refer can be influenced by confidence and competence both ways. Those GPs who felt less sure of their own knowledge would be more likely to refer. For example, one of the GPs said she may ask the consultant for advice on investigations/ diagnosis.
Those with more experience/knowledge of cardiology would equally be more likely to refer if for example they knew what investigations/consultant-led treatments were required.

Confidence in reading ECGs and interpreting results of other investigations varied.

5.2.3 Implications of different referral rates
The referral rate is not in itself a marker of quality. Even a high conversion rate to treatment may not be a marker of quality if clinicians are also failing to refer patients that would benefit from specialist intervention. Nevertheless, variation in referral rates and conversion need to be understood. This study seeks to understand this from the perspective of the primary care clinician, which is important when considering service re-design and primary care training.

The small number of practices involved in the study means that it is not easy to identify distinguishing features between higher referring practices and those that have lower rates. However, lower referring practices were more likely to have a GP with an interest in cardiology and had a greater awareness of cardiology guidelines. These clinicians were more likely to appreciate the benefits of direct access to some investigations and smoother pathways especially for urgent cases. Higher rate referrers were more likely to express reduced clinician confidence and a greater perceived need for education. Access to guidelines and decision making support during the consultation was mentioned within this group.

5.3 COMMENTS ON CURRENT CARDIOLOGY SERVICES

There was general satisfaction with the referral process with clinicians in primary care valuing the assessment and actions taken in secondary care.

5.3.1 Knowledge of services offered within the Cardiff and Vale Cardiology Service
There was some uncertainty about all the services that might be available. Some GPs were unsure about how to access specialist nurses such as the Heart Failure (HF) nurse. Those who used this service found it helpful for monitoring patients and titrating medication.

Some GPs know what each consultant cardiologist specialises in and therefore feel it would be more efficient to refer to specific cardiologists: e.g. to refer a HF patient to the cardiologist who deals mainly with this condition in preference to one whose main work is invasive investigations. The centralised referral management system prohibits this.

Several GPs said that more information on the services available in Cardiology and on the cardiologists’ specialisms would be useful.

5.3.2 Information about Rapid Access Chest Pain Clinic
All the GP practices interviewed mentioned the Rapid Access Chest Pain Clinic. There was general confusion as to whether this was still running, the criteria for referral and the capacity of the clinic.

5.3.3 Lack of diagnosis on discharge and joint cardiology/respiratory clinics
There was some frustration when patients are sent back to Primary Care with the advice that their symptoms are ‘not of cardiac origin’. The GP then has to refer elsewhere, which is frustrating for patient and GP. Where there is crossover of respiratory and cardiology symptoms it was felt it would be helpful to develop a general medical clinic which could cover both specialties to review patients whose diagnosis is uncertain.

5.3.4 Lack of clear medication advice
Clear medication advice from cardiologists to GPs e.g. when to stop the medication of patients prescribed Warfarin or Clopidogrel where the GP would be appreciated and could
reduce follow up appointments. It would also help GPs in the management of their patients if consultants explained why they deviate from the guidelines for certain patients.

5.3.5 Access to diagnostic results
Access to results e.g. echocardiograms results is not always easy. It would be helpful if interpreted reports were available on the Clinical Portal (the images themselves are not necessary). One GP had experience of working in another area (Bridgend) where there was direct GP access to investigations such as echos and 24hr ECGs and results came back with interpretation. The delay in receiving results can also increase patient anxiety as there may be a long time between the echo being done and the patient being seen in cardiology for the result.

5.3.6 Real time rapid access to specialist advice – “a virtual clinic”
Access to advice from a specialist in real time would be useful and may prevent referrals, e.g.

Case studies
1. A 68 year old female with severe COPD, diabetes and a rapid irregular pulse was due to fly to Turkey on holiday. The GP wanted advice on fitness to fly. An ECG was performed but was difficult for the GP to interpret. The GP sent a referral letter with copy of the ECG for an urgent opinion. The patient was not assessed by the specialist prior to flying and flew to Turkey anyway. She was seen in clinic at a later date. The GP felt that immediate advice from a specialist would have been helpful and may have avoided a referral.

2. A 60 year old man with a previous episode of AF but now in sinus rhythm on Warfarin and wanted to stop his Warfarin. The GP was unsure whether this was safe so the patient was referred. The GP wondered whether these issues could have been clarified virtually.

5.3.7 Rapid response to urgent cases
The ability to access urgent appointments for some patients or a one stop clinic for assessment and investigation could prevent unnecessary admissions and more appropriate use of out patient referral.

