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Literature Search Results

Search completion date: 17th November 2011
Search completed by: Alison Price

Enquiry Details

GP Referral Behaviour

As part of my MSC in Commissioning I am doing my dissertation on 'What factors influences GP referral behaviour' and 'what is the impact of variation in GP referral rates’ - linked to this is the theory of change management and what needs to be in place to enable changes to occur in GP referral behaviour.
Opening Internet Links
The links to internet sites in this document are ‘live’ and can be opened by holding down the CTRL key on your keyboard while clicking on the web address with your mouse.

Full Text Papers
Links are given to full text resources where available. For some of the papers, you will need a free NHS Athens Account. If you do not have an account you can register by following the steps at: https://register.athensams.net/nhs/nhseng/ You can then access the papers by simply entering your username and password. If you do not have easy access to the internet to gain access, please let us know and we can download the papers for you.

Guidance on Searching within Online Documents
Links are provided to the full text of each of these documents. Relevant extracts have been copied and pasted into these Search Results. Rather than browse through often lengthy documents, you can search for specific words and phrases as follows:

Portable Document Format / pdf. / Adobe
Click on the Search button (illustrated with binoculars). This will open up a search window. Type in the term you need to find and links to all of the references to that term within the document will be displayed in the window. You can jump to each reference by clicking it. You can search for more terms by pressing ‘search again’.

Word documents
Select Edit from the menu, the Find and type in your term in the search box which is presented. The search function will locate the first use of the term in the document. By pressing ‘next’ you will jump to further references.
The King’s Fund has produced a series of detailed reports examining the quality and management of GP referral. The following three reports are attached in full text to the email accompanying these search results.

**Referral Management: Lessons for success, Kings Fund 2010**

*Summary*

Referral management: lessons for success provides practical advice to those seeking to influence the content and pattern of GP referrals. It draws on the current literature and new qualitative and quantitative research to evaluate the full range of referral management activities from full-scale referral management centres to the ‘passive’ provision of guidelines to GPs.

A range of interventions and approaches were found to be effective in influencing GP referrals. However, there was evidence that full-scale referral management centres are unlikely to present value for money and some of the new clinical triage and assessment services might add to rather than reduce costs. Instead, a referral management strategy built around peer review and audit, supported by consultant feedback, with clear referral criteria and evidence-based guidelines is most likely to be both cost- and clinically-effective.

The report draws out the following seven lessons that will help GP commissioners ensure that any referral management approach improves quality and make savings.

1. Any intervention to manage referrals cannot look at the referral in isolation but needs to understand the context in which the referral is being made.
2. Changing referral behaviour is a major change management task that will require strong clinical leadership from both primary and secondary care.
3. There are inherent risks at a point of referral, as clinical responsibility is passed from one clinician to another and any referral management strategy needs to have robust means to manage those risks.
4. There may be just as much under-referral as over-referral by local GPs. A strategy to reduce over-referral could, and indeed should, expose under-referral. This will limit the potential reductions in demand.
5. Commissioners should not introduce financial incentives to drive blanket reductions in referral numbers.
6. Reductions in referrals from one source can be negated by rises in referrals from other sources. Any demand management strategy needs to consider all referral routes and not just target one.
7. A whole systems strategy will be required to manage demand, with active collaboration between primary, secondary and community care services.

**An Anatomy Of GP Referral Decisions** The Kings Fund 2007

This paper presents the findings of a small qualitative study exploring GPs’ views about their role in supporting patient choice at the point of referral and explores the use of 5 different domains. In particular, it focuses on GPs’ level of support for patient choice and the influences on their referral behaviour; GPs’ early experiences of Choose and Book; the information that GPs need to inform patients about choice; and the impact of patient characteristics on equity in choice.

Full Text Attached
The Quality of GP Diagnosis and Referral

The Quality of GP Diagnosis and Referral looks at variations across general practice, and identifies evidence-based ways to improve the quality of this core aspect of GP care. The paper is written by a team from The King’s Fund: Catherine Foot, Chris Naylor and Candace Imison.

Full Text Attached

What have we learnt about diagnosis and referral?

In March 2010 the Inquiry into the Quality of General Practice held a seminar on diagnosis and referral with participants including GPs, practice nurses, NHS executives, health academics and patient representatives.

Key issues raised in discussion include:
- Has the introduction of the ‘Choose and Book’ referral process undermined the relationships between GPs and individual hospital consultants, to the detriment of patient care?
- How might judgements be made about what degree of variation in diagnosis and referral ought to be deemed acceptable, and therefore at what level any quality indicator thresholds ought to be set?
- Are the growing number of clinical guidelines mitigating against their utility in general practice?

www.kingsfund.org.uk/applications/site_search/?term=GP+referrals&searchreferer_id=21398


In January 2007 CRG Research Ltd and Cardiff University were commissioned by the National Leadership and Innovation Agency for Healthcare to evaluate the progress of the seven referral management pilots funded Welsh Assembly Government during the 2005 – 2006 financial year and to note any ‘lessons learnt’ in order to aid the future development of referral management across Wales.

The report builds on the Baseline Study and Evaluation of Referral Management Pilots in Wales completed by CRG and Cardiff University in April 2006 and includes: a literature review of relevant academic papers published in the past 12 months and a summary of key debates relating to referral management arising in the academic, professional, national and local press; and follow up case studies of each which incorporated interviews with pilot managers and other stakeholders as well as an analysis of any data available to demonstrate the pilot’s impacts and outcomes.


GP referral incentive schemes

There has been concern at the development by PCTs of incentive schemes that aim to reduce referral rates or the cost of referrals from general practice to secondary care. These schemes often take two broad forms; either to encourage GPs to analyse and better understand their practice referral patterns and/or promote the use of alternative referral pathways to hospital services, or to encourage GPs to reduce their level or cost of referrals as an outcome in itself. Such schemes were established with the advent of practice based commissioning, but have become more prominent and widespread in the context of a reported 16% rise in referrals from general practice in the first quarter of 2008/09 compared with this same period last year. This guidance intends to inform LMCs of what the GPC regards as appropriate practice.

Coastal West Sussex Federation:

REFERRAL MANAGEMENT PEER REVIEW SCHEME – 6 month review

Now that the scheme has been operating for six months, the Referral Management Steering Group has been giving some thought to the scheme, in terms of results, the experience so far, and how best to consolidate and develop the scheme further.

**Issues for us …**

- the need to meet the financial challenges
- the need to focus on the Coastal West Sussex commissioning priorities
- the importance of the ‘learning culture’ within the scheme and maximising the opportunity for ‘behavioural change’ of all GPs
- the best way to communicate with practices

The steering group felt that the success of the scheme lies in its ability for individual practices and clinicians to influence / understand ‘individual’ GP referral behaviour. The group agrees that “there is no need to rebuild the health system to change people’s habits. In the majority of specialties we need ‘behaviour redesign’ rather than ‘service redesign’”.

**The story so far …**

The specialties reviewed to date (Ophthalmology, T&O, Gynaecology, Dermatology, Urology) represent 42% of overall referral activity.

Using current available referral data (November to April) the recorded actual number of GP initiated referrals to consultant led acute clinics has reduced against the same months of the previous year, with the specialties having peer review reducing the most, providing us with confidence in the effectiveness of this scheme.

Despite this, the Steering Group have recognised the need to strive for continued improvements to the scheme, particularly as elsewhere in the country similar schemes are seeing a 16-18% reduction in referrals through peer review.

**Proposed next steps …**

The steering group believes that the reduction opportunities will be realized more robustly if the process involves a prospective rather than a retrospective review, as this challenges behaviour in ‘real time’ and helps to embed the learning.

To test this approach, during the month of June practices will be asked to prospectively review all (non 2WR) referrals prior to sending on, and report/feedback on the outcomes of this process.

The group also considered that the second half of the year should be spent consolidating the work on the specialties reviewed so far – in order that practices are able to evidence effective change in terms of their referral behaviour.

**Practice support …**

Examples of existing models of reviewing referrals prior to leaving the practice will be shared.

Cluster practices to consider working together in an in-house ENCIRCLE session to re-focus on referral management (members of the Steering Group will make themselves available to help facilitate these discussions if required).
Looking ahead …
June – a pack will be sent to practices in advance in preparation for the prospective review
July – the steering group will be putting together a pack of information for practices to review ENT and Audiology.
August – no specific requirements
September to March – revisit key specialties already reviewed (ie., Ophthalmology, MSK, Gynae, Derm, Urology)

NB From September, it is proposed that the scheme will take a prospective approach.
Finally, the steering group will also be considering the alignment of the Peer Review Scheme with the management of the new QoF points, both in terms of elective and non-elective referrals. More details to follow.

Dr Jo Parsonage
Referral Management Steering Group

The Torfaen referral evaluation project.
Citation: Quality in Primary Care, 2009, vol./is. 17/6(423-429), 1479-1072
Author(s): Evans, Elizabeth
Abstract: BACKGROUND: This paper provides an overview of the Referral Evaluation Project, which took place in South East Wales, UK during 2007-2008. AIM: To engage general practitioners (GPs) and consultants in the local hospitals of Gwent Healthcare Trust in discussions as to the validity, quality and appropriateness of GPs' referrals and to increase the quality of those referrals. To discuss with other healthcare professionals the use of community-based services, which could be used instead of referral to hospital. METHOD: A year-long scheme whereby GPs were funded for weekly protected time to discuss their referrals retrospectively by peer review, and to attend six-weekly cluster meetings where representatives from the practices met with consultants to discuss the appropriateness of those referrals and the use of alternative community-based services. Referral data were fed back to the practices by personnel from the local health board (LHB). The evaluation involved three practices in Torfaen, South East Wales; Torfaen LHB staff, consultants in Gwent Healthcare Trust, and other health professionals. The main outcomes used were indicators of referral quality as judged by the GPs, referral rates to hospital orthopaedics and emergency admissions, and evidence of increased use of community-based services. RESULTS: The quality of referrals as judged by doctors' peers improved. Referral rates in orthopaedics and emergency admissions showed a striking reduction by up to 50 per cent, variability between practices decreased, and referrals to local services increased. Alternative community-based services were explored and an understanding of the best local pathways for some common conditions was reached. CONCLUSION: This approach was felt to be a more sustainable and more intuitive method of improving the quality of referrals and reducing inappropriate demand compared to other approaches, for example, conventional referral management centres. 10 refs. [Abstract]
Auditing the diagnosis of cancer in primary care: the experience in Scotland

Citation: British Journal of Cancer, 2009, vol./is. 101/, 0306-9443
Author(s): Baughan, P, O'Neill, B, Fletcher, E

Abstract: This paper reports on an ongoing primary care audit of cancer referrals undertaken in Scotland in 2006-2007 and 2007-2008. General practitioners (GPs) in Scotland were asked to review all new cancer diagnoses within their practice during the preceding year. Four thousand, one hundred and eighty-one patients were identified in year one and 12,294 in year two. The pathway taken for patients to present to, and be referred from, their GP has been analysed for 7,430 of the 12,294 patients identified within year two across five separate health boards. The time from first symptoms to presentation to a GP varied between tumour types, being the longest (median 30 days) for head and neck cancers and the shortest (median two days) for bladder cancer. In all, 25% of patients within the following tumour groups waited longer than two months to present to their GP following first symptoms: prostate, colorectal, melanoma and head and neck cancers. Once patients had presented to their GP, those with prostate and lung cancer were referred later (median time 11 days) than those with breast cancer (median time two days). The priority with which GPs referred patients varied considerably between tumour groups (breast cancer 77.5% 'urgent' compared with prostate cancer 44.75 'urgent'). In one health board the proportion of cancer patients being referred urgently increased from 46% to 58% between the first and second audit.

The conclusion was the authors data show that there are very different patterns of presentation and referral for patients with cancer, with some tumour groups being more likely to be associated with a delayed diagnosis than others. Cites 16 references.

Out-of-hours primary care: development of indicators for prescribing and referring

Citation: International Journal for Quality in Health Care, 2007, vol./is. 19/5, 1353-4505
Author(s): Giesen, Paul, Willekens, M, Mokkink, H, Braspenninck, Joze, Bosch, W Van

Abstract: Dutch general practitioners have reorganised their out-of-hours primary health care to general practice cooperatives. Good insight into the quality of delivered medical care is important to make the accountability of health practitioners and managers transparent to society and to identify and minimise medical errors. The objective of the study was development of a set of quality indicators for internal quality improvement in out-of-hours primary clinical care. A systematic approach combining the opinion of three different general practitioner expert panels, and an empirical test in daily practice. The indicators were based on clinical, evidence-based, national guidelines. The authors tested the validity, feasibility, reliability and opportunity for quality improvement. The results were, of the 80 available national clinical guidelines, 29 were approved and selected by the first general practitioner expert panel. Out of these 29 guidelines, 73 indicators concerning prescribing and referring were selected by the second panel. In an empirical test on 36,254 patient contacts, 7,344 patient contacts (22.7%) were relevant for the assessment of these 73 indicators. Six indicators were excluded because they scored more than 15% missing values. In total, 38 indicators were excluded because the opportunity for quality improvement was limited (performance score greater than or equal to 90%). In the final meeting, the third general practitioner expert panel excluded five indicators, leaving to a final set of 24 indicators. The conclusion was this study shows the importance of subjecting indicators to an empirical test in practice. The national clinical guidelines are only partially applicable in the assessment of out-of-hours primary care. They need to be expanded with topics that are related to general practitioner care in an out-of-hours setting and acute medical problems. Cites 24 references. [Journal abstract]
Implementing referral guidelines: lessons from a negative outcome cluster randomised factorial trial in general practice.


Jiwa M, Skinner P, Coker AO, Shaw L, Campbell MJ, Thompson J.

BACKGROUND: Few patients with lower bowel symptoms who consult their general practitioner need a specialist opinion. However data from referred patients suggest that those who are referred would benefit from detailed assessment before referral.

METHODS: A cluster randomised factorial trial. 44 general practices in North Trent, UK. Practices were offered either an electronic interactive referral pro forma, an educational outreach visit by a local colorectal surgeon, both or neither. The main outcome measure was the proportion of cases with severe diverticular disease, cancer or precancerous lesions and inflammatory bowel disease in those referred by each group. A secondary outcome was a referral letter quality score. Semi-structured interviews were conducted to identify key themes relating to the use of the software.

RESULTS: From 150 invitations, 44 practices were recruited with a total list size of 265,707. There were 716 consecutive referrals recorded over a six-month period, for which a diagnosis was available for 514. In the combined software arms 14% (37/261) had significant pathology, compared with 19% (49/253) in the non-software arms, relative risk 0.73 (95% CI: 0.46 to 1.15). In the combined educational outreach arms 15% (38/258) had significant pathology compared with 19% (48/256) in the non-educational arms, relative risk 0.79 (95% CI: 0.50 to 1.24). Pro forma practices documented better assessment of patients at referral.

CONCLUSION: There was a lack of evidence that either intervention increased the proportion of patients with organic pathology among those referred. The interactive software did improve the amount of information relayed in referral letters although we were unable to confirm if this made a significant difference to patients or their healthcare providers. The potential value of either intervention may have been diminished by their limited uptake within the context of a cluster randomised clinical trial. A number of lessons were learned in this trial of novel innovations.