Case Study
3. A female smoker with no significant cardiovascular history presented with a chronic cough. A chest x-ray was performed which showed bilateral pleural effusions. The GP had to choose which specialty to direct the referral to. An urgent respiratory referral was made. An appointment was arranged within 2 weeks but the patient did not receive the letter. When she failed to attend her appointment the respiratory consultant, wrote to the GP suggesting a trial of diuretics and a follow up x-ray. The GP reviewed the patient who had developed ankle oedema. A referral to the heart failure clinic was made and a diuretic was prescribed. The patient deteriorated before an urgent cardiac assessment could be made and the patient was admitted for heart failure. The GP felt that the current system made it a matter of chance as to whether the patient was initially assessed by an appropriate specialist. In this case, the delay in receiving an appropriate assessment may have increased the chance of admission.
6. SERVICE IMPROVEMENT POSSIBILITIES

A number of areas were identified which could potentially improve services:

6.1 Knowledge of services offered within the Cardiff and Vale Cardiology Service
A regularly up-dated electronic directory of cardiology services offered by Cardiff & Vale UHB and how they are accessed, including a list of consultants and their speciality would be valued.

6.2 Information about Rapid Access Chest Pain Clinic
Some frustrations were voiced about the changes and lack of clarity in the arrangements for accessing the Rapid Access Chest Pain Service. Clear criteria for referral were looked for.

6.3 Lack of diagnosis on discharge and joint cardiology/respiratory clinics
GPs would value greater feedback and advice in discharge letters. A general cardiology / respiratory clinic which provided the GP and patient with a diagnosis could result in fewer out patient appointments and delays.

6.4 Lack of clear medication advice
Clear advice on ongoing management in primary care, such as the duration or titration of certain drugs could again reduce the need for follow up appointments (particularly the duration of clopidogrel use).

6.5 Access to diagnostic results
Many felt that improved primary care access to non invasive diagnostics should be explored. Investigation results on the clinical portal should be available. Some clinicians felt that an ECG reading service would be of value.

6.6 Rapid access to specialist advice – virtual clinic
All clinicians, whatever their perceived competence, requested rapid access via telephone or e-mail to a specialist consultant or GPwSI opinion for advice. Other suggestions were a consultant-led assessment service which could offer an appointment within 2 weeks.

6.7 Different types of services
New services proposed by clinicians included problem orientated assessment services, such as a breathlessness service, which offered a timely diagnosis and entry onto an appropriate pathway.

One or two GPs thought that an intermediary service would be useful, such as a community clinic where a GPwSI or a hospital consultant offered initial assessment and investigation. Some English Primary Care Trusts have developed this kind of service. However it was acknowledged that the disadvantage is that it creates another tier of service.

7. EDUCATION

7.1 Use of Guidelines
The GPs interviewed mentioned several national guidelines such as NICE; SIGN; Map of Medicine; BHF. The general consensus was that guidelines are useful for reference but are unlikely to be used in a busy surgery, where time is short. There are a plethora of guidelines which can be counter-productive by being over-complicated and even contradictory e.g. Atrial Fibrillation guidelines.

There were frustrations when guidelines are not adhered to: e.g. NICE states that patients referred to cardiology should be seen within two weeks, but this does not always happen.
Consultants also often prescribe outside the guidelines, e.g. using ARBs as first line treatments, without GP understanding their reasons for doing so.

Advice can be confusing advice at times e.g. in an educational session a cardiologist complained about the large number of referrals for echoes and in the next breath mentioned that they would echo everyone who came to their clinic. Local cardiology advice regarding urgent cardioversion for AF is confounded by delays in getting the patient referred quickly.

Some clinicians with lower perceived confidence and competence proposed using decision making support in the surgery and the Map of Medicine was suggested as an aid in this regard.

The suggestion was made that secondary care is more focused on throughput and targets (Referral to Treatment Time is now 26 weeks) and directing patient care through the system by means of pathways and guidelines. The implication was that this may not be as straightforward as it would seem since the sum of the patient is more than one medical condition.

7.2 Keeping updated
A wide variety of educational resources were used by clinicians including Health Board CPET educational sessions, cardiologist attendance at practice meetings, online educational resources and reading journals, but these could be complicated and contradictory.

Opinion was that CPET sessions provided a good place for updating and discussion with colleagues and consultants. However, the key messages given in the various settings were not consistent and the quality of relevant educational content was also variable. GPs were keen to have cardiology updates within this system.

One practice had invited a cardiologist to their practice meeting and found this to be a very useful way of updating and discussing management issues.

7.3 Reflection on own practice data and behaviour
Practices claimed that they had learned from reviewing their own referral data as part of this study but this type of exercise was not commonly used. Some had done this by looking at their most recent referrals and one practice had audited the referrals done in the previous year. They felt that they could also benefit from looking at the discharge letters and patient records of those discharged back with no further management.

8. CONCLUSIONS
Referral is an important element of patient care. There is a huge variation in patient referral which needs to be understood. Decisions to refer are complex, involving the interplay of factors relating to the problem, the patient and the practitioner. Unsupported downward pressure on referral may result in dissatisfied patients and doctors. Self-evaluated confidence and competence varies amongst primary care clinicians. A multi-faceted range of interventions may be needed to reflect these variations.

The changes and service improvements most commonly put forward by primary care clinicians include:

a. Up to date information about services offered within cardiology
b. Alternative ways of rapidly accessing specialist advice could avoid a referral – “virtual clinics” using a variety electronic communications
c. Simpler patient pathways especially for urgent cases  
d. Improved access to non invasive investigations and interpreted results  
e. A variety of educational media with consistent key messages  
f. Access to decision making support in the consultation

9. RECOMMENDATIONS

It is recommended that planners and managers take into account the following recommendations for future service changes:

a. Plan service re-design with consideration given to GP views as indicated in this report  
b. Study the impact of sharing referral data with practices involved in the project  
c. Consider multifaceted support and access to specialist advice to primary care to improve appropriate referral  
d. Study GP referral from a secondary care perspective  
e. Consider replicating the project in areas where there are potentially more extreme variations in referral patterns
Appendix 1

Referrals per 1000PU during 2008-09
Appendix 1

Prevalence of CHD per list size

Prevalence %
Patients discharged back to GP (Code 502) without further management per 100PU
Practice Demographic

Practice Identifier: 1
Practice List size: 8,000

Date of Meeting: 26.04.10
Present: 4 General Practitioners (GPs) + Practice Manager (PM)

Outcome of discussion

General starting points

The general feeling among the GPs in this practice was that they were not high referrers to Cardiology services. However one GP with a special interest in cardiology felt that he did refer more than his partners. ‘Embarrassment’ over the number of patients that the practice refers to a particular speciality could be an inhibitor to referral. The group questioned whether they were referring all the patients that they should – the statistical data presented at the beginning of the meeting could be a start to investigating this issue within the practice.

When considering how they refer, the GPs feel that since the nature of general practice is to deal with the patient in an holistic way, the decision to refer may involve several elements. It may be that patient anxiety, social circumstances, GP reassurance even the concern over how long the waiting list might be would influence the referral. With this in mind the GPs questioned whether there was such a thing as an ‘inappropriate referral’. The feeling was that only secondary care practitioners were likely to use the terms ‘appropriate’ or ‘inappropriate’.

The impression GPs have from secondary care specialists in this field is that the specialists’ opinion of GPs is that their clinics are “full of people who should not be there” while paradoxically thinking that “not enough people (or not the right people) are being referred”. The opinion here is that both these statements can be true.

Why do GPs refer to Cardiology?

- They know what the likely diagnosis is but need investigations to confirm this and referral to a secondary care clinic is the only route to these.
- They are not certain of the diagnosis
- They may feel pressurised by the patient to refer to a ‘specialist’ (possibly more likely in an ‘affluent’ area?).
- One GP felt that having less confidence in the specialism of cardiology, she might refer for reassurance that she was doing all she could for the patient.

On the subject of competence or confidence - does this influence the rate of referral?

The decision to refer can be influenced by competence both ways i.e. those GPs who felt less sure of their own knowledge would be more likely to refer; as an example one of the GPs said she may ask the consultant for advice on investigations/diagnosis. Those with more experience/knowledge of cardiology...
would equally be more likely to refer if e.g. they knew what investigations/consultant-led treatments were required.

Access to investigations is a major issue – the frustration of the need to have to refer to a consultant when the GP knows what investigation is required.

**Exploring new ways of working – what might help the patient’s (+GPs!) journey along the cardiology care pathway?**

If GPs feel that they need another opinion about a patient’s cardiac symptoms they could:

- Ask another GP with special interest in cardiology within the practice for an opinion – informal method which is being done currently.
- A group of practices could use the service of a GP with a special interest in cardiology – locality group method.
- The post of a generalist physician in secondary care might offer the opportunity to refer a patient with undifferentiated symptoms rather than a ‘specialist’ opinion that that the patient has ‘no significant cardiological problem’.
- An intermediary service - ?community clinic with a GP with special interest or a hospital consultant could see patient + advise – this happens in England where some Primary Care Trusts (PCTs) have developed this kind of service. The disadvantage of this is that it creates another tier of service.

**How much do you know about what is offered within the Cardiology Service?**

There was some uncertainty about all that might be available. Most of the GPs were unsure about access to specialist nurses such as the Heart Failure (HF) nurse. A directory of services might be useful. (The PM suggested at this point that this information may already be available on the Clinical Portal system – it is!! So we all learned something there!)