A qualitative study to investigate why patients accept or decline a copy of their referral letter from their GP.

British Journal of General Practice, 2005, vol./is. 55/517(626-629), Morrow, Gerry

Abstract: BACKGROUND: Our practice in Northumberland has offered patients copies of their clinical referral letters for almost three years. However, many patients declined this offer and this qualitative study was conducted to determine why almost 80 per cent of patients offered a copy of their referral letter opted not to receive one. AIM: To discover why some patients accepted and others declined a copy of the letter written from GP to specialist. DESIGN OF STUDY: A qualitative focus-group study. SETTING: General practice in Northumberland. METHOD: Three focus groups of referred patients were created, and discussions were taped, transcribed and analysed for major themes.

RESULTS: The patients chose to accept or decline a copy of their referral letter for diverse reasons. However, most felt that the ability to choose for themselves whether to have a copy or not was essential. CONCLUSIONS: The concept of trust in their GP was a major theme that patients related was often behind their decision to decline a copy of their letter. These results, if transferable, may have implications for the application of this policy. 8 refs. [Abstract]

http://ukpmc.ac.uk/ukpmc/ncbi/articles/PMC1463244/pdf/bjpg55-626.pdf
Take a letter ... an audit of GP referrals in south west Sydney.
Australian Family Physician, April 2001, vol./is. 30/4(395-8) Ramrakha S, Giles A
Abstract: OBJECTIVE: The overall aim of the study was to examine the quality of
communication and the amount of patient information conveyed by general practitioners
when referring patients to an emergency department. The study also looked at the prior
use of telephone calls made by the referring doctors and ambulance usage for patients
referred with a provisional diagnosis of acute coronary or cerebral event.METHOD: An
audit of the first 998 patients who presented to the Liverpool Hospital emergency
department with a referral letter, after initially presenting to their GP, was carried out
between June and September 1997. Subgroup analysis was done on referral letters
from the patients' own GP compared with another GP. The use of the telephone before
sending the patient was also noted. The admitting officer entered patient information on
a computerised 'expects screen'. On arrival, the mode of transport was ascertained, in
particular, whether an ambulance was used in transporting these patients.RESULTS: Of
998 consecutive patients with letters, the majority were not referred by the patient's own
GP. The number of prior telephone calls to the admitting officer was low. If a patient was
sent by their usual GP, a more detailed account of the patient's past medical history,
investigations and management was given. In patients with a presumptive diagnosis of
'unstable angina pectoris' or 'acute myocardial infarction', 26% were transferred via
ambulance. Only 12.5% were transported by ambulance with a presumptive diagnosis of
a cerebral event, 'seizure', 'stroke' or 'CVA'.CONCLUSION: For those patients who did
present with a referral letter, the standard of information lacked consistency and there
was a difference between the content of letter written by their usual GP as opposed to
another GP. This study found there was infrequent telephone communication when
patients were referred by their GP to the emergency department. This study also shows
an under-utilisation of the ambulance service by GPs in south west Sydney when
referring patients with coronary ischaemia or a cerebral event to the emergency
department.

Referrals and relationships : in-practice referrals meetings in a general practice.
Family Practice, 2001, vol./is. 18/4(399-406), Rowlands, G., Singleton, A.,
Abstract: BACKGROUND: GP referrals to secondary care are an important factor in the
cost of running the NHS. The known variation in referral rates between doctors has the
potential to cause tension within primary care which will be exacerbated by the latest
reorganisation of primary care and the trend towards capitation-based budgets. The
importance of postgraduate learning for GPs has been recognised; continuing
professional development is moving towards self-directed practice-based learning
programmes. Educational interventions have been shown to alter doctors' prescribing
behaviour. This, together with the pressure on accounting for referral activity, makes the
prospect of improving, and possibly reducing, referral activity through educational
interventions very attractive. OBJECTIVES: This study complemented a randomised
controlled trial (RCT) which investigated whether an intervention of the type which had
reduced prescribing costs would have a similar effect on referral activity. METHODS:
The context of the study, description of the characteristics of the practice and the issues
seen as important by the doctors and practice manager were identified through
preliminary semi-structured interviews. The practice then held a series of educational in-
practice meetings to discuss referrals and issues arising from referrals. The audio- and
videotaped transcripts were interpreted using content and group dynamic analysis.
Participants commented upon our preliminary findings. In addition, we used dimensional
analysis to induce a preliminary theory describing the effect of the intervention on this
general practice which enabled us to review the findings of the parallel RCT. The
educational value of the meetings and the learning needs of the participants were also assessed. RESULTS: Our complementary study showed no alteration of practice referral rates following the educational intervention. The qualitative study, unencumbered by the assumptions inherent in the development of the hypothesis tested in the RCT, highlighted the complexity of decision making in general practice and the likely impact of historical background and a variety of internal and external pressures on this self-directive educational intervention. The practice members described the individual and group learning needs identified as a result of the meetings. CONCLUSION: The findings of this study raise important questions for developing practice-based learning. The outcomes of self-directive interventions in practices will be influenced by internal and external events both past and present. Such outcomes may be qualitative and difficult to measure. They are likely to differ from outcomes seen when interventions are applied to groups of doctors who are not all members of the same practice. 4 figs. 18 refs.

Effect of audit and feedback, and reminder messages on primary-care radiology referrals: a randomised trial.
Citation: Lancet, 2001, vol./is. 357/9266(1406-1409), 0140-6736
Author(s): Eccles, Martin
Abstract: BACKGROUND: Radiological tests are often used by general practitioners (GPs). These tests can be overused and contribute little to clinical management. We aimed to assess two methods of reducing GP requests for radiological tests in accordance with the UK Royal College of Radiologists' guidelines on lumbar spine and knee radiographs. METHODS: We assessed audit and feedback, and educational reminder messages in six radiology departments and 244 general practices that they served. The study was a before-and-after, pragmatic, cluster randomised controlled trial with a 2x2 factorial design. A random subset of GP patients' records were examined for concordance with the guidelines. The main outcome measure was number of radiograph requests per 1000 patients per year. Analysis was by intention to treat. FINDINGS: The effect of educational reminder messages (ie, the change in request rate after intervention) was an absolute change of -1.53 (95 per cent C -2.5 to -0.57) for lumbar spine and of -1.61 (-2.6 to -0.62) for knee radiographs, both relative reductions of about 20 per cent. The effect of audit and feedback was an absolute change of -0.07 (-1.3 to 0.9) for lumbar spine of 0.04 (-0.95 to 1.03) for knee radiograph requests, both relative reductions of about one per cent. Concordance between groups did not differ significantly. INTERPRETATION: Six-monthly feedback of audit data is ineffective but the routine attachment of educational reminder messages to radiographs is effective and does not affect quality of referrals. Any department of radiology that handles referrals from primary care could deliver this intervention to good effect. 3 tables 30 refs.

Outcomes of referrals from general practice.
Citation: Scandinavian Journal of Primary Health Care, December 1995, vol./is. 13/4(287-93), 0281-3432;0281-3432 (1995 Dec)
Author(s): Haikio JP, Linden K, Kvist M
Abstract: OBJECTIVE: To investigate hospital referrals by general practitioners, subsequent hospital events, and discharge letters.DEsign: Audit of 340 referrals written by 29 general practitioners, hospital case records, discharge letters, and primary care case records.SETting: Salo Area Health Authority in southern Finland (population 43,000).MAIN OUTCOME MEASURES: Referral rates, reasons for referrals, distribution according to specialty, number of hospital days, visits to outpatient-departments, laboratory and radiological examinations, therapeutic procedures, changes in medication and/or diagnosis and availability of discharge letters.RESULTS: The mean referral rate
was 4.5% and varied from 1.6-10.0 per cent. The referring physician’s age, sex, and workload did not significantly explain the variation of referral rates between individual general practitioners. A third of all hospital referrals from general practitioners led to a single visit at the hospital outpatient department. Discharge letters were received for 33% of all referrals. A change in medication or diagnosis did not substantially affect the rate of discharge information supplied by the hospital. CONCLUSIONS: The variation of the referral rates between the individual general practitioners was large. The small number of participating general practitioners (n = 29) did not permit valid explanations for this variation. The referring general practitioner rarely receives discharge letters from secondary care providers.

Using referral letters to measure quality and performance in general practice. Citation: Journal of Quality in Clinical Practice, March 1995, vol./is. 15/1(45-50), 1320-5455;1320-5455 (1995 Mar)
Author(s): Montalto M
Abstract: Although quality assurance is a concern of professional Colleges of General Practice and researchers in primary care, there are practical difficulties in measuring performance in general practice. Reliance on medical record audits in general practice has many shortcomings. Referral letters hold many advantages as a tool for audit or quality assessment in general practice: accessibility; acceptability; objectivity; consensus in standard setting for letters; and a positive impact on the quality and cost of management. Professional consensus standards will continue to be developed. If they are to be used for performance measurement, rather than simply serve an educational function, more use can and should be made of referral letters to assess and improve general practitioner performance.

Thirty eight specialists in one district health authority were asked to take part in a questionnaire survey to assess the appropriateness of referral and the quality of the referral letter for 20 consecutive new patients each. A total of 705 new patient referrals to 13 specialties were included in the study. Twelve of the 38 specialists were randomly selected and their 234 new patient referral letters were independently assessed by a general practitioner for the appropriateness of the referral decision. The study revealed errors and omissions in between 5% and 28% of referral letters according to the category of information. Thirteen per cent of the new patient referrals were assessed by specialists to be inappropriate and 4% of patients had been referred to an inappropriate specialty. Significantly more of the referrals to medical specialties were inappropriate (20%) than to surgical specialties (9%) (P < 0.01). There were more than three times the number of errors and omissions in the referral letters of referrals assessed as inappropriate than in the referral letters of referrals assessed as appropriate (P < 0.01). The referral letters of referrals assessed as inappropriate were more than nine times as likely to omit the reasons for or objectives of the referral compared with letters for those referrals assessed as appropriate (P < 0.01). There was a good overall agreement between the specialists and general practitioner in their assessment of the appropriateness of the clinical referrals (kappa = 0.614, P < 0.001).
How valuable is feedback of information on hospital referral patterns?
Citation: British Medical Journal, 1993, vol./is. 307/6917(1465-1466), 0959-8138 (1993
Author(s): De Marco, Paulo
Abstract: The objectives of this study were to determine GPs' responses to and explanations for variation in rates of referral to hospital and how feedback of data on rates of referral could be used to facilitate practices in auditing their own referral behaviour. Visits by audit facilitators to general practices after feedback of details of rates of referral to hospital derived from annual reports in general practice were made, involving 92 general practices in East Anglia. GPs judged that access to specialist care, the individual skill of GPs, patient demand, and fear of litigation were major determinants of referral behaviour. Because there was widespread scepticism about the accuracy of the data on which the feedback was based and because there is no clear relation between rates of referral and quality of care, it was extremely difficult to encourage doctors to use the feedback as a basis for auditing their own hospital referrals. The paper concludes that if GPs are to contribute meaningfully to monitoring future changes in referral patterns it will be essential to develop reliable information systems in which doctors have confidence. Furthermore, audits need to be based on analysis of clinical cases rather than on rates of referral. Cites 18 references. [Journal abstract].

An examination of practice referral rates in relation to practice structure, patient demography and case mix.
This paper examines the variation in practice referral rates from 53 practices over a twelve-month period. Data from the Second National Morbidity Study were used in relation to practice structure; age, sex and Social Class composition of the patient population; and the case mix by practice. The results show that the age of the patient is an important determinant of the probability of referral, whereas Social Class has little influence. Analysis of the practice-based data showed that practices were highly concordant in their referral activity across sex and age (greater or less than 45 years), sex and Social Class (manual or non-manual), and across chapters of the disease classification. This degree of concordance points to characteristics of the practices rather than patients, and their problems as the main source of variation in practice referral behaviour.

The Measurement of referrals for practice audit
Citation: Health Trends, 1991, vol./is. 23/2(66-69), 0017-9132
Author(s): FLEMING, Douglas, CROMBIE, Donald, CROSS, Kenneth
Abstract: The Royal College of General Practitioners and the Office of Population Censuses and Surveys have collaborated in three national studies of morbidity in general practice at approximately 10-year intervals. This paper presents data derived from the second survey conducted in 1970/71. A comparison of practice referral rates based on different measures is reported, and consideration given to the consequences of the choice of measure on how practices may be perceived. The findings of this study emphasise the need for caution in the interpretation of practice referral data, while providing encouragement for general practitioners to engage in open peer review of their practice activities. Cites 10 references. [Journal abstract].
The use of routine referral data in the development of clinical audit management in North Lincolnshire.

Citation: Journal of Public Health Medicine, 1990, vol./is. 12/1(22-27)
Author(s): Madely, Richard J.
Abstract: As part of the national waiting list initiative, a retrospective survey of routine referrals in seven specialties to Lincoln County Hospital by general practitioners within its catchment area was carried out, using data from the Patient Administration System and the Lincolnshire Family Practitioner Committee. These specialties were identified by managers and clinicians as those in which a significant problem of waiting times and waiting lists existed, both as perceived locally and in comparison with other districts. 1 fig. 1 table 19 refs. [Abstract amended]

Monitoring of general practitioners’ outpatient referral rates by Family Health Services Authorities: how practical?
The Government proposes that Family Health Services Authorities should monitor general practitioner referral rates, although the information available to them might be inadequate for the task. This study was undertaken to assess the difficulties Family Health Services Authorities could face when monitoring referrals using rates related to doctors’ list size. This paper describes an investigation into this problem which analysed all outpatient referrals from one general practice from 1984 to 1988. Referral rates showed important variations between calendar quarter recording periods, and rates based on list size were inaccurate compared with those based on consultations. Proportions of obstetric, gynaecological and private referrals varied widely between the doctors. These findings suggest that monitoring of referral rates by Family Health Services Authorities will be relatively crude, and can only be improved by the full cooperation of general practitioners.

Comparing the quality of referrals of general practitioners with high and average referral rates: an independent panel review.
The quality of referrals of four general practitioners, two with high and two with average rates of referral to the department of internal medicine, was judged by an independent expert panel. The panel, consisting of two general practitioners and one specialist, reviewed a set of information about the referrals blindly and in random sequence. The same distribution of quality of referrals was found among the referrals of the two high referring general practitioners (n = 192) as among those of the general practitioners with average rates (n = 88); that is, 57% and 55% respectively, of the cases had clear medical indications for referral, while the data did not permit a conclusion in 15% and 10%, respectively, of the cases. Controlling for sex, age and status of the referral (first or repeat referral) did not alter the results. We conclude that using referral rates to judge referral quality is misleading. However, a blind and randomly performed panel review of referrals is a time consuming but feasible method of quality assessment.
The challenge of long waiting lists: how we implemented a GP referral system for non-urgent specialist’ appointments at an Australian public hospital.