This raised the issue of specialisms within the Cardiologists. GPs know what each consultant cardiologist specialises in and therefore feel it would be more efficient to refer appropriately e.g. to refer a HF patient to the cardiologist who deals mainly with this condition in preference to one whose main work is invasive investigations. The centralised referral management system prohibits this.
Issues raised from the Case Study:

If letter of referral could have been faxed rather than sent by mail
Direction to patient to come back to GP sooner
Getting to the appropriate consultant immediately
Telephone access to consultant made easier
Intra-consultant referral i.e. when respiratory cause is ruled out +HF suspected

The crossover of respiratory and cardiology conditions – it was agreed that it would be helpful to develop roles within these specialties to deal with this. Discussion revolved around creating a general medical clinic to review patients whose diagnosis is uncertain.

What about Guidelines

General consensus here was that guidelines are useful for reference but are unlikely to be used in a busy surgery, where time is short. One GP said she would be more likely to use a standard referral letter.

The suggestion was made that secondary care is focused on throughput and targets (referral to treatment time is now 26 weeks) and directing patient care through the system by means of pathways and guidelines. The implication was that this may not be as straightforward as it would seem since the sum of the patient is more than one medical condition.

Is there a place for further education?

Opinion here was that CPET provided a good place for up-dating and discussion with colleagues and consultants. And the group were keen to have cardiology up-dates within this system.

What would help the GP with Cardiology Referrals?

- A consultant-led assessment service which could offer an appointment within 2 weeks
- A regularly up-dated electronic directory of services including a list of consultants and their speciality
- Access to consultant for telephone advice
Summary of main points

- Referral to cardiology can be multifactorial and often involves more than the presenting symptoms.
- Self-evaluated confidence and competence varies amongst GPs.
- Direct access to some investigations would be useful
- Knowledge of services is important
- Referral pathway should be smoother especially for urgent cases
- Guidelines are useful for reference but unlikely to be used in a busy surgery
- Cardiology education is useful in the form of CPET up-date
- Direct access to consultant advice would be very helpful
Practice demographic:

Practice identifier: 2
Practice list size: 7,500

Date of meeting: 11.5.10
Present: 3 GPs  PM

Outcome of meeting

In looking at the data the GPs noted that the practice have fairly high referral rate, although in terms of actual numbers it is probably a small. One GP said he could only think of 5 or 6 referrals he had made in the last year.

General starting points

Cardiology cases are acute but the cases referred in to the speciality tend to be in small volume. However Cardiology needs to be able to respond quickly to requests for advice or for patient assessment, unlike some other specialities where time between the patient presenting and diagnosis is less urgent.

Rapid access chest pain clinic. GPs have issues with this – criteria for referral to this clinic are not clear. GPs are then unsure who can be referred and therefore often such a service is then underused as GPs find another route to refer the patient.

One GP who is new to the area said his main concern is to have an efficient means of knowing what services are available/how to then do the referral and how to refer patients appropriately.

In-house referral generally doesn’t happen for cardiology as there is no one GP who has a special interest in this area.

What about the use of guidelines?

One of the GPs has used an on-line guidance which advises on arrhythmias. She couldn’t remember the origin of these guidelines. She found them a help in the decision making process for referral.

Some guidelines can be counter-productive if they are over complicated e.g. Atrial Fibrillation guidelines (don’t know which guidelines were being referred to here).

What influences referral?

- Clinical reasons
- Reassurance
- Lack of knowledge
- Lack of options for investigation/assessment
- If there is some uncertainty on the part of the GP as to the diagnosis the default position would be to refer to a general physician or to a care of the elderly consultant.
Issues with the current referral system?

The issue of ECGs – some lack of confidence in interpreting an ECG and a recognition that ECGs done in the surgery are often of poor quality. Historically GPs had sent ECGs to the cardiology for interpretation but this had been suspended because of the poor quality of the recording. One GP said he rarely now asked for an ECG because if he was sufficiently concerned about the patient he would just admit them.

What would improve the situation?
Virtual clinic – a consultant who was available by e-mail/telephone for advice

Sources of help?

Most would phone the on-call cardiology registrar for advice, although it is understood that this would be difficult for this person to deal with large volumes of phone advice requests.

Cardiology admissions taken directly by cardiologists are usually limited to patients with an ECG showing ST elevation indicating a Myocardial Infarction (MI). Anything else would go through other MAU.

Referral pathways – information on the most appropriate place to direct the referral

Is there a need for more education or up-dating?

What might be useful in terms of cardiology education or up-dating?