Stainkey LA, Seidl IA, Johnson AJ, Tulloch GE, Pain T.
BMC Health Serv Res. 2010 Nov 4;10:303.

OUR PROBLEM: The length of wait lists to access specialist clinics in the public system is problematic for Queensland Health, general practitioners and patients. To address this issue at The Townsville Hospital, the GP Liaison Officer, GPs and hospital staff including specialists, collaborated to develop a process to review patients waiting longer than two years. GPs frequently send referrals to public hospital specialist clinics. Once received, referrals are triaged to Category A, B or C depending on clinical criteria resulting in appointment timeframes of 30, 90 or 365 days for each category, respectively. However, hospitals often fail to meet these targets, creating a long wait list. These wait listed patients are only likely to be seen if their condition deteriorates and an updated referral upgrades them to Category A. PROCESS TO ADDRESS THE PROBLEM: A letter sent to long wait patients offered two options 1) take no action if the appointment was no longer required or 2) visit their GP to update their referral on a clinic specific template if they felt the referral was still required. Local GPs were advised of the trial and provided education on the new template and minimum data required for specialist referrals.

WHAT HAPPENED: In 2008, 872 letters were sent to long wait orthopaedic patients and 101 responded. All respondents were seen at specially arranged clinics. Of these, 16 patients required procedures and the others were discharged. In 2009 the process was conducted in the specialties of orthopaedics, ENT, neurosurgery, urology, and general surgery. Via this new process 6885 patients have been contacted, 633 patients have been seen by public hospital specialists at specially arranged clinics and 197 have required a procedure. LEARNINGS: Since the start of this process in 2008, the wait time to access a specialist appointment has reduced from eight to two years. The process described here is achievable across a range of specialties, deliverable within the routine of the referral centre and identifies the small number of people on the long wait list in need of a procedure.

Opinion: GPs know better than managers when to refer.

GP: General Practitioner, 10 June 2011, vol./is. /(22-22) Author(s): Lancelot, Chris

Abstract: In this article the author discusses the need to reduce patient referrals by general practitioners (GPs). According to the author, he refers patients where secondary care alone possesses the specialised equipment, expertise or staff to deal with the situation. The author says that if the British National Health Service (NHS) managers want to reduce referrals by 15 percent, it should be the primary care organisation that takes the risk and pays compensation, and not the GPs.

Cultivation of a learning culture in general practice: an educational intervention

Citation: Education for Primary Care, 2010, vol./is. 21/5, 1473-9879
Author(s): Gray, Francesca, Spence, William, Kelly, Diane

Abstract: Increasing challenges are faced in primary care, including the increase in chronic disease and its management in the community. This paper describes an educational initiative developed to help local general practitioners (GPs) and primary care teams manage chronic conditions and address referral behaviour. The purpose of this study was to evaluate the initiative through the exploration of the experiences of the participants and providers. A variety of methods was used to collect data for the evaluation. These included feedback from participants in the form of workshop
evaluation questionnaires, semi-structured interviews of both participants and presenters and focus groups involving participants. The results were, following analysis of the data, five themes were identified across all the methods used. This paper focuses on the key themes of 'practice change' and 'referral behaviour' as they relate to the specific aims and objectives of the initiative. The data indicated that participants had identified actual changes in practice following their participation in the educational initiative, including changes in individual practice and prescribing behaviour as well as in the provision of healthcare in the community. Changes identified in referral behaviour were evident in feedback from both participants and presenters in secondary care. Participants indicated proposed changes, including an anticipated reduction in referrals for dermatology with greater management of conditions in primary care, as well as a greater awareness of indications for early referral. The use of guidelines in aiding referral decisions was identified and the content and information required from referral letters was also a key area. The evaluation of this educational initiative has identified changes in practice in primary care and demonstrates how educational interventions can support and enhance future developments in primary care. (Cites 19 references. [Journal abstract]

Factors capable of influencing an increase in GP referral rates to secondary care (England only) BMA, May 2009
Although there is little research into this area that can be drawn upon, this paper presents a series of possible factors that would be capable of influencing an increase in GP referral rates.

Association between general practice referral rates and patients' socioeconomic status and access to specialised health care. A population-based nationwide study Citation: Health Policy, 2009, vol./is. 92/2, 0168-8510
Author(s): Sorensen, Torben Hojmark, Olsen, Kim Rose, Vedsted, Peter
Abstract: The objectives of the study were to explore the association between patients' socioeconomic status and their referral from general practice to specialised health care. Multiple regression analysis was used on cross-sectional data on general practice referral rates for all Danish general practices in year 2006. Our models explained between 26% and 45% of the variation in general practice referral to specialised care. Adjusting for access to specialised care (local supply of hospitals and practicing specialists) reduced the association between socioeconomic factors and referral rates. The results suggest that persons with high socioeconomic status are referred more to practicing specialist than persons with low socioeconomic status and that the latter are referred more to hospital care than the former. The authors' results indicate that the influence of socioeconomic factors may be overstated failing to control for access to specialised care. Still, a socioeconomic gradient was observed in GPs' referral pattern to different sorts of health care after adjusting for access. The association between socioeconomic status and referral pattern can both be rooted in morbidity variation and to the ability of persons with high socioeconomic status to influence general practitioners' (GPs') decision-making. Cites 17 references. [Journal abstract]
Risk taking in general practice: GP out-of-hours referrals to hospital.
Citation: British Journal of General Practice, 2009, vol./is. 59/558(24-28), 0960-1643
Author(s): Ingram, Jenny C.
Abstract: BACKGROUND: Emergency admissions to hospital at night and weekends are distressing for patients and disruptive for hospitals. Many of these admissions result from referrals from GP out-of-hours (OOH) providers. AIM: To compare rates of referral to hospital for doctors working OOH before and after the new general medical services contract was introduced in Bristol in 2005; to explore the attitudes of GPs to referral to hospital OOH; and to develop an understanding of the factors that influence GPs when they refer patients to hospital. DESIGN OF STUDY: Cross-sectional comparison of admission rates; postal survey. SETTING: Three OOH providers in south-west England.
METHOD: Referral rates were compared for 234 GPs working OOH, and questionnaires explored their attitudes to risk. RESULTS: There was no change in referral rates after the change in contract or in the greater than fourfold variation between those with the lowest and highest referral rates found previously. Female GPs made fewer home visits and had a higher referral rate for patients seen at home. One-hundred and fifty GPs responded to the survey. Logistic regression of three combined survey risk items, sex, and place of visit showed that GPs with low 'tolerance of risk' scores were more likely to be high referrers to hospital (P<0.001). CONCLUSION: GPs' threshold of risk is important for explaining variations in referral to hospital. 4 tables 12 refs. [Abstract]

General practitioner attitudes towards referral of eating-disordered patients: a vignette study based on the theory of planned behaviour
Citation: Mental Health in Family Medicine, 2009, vol./is. 5/4, 1756-834X
Author(s): Green, Helen, Johnston, Olwyn, Cabrini, Sara, Fornai, Gemma, Kendrick, Helen
Abstract: The study examined individual differences between general practitioners (GPs) to determine their impact on variations in intention to refer a hypothetical patient with disordered eating to specialist eating disorder services. The study also examined the impact of patient weight on intention to refer. GPs within three primary care trusts (PCTs) were posed a vignette depicting a patient with disordered eating, described as either normal weight or underweight. A questionnaire was developed from the theory of planned behaviour to assess the GPs' attitudes, perception of subjective norms, perceived behavioural control, and intention to refer the patient. Demographic details were also collected. The results were responses were received from 88 GPs (33%). Intention to refer the patient was significantly related to subjective norms and cognitive attitudes. Together these predictors explained 86% of the variance in the intention to refer. GP or practice characteristics did not have a significant effect on the GPs' intention to refer, and nor did the patient's weight. The conclusion was despite National Institute for Health and Clinical Excellence current guidance, patient weight did not influence GPs' decisions to refer. Much of the variance in actual referral behaviour may be explained by cognitive attitudes and subjective norms. Interventions to reduce this variation should be focused on informing GPs about actual norms, and best practice guidelines. Cites 15 references. [Journal abstract]
The Torfaen referral evaluation project.
Citation: Quality in Primary Care, 2009, vol./is. 17/6(423-429), 1479-1072
Author(s): Evans, Elizabeth
Abstract: BACKGROUND: This paper provides an overview of the Referral Evaluation Project, which took place in South East Wales, UK during 2007-2008. AIM: To engage general practitioners (GPs) and consultants in the local hospitals of Gwent Healthcare Trust in discussions as to the validity, quality and appropriateness of GPs' referrals and to increase the quality of those referrals. To discuss with other healthcare professionals the use of community-based services, which could be used instead of referral to hospital. METHOD: A year-long scheme whereby GPs were funded for weekly protected time to discuss their referrals retrospectively by peer review, and to attend six-weekly cluster meetings where representatives from the practices met with consultants to discuss the appropriateness of those referrals and the use of alternative community-based services. Referral data were fed back to the practices by personnel from the local health board (LHB). The evaluation involved three practices in Torfaen, South East Wales; Torfaen LHB staff, consultants in Gwent Healthcare Trust, and other health professionals. The main outcomes used were indicators of referral quality as judged by the GPs, referral rates to hospital orthopaedics and emergency admissions, and evidence of increased use of community-based services. RESULTS: The quality of referrals as judged by doctors' peers improved. Referral rates in orthopaedics and emergency admissions showed a striking reduction by up to 50 per cent, variability between practices decreased, and referrals to local services increased. Alternative community-based services were explored and an understanding of the best local pathways for some common conditions was reached. CONCLUSION: This approach was felt to be a more sustainable and more intuitive method of improving the quality of referrals and reducing inappropriate demand compared to other approaches, for example, conventional referral management centres. 10 refs. [Abstract]

What should prompt an urgent referral to a community mental health team?
Citation: Mental Health in Family Medicine, 2009, vol./is. 5/4, 1756-834X
Author(s): Hilton, Catriona, Bajaj, Priya, Hagger, Matthew, Taha, Sarah, Warner, James
Abstract: There is often little guidance to advise general practitioners on whether a referral to a community mental health team should be classified as 'urgent' or not. The aims of the study were (1) To identify the proportion and appropriateness of referrals considered urgent by the referrer; (2) To develop a set of criteria to guide what should constitute an 'urgent' referral. One hundred consecutive referral letters to a community mental health team were analysed to determine the proportion that were considered urgent by the referrer compared to a consensus panel of psychiatrists. A Delphi group was then used to develop a set of criteria to guide referrers as to what should be regarded as an urgent referral. The results were 33% of referrals were deemed urgent by the referrer, compared to 17% by the psychiatric consensus panel, with little agreement between the two (kappa = 0.021, P = 0.013). Referrals that were made using a single assessment process (SAP) form were significantly more likely to be inappropriately marked as being urgent (P < 0.001). A set of 12 criteria was developed using the Delphi technique. The conclusions were there was significant disagreement between the referrers and the assessing team as to which referrals required urgent attention. The findings justified the creation of guidelines, and this paper outlines a set of 12 criteria to guide what should prompt an urgent referral. Cites nine references.
Why GPs refer patients to complementary medicine via the NHS: a qualitative exploration.

Citation: Primary Health Care Research and Development, 2008, vol./is. 9/3(205-215), Author(s): Brien, Sarah

Abstract: BACKGROUND: The use of complementary and alternative medicine [CAM] is increasing. Access to CAM through primary care referral is common with some of these referrals occurring through existing NHS contracts. Yet currently little is understood about general practitioners [GPs] referrals to CAM via an NHS contract. AIM: This exploratory qualitative study was designed to explore UK GPs experiences of referring patients to CAM under an NHS contract. METHOD: Semi-structured interviews were conducted with ten GPs in the UK, purposively sampled, who referred patients under an NHS contract to a private CAM clinic, staffed by medically qualified CAM practitioners. Qualitative methodology making use of the framework approach was used to undertake the interviews and analysis. FINDINGS: The decision of GPs to refer a patient to CAM through an NHS contract is complex and based on negotiation between patient and GP but is ultimately determined by the patients' openness and motivation towards CAM. Most GPs would consider referral when there are no other therapeutic options for their patients. Various factors, including clinical evidence, increase the likelihood of referral but two overarching influences are crucial: (a) the individual GPs positive attitude to, and experience of CAM, including a trusting relationship with the CAM practitioner; and (b) the patient's attitude towards CAM. In-depth knowledge of CAM was not a vital factor for most GPs in the decision to refer. CONCLUSION: A CAM referral only took place if the patient readily agreed with this therapeutic approach, and in this respect it may differ from referrals by GPs to conventional medicinal practitioners. Such an approach, then, relies on patients having a positive view of CAM and as such could result in inequity in treatment access. Increasing knowledge about and evidence for CAM will assist GPs in making appropriate referrals in a timely manner. We propose a preliminary model that explains our findings about referrals considering patients need as well as the medical process. As data saturation may not have been achieved, further investigation is warranted to confirm or refute these suggestions. 3 figs. 1 table 36 refs. + 1 appendix

Data briefing: what is causing GP referrals to rise?

Citation: Health Service Journal, 2008, vol./is. 118/6134(19), 0952-2271

Author(s): Edwards, Nigel

Abstract: The Policy Director at the NHS Confederation considers why there has been a growth in general practitioner referrals to hospital in quarter one 2008-2009. He also briefly outlines the referral management system used by Kingston PCT who had the lowest referral rate in London. 3 tables [KJ]

The rise in GP referrals

Citation: Pulse, 2008, vol./is. 68/33, 0048-6000

Author(s): Anekwe, Lilian

Abstract: The article looks into the recent increase of GP referrals to local Primary Care Trusts. The author looks into the possible causes behind this worrying rise in referrals.
A qualitative study exploring variations in GPs' out-of-hours referrals to hospital

Citation: British Journal of General Practice, 2007, vol./is. 57/542, 0960-1643

Author(s): Calnan, Michael, Payne, Sarah, Kemple, Terry, Rossdale, Michael, Ingram, Terry

Abstract: There is evidence of significant variations in hospital referral rates for GPs working in out-of-hours care. The aims of the study were to explain why there are marked variations in hospital referral rates for GPs working in out-of-hours care. The design of study was in depth face-to-face interviews with a purposive sample of GPs with different out-of-hours referral rates. The setting was Bristol, UK. GPs were selected according to their rate of out-of-hours hospital referral. They were classified as high, medium, or low referrers. Five interviews were carried out with GPs from each of the three categories. High referring GPs are typically cautious and believe it is better to admit if in doubt. They express anxiety about the consequences of a decision not to admit, both for the patient and for themselves. They hold negative attitudes towards alternatives to hospital admission. Low referrers were more confident about their decisions and less often worried afterwards. Low referrers were positive about alternatives to hospital admission and described themselves as able to resist pressures from family or carers to have someone admitted. Low referrers also see hospitals as places to be avoided and viewed their goal as preventing an admission. Educational programmes need to be developed to improve GPs' judgements of their competencies and to build appropriate levels of confidence. Cites 10 references. [Journal abstract]

Generic outpatients referrals: why don't GPs make them?

Citation: Journal of Public Health, 2006, vol./is. 28/3, 1741-3842

Author(s): Taggarshe, Deepa, Haldipur, Nandan, Singh, Sewa

Abstract: Generic general practitioners' (GPs') referrals to secondary care would facilitate equitable distribution of workload and allow planning to meet access time targets. This study assessed GP's referral patterns across a metropolitan health authority, which has actively encouraged generic referral. A focus group of GPs was used to determine the factors influencing their referral patterns to secondary care for a surgical opinion. A questionnaire was devised based on the factors that emerged from the focus group. All GPs attending continuing-medical-education sessions across Doncaster Health authority were asked to complete this questionnaire. Of the 79 GPs surveyed, 78 completed the questionnaire. Of them, 22% stated that they make generic referrals rather than to an individual surgeon. Almost four of five GPs made referrals specifically to a named surgeon. A total of 43% of the GPs who referred to a named surgeon ranked perceived clinical skills/competence as the most important factor. The other factors that influenced their decision in order of importance were waiting times (19%), personal rapport with consultant (12.6%) and feedback from patients (12.6%). Despite encouragement by secondary care and the local health authority, 78% of GPs in the Doncaster area do not make generic referrals. This has to be taken into account in planning service delivery. Cites six references. [Journal abstract]
Factors influencing general practitioner referral of patients developing end-stage renal failure: a standardised case-analysis study.

Citation: BMC Health Services Research, 2006, vol./is. 6/114;
Author(s): Montgomery, Anthony J.
Abstract: BACKGROUND: To understand why treatment referral rates for ESRF are lower in Ireland than in other European countries, an investigation of factors influencing general practitioner referral of patients developing ESRF was conducted. METHOD: Randomly selected general practitioners (N = 51) were interviewed using 32 standardised written patient scenarios to elicit referral strategies. MAIN OUTCOME MEASURES: General practitioner referral levels and thresholds for patients developing end-stage renal disease; referral routes (nephrologist vs other physicians); influence of patient age, marital status and comorbidity on referral. RESULTS: Referral levels varied widely with the full range of cases (0-32; median = 15) referred by different doctors after consideration of first laboratory results. Less than half (44 per cent) of cases were referred to a nephrologist. Patient age (40 vs 70 years), marital status, co-morbidity (none vs rheumatoid arthritis) and general practitioner prior specialist renal training (yes or no) did not influence referral rates. Many patients were not referred to a specialist at creatinine levels of 129 aemol/l (47 per cent not referred) or 250 aemol/l (45 per cent). While all patients were referred at higher levels (350 and 480 aemol/l), referral to a nephrologist decreased in likelihood as scenarios became more complex; 28 per cent at 129 aemol/l creatinine; 28 per cent at 250 aemol/l; 18 per cent at 350 aemol/l and 14 per cent at 480 aemol/l. Referral levels and routes were not influenced by general practitioner age, sex or practice location. Most general practitioners had little current contact with chronic renal patients (mean number in practice = 0.7, s.d. = 1.3). CONCLUSION: The very divergent management patterns identified highlight the need for guidance to general practitioners on appropriate management of this serious condition. 2 figs. 1 table 25 refs. [Abstract]

A qualitative study to investigate why patients accept or decline a copy of their referral letter from their GP.

Citation: British Journal of General Practice, 2005, vol./is. 55/517 (626-629), 0960-1643
Author(s): Morrow, Gerry
Abstract: BACKGROUND: Our practice in Northumberland has offered patients copies of their clinical referral letters for almost three years. However, many patients declined this offer and this qualitative study was conducted to determine why almost 80 per cent of patients offered a copy of their referral letter opted not to receive one. AIM: To discover why some patients accepted and others declined a copy of the letter written from GP to specialist. DESIGN OF STUDY: A qualitative focus-group study. SETTING: General practice in Northumberland. METHOD: Three focus groups of referred patients were created, and discussions were taped, transcribed and analysed for major themes. RESULTS: The patients chose to accept or decline a copy of their referral letter for diverse reasons. However, most felt that the ability to choose for themselves whether to have a copy or not was essential. CONCLUSIONS: The concept of trust in their GP was a major theme that patients related was often behind their decision to decline a copy of their letter. These results, if transferable, may have implications for the application of this policy. 8 refs. [Abstract]
http://ukpmc.ac.uk/ukpmc/ncbi/articles/PMC1463244/pdf/bjpg55-626.pdf
General practitioner-specialist referral process.
This is the second of two articles that explore the general practitioner (GP)-specialist relationship. In this article, we explore the nature of the referral process, beginning with referrals frequently made by GPs in Australia and reasons for referral to specialists. In Australia, GPs commonly refer patients to specialists, particularly orthopaedic surgeons, ophthalmologists, surgeons and gynaecologists for a variety of reasons, including diagnosis or investigation, treatment and reassurance (reassurance for themselves as well as reassurance for the patient). GPs will choose a specialist after considering a variety of factors, such as the specialist's medical skill, their previous experience with the specialist, the quality of communication between them, office location and patient preferences. The referral is generally made by telephone or by letter, the latter of which is known to vary significantly in content and quality. The specialist, GP and patient expectations of the referral and the consultation process are also described. Specialists expect the GP to provide information about the problem to be addressed and adequate patient history, GPs expect a clear response regarding diagnosis and management as well as justification for the course of action, and patients expect clear communication and explanation of the diagnosis, treatment and follow-up requirements. When these expectations remain unmet, GPs, specialists and patients end up dissatisfied with the referral process.

GPs’ payment contracts and their referral practice.
Citation: Journal of Health Economics, 2003, vol./is. 22/4(617-635), 0167-6296
Author(s): Garcia Marinoso, Begonia, Jelovac, Izabela
Abstract: This paper compares the role of general practitioners in determining access to specialists in two types of health care systems: gate-keeping systems, where a general practitioner (GP) referral is compulsory to visit a specialist, and non-gate-keeping systems, where this referral is optional. We model the dependence between the GP’s diagnosis effort and her referral behaviour, and identify the optimal contracts that induce the best behaviour from a public insurer's point of view, where there is asymmetry of information between the insurer and the GP regarding diagnosis effort and referral decisions. We show that gate keeping is superior wherever GP's incentives matter.

A systematic review of the effect of primary care-based service innovations on quality and patterns of referral to specialist secondary care.
Br J Gen Pract. 2003 Nov;53(496):878-84.
BACKGROUND: Innovations are proliferating at the primary-secondary care interface, affecting referral to secondary care and resource use. Evidence about the range of effects and implications for the healthcare system of different types of innovation have not previously been summarised.
AIM: To review the available evidence on initiatives affecting primary care referral to specialist secondary care.
SETTING: Studies of primary-secondary care interface.
METHOD: Systematic review of trials, using adapted Cochrane Collaboration (effective practice and organisation of care) criteria. Studies from 1980 to 2001 were identified from a wide range of sources. Strict inclusion criteria were applied, and relevant clinical, service and cost data extracted using an agreed protocol. The main outcome measures were referral rates to specialist secondary care.
RESULTS: Of the 139 studies initially identified, 34 met the review criteria. An updated search added a further 10 studies. Two studies provided economic analysis only.
Referral was not the primary outcome of interest in the majority of included studies. Professional interventions generally had an impact on referral rates consistent with the intended change in clinician behaviour. Similarly, specialist ‘outreach’ or other primary care-based specialist provider schemes had at least a small effect upon referral rates to secondary care with the direction of effect being that intended or rational from a clinical and sociological perspective. Of the financial interventions, one was aimed primarily at changing the numbers or proportion of referrals from primary to specialist secondary care, and the direction of change was as expected in all cases. The quality of the reporting of the economic components of the 14 studies giving economic data was poor in many cases. When grouped by intervention type, no overall pattern of change in referral costs or total costs emerged.

CONCLUSION: The studies identified were extremely diverse in methodology, clinical subject, organisational form, and quality of evidence. The number of good quality evaluations of innovative schemes to enhance the existing capacity of primary care was small, but increasing. Well-evaluated service initiatives in this area should be supported. Organisational innovations in the structure of service provision need not increase total costs to the National Health Service (NHS), even though costs associated with referral may increase. This review provides limited, partial, and conditional support for current primary care-oriented NHS policy developments in the United Kingdom.

Hull SA, Jones C, Tissier JM, Eldridge S, Maclaren D.

BACKGROUND: Community mental health teams (CMHTs) are the established model for supporting patients with serious mental illness in the community. However, up to 25% of those with psychotic disorders are managed solely by primary care teams. Effective management depends upon locally negotiated referral and shared care arrangements between CMHTs and primary care.

AIM: To examine whether the style of working relationship between general practices and CMHTs affects the numbers and types of referrals from general practices to CMHTs, taking into account population and practice factors and provision of other mental health services which may influence referral rates.

DESIGN OF STUDY: Cross-sectional study.

SETTING: All 161 general practices in East London and the City Health Authority.

METHOD: Questionnaire survey to all general practices to identify style of relationship. Collection of routinely available referral data to all statutory mental health services over a two-year period. Main outcome measures were number and types of referrals from general practices to CMHTs.

RESULTS: The average annual referral rate to the eleven CMHTs in east London is 10 per 1000 adult population annually. The teams show a sixfold variation in rates of referral from all sources. Where good working relationships (a consultation-liaison style) exist between CMHTs and general practice, there are greater numbers of referrals requiring both long and short-term work by CMHTs. Two-stage multivariate models explained 47% of the referral variation between practices. Where primary care-based psychologists work with practices there are greater numbers of CMHT referrals, but less use of psychiatric services.

CONCLUSION: Shifting to a consultation-liaison relationship should increase rates of referral of patients with serious mental illness, including those who can most benefit from the skills of CMHTs. Increasing the provision of primary care-based psychology might improve practice use of mental health services, reducing avoidable outpatient psychiatric referrals.
The process of outpatient referral and care: the experiences and views of patients, their general practitioners and specialists
Citation: British Journal of General Practice, 2000, vol./is. 50/451, 0960-1643
Author(s): Bowling, Ann, Redfern, Judith
Abstract: The primary care system in the United Kingdom, involving the general practitioner (GP) as gatekeeper to further services, has helped to keep health care costs down. Despite this, unexplained variation in referral rates and increasing health care costs have led to the search for methods of improving efficiency. There is relatively little recent descriptive data on the processes of care at the primary-secondary care interface. The study reported here provides information about this. The aim was to analyse the patterns and process of care for the referral of outpatients, together with the views of patients, their GPs, and specialists. The method was a questionnaire survey of outpatients, their hospital specialists, and GPs in randomly sampled district health authorities in the North Thames Region. The measures included items and scales measuring satisfaction and processes. A large amount of work is carried out in general practice prior to the hospital referral of patients, and GPs have direct access to some technologies and services that can act to reduce the burden on hospitals. The discrepancy between GPs' and specialists' perceptions about the potential for further investigative work prior to patient referral merits further investigation. Cites 22 references. [Journal abstract - background, aim, method and conclusion only]

Obtaining the views of general practitioners on the services to which they refer patients - a locality approach
Citation: British Journal of General Practice, 1997, vol./is. 47/422, 0960-1643
Author(s): Horobin, Jean M, Hester, Simon B, Macdonald, Sheena, Baijal, Eric
Abstract: A survey, with a locality emphasis, of the opinions of Fife general practitioners (GPs) on the quality and availability of a selection of services to which the GPs refer their patients was undertaken. Far more GPs rated services as 'poor' for availability than for quality. GPs acting as locality advisers were actively involved in the planning and execution of the survey as well as the dissemination of the results. The overall response rate was disappointing considering this approach. Cites 11 references. [Journal http://ukpmc.ac.uk/ukpmc/ncbi/articles/PMC1313107/pdf/9406492.pdf

Survey of general practitioners' views of consultants' non urgent referral of outpatients to other consultants
British Medical Journal, 1996(821-822), Author(s): Bridger, S., Cairns, S. R.
Abstract: The results of a questionnaire sent to 165 general practitioners in the Brighton area. Cites five references.
http://ukpmc.ac.uk/ukpmc/ncbi/articles/PMC2350728/pdf/bmj00535-0037.pdf

A study of the referral decision in general practice.
Family Practice, 1994, vol./is. 10/2(104-110) Author(s): Evans, Alison
Abstract: The applicability of published models of the referral decision in general practice was investigated by asking general practitioners to record data on consultations during which referral to a consultant's outpatient clinic was considered, whether this resulted in referral or not. The GPs were then interviewed about their decisions with particular reference to patient factors, clinical factors, their perception of the risk involved, consultant factors and time factors. The doctors varied in the weight that they gave to the patient's wishes, and also in their selection and interpretation of diagnostic data. Risk
to the patient was rarely a major consideration; neither was risk to the doctor's self-esteem. There was virtually no evidence of conflict arising during the decision making process, and doctors on the whole, did not feel pressed for time. This was, however, a self-selected sample of highly motivated general practitioners. It is suggested that the assumptions on which the conflict model of decision making is based do not apply to the majority of referral decisions in general practice. 2 figs. 3 tables 10 refs. [Abstract]

**Quality of general practitioner referrals to outpatient departments: assessment by specialists and a general practitioner.**


Thirty eight specialists in one district health authority were asked to take part in a questionnaire survey to assess the appropriateness of referral and the quality of the referral letter for 20 consecutive new patients each. A total of 705 new patient referrals to 13 specialties were included in the study. Twelve of the 38 specialists were randomly selected and their 234 new patient referral letters were independently assessed by a general practitioner for the appropriateness of the referral decision. The study revealed errors and omissions in between 5% and 28% of referral letters according to the category of information. Thirteen per cent of the new patient referrals were assessed by specialists to be inappropriate and 4% of patients had been referred to an inappropriate specialty. Significantly more of the referrals to medical specialties were inappropriate (20%) than to surgical specialties (9%) (P < 0.01). There were more than three times the number of errors and omissions in the referral letters of referrals assessed as inappropriate than in the referral letters of referrals assessed as appropriate (P < 0.01). The referral letters of referrals assessed as inappropriate were more than nine times as likely to omit the reasons for or objectives of the referral compared with letters for those referrals assessed as appropriate (P < 0.01). There was a good overall agreement between the specialists and general practitioner in their assessment of the appropriateness of the clinical referrals (kappa = 0.614, P < 0.001).