Clear and quickly accessible information e.g a flow chart
CPET – but recognised that this is very dependent on the quality of the speaker
Website information on local services
Website – concise guidelines

Summary of main points

- Need clarity on Rapid Access Chest Pain Clinic referral criteria
- Need clear information on what services are available and how these are accessed
- Availability of a cardiologist for advice would speed referral and management processes
Appendix 2
Anonymised interview summary notes

SOUTH EAST WALES CARDIAC NETWORK
Cardiology Referral Study
2010

Practice Demographic

Practice Identifier 3
Practice List size 8,500

Date of Meeting 24.05.10
Present 5 General Practitioners (GPs) + Practice Manager (PM)

Outcome of discussion

General starting points

Referrals noted to be lower than the Cardiff average which the GPs felt reflected the lower prevalence of CHD. GPs were confident of the influence on their referrals, they were all very clear that they often have a good idea of the diagnosis and for most referrals they would be asking for appropriate investigations to confirm the diagnosis e.g. echocardiogram, 24hr BP or 24hr ECG etc. They acknowledge that there will be other reasons for referring such as patient request for a specialist opinion.

Main reasons for referral:
- Confirmation of diagnosis
- For further investigations
- For risk stratification for angina
- Patient request

Do you use guidelines?

The GPs use guidelines and feel it is both helpful and necessary to have some sort of structured way of guiding the decision making process in this area. Two national guidelines were mentioned – NICE Guidelines and Map of Medicine. However there were some frustrations in the use of guidelines by those outside the practice. For example although NICE guidelines say that patients referred to cardiology should be seen within two weeks this does not always happen. Also the GPs had a real issue with the fact that secondary care consultants often manage/prescribe outside these recognised guidelines e.g. using ARBs as first line treatments. While the GPs understand that the consultants use clinical judgement/expertise the consultants do not justify their actions by giving GPs the rationale for treating outside the guidelines. This was a source of frustration for the GPs.

What cardiology services are available to you?

Did not know what was available – would value information a list of things – (I mentioned Clinical Portal as a source of local services).

What would help in managing cardiology referrals?

All of the GPs would like direct access for advice from a specialist.
They like the idea of another tier of advice, by this they mean that getting direct access on the day to a specialist who could guide them as to appropriate management. One of the GPs said she often contacted Coronary Care Unit or on-call registrar for cardiology, who were often happy to advise but the point was made that they would not wish to swamp this point of access by too many calls.

One GP said he would often send in an ECG done in surgery with a covering letter to one of the cardiologists for advice and receives helpful advice back.

Quality of ECGs in-house is considered by GPs to be good and they generally are confident in reading them.

They like the idea of a one-stop clinic where the patient could be seen /assessed /investigated quickly.

A good Chest Pain Clinic with clear referral criteria. The GPs are unhappy with the current nurse-led Rapid Access Chest Pain Clinic. They are unclear about the referral criteria for this clinic and have had several attempts at referring patients rejected. Consequently they no longer use this clinic.

Any other questions?
The comment was made that I had not asked specifically for views on what GPs take issue with secondary care clinicians. This elicited the comment on specialists not keeping to guidelines.

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<th>Summary of main points</th>
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<tbody>
<tr>
<td>• Direct access to a specialist for advice would be helpful</td>
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<td>• A one-stop clinic for assessment and investigation would be good</td>
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<td>• Guidelines are useful but some frustration when specialists do not always adhere to them</td>
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<td>• Clear information on rapid access chest pain clinic criteria</td>
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Practice Demographic
Practice Identifier: 4
List size: 5,800

Date of meeting 16.6.10
Present: 3 GPs

Outcome of discussion
The GPs had printed off some current referral letters which had been sent by them. These were used as a basis for discussion of the issues.

GPs refer anyone they feel needs a cardiology opinion, specifically:
- New onset anginas for investigation
- Chest pain – to general physician since no rapid access chest pain clinic now
- Palpitations
- Investigations – 24hr ECG/BP/Echocardiograms

The GPs are very unhappy that there is no Rapid Access Chest Pain Clinic (RACPC) now. However they felt that even when this was an available option in the past, it had limited usefulness – only 6 beds which were filled very early in the day and was not always as ‘rapid’ an access as it implied. However they feel that an efficient chest pain clinic which allowed for rapid referral and a one-stop assessment point would be very beneficial.

An accessible point of contact for advice would be very helpful. There was discussion about the means of access i.e. e-mail or telephone contact. It was agreed that e-mail access to a consultant’s advice with a response within one week would be the most beneficial and efficient.

GPs were most unhappy about the lack of easy advice and also lack of RACPC.

Response from cardiology department?
The opinion here was that letters following clinic visits are now nearly all from the consultant. The GPs feel that the quality of the letters in terms of advice has improved, often the letters are 2-3 pages.

It was also felt that there was a greater efficiency of discharge with fewer patients being seen in follow-up clinics.

There was some discussion about the referral form in use at one time - ?software to take up the QOF data from the GP system to fill in the referral form?

The practice secretary said that there was a difficulty in getting results of investigations, particularly ECHOs if these had been initiated by the consultant rather than the GP. GPs had more success in getting this information but results were not routinely sent to the GP.
Investigations and services?