**Effect of NHS reforms on general practitioners' referral patterns.**


OBJECTIVE: To compare outpatient referral patterns in fundholding and non-fundholding practices before and after the implementation of the NHS reforms in April 1991. DESIGN: Prospective collection of data on general practitioners' referrals to specialist outpatient clinics between June 1990 and March 1992 and detailed comparison of two time periods: October 1990 to March 1991 (phase 1) and October 1991 to March 1992 (phase 2). SETTING: 10 fundholding practices and six non-fundholding practices in the Oxford region. SUBJECTS: Patients referred to consultant outpatient clinics. RESULTS: After implementation of the NHS reforms there was no change in the proportion of referrals from the two groups of practices which crossed district boundaries. Both groups of practices increased their referral rates in phase 2 of the study, the fundholders from 107.3 per 1000 patients per annum (95% confidence interval 106 to 109) to 111.4 (110 to 113) and the non-fundholders from 95.0 (93 to 97) to 112.0 (110 to 114). In phase 2 there was no difference in overall standardised referral rates between fundholders and non-fundholders. Just over 20% of referrals went to private clinics in phase 1. By phase 2 this proportion had reduced by 2.2% (1.0% to 3.4%) among the fundholders and by 2.7% (1.2% to 4.2%) among the non-fundholders. CONCLUSIONS: Referral patterns among fundholders and non-fundholders were strikingly similar after the implementation of the NHS reforms. There was no evidence that fundholding was encouraging a shift from specialist to general practice care or that budgetary pressures were affecting general practitioners' referral behaviour.
Factors influencing general practitioners' decisions to refer: a preliminary step towards explaining variations in GP referrals

HEALEY, Andrew, RYAN, Mandy

Abstract: This paper attempts to identify factors influencing general practitioners' (GPs) referral decisions, with in mind the question: if economists and others are to mount research into variations in referrals, what direction should it take? It argues that consideration must be given to the behaviour and attitudes of clinicians, with specific reference to the agency relationship in health care and the doctor's utility function. An attempt was made to investigate certain aspects of this. A model was tested on a random sample of Grampian GPs and the results are reported. The intention is not to explain why variations exist but to look at the factors influencing the decision. The results suggested substantial variation in doctors' attitudes towards influencing factors; it is recognised that the study has limitations, but the results do indicate the need for a more detailed micro-analysis of GP behaviour. Areas for future research are suggested.

An examination of practice referral rates in relation to practice structure, patient demography and case mix.


This paper examines the variation in practice referral rates from 53 practices over a twelve-month period. Data from the Second National Morbidity Study were used in relation to practice structure; age, sex and Social Class composition of the patient population; and the case mix by practice. The results show that the age of the patient is an important determinant of the probability of referral, whereas Social Class has little influence. Analysis of the practice-based data showed that practices were highly concordant in their referral activity across sex and age (greater or less than 45 years), sex and Social Class (manual or non-manual), and across chapters of the disease classification. This degree of concordance points to characteristics of the practices rather than patients, and their problems as the main source of variation in practice referral behaviour.

General practitioner outpatient referrals: do good doctors refer more patients to hospital?

Citation: British Medical Journal, 1991, vol./is. 302/6787(1250-1252), 0959-8154 (1991
Author(s): REYNOLDS, G A, CHITNIS, J G, ROLAND, M O

Abstract: The objective of this study was to investigate the relation between general practitioners' referral rates to individual specialties and the individual areas of expertise of the referring doctors. It was carried out in a general practice in suburban Birmingham consisting of five partners and a trainee. In 395 referrals there were large differences in referral patterns among partners for otorhinolaryngology, ophthalmology, general surgery and dermatology. The doctors with particular expertise in otorhinolaryngology and ophthalmology had high referral rates to those specialties, and these differences persisted after allowing for case mix. The authors conclude that a high referral rate does not necessarily imply a high level of inappropriate referral. Cites eight references.

General practitioners' views on quality specifications for "outpatient referrals and care contracts".

Citation: BMJ, 1991, vol./is. 303/6797(292-294), 0959-8138
Author(s): Bowling, Ann

Abstract: The authors ascertained general practitioners' views about which quality specifications should be included in contracts for hospital care. They conclude that a high premium was attached by GPs to effective organisation, effective communication
between primary and secondary sources of care, and effective communication with patients. 1 table 5 refs. [Abstract abbreviated]

Comparing the quality of referrals of general practitioners with high and average referral rates: an independent panel review.
Br J Gen Pract. 1990 May;40(334):178-81. Knottnerus JA, Joosten J, Daams J. The quality of referrals of four general practitioners, two with high and two with average rates of referral to the department of internal medicine, was judged by an independent expert panel. The panel, consisting of two general practitioners and one specialist, reviewed a set of information about the referrals blindly and in random sequence. The same distribution of quality of referrals was found among the referrals of the two high referring general practitioners (n = 192) as among those of the general practitioners with average rates (n = 88); that is, 57% and 55% respectively, of the cases had clear medical indications for referral, while the data did not permit a conclusion in 15% and 10%, respectively, of the cases. Controlling for sex, age and status of the referral (first or repeat referral) did not alter the results. We conclude that using referral rates to judge referral quality is misleading. However, a blind and randomly performed panel review of referrals is a time consuming but feasible method of quality assessment.

Referrals from general practice to hospital outpatient departments: a strategy for improvement. BMJ, September 1989, vol./is. 299/6701(722-4), Author(s): Emmanuel J, Abstract: OBJECTIVE: To determine the appropriateness of referrals from general practice to hospital outpatient departments.DESIGN: Prospective audit of referrals from a group practice over one year.SETTING: Six handed practice in a southern coastal town.SUBJECTS: All patients referred during the study period for whom a copy of the referral letter was available.MAIN OUTCOME MEASURES: The investigations carried out by the consultant that led to the diagnosis; the diagnosis reached; and the management.RESULTS: Of roughly 3000 patients referred during the year, 277 with various skin and soft tissue disorders could probably have been managed solely by the general practitioner. Referrals for cryotherapy (96 in this series) and diabetes (19) could probably also have been avoided by specialist training of the general practitioner. In addition, in cases of haematuria and prostatic hypertrophy (34 and 22 referrals) substantial time could have been saved for both the patient and the consultant had the general practitioner supplied the results of relevant investigations. Probably the most important outcome was the model that the study offered for other general practitioners to improve the appropriateness of referrals.CONCLUSION: This approach to determining the appropriateness of referrals benefits the general practitioners, the consultant, and the patient.

General practitioners' referral thresholds and choices of referral destination: an experimental study. Health Econ. 1998 Dec;7(8):711-22. Earwicker SC, Whynes DK. General practitioners (GPs) exert a major impact on NHS resource use, both as providers of primary care and as referrers to secondary care. Referral rates are subject to wide variations, leading to the conjecture that certain GPs may have different 'referral thresholds' from those of others. In this paper, the authors describe an experiment designed both to test the referral threshold hypothesis and to illuminate the GP's decision process with respect to choice over referral destination. Nottinghamshire GPs were provided with hypothetical case histories and a list of possible referral destinations, specifying a range of consultants,
their specialist interests, plus the expected waiting times and costs for both out-patient investigation and in-patient treatment. For each case, respondents were requested to indicate whether or not they would refer the patient, and to whom. Respondents were also asked to indicate the extent to which their choices of consultants generally were governed by the specialist interest, the waiting time and the cost information. The responses of the sample support the referral threshold conjecture, with specialist interests and waiting time appearing to be far more important than cost in influencing choice of referral destination. The possibilities of influencing GPs' referral behaviour are discussed, in the light of recent initiatives with respect to prescribing.

Referral to hospital: perceptions of patients, general practitioners and consultants about necessity and suitability of referral Family Practice, 1987, vol./is. 4/3(170-175)
Abstract: A sample of new referrals from general practitioners to hospital specialists was examined from the points of view of the patient, general practitioner and consultant concerned with regard to the adequacy of the general practitioners' performance before referral, his ability to have managed without referral and the suitability of the specialist seen. Little agreement was found between the opinions expressed by the three groups, although some of the opinions expressed within the groups were found to be associated with characteristics of the groups. [Journal abstract]
Variation & Appropriateness

NICE launches database to cut inappropriate GP referrals
The NICE 'referral advice' recommendations database covers referral advice for patients with the range of conditions NICE has published guidance on such as suspected cancer, lower back pain and psoriasis.

This database highlights recommendations from NICE guidance which clearly identify where patients might benefit from secondary care or specialist services and, by implication, those where patients would not benefit from these services.

As well as saving money, following the recommendations will also help to improve clinical outcomes and patient experience, as well as reduce local and regional inequalities in the care offered to patients.

Professor Peter Littlejohns, NICE Clinical and Public Health Director, said: “Inappropriate referral to secondary care places a large financial burden on the NHS.

“Implementing NICE guidance can provide a way for GPs and commissioners to ensure that patients receive treatment that is proven to be both clinically and cost effective, including when it is appropriate to refer a patient to hospital. Following NICE guidance frees up resources and capacity that can then be channelled into other services.”

“The decision to refer a patient to secondary care or specialist services is extremely important and is based on a variety of factors,” said Professor Littlejohns.

“The NICE ‘referral advice’ recommendations database is a valuable resource for those providing and commissioning care on when patients should be referred on from primary care,” he added.

The database is one of a number of initiatives from NICE focussing on helping the NHS as it faces up to arguably its greatest challenge yet - to deliver the QIPP (Quality, Improvement, Productivity and Prevention) agenda, whilst facing a squeeze on finances. http://www.nice.org.uk/usingguidance/referraladvice/search.jsp

Effectiveness and cost effectiveness of targeted interventions to reduce unnecessary referrals and improve the quality of referrals from primary care to secondary care: A rapid review of the literature

www.eac.cptf.nhs.uk/Download/Public/18582/1/ReferralManagementSchemes%20Review.pdf
Does a general practitioner support unit reduce admissions following medical referrals from general practitioners?
BACKGROUND: Emergency medical admissions to UK hospitals have been increasing steadily over the past few decades and there are likely to be a proportion of these admissions that are avoidable. This evaluation aims to demonstrate whether a general practitioner support unit (GPSU) reduces general practitioner (GP) referred emergency medical admissions to an acute hospital.
METHODS: The GPSU comprises a team of GPs based in the hospital with the purpose of providing alternatives to admission for medical referrals from community GPs. This is an observational study of patients referred and admitted to the Medical Admissions Unit (MAU) of an acute hospital over two six-month periods, in 2007 prior to and in 2008 after the introduction of the GPSU.
RESULTS: The number of GP referrals to the MAU per day decreased by 1.55 (confidence interval -2.45 to -0.51) patients with the GPSU in place. The number admitted to the hospital per day from MAU decreased by a mean of 0.48 patients but with confidence intervals that included the null hypothesis (-1.39 to 0.44). In comparison, non-GP admissions that were not targeted by the GPSU increased by 3.99 per day (2.64 to 5.33).
CONCLUSION: An acute GP led service run from within the hospital to provide support to community GPs led to a modest reduction in the number of GP admissions to the MAU, but did not reduce the number of GP admissions to the hospital wards.

Who goes where? A prospective study of referral patterns within a newly established primary care team.
Coyle E, Hanley K, Sheerin J.
BACKGROUND: Since the introduction of primary care teams, referral patterns of General Practitioners (GPs) in Ireland have not been studied.
AIMS: To study the referral patterns of GPs within a primary care team (PCT) to allied health care professionals in a PCT and to secondary care. To identify indirect referral pathways. To study variation in individual GP referral patterns.
METHOD: Questionnaire based survey. Statistical analysis was carried out using Epi Info version 3.5.1.
RESULTS: Of 3,166 consultations, 2,841 (89.7%) were dealt with by the GP and required no referral, 107 (3.4%) were referred within the PCT, and 218 (6.9%) were referred elsewhere. Therefore, 93.1% of consultations were managed in primary care alone. Ninety percent of GPs refer patients to the PCT. Indirect referrals constituted 17% of all outpatient referrals. Females have significantly higher referral rates than males. Referral rates of GPs in single-handed practices are higher than GPs in group practices.
CONCLUSIONS: GPs alone can manage the vast majority of presentations in general practice. Greater GP access to diagnostic and therapeutic interventions may reduce outpatient referrals. GPs in group practices may collectively have greater experience and expertise and therefore can manage more patients in primary care. There is a significant variation in referral rates between both genders.
Reducing variation in general practitioner referral rates through clinical engagement and peer review of referrals: a service improvement project.


BACKGROUND: General practitioner (GP) referral rates to hospital services vary widely, without clearly identified explanatory factors, introducing important quality and patient safety issues. Referrals are rising everywhere year on year; some of these may be more appropriately redirected to lower technology services. AIM: To use peer review with consultant engagement to influence GPs to improve the quality and effectiveness of their referrals.

DESIGN: Service development project.

SETTING: Ten out of 13 GP practices in Torfaen, Gwent; consultants from seven specialties in Gwent Healthcare NHS Trust; project designed and managed within Torfaen Local Health Board between 2008 and 2009.

METHODS: GPs discussed the appropriateness of referrals in selected specialties, including referral information and compatibility with local guidelines, usually on a weekly basis and were provided with regular feedback of 'benchmarked' referral rates. Six-weekly 'cluster groups', involving GPs, hospital specialists and community health practitioners discussed referral pathways and appropriate management in community based services.

RESULTS: Overall there was a reduction in variation in individual GP referral rates (from 2.6-7.7 to 3.0-6.5 per 1000 patients per quarter) and a related reduction in overall referral rate (from 5.5 to 4.3 per 1000 patients per quarter). Both reductions appeared sustainable whilst the intervention continued, and referral rates rose in keeping with local trends once the intervention finished.

CONCLUSION: This intervention appeared acceptable to GPs because of its emphasis on reviewing appropriateness and quality of referrals and was effective and sustainable while the investment in resources continued. Consultant involvement in discussions appeared important. The intervention's cost-effectiveness requires evaluation for consideration of future referral management strategies.

Akbari A, Mayhew A, Al-Alawi MA, Grimshaw J, Winkens R, Glidewell E, Pritchard C,

BACKGROUND: The primary care specialist interface is a key organisational feature of many health care systems. Patients are referred to specialist care when investigation or therapeutic options are exhausted in primary care and more specialised care is needed. Referral has considerable implications for patients, the health care system and health care costs. There is considerable evidence that the referral processes can be improved.

OBJECTIVES: To estimate the effectiveness and efficiency of interventions to change outpatient referral rates or improve outpatient referral appropriateness.

SELECTION CRITERIA: Randomised controlled trials, controlled clinical trials, controlled before and after studies and interrupted time series of interventions to change or improve outpatient referrals. Participants were primary care physicians. The outcomes were objectively measured provider performance or health outcomes.

DATA COLLECTION AND ANALYSIS: A minimum of two reviewers independently extracted data and assessed study quality.

MAIN RESULTS: Seventeen studies involving 23 separate comparisons were included. Nine studies (14 comparisons) evaluated professional educational interventions. Ineffective strategies included: passive dissemination of local referral guidelines (two studies), feedback of referral rates (one study) and discussion with an independent medical adviser (one study). Generally effective strategies included dissemination of guidelines with structured referral sheets (four out of five studies) and involvement of consultants in educational activities (two out of three studies). Four studies evaluated organisational interventions (patient management by family physicians compared to general internists, attachment of a physiotherapist to general practices, a new slot system for referrals and requiring a second 'in-house' opinion prior to referral), all of which were effective. Four studies (five comparisons) evaluated financial interventions. One study evaluating change from a capitation based to mixed capitation and fee-for-service system and from a fee-for-service to a capitation based system (with an element of risk sharing for secondary care services) observed a reduction in referral rates. Modest reductions in referral rates of uncertain significance were observed following the introduction of the general practice fundholding scheme in the United Kingdom (UK).

AUTHORS’ CONCLUSIONS: There are a limited number of rigorous evaluations to base policy on. Active local educational interventions involving secondary care specialists and structured referral sheets are the only interventions shown to impact on referral rates based on current evidence. The effects of 'in-house' second opinion and other intermediate primary care based alternatives to outpatient referral appear promising.
A systematic review of the effect of primary care-based service innovations on quality and patterns of referral to specialist secondary care.
Br J Gen Pract. 2003 Nov;53(496):878-84.

BACKGROUND: Innovations are proliferating at the primary-secondary care interface, affecting referral to secondary care and resource use. Evidence about the range of effects and implications for the healthcare system of different types of innovation have not previously been summarised.

AIM: To review the available evidence on initiatives affecting primary care referral to specialist secondary care.

SETTING: Studies of primary-secondary care interface.

METHOD: Systematic review of trials, using adapted Cochrane Collaboration (effective practice and organisation of care) criteria. Studies from 1980 to 2001 were identified from a wide range of sources. Strict inclusion criteria were applied, and relevant clinical, service and cost data extracted using an agreed protocol. The main outcome measures were referral rates to specialist secondary care.

RESULTS: Of the 139 studies initially identified, 34 met the review criteria. An updated search added a further 10 studies. Two studies provided economic analysis only. Referral was not the primary outcome of interest in the majority of included studies. Professional interventions generally had an impact on referral rates consistent with the intended change in clinician behaviour. Similarly, specialist ‘outreach’ or other primary care-based specialist provider schemes had at least a small effect upon referral rates to secondary care with the direction of effect being that intended or rational from a clinical and sociological perspective. Of the financial interventions, one was aimed primarily at changing the numbers or proportion of referrals from primary to specialist secondary care, and the direction of change was as expected in all cases. The quality of the reporting of the economic components of the 14 studies giving economic data was poor in many cases. When grouped by intervention type, no overall pattern of change in referral costs or total costs emerged.

CONCLUSION: The studies identified were extremely diverse in methodology, clinical subject, organisational form, and quality of evidence. The number of good quality evaluations of innovative schemes to enhance the existing capacity of primary care was small, but increasing. Well-evaluated service initiatives in this area should be supported. Organisational innovations in the structure of service provision need not increase total costs to the National Health Service (NHS), even though costs associated with referral may increase. This review provides limited, partial, and conditional support for current primary care-oriented NHS policy developments in the United Kingdom.

This paper has been critically appraised by the NHS Centre for Reviews and Dissemination.

This review assessed the effects of primary care-based interventions on referral to specialists. The authors concluded that there were few studies of good quality, although there was some support for organisational and in-house specialists, and that further good-quality research is required. The authors’ conclusions regarding the need for such research are likely to be reliable.

www.crd.york.ac.uk/CMS2Web/ShowRecord.asp?LinkFrom=OAI&ID=12004008028
The challenge of long waiting lists: how we implemented a GP referral system for non-urgent specialist’ appointments at an Australian public hospital.
Stainkey LA, Seidl IA, Johnson AJ, Tulloch GE, Pain T.
BMC Health Serv Res. 2010 Nov 4;10:303.

OUR PROBLEM: The length of wait lists to access specialist clinics in the public system is problematic for Queensland Health, general practitioners and patients. To address this issue at The Townsville Hospital, the GP Liaison Officer, GPs and hospital staff including specialists, collaborated to develop a process to review patients waiting longer than two years. GPs frequently send referrals to public hospital specialist clinics. Once received, referrals are triaged to Category A, B or C depending on clinical criteria resulting in appointment timeframes of 30, 90 or 365 days for each category, respectively. However, hospitals often fail to meet these targets, creating a long wait list. These wait listed patients are only likely to be seen if their condition deteriorates and an updated referral upgrades them to Category A. PROCESS TO ADDRESS THE PROBLEM: A letter sent to long wait patients offered two options 1) take no action if the appointment was no longer required or 2) visit their GP to update their referral on a clinic specific template if they felt the referral was still required. Local GPs were advised of the trial and provided education on the new template and minimum data required for specialist referrals.

WHAT HAPPENED: In 2008, 872 letters were sent to long wait orthopaedic patients and 101 responded. All respondents were seen at specially arranged clinics. Of these, 16 patients required procedures and the others were discharged. In 2009 the process was conducted in the specialties of orthopaedics, ENT, neurosurgery, urology, and general surgery. Via this new process 6885 patients have been contacted, 633 patients have been seen by public hospital specialists at specially arranged clinics and 197 have required a procedure. LEARNINGS: Since the start of this process in 2008, the wait time to access a specialist appointment has reduced from eight to two years. The process described here is achievable across a range of specialties, deliverable within the routine of the referral centre and identifies the small number of people on the long wait list in need of a procedure.

Explaining variation in referral from primary to secondary care: cohort study
Dulcie McBride Sarah Hardoon, Kate Walters, Stuart Gilmour, Rosalind Raine, BMJ 2010; 341:c6267

Objectives To determine the extent to which referral for defined symptoms from primary care varies by age, sex, and social deprivation and whether any sociodemographic variations in referral differ according to the presence of national referral guidance and the potential of the symptoms to be life threatening.

Design Cohort study using individual patient data from the health improvement network database in primary care.

Setting United Kingdom.

Participants 5492 patients with postmenopausal bleeding, 23121 with hip pain, and 101212 with dyspepsia from 326 general practices, 2001-7.

Main outcome measures Multivariable associations between odds of immediate referral for postmenopausal bleeding and age and social deprivation; hazard rates of referral for hip pain or dyspepsia and age, sex, and social deprivation. Analyses for dyspepsia were stratified for people aged less than and more than 55 years because referral guidance differs by age.

Results 61.4% (3374/5492) of patients with postmenopausal bleeding, 17.4% (4019/23121) with hip pain, and 13.8% (13944/101212) with dyspepsia were referred.
The likelihood of referral for postmenopausal bleeding declined with increasing age: the adjusted odds ratio for patients aged 85 or more compared with those aged 55-64 was 0.39 (95% confidence interval 0.31 to 0.49). Patients aged 85 or more with hip pain were also less likely to be referred than those aged 55-64 (0.68, 0.57 to 0.81). Women were less likely than men to be referred for hip pain (hazard ratio 0.90, 95% confidence interval 0.84 to 0.96). More deprived patients with hip pain or dyspepsia (if aged <55) were less likely to be referred. Adjusted hazard ratios for those in the most deprived Townsend fifth compared with the least deprived were 0.72 (95% confidence interval 0.62 to 0.82) and 0.76 (0.68 to 0.85), respectively. No socioeconomic gradient was evident in referral for postmenopausal bleeding.

Conclusions Inequalities in referral associated with socioeconomic circumstances were more likely to occur in the absence of both explicit guidance and potentially life threatening conditions, whereas inequalities with age were evident for all conditions.

Full text: [www.bmj.com/content/341/bmj.c6267.abstract](http://www.bmj.com/content/341/bmj.c6267.abstract)

Explaining variation in referral from primary to secondary care: cohort study
Citation: British Medical Journal, 2010, vol./is. 34/, 1756-1833
Author(s): McBride, Dulcie, Hardoon, Sarah, Walters, Kate, Gilmour, Stuart, Raine, 
Abstract: The objectives of the study were to determine the extent to which referral for defined symptoms from primary care varies by age, sex, and social deprivation and whether any socio-demographic variations in referral differ according to the presence of national referral guidance and the potential of the symptoms to be life threatening. The design was a cohort study using individual patient data from the health improvement network database in primary care. The setting was the United Kingdom. The participants were 5,492 patients with postmenopausal bleeding, 23,121 with hip pain, and 101,212 with dyspepsia from 326 general practices, 2001-7. The main outcome measures were, multivariable associations between odds of immediate referral for postmenopausal bleeding and age and social deprivation, hazard rates of referral for hip pain or dyspepsia and age, sex, and social deprivation. Analyses for dyspepsia were stratified for people aged less than and more than 55 years because referral guidance differs by age. The results were, 61.4% (3,374/5,492) of patients with postmenopausal bleeding, 17.4% (4,019/23,121) with hip pain, and 13.8% (13,944/101,212) with dyspepsia were referred. The likelihood of referral for postmenopausal bleeding declined with increasing age: the adjusted odds ratio for patients aged 85 or more compared with those aged 55-64 was 0.39 (95% confidence interval 0.31 to 0.49). Patients aged 85 or more with hip pain were also likely to be referred than those aged 55-64 (0.68, 0.57 to 0.81). Women were less likely than men to be referred for hip pain (hazard ratio 0.90, 95% confidence interval 0.84 to 0.96). More deprived patients with hip pain or dyspepsia (if aged <55) were less likely to be referred. Adjusted hazard ratios for those in the most deprived Townsend fifth compared with the least deprived were 0.72 (95% confidence interval 0.62 to 0.82) and 0.76 (0.68 to 0.85), respectively. No socioeconomic gradient was evident in referral for postmenopausal bleeding. The conclusions were, inequalities in referral associated with socioeconomic circumstances were more likely to occur in the absence of both explicit guidance and potentially life threatening conditions, whereas inequalities with age were evident for all conditions. Cites 44 references. [Journal
Association between general practice referral rates and patients' socioeconomic status and access to specialised health care. A population-based nationwide study Health Policy, 2009, vol./is. 92/2, Sorensen, Torben Hojmark, Olsen, Kim Rose, Abstract: The objectives of the study were to explore the association between patients' socioeconomic status and their referral from general practice to specialised health care. Multiple regression analysis was used on cross-sectional data on general practice referral rates for all Danish general practices in year 2006. Our models explained between 26% and 45% of the variation in general practice referral to specialised care. Adjusting for access to specialised care (local supply of hospitals and practicing specialists) reduced the association between socioeconomic factors and referral rates. The results suggest that persons with high socioeconomic status are referred more to practicing specialist than persons with low socioeconomic status and that the latter are referred more to hospital care than the former. The authors'results indicate that the influence of socioeconomic factors may be overstated failing to control for access to specialised care. Still, a socioeconomic gradient was observed in GPs’ referral pattern to different sorts of health care after adjusting for access. The association between socioeconomic status and referral pattern can both be rooted in morbidity variation and to the ability of persons with high socioeconomic status to influence general practitioners' (GPs') decision-making. Cites 17 references. [Journal abstract]

Improving the appropriateness of referrals and waiting times for endoscopic procedures Journal of Health Services Research and Policy, 2008, vol./is. 13/3, Mariotti, Giuliano, Meggio, Alberto, de Pretis, Giovanni, Gentilini, Maria Abstract: There is a lack of standard methods for determining the clinical priority of patients referred by general practitioners (GPs) for specialist outpatient consultations. The authors introduced a system of progressive involvement by general practitioners and specialists with 80 diagnostic procedures. The aim of this study was to evaluate this new method of prioritisation of patients suffering from significant gastroenterological disorders needing rapid access to diagnostic procedures. The study included 438 outpatients who were referred for and underwent a gastroscopy or colonoscopy. GPs used a ranking of waiting times for different levels of clinical priority, called 'homogeneous waiting groups'. Specialists also assigned a priority level for each patient as well as evaluating the appropriateness of the referral and the presence of significant endoscopic disorders. Agreement between GPs' and specialists' priority assessments was evaluated by the kappa statistic. The results were, most referrals (74.4%) were deemed low priority by GPs, with no maximum waiting time assigned. The level of agreement between GPs and specialists as regards patients' priorities was poor or moderate: for gastroscopy the kappa was 0.31 (weighted kappa 0.47) and for colonoscopy 0.44 (weighted kappa 0.46). There was an association between the proportion of significant disorders identified with endoscopy and the priority assigned to the referral ($X^2 = 18.9$, one df, $p<0.001$). The overall proportion of referrals deemed inappropriate by specialists was 22.1%. The conclusions were there is value in liaison between GPs and specialists for achieving timely referrals and avoiding delayed diagnosis though higher levels of agreement need to be achieved. Cites 28 references.
An observational study of variation in GPs' out-of-hours emergency referrals
Citation: British Journal of General Practice, 2007, vol./is. 57/535, 0960-1643
Author(s): Rossdale, Michael, Kemple, Terry, Payne, Sarah, Calnan, Michael, Abstract: Out-of-hours organisations are responsible for the care of patients 70% of the time, and their GPs act as gatekeepers to secondary care services. This observational study identifies the variations in GPs’ out-of-hours referral rates to secondary care and factors that could explain these variations. One hundred and forty-nine GPs who worked in one UK general practice out-of-hours cooperative which served 19 practices with 167,000 registered patients. Data on patients who accessed the out-of-hours service over three years (2001-2004) were examined. Factors thought to be predictors of variation in referral rates were investigated using logistic regression analysis. There was a fivefold difference in referral rates between the lowest and highest referring quartiles of GPs (OR (odds ratio) = 4.56, CI (confidence interval) = 3.86 to 5.38). The sex (female) of the clinician, the time of the consultation (11 pm to 7 am), and the place of the consultation (home visit) accounted for some, but not all, of the increased referral rates. A doctor working out-of-hours disproportionately influences the fate of the patient, the number of hospital admissions, and extra costs to the health service. There is a need for follow-up studies to investigate the factors associated with referral behaviour, and how the variation relates to patient factors and the resources available. These findings could be used when planning the staffing of out-of-hours services to optimise appropriate care and minimise patients’ exposure to unnecessary intrusive and expensive hospital care.