GPs were happy about reading their own in-house ECGs but not interpreting 24hr ECGs or ECHOs. There was some debate between them whether they would or wouldn’t refer directly for investigations – it seemed to depend on how confident they felt in interpreting the results.

In terms of other services the GPs were glad of and liaised with the HF nurse and found her input in managing titration of medication particularly helpful.

Education and up-dating?

No strong views on this. CPET was as good a place as any for this although it was felt that the consultants often used this as a means of stating their political issues and problems with Primary Care, rather than the clinical guidance the GPs required. Also that the consultants did not always display internal consistency e.g. when a cardiologist recently complained about the large numbers of requests for ECHOs and in the next breath mentioned that they would routinely ECHO everyone who came to clinic. The GPs also feel that they would like generalised and a consensus view of dealing with the common cardiology problems they see. One GP suggested in journal articles he read that there was a confusing plethora of views.

Guidelines?

The GPs know about guidelines and mentioned SIGN and NICE Guidelines but on the whole in day-to-day practice they do not use them. They did also mention the clinical pathways that are used by secondary care for HF and AF as a means of understanding the way patients are dealt with through the system.
Case study 1
A patient aged 60 seen by SYNEXUS who had an abnormal ECG and referred by the GP for an opinion on ECG and further investigation. The GP opinion was that this was a case of undiagnosed heart disease.

Case study 2
A patient aged 80 with shortness of breath and persistent hypertension who required orthopaedic surgery who was referred for a risk assessment – the patient was investigated (ECHO) and advice given on medication.

Case study 3
GP diagnosed a cardiac pacemaker patient with thoracic outlet syndrome following a (difficult) insertion of pacemaker. The pacemaker wires were compressing the subclavian vein causing swelling of the arm. GP had difficulty in getting patient seen in secondary care quickly because the patient’s consultant was away and no-one else was prepared to see the patient.

Of 3 current referral letters where the patient was waiting for an appointment, two of these were for advice only and could have been dealt with by advice from consultant to GP.

Summary of main points:

- Access to an efficient RACPC
- Access to ‘real-time’ advice from cardiologist by both phone or e-mail
Practice demographic
Practice identifier: 5
List size: 8,200

Date of Meeting: 17.6.10
Present: 4GPs, 1 GP trainee (with special interest in cardiology), Practice Manager
3 nurses.

Outcome of discussion

Discussion centred around the data and the recognition that there were many influences on whether to refer. GPs feel that as well as obvious clinical reasons for referral, need for investigations, patient anxiety and desire to 'see a specialist' plays a part. They suggested that QOF is an influence too when the indicators ask whether certain investigations have been done. Also the waiting lists may influence in that GPs may feel that referring sooner rather than later means that the patient gets on to the list.

There is some uncertainty as to who the consultants are and what they specialise in. This would be useful so that the GP would know where to most appropriately direct the referral.

The GPs say that they are dissuaded from making referrals to a named consultant, that the RMC process makes this more difficult. The GPs wanted to know how RMC makes the decision who sees the patient, PM says this is based on waiting list size and patient is seen by ‘first available’ consultant. GPs say when making clinical decisions it would be helpful to be able to direct patients more appropriately.

Services

GPs concerned that there is no Rapid Access Chest Pain Clinic (RACPC) and that when this service was available (18 months ago?) it was inefficient. It was also a concern that they were not informed that the clinic had stopped and were still referring patients which caused a delay in patient assessment.

GPs would like an efficient RACPC.

There seem to be many departments and specialisms within the cardiology service and the GPs did not have a clear understanding of what all these were. Again the PM mentioned that the Clinical Portal did have an outline of the service and the facilities offered.

Cardiology advice regarding cardioversion for AF and the need to do this quickly is confounded by delays in getting patient referred in quickly.

Investigations

Although they acknowledged that some of their referrals were for investigations, the GPs were ambivalent in their desire to have direct access to investigations. They suggested that they would also like an interpretation of these results by a specialist.
ECHO results are not available on Clinical Portal. This sometimes causes a delay in the patient journey - the patient is referred to consultant, they may have their investigations e.g. ECHO fairly quickly but then there may be a long period before the patient is seen again by the consultant to be given the result - in the meantime the patient is anxious for the result and may come to see the GP on one or more occasions. One suggestion was that an interim letter to the patient and the GP giving some information about the result would be helpful.

ECGs are done in-house. The GPs are happy to read them although find they sometimes would like a more expert eye on reading and interpretation. They sometimes use contacts known to them such as a cardiology registrar. Means of getting another opinion on reading ECGs is through these informal routes. GPs felt that a more formal arrangement for this, such as a CPC which would also offer an ECG reading facility would be useful.