Quality and appropriateness of referrals for dementia patients
Citation: Quality in Primary Care, 2007, vol./is. 15/1, 1479-1072
Author(s): Kada, Sundaran, Nygaard, Harald A, Geitung, Jonn T, Mukesh, Bickol N, Abstract: The objective was to evaluate the quality and appropriateness of referrals from general practitioners (GPs) to geriatricians of patients with suspected dementia. The design was a retrospective review of referrals from primary health care to a department of geriatric medicine. A data sheet was developed from a review of previous literature. Two GPs and two geriatricians assess the quality and appropriateness of the referrals. Patient records in the geriatric department were collected, registered and scrutinised. A total of 135 first-time referrals from January 2002 to December 2002 were evaluated. All patients and relatives were informed that participation was voluntary and anonymity was guaranteed. The main outcomes were assessment of the appropriateness of referrals. The mean age of all referred patients was 78.7 years (standard deviation (SD) 7.3; range 42-90 years) and 61.5% were female; 81 (60.0%) referrals were initiated by GPs, 33 (24.4%) by family members, three (2.2%) by community nurses, nine (6.7%) by the patients themselves and referral initiation was not specified for nine (6.7%). The agreement on appropriateness of referrals between the geriatricians was 83.7% (kappa 0.67; 95% confidence interval (CI) 0.55-0.79; P = 0.03) and the GPs was 71.1% (kappa 0.21; 95% CI 0.07-0.35; P < 0.001). After consensus, the agreement between the geriatricians and GPs was 57.8% (kappa 0.08; 95% CI 0.0-0.23). This difference was statistically significant (P < 0.001). There was disagreement between geriatricians and GPs regarding the appropriateness of referrals. It was found that time-consuming tests were infrequently performed or reported, and key medical information was absent from the referral letters. Cites 22 references [Journal abstract].
A qualitative study exploring variations in GPs' out-of-hours referrals to hospital
Citation: British Journal of General Practice, 2007, vol./is. 57/542, 0960-1643
Author(s): Calnan, Michael, Payne, Sarah, Kemple, Terry, Rossdale, Michael, Ingram,
Abstract: There is evidence of significant variations in hospital referral rates for GPs
working in out-of-hours care. The aims of the study were to explain why there are
marked variations in hospital referral rates for GPs working in out-of-hours care. The
design of study was in depth face-to-face interviews with a purposive sample of GPs
with different out-of-hours referral rates. The setting was Bristol, UK. GPs were selected
according to their rate of out-of-hours hospital referral. They were classified as high,
medium, or low referrers. Five interviews were carried out with GPs from each of the
three categories. High referring GPs are typically cautious and believe it is better to
admit if in doubt. They express anxiety about the consequences of a decision not to
admit, both for the patient and for themselves. They hold negative attitudes towards
alternatives to hospital admission. Low referrers were more confident about their
decisions and less often worried afterwards. Low referrers were positive about
alternatives to hospital admission and described themselves as able to resist pressures
from family or carers to have someone admitted. Low referrers also see hospitals as
places to be avoided and viewed their goal as preventing an admission. Educational
programmes need to be developed to improve GPs' judgements of their competencies
and to build appropriate levels of confidence. Cites 10 references. [Journal abstract]

Quality indicators and variation in primary care: modelling GP referral patterns.
BACKGROUND: Health agencies frequently seek to develop indicators of the quality
and performance of work done by clinicians. The validity of such indicators is a subject
of debate among clinicians and health managers.
OBJECTIVES: Our aim was to quantify the effects of chance and small caseload on an
indicator of referral behaviour for GPs.
METHODS: The study used random simulation of GP referral to physiotherapy and
variance components analysis of routinely collected accident insurance data. It analysed
129 079 episodes of accident-related back pain in New Zealand which were managed by
2679 GPs. The main outcome measure was the percentage of back pain cases referred
for physiotherapy and for specialist assessment and by each GP.
RESULTS: The observed number of GPs who refer to physiotherapy at high levels is
satisfactorily accounted for by chance. The variability of practice among GPs within any
one area is not related to the absolute level of referral.
CONCLUSION: The primary care setting, in which a low caseload for any one condition
is the norm, presents challenges for measuring clinical performance. An emphasis upon
changing the behaviour of GPs with extremely high levels on a performance indicator
cannot necessarily be expected to have an impact upon the level of the indicator across
a geographic area. Indicators for quality improvement should be used across whole
populations of practitioners, rather than used to focus upon extremely high referring
individuals. Full Text: http://fampra.oxfordjournals.org/content/21/2/160.full
Piloting an approach to the identification of avoidable referrals in a general practice with a high referral rate.

Citation: Journal of Clinical Excellence, 2001, vol./is. 2/4(209-213), 1320-5455
Author(s): Bateman, Hilarie
Abstract: The identification of avoidable referrals might benefit patients and the NHS through more appropriate use of out-patient resources. We aimed to determine whether, in a practice with a high referral rate, an intervention combining a questionnaire and an invitation to review by the referring general practitioner (GP) identified patients on the waiting list who considered their referral to be unnecessary, making possible a negotiated cancellation of the out-patient appointment. In addition we aimed to explore the views of patients about their adherence to the referral decision. Four to seven weeks after referral, selected patients were sent a questionnaire and an invitation to review appointment. Subsequently a series of 22 semi-structured interviews was undertaken to ascertain the views of referred patients on the factors affecting their willingness to review the referral decision. Of 453 referrals, 109 (25%) were eligible for the study. Seventy-seven (72%) responded to the questionnaire and, of these, ten (13% of respondents) indicated uncertainty that referral was still needed. Eight of these attended for review ut in ne of these cases was the appointment subsequently cancelled. Interviews revealed a number of factors in explanation of patient's adherence to the referral decision. We conclude that this intervention is not as effective method of detecting avoidable referrals or enabling the negotiated cancellation of out-patient referrals in the high referring practice in which it was applied. The ineffectiveness of the intervention may be partly explained by a number of perceptions and influences described by patients at interview.

Variation in GP referral rates: what can we learn from the literature?
BACKGROUND: Variations in referral rates exist, at GP and practice level. Although the National Institute for Clinical Excellence is to produce referral guidelines, it is unclear if this variation requires regulation. A critical review of the literature on variation in referral rates was undertaken to see if existing evidence could inform the debate.
OBJECTIVES: The aim of this study was to describe the variation in referral rates; to identify likely explanatory variables; and to describe the effect of GPs’ decision making on the referral process.
METHODS: Six bibliographic databases, the Cochrane Library, the NHS Centre for Reviews and Dissemination, and the National Research Register were searched.
RESULTS: Patient characteristics explain <40% of the observed variation; practice and GP characteristics <10%. The availability of specialist care does affect referral rates, but its influence on the observed variation of referral rates is not known. Intrinsic psychological variables are important. GPs who are less tolerant of uncertainty or who perceive serious disease to be a more frequent event may refer more patients. There is a lack of consensus about what constitutes an appropriate referral, and the use of guidelines has had only limited success in altering referral behaviour.
CONCLUSIONS: Variation in referral rates remains largely unexplained. Targeting high or low referrers through clinical guidelines may not be the issue. Rather, activity should concentrate on increasing the number of appropriate referrals, regardless of the referral rate. Pressure on GPs to review their referral behaviour through the use of guidelines may reduce their willingness to tolerate uncertainty and manage problems in primary care, resulting in an increase in referrals to secondary care. The use of referral rates to stimulate dialogue and joint working between primary and secondary care may be more appropriate.
http://fampra.oxfordjournals.org/content/17/6/462.full.pdf+html
General practitioners' attitudes to variations in referral rates and how these could be managed.
Citation: Family Practice, 1996, vol./is. 13/3(259-263), 0263-2136
Author(s): Wright, John, Wilkinson, John
Abstract: Hospital referral rates have received widespread attention for both clinical and economic reasons. This study was undertaken to find out the views of general practitioners in North Yorkshire on current arrangements for the feedback of routine referral data, perceived factors that influenced their referral behaviour and changes that might help their referral decisions. Survey questions were chosen from the issues raised during semi-structured interviews with 11 selected practices. A postal questionnaire was sent to all 114 general practices in North Yorkshire. A 60 per cent response rate was obtained from the postal questionnaire. The majority of practices agreed that the referral information supplied by them was accurate and that the feedback of this data was useful. Uncertainty of diagnosis/management and patient pressure were the two most commonly agreed factors that were suggested as influencing referral behaviour. Training in procedures and use of clinical guidelines were the most popular change chosen as being helpful in referral decision making. The feedback of routine referral data is considered accurate and useful, and should continue. Expanding opportunities for the training of general practitioners in specific skills and the development of clinical guidelines for the management and referral of commonly suggested areas would be helpful to general practitioners in making referral decisions. 4 tables 9 refs. [Abstract amended]

Avoidable referrals? : analysis of 170 consecutive referrals to secondary care.
Citation: BMJ, 1994, vol./is. 309/6955(576-578), 0959-8138
Author(s): Jones Elwyn, Glyn, Stott, Nigel C. H.
Abstract: The authors determine appropriateness of referrals from primary care to secondary care. They conclude that many theoretically avoidable referrals were due to managers and politicians' decisions about allocation of resources but some inappropriate referrals could be avoided by assessment of general practitioners' needs for further knowledge and skills. 1 table 8 refs. [Abstract abbreviated]

Understanding variation in rates of referral among general practitioners: are inappropriate referrals important and would guidelines help to reduce rates?
OBJECTIVES: To determine the extent to which variation in rates of referral among general practitioners may be explained by inappropriate referrals and to estimate the effect of implementing referral guidelines.
SETTING: Practices within Cambridge Health Authority and Addenbrooke's Hospital, Cambridge.
MAIN OUTCOME MEASURES: Data on practice referral rates from hospital computers, inappropriate referrals as judged by hospital consultants, and inappropriate referrals as judged against referral guidelines which had been developed locally between general practitioners and specialists. Effect of referral guidelines on referral patterns as judged by general practitioners using the guidelines in clinical practice.
RESULTS: There was 2.5-fold variation in referral rates among general practices. According to the specialists, 9.6% (95% confidence interval 6.4% to 12.9%) of referrals by general practitioners and 8.9% (2.6% to 15.2%) of referrals from other specialists were judged possibly or definitely inappropriate. Against locally determined referral guidelines 15.9% of referrals by general practitioners were judged possibly inappropriate (11.8% to 20.0%). Elimination of all possibly inappropriate referrals could reduce variation in practice referral rates only from 2.5-fold to 2.1-fold. An estimate of the effect of using referral guidelines for 60
common conditions in routine general practice suggested that application of guidelines would have been unlikely to reduce rates of referral in hospital (95% confidence interval -4.5% to 8.6% of consultations resulting in referral).

CONCLUSION: The variation in referral rates among general practitioners in Cambridge could not be explained by inappropriate referrals. Application of referral guidelines would be unlikely to reduce the number of patients referred to hospital.

Comparing the quality of referrals of general practitioners with high and average referral rates: an independent panel review.
The quality of referrals of four general practitioners, two with high and two with average rates of referral to the department of internal medicine, was judged by an independent expert panel. The panel, consisting of two general practitioners and one specialist, reviewed a set of information about the referrals blindly and in random sequence. The same distribution of quality of referrals was found among the referrals of the two high referring general practitioners (n = 192) as among those of the general practitioners with average rates (n = 88); that is, 57% and 55% respectively, of the cases had clear medical indications for referral, while the data did not permit a conclusion in 15% and 10%, respectively, of the cases. Controlling for sex, age and status of the referral (first or repeat referral) did not alter the results. We conclude that using referral rates to judge referral quality is misleading. However, a blind and randomly performed panel review of referrals is a time consuming but feasible method of quality assessment.

Referrals from general practice to hospital outpatient departments: a strategy for improvement. BMJ, 1989, vol./is. 299/6701(722-4), Author(s): Emmanuel J, Walter N
Abstract: OBJECTIVE: To determine the appropriateness of referrals from general practice to hospital outpatient departments.DESIGN: Prospective audit of referrals from a group practice over one year.SETTING: Six handed practice in a southern coastal town.SUBJECTS: All patients referred during the study period for whom a copy of the referral letter was available.MAIN OUTCOME MEASURES: The investigations carried out by the consultant that led to the diagnosis; the diagnosis reached; and the management.RESULTS: Of roughly 3000 patients referred during the year, 277 with various skin and soft tissue disorders could probably have been managed solely by the general practitioner. Referrals for cryotherapy (96 in this series) and diabetes (19) could probably also have been avoided by specialist training of the general practitioner. In addition, in cases of haematuria and prostatic hypertrophy (34 and 22 referrals) substantial time could have been saved for both the patient and the consultant had the general practitioner supplied the results of relevant investigations. Probably the most important outcome was the model that the study offered for other general practitioners to improve the appropriateness of referrals.CONCLUSION: This approach to determining the appropriateness of referrals benefits the general practitioners, the consultant, and the patient.
Measuring general practitioner referrals: patient, workload and list size effects.
Individual general practitioners are known to vary widely in the number of patients they refer to hospital outpatient departments; indeed there is increasing concern that the 'high' referrers use a disproportionate quantity of National Health Service resources. Data from a one-week survey of referrals by 122 general practitioners in one health district showed that a different age-sex mix of patients consulting individual general practitioners might account for about one quarter of his or her referrals. The results also showed that different referral rates, calculated by using either workload or list size denominators, identified markedly different groups of high referrers. These different methods of measurement are discussed, and on practical grounds a referral rate based on actual referrals divided by mean practice list size is suggested for future comparisons.

General practitioner referrals to hospital: the financial implications of variability.
The emergency and outpatient referral rates of practices taking part in the 2nd and 3rd National Morbidity Studies (NMS-2, NMS-3) were studied. Variation in referral rate between individual practices was contrasted with variation between different practice and patient sub-groups. Variability in referral rates between practices to outpatient departments was shown greatly to exceed variability of these rates associated with different practice locations (urban/rural), and between sexes, age-groups or social groups of patients. A similar contrast was seen when exploring rates for inpatient referrals (with exception made for rates in patients aged 75+). There were strong correlations present between individual practice referral activity in the first two years of NMS 2 (R = 0.72, n = 43, P = less than .001), and between NMS-2 and NMS-3 for those practices which participated in both studies (R = 0.80, n = 18, P = less than .001), indicating a high degree of consistency of referral behaviour. In the 3rd study total referrals from general practice were 10.6 per 100 population compared with 20.7 per 100 reported in hospital statistics. Direct access to Accident and Emergency (A and E) Departments and internal hospital referrals between specialist departments account for the bulk of the difference. The cost implications of variability in referral rates among practitioners are considerable. More data about referral are required.

Referral to hospital: perceptions of patients, general practitioners and consultants about necessity and suitability of referral
Citation: Family Practice, 1987, vol./is. 4/3(170-175) (1987 Sep)
Abstract: A sample of new referrals from general practitioners to hospital specialists was examined from the points of view of the patient, general practitioner and consultant concerned with regard to the adequacy of the general practitioners' performance before referral, his ability to have managed without referral and the suitability of the specialist seen. Little agreement was found between the opinions expressed by the three groups, although some of the opinions expressed within the groups were found to be associated with characteristics of the groups. [Journal abstract]
Explaining variation in general practitioner referrals to hospital.
Reported rates of referral by individual general practitioners to hospitals range from less than 1% of all consultations to more than 20%. Research on variations in rates of referral by general practitioners in the UK is reviewed here. Studies have largely failed to account for variation either in terms of differences in the characteristics of patients or differences in the doctors and their practices. It is argued that this failure arises because most studies do not distinguish between different types of referral or reasons for making a referral. In order to begin to explain variations it is necessary to identify the stages in the complex process of decision making. A theoretical model of the referral decision is advanced, which is intended to provide a framework for further research on the referral process.
Commissioning groups urged to closely police GP referrals and prescribing rates

By Edward Davie | 20 Sep 2011
A new report jointly authored by former primary care tsar Professor David Colin Thome recommends GPs should be ranked against each other on their referral rates and prescribing behaviour to ramp up 'peer pressure' to control costs.

The report by the Intelligent Board, an initiative within Dr Foster Intelligence, said clinical commissioning groups should carry out 'in-depth' comparative reviews of GP referrals and prescribing every two to three years.

The authors said CCGs should initially encourage analysis as an internal process, 'but the aim should be to gradually increase transparency and peer pressure'.

Dr Foster. The Intelligent Board 2011 Clinical Commissioning

The NHS Atlas of Variation in Healthcare, November 20101 (www.rightcare.nhs.uk) illustrates starkly the opportunities for commissioners to secure better value healthcare. It notes in particular the likely existence of unwarranted variations in activity and expenditure and the scope for realising savings to deliver better care. The result should be fewer variations in the nature and number of GP referrals, and fewer interventions of low clinical value.