**Guidelines?**

Yes GPs do use them for reference. NICE mentioned. But don’t use them day-to-day when seeing patients.

**Education and up-dating?**

Actively seek out knowledge - on-line education used by several of the GPs and also invite cardiologist to a practice meeting for clinical up-date which was very good. CPET not so useful as GPs find that speakers use this venue to talk about service management issues when the GPs would prefer more clinical input.

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**Case Study**

A patient with palpitations consults GP twice, no other symptoms, patient anxious and would like to be referred - GP refers - sent back with diagnosis of benign origin of palpitations and no further management required.

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**Summary of Main Issues**

- An efficient RACPC
- Would value a GP meeting with Cardiologists to discuss clinical issues as well as service/management issues.
- Access to advice form specialist
SOUTH EAST WALES CARDIAC NETWORK
Cardiology Referral Study
2010

Practice demographic:
Practice Identifier: 6
List size: 8,000

Date of meeting: 17.6.10

Outcome of discussion
GPs were surprised by the referral data - at the level of referral although as we discussed the actual numbers that the graph represents is not given. They say that they are disadvantage in terms of adjustment for PU as they have a predominantly young population.

The GPs would value more specific advice in cardiologists letters. The comment was made that as GPs are encouraged to work more flexibly and to be more available to patients via phone or e-mail, then GPs themselves should have similar access to specialist advice.

The lead GP, who has a special interest in cardiology had looked at the practice referral data and found:
Cardiology referrals over 1 year.

51 referrals to Cardiology service in the previous year:
- of 32 he looked at closely: 9 had not yet been seen
- of 23 seen: 4 had been discharged back without any further management.

It was concluded that the 19 remaining patients had all been discharged without further management or a possible other reason for high referral was that many of their patients tend to DNA appointments which would necessitate a re-referral counting as another referral or they could think of one sudden death of cardiac origin which resulted in referrals for a further 4 family members.

The breakdown of reasons for referral were:
- Increasing angina
- Family History of arrhythmia
- palpitations
- aortic regurgitation
- Atrial Fibrillation
- Hypertension
- Chest pain
- Acute Coronary Syndrome
- Left Ventricular Failure
- Congenital Heart Disease
- unexplained Shortness of breath
- Heart Failure
- Collapse

On reviewing these the GPs felt they would have not done anything differently.

Influences on referral?
- QOF
- Investigations
- reassurance for GP
- Reassurance for patient

Education and up-dating?

CPET - mentioned a speaker on palpitations who suggested that patients with this symptom did not necessarily need a referral. Varies in usefulness depending on the speaker.

GPs valued clinical up-date sessions with Armon.

They would informally seek advice in-house - one GP in practice with special interest.

The GPs felt they had learned from looking at current referrals but would also learn from looking at the cases which were referred back with no need for further management.
Guidelines?

NICE and SIGN - the practice’s own guidelines are based on these
ECHO guidelines
HF audit from the prescribing audit

Investigations and knowledge of services?

One GP had experience of working in another area (Bridgend) where there was direct GP access to investigations such as Echocardiograms and 24hr ECG and results came back with interpretation.

The GPs asked about Rapid Access Chest Pain Clinic (RACPC) - they were unaware that this had been discontinued and were still referring patients.

The GPs valued the ECG reading service that they had previously from Dr Buchalter

The GPs would value knowledge on the Cardiology services and the specialty of each consultant - we discussed information on Clinical Portal but this may not be updated regularly.

Case studies

1. 26 year old female with H/O previous MI, paroxysmal AF diagnosed in 2007 which was documented, 24hr ECG was normal, diagnosis doubtful. On appropriate medication. Patient described palpitations well to GP - ECG revealed prolonged QT interval. GP sent referral letter and copy of ECG. Not seen yet.

2. 68 year old female. Severe COPD, Diabetes, rapid irregular pulse ECG showed bi-ventricular block. Patient wanted to travel to Turkey. GP referred with copy ECG - for urgent opinion. Patient went away anyway. GP felt this would have been a case where immediate advice from a specialist would have been helpful and may have avoided a referral.

3. 60year old man with AF - on Warfarin and Amlodipine which put him into sinus rhythm - 18months on would like to stop Warfarin and GP unsure about Amlodipine dose - therefore referred.