Facilitate, do not berate. For example, offer alternatives to ‘excessive’ referrals by GPs. In Somerset, for example, GPs have been encouraged to make paediatric referrals for ‘advice and guidance’ rather than ‘please see this patient’. This has reduced the number of outpatient appointments and improved their quality.

GP practices: From a commissioning point of view, the key challenge is to understand variations between GP practices and individual practitioners, particularly in their referral and prescribing habits and in the experiences and views of patients. Again, the aim is not to pass judgement but to shed light on differences and identify opportunities for learning and improvement in both quality of primary care and value for money. This may start off as an internal process but the aim should be to gradually increase the level of transparency (and peer pressure). Board members, both GPs and others, will need to pay close attention to engaging with GP practices and individual practitioners so as to build mutual understanding and shared objectives.

GP referrals drop for first time in six years
By Andrew McNicoll | 01 Sep 2011

GP hospital referrals for the first quarter of the year have fallen for the first time in six years, the latest NHS figures show.
Statistics released last week by the Department of Health show that GPs made 2.87 million hospital referrals in the first quarter of 2011/12, compared to 3 million during the same period in 2010/11. The new figures mark a 4% drop in referrals and represent the first time quarter one referrals have fallen year on year since 2006/07.
Despite the drop in referrals in the first quarter of 2011/12, GP hospital admissions have spiralled in recent years. In quarter one of 2007/08 GPs made 2.3 million referrals to hospital, almost 600,000 less than current levels, and the figures rose consistently until this year’s drop.

GPs are under intense pressure to reduce hospital activity, as the NHS scrambles to make £20bn efficiency savings by 2015.

Pulse: Achieving new QOF indicators: Part 2 - referrals and admissions
Module summary
Dr Nigel Watson considers the new commissioning-focused QOF indicators on outpatient referrals and emergency admissions.

QOF will not pay GPs to cut prescribing and referrals, says GPC
By Tom Ireland, 18 March 2011

GPC negotiators have insisted prescribing and referral indicators introduced in the 2011/12 GP contract will not amount to paying practices to cut referrals.
But the GPC revealed the indicators would assess whether practices had moved their prescribing and referral rates closer to national averages.
As part of the 2011/12 contract deal, 10% of QOF points will be reassigned to productivity indicators focused on reviewing referring, prescribing and emergency admissions.

GPC chairman Dr Laurence Buckman said GPs will be allowed to select which areas of their prescribing and referring they review.
At the end of the financial year, GPs will be ‘judged’ on whether they have moved closer to published national averages, said Dr Buckman.
The GPC is suggesting GPs use figures in the document Better Care, Better Value as a starting point for reviewing if their referring or prescribing is above average.
‘You look at where you are variant compared to the national average. If there is not a good reason for it, at that point, then you look at local pathways to see how you can do this better,’ said Dr Buckman.
‘You don’t have to, but we are suggesting you look at the ones mentioned in Better care, Better Value. They are the ones with most variation.
‘Work out what pathways will be best and work out how you can move your referral patterns nearer to the national average.
GPC negotiators stressed that GPs were not being paid to lower referrals.
‘You don’t have to hit a number, it’s about appropriate referrals,’ said Dr Buckman.
‘You have to justify what you are doing; it might be that what you are doing is right.
‘This isn’t some number cutting process.’
Lansley blocks blanket bans on GP scan referrals.
Citation: GP: General Practitioner, 23 September 2011, vol./is. /5(5), 02688417
Author(s): Robinson, Stephen, Durham, Neil
Available in fulltext at EBSCO Host

Title: Call for CCGs to rank GPs on referral rates.
Citation: Pulse, 21 September 2011, vol./is. 71/30(2-), 00486000
Abstract: The article reports on the recommendation of former primary care tsar professor David Colin Thomé for clinical commissioning groups (CCGs) to rank general practitioners (GP) in Great Britain on referral rates and prescribing behaviour.
Available in fulltext at EBSCO Host

The true cost of referral gateways.
Citation: Pulse, 21 September 2011, vol./is. 71/30(19-), 00486000
Author(s): Imison, Candace
Abstract: A letter to the editor is presented in response to the article "Referral gateways can improve care."
Available in fulltext at EBSCO Host

GP referrals to hospital fall by 4%.
Citation: Pulse, 07 September 2011, vol./is. 71/28(4-), 00486000
Available in fulltext at EBSCO Host

Referral gateways can improve care.
Citation: Pulse, 07 September 2011, vol./is. 71/28(20-21), 00486000
Author(s): Serjeant, Jonathan
Available in fulltext at EBSCO Host

Our referrals must be respected.
Citation: Pulse, 07 September 2011, vol./is. 71/28(20-), 00486000
Author(s): Sidhu, Kamal
Available in fulltext at EBSCO Host

Choose and Book beats any referral gateway.
Citation: Pulse, 07 September 2011, vol./is. 71/28(20-), 00486000
Author(s): Speak, Nigel
Available in fulltext at EBSCO Host

How our new online tool helps us control our own referrals.
Citation: Pulse, 07 September 2011, vol./is. 71/28(37-37), 00486000
Author(s): Findlay, James
Available in fulltext at EBSCO Host

Gateway 'blocks one in four referrals'.
Citation: Pulse, 24 August 2011, vol./is. 71/27(4-), 00486000
Abstract: The article reports that general practitioners (GPs) have been forced to file a complaint to primary care trusts (PCTs) over a series of technical and administrative problems concerning referral management centers in Great Britain.
Available in fulltext at EBSCO Host
Screening GP referrals is gateway to disaster.
Citation: Pulse, 24 August 2011, vol./is. 71/27(10-), 00486000
Author(s): Nasiruddin, Ismat, Gerada, Clare, Bradbury, Vic, Herberts, David, Dickson,
Abstract: Several letters to the editor are presented in response to articles in previous
issues including "Gateways using nurses to screen GP referrals," "Gatekeeper job is one
for a trained GP," and "GMC promises to relook at "praying with patience" guidance.
Available in fulltext at EBSCO Host

Gateways using nurses to screen GP referrals.
Citation: Pulse, 10 August 2011, vol./is. 71/26(1-), 00486000
Author(s): Davie, Edward
Abstract: The article offers information on the screening process at referral management
centres that want to reduce the number of general practitioner's (GP) referrals to
secondary care by using non-doctors for triage. It notes that GP referral are screened by
nurses, physiotherapists, and podiatrists employed by primary care trusts (PCTs). It
reveals that referral management centres are rejecting one in eight referrals for hip and
knee replacements, cataract surgery, and allergy care.
Available in fulltext at EBSCO Host

Two-thirds of PCTs restrict referrals.
Citation: GP: General Practitioner, 05 August 2011, vol./is. /(1-1), 02688417
Available in fulltext at EBSCO Host

Opinion: GPs know better than managers when to refer.
Citation: GP: General Practitioner, 10 June 2011, vol./is. /(22-22), 02688417
Author(s): Lancelot, Chris
Abstract: In this article the author discusses the need to reduce patient referrals by
general practitioners (GPs). According to the author, he refers patients where secondary
care alone possesses the specialised equipment, expertise or staff to deal with the
situation. The author says that if the British National Health Service (NHS) managers
want to reduce referrals by 15 percent, it should be the primary care organisation that
takes the risk and pays compensation, and not the GPs.
Available in fulltext at EBSCO Host

Introducing a GP-led referral gateway.
Citation: Pulse, 18 May 2011, vol./is. 71/18(29-30), 00486000
Author(s): Whiting, Martin, Wootton, Simon
Abstract: The article offers the authors' perspective regarding the significance of a
radical referral scheme in helping general practitioners in Great Britain achieve the
quality and outcomes framework (QOF) indicators. The authors mention that a referral
gateway proved to be effective in reducing outpatient referral activity. Also provided is
information on how they plan to link the gateway to new QOF targets.
Available in fulltext at EBSCO Host

Centres fail to reduce referrals.
Citation: Pulse, 13 April 2011, vol./is. 71/13(4-), 00486000
Abstract: The article discusses the study which reveals that the introduction of privately
run clinical assessment and treatment centres (CATs) fail to reduce outpatient referrals
in Great Britain.
Available in fulltext at EBSCO Host
Trainees must learn when to refer.
Citation: Pulse, 06 April 2011, vol./is. 71/12(17-), 00486000
Author(s): Bhandary, Nishan
Abstract: A letter to the editor is presented about the need for general practice (GP) trainees to known when referral to psychiatry is appropriate or not.
Available in fulltext at EBSCO Host

A steaming pile of….
Citation: Pulse, 06 April 2011, vol./is. 71/12(40-), 00486000
Author(s): Copperfield, Tony
Abstract: In this article the author discusses the constraints and pressures faced by general practitioners (GP) in England such as outpatient referrals, emergency admissions, and prescribing.
Available in fulltext at EBSCO Host

GPs told to delay referrals until April.
Citation: Pulse, 02 March 2011, vol./is. 71/8(2-3), 00486000
Author(s): Quinn, Ian
Abstract: The article reports on a survey of 450 General Practitioners (GPs) in Great Britain that one out of eight GPs were told by the Government to delay referrals for the final quarter of the year until April 2011 which increases the tension between the National Health Services and GPs.
Available in fulltext at EBSCO Host

GP access to diagnostic tests 'not cost-effective'.
Citation: Pulse, 02 March 2011, vol./is. 71/8(6-), 00486000
Abstract: The article reports on a study presented during the annual meeting of the Association of British Neurologists in Great Britain which reveals that the direct access of general practitioners (GPs) to diagnostic tests has contributed to minimal reductions in referrals.
Available in fulltext at EBSCO Host

Referral blocks will not save money.
Citation: Pulse, 02 March 2011, vol./is. 71/8(15-), 00486000
Abstract: In this article the author presents his views about the referral management for health services in Great Britain.
Available in fulltext at EBSCO Host

Referral management: not Just a numbers game.
Citation: Pulse, 02 March 2011, vol./is. 71/8(26-27), 00486000
Abstract: The article presents several case studies related to referral management in England. It looks at the data sharing as an effective and low-tech approach to managing referrals enforced by General Practitioner commissioners in Cumbria. It depicts a set of referral guidelines developed by Sentinel with several groups of medical executives in Plymouth. It discusses a system for tracking patients with real-time data worked by National Health Services (NHS) with local commissioning groups.
Available in fulltext at EBSCO Host
Referral management is harming your patients.
Citation: Pulse, 02 March 2011, vol./is. 71/8(27-), 00486000
Author(s): Cornock, Sarah
Abstract: The article presents the author's advice on what to do if the referral management process is affecting the physicians' quality of care for their patients.
Available in fulltext at EBSCO Host

'No' to one in eight GP referrals.
Citation: Pulse, 23 February 2011, vol./is. 71/7(3-), 00486000
Author(s): Quinn, Ian
Abstract: The article reports on the increasing restrictions of referrals for general practitioners (GPs) in Great Britain.
Available in fulltext at EBSCO Host

Crude referral blocks won't save NHS.
Citation: Pulse, 23 February 2011, vol./is. 71/7(10-), 00486000
Author(s): Hoey, Richard
Abstract: The author discusses the impact of denying the general practitioner (GP) referrals to the long-term savings plan of the National Health Service (NHS) in Great Britain.
Available in fulltext at EBSCO Host

Firm screening GP referrals remotely.
Citation: Pulse, 02 February 2011, vol./is. 71/4(2-3), 00486000
Author(s): Quinn, Ian
Abstract: The article reports on the outsourcing schemes that place tougher remote referral management for general practitioners (GPs) in Great Britain.
Available in fulltext at EBSCO Host

Pulse: A RIGHT TO REFER: OUR CAMPAIGN
What we have found
An increasing proportion of GP referrals are being screened by referral management centres, with some areas seeing a raft of complaints from patients and serious untoward incidents. Other GPs are facing a ban on locum referrals, or being limited to as few as four referrals a week.

What we are campaigning for
1. Every referral management centre must be put to a ballot of GP practices at the clinical commissioning group, and should only continue if it has a mandate to do so.

2. The Department of Health or NHS Commissioning Board should make funding available for GP peer review of referrals, as a cost-effective, evidence-based alternative to referral management centres.

3. The secretary of state must provide a written guarantee that GPs have the ultimate right to refer a patient whenever they believe it is unequivocally in that patient's best interests.

4. The DH must launch an investigation into the serious incidents and patient complaints that have arisen at some referral management centres.
http://www.pulsetoday.co.uk/right2refer
Why Pulse is campaigning to reclaim GPs’ right to refer  Nov 2011
Our campaign aims to champion approaches that draw on the expertise and experience of GPs – and expose those imposed on them.
http://www.pulsetoday.co.uk/main-content/-/article_display_list/13052547/why-pulse-is-campaigning-to-reclaim-gps-right-to-refer

Serious incidents and patient care blunders at referral gateways under investigation By Andrew McNicoll | 16 Nov 2011
Exclusive A series of ‘serious untoward incidents’ involving triage of GP referrals at referral management centres has been placed under investigation, Pulse can reveal.
Our investigation across 85 PCTs shows four new referral management centres have been set up over the last year and that many existing gateways are screening a rapidly increasing proportion of referrals from GPs.
But some centres have been dogged with administrative errors and as many as 10 complaints a month from patients and GPs, while three have suffered serious untoward incidents – defined as having potential to cause serious harm to patients.
We expose the incidents – involving delayed operations, patients wrongly diverted by referral management software and decisions affecting a patient's ‘clinical outcomes’ – as we launch a new campaign demanding respect for GPs' clinical freedom.

GPs secure funding for peer review of referrals 15 Nov 2011
GPs have been handed a huge cash boost by their CCG to help them cut their referrals by peer education and support without the need for draconian referral management.
The scheme, set up in Hertfordshire by Herts Valleys clinical commissioning group, has been awarded 202,000 funding from the regional innovation fund to develop support for GPs.
It will involve setting up specialist programmes for each of the top ten specialties - trauma and orthopaedics, dermatology, cardiology, ENT, gynaecology, ophthalmology, urology, gastroenterology, rheumatology and neurology - which together accounted for nearly 60,000 first outpatient attendances across the CCG last year.
Lead GPs in each specialty will lead and provide peer-education via virtual surgeries, web resources and educational events as well as ‘up-skilled' GPs in every large practice. The CCG - which covers Dacorum, Hertsmere, St Albans & Harpenden, Watford and Three Rivers localities - will encourage smaller practices to federate so that each group of smaller practices has access to an expert GP. All GPs will receive feedback about their referral patterns so continuous learning takes place.
The project will initially establish two lead GPs, followed by another eight. The leads will each receive a budget to fund their on-going development, identification of referral patterns, liaison with leads at locality/practice level, and identification of best practice including care pathways.
It will also fund virtual surgeries running over a six month period so that clinicians can email or telephone with questions about referrals, the development of frequently asked questions and answers logs, and the designing of educational events for clinicians and patients. The project will be evaluated in March.
http://www.pulsetoday.co.uk/newsarticle-content/-/article_display_list/13052630/gps-secure-funding-for-peer-review-of-referrals