Summary of main points

- A RACPC
- Follow-up appointments could be reduced if there were more guidance on management in the letters back to GPs
- Access to advice from specialist by phone or e-mail.
- ECHO results on Clinical Portal - don’t need the image but just a summary of the result.
- Access to BNP blood test - since it is indicated in Guidelines - if this test is normal an ECHO would not be required therefore there would be a potential cost saving.
Practice demographic:

Practice Identifier: 7  
List size: 5,000

Date of meeting: 21.6.10  
Present: 3 GPs and Practice Manager

Outcome of discussion

GPs wondered if DNAs were counted in the referral numbers as a re-referral would count as a second referral. GPs also wondered whether response from cardiologist after the first visit with instruction on management such as a change of medication constituted a ‘no further management’ response. The GPs felt satisfied with the guidance in letters back from cardiologists. The comment was made that on the whole the Cardiology service was an efficient one and that the GPs were satisfied with it. There was generally a fairly low number of referrals to Cardiology compared with other specialities

Influences on referrals.

The GPs acknowledged that there are many reasons to refer patients from general practice including the need for patient reassurance and GP reassurance. Other reasons given were:
- QOF
- Need for investigations such as ECHOs, 24hr tapes and exercise tolerance tests.

The GPs were not happy with the Rapid Access Chest Pain Clinic service and they were unaware that this service is currently unavailable. They did not feel that this was an efficient service because the criteria to refer in were not clear and cases were often refused.

Guidelines

The GPs mentioned NICE and British Hypertension Society guidelines and also mentioned that they had used the New York Heart Association Heart Failure assessment tool, part of the prescribing audit. This had been a useful exercise for them although they said that they already were coding patients with Heart Failure in the practice.

GPs mentioned that most of the specialities have a similar clinical pathway that the patient should follow.

Education/up-dating

CPET was mentioned as the usual resource for learning.

The GPs also felt that they learned from the cardiologists response in letters following a referral. It would be useful for them to have a list of names of patients referred to cardiology in the last six months. They could then track the patient’s pathway and use these cases as a learning exercise.
Case Studies
These were given as examples of recent referrals made from the practice. The patients are still either waiting to be seen or not had letters back yet.

1. 85yr old male with chest pain, SOB, new symptom of SOB at night and no response from GTN. Urgent referral for investigations and an exercise tolerance test.

2. 61yr old female with thyroid disease, SOB, CXR showing enlarged heart, heavy smoker, now SOB on exertion. Referred for assessment of Heart Failure.

3. Male, on digoxin, still SOB on exertion. ?HF referred for ECHO.


Summary of main issues

- GPs would value dialogue with cardiologists to discuss clinical issues and that this would be most useful with case studies.
- That real-time access to advice from a specialist would be very valuable.
Practice Demographic:

Practice Identifier: 8
Practice list size: 2,500

Date of meeting: 28.6.10
Present: 1 GP

Outcome of discussion

General points

GP has low prevalence of Coronary Heart Disease (CHD) and is a relatively low referrer, with average patients discharged back without further management. This was what the GP would have expected. GP is single-handed with a salaried GP for 3 sessions and made the point that this does bring some difficulties in managing workload.

What influences you to refer into cardiology?

- Confirmation of diagnosis
- Investigation of symptoms
- Patient concern – for reassurance
- Medico-legal issues are also a driver.

Investigations

It would be advantageous if GPs had direct access for investigations such as ECG, 24hr ECG/BP, exercise tolerance tests and ECHOs. The GP no longer does ECGs in the surgery because he/staff could not cope with the numbers needing them. Patients are referred to Barry Hospital where they offer a standard ECG service. However it would also be good if there were a service which interpreted these investigations (including ECGs).

Information and response from cardiology.

GP has reasonable confidence with cardiology cases but appreciates consultant advice. Letters from consultants vary in their degree of helpfulness. GP has noticed that when the cardiologists suggest or commence patients on Warfarin or Clopidogrel they invariably do not give advice on when to review or stop this medication.

It would be good to have direct access to advice from a cardiologist by phone or e-mail.

The practice took part in the New York Heart Failure assessment tool. They looked at the letters back from secondary care. Of all the patients they referred for HF, none of the letters quoted the New York criteria.
Guidelines?

GP does not use guidelines but is aware of NICE guidelines generally and has referred to the cardiology guidelines.

Knowledge of services available.

GP was not aware of the services offered by cardiology department. He was not aware of the specialist nurse service for HF and was very interested as he has a patient who would benefit from this service.

Case study

A 46 year old male patient with heart disease – investigated abroad – exercise tolerance test and angiogram – had copies of results of these tests which were given to GP. The tests showed 40% stenosis in one coronary artery – well controlled symptomatically – worried – new symptom of sweating, no other symptoms. GP referred to cardiologist who reassured patient with a wait and see approach – cardiologist sees patient every 3-4 months and GP sees him in between as the patient continues to be anxious.

Case study

A 69 yr old male patient with cardiac pacemaker. Patient continues to have SOB on minimal effort and has a degree of cardiomyopathy. Referred to cardiology but little more can be offered to patient therefore seen by GP for continuing care.

Summary of main points

- Access to investigations would be useful
- Advice from cardiologist would be helpful