### Research papers

# An investigation of an orthopaedic referral system: implications for clinical governance

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#### **ABSTRACT**

**Objectives** An ethnographic enquiry aimed to understand issues relevant to clinical governance in relation to how health professionals and patients interacted in a system of referrals to orthopaedic services.

**Design** A qualitative approach to description, analysis and interpretation was taken using ethnographic techniques to select and analyse data from four component studies of an orthopaedic services referrals management initiative.

**Results** The network of referral routes reflected potential for a wide variation in decision making for patient care. A lack of important information

transfer and feedback through the system was identified at critical points.

Conclusions The findings of this study demonstrate benefits to be gained in taking a systematic wider look at the scope for supporting responsiveness to patients in an orthopaedic care system. Doing this identified a need to improve system communication in orthopaedic services, to underpin cultural change which can enhance patient care in the community and support a continuum of delivery of lifelong care.

**Keywords**: clinical governance, ethnography, orthopaedic referral, qualitative research

#### Introduction

#### Background

'Clinical governance' can be viewed as a new name for established concepts of cultural change which provide means of developing organisational capacity to deliver sustainable, accountable, patient-focused, quality-assured health care.<sup>1</sup> Establishing clinical governance in practice in a healthcare system thus entails engaging in a dynamic process of articulating its potentially diverse elements. This paper examines such a process in relation to a local, orthopaedic service referrals initiative.

Concerns for the management of the orthopaedic surgery waiting list and the demand for referrals to orthopaedic services in one healthcare authority in 2001 brought together general practitioners (GPs) from a number of primary care trusts with orthopaedic and rheumatology consultants and managers from an acute trust orthopaedic department. A collaborative approach to achieve improved management was agreed, co-ordinated by the health authority. A 'paramedic clinic' was established using a multidisciplinary musculoskeletal assessment team (MMAT) comprising nurses, a senior physiotherapist, and GP musculoskeletal

specialists. There were plans to link this to a managed demand 'slot' system' for GP referrals that would provide early specialist assessment and intervention.

A mixed-methods, longitudinal evaluation design was commissioned to evaluate the project over a 30-month period between October 1999 and March 2002.<sup>2</sup> This compared data from the project area with a control area and comprised five linked sub-studies developed to examine a range of outcomes over a period of 11 months. Data were collected, within project and control health areas, from 32 key stakeholders including hospital-based clinicians, GPs, health authority representatives, user representatives, and community health representatives. These included quantitative questionnaire data on the health and quality of life of 225 patients, measured shortly after their referral to musculoskeletal services, and then at 5 and 10 months. Qualitative interview data were collected from: 11 patient subjects; exploring their experiences of being referred; 8 hospital-based clinicians in the MMAT team to explore the experiences of working with patients within this system; with 8 GPs to explore their perceptions of the referral and treatment pathways for this group of patients.

This paper reports the final study which drew on the whole dataset to develop a longitudinal overview of the culture of the system of work. The aim was to identify any implications for clinical governance in processes established to provide audit, timely service and patient-focused care.

#### Design

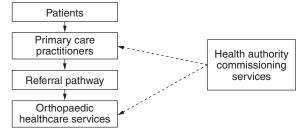
A qualitative approach to the description, analysis and interpretation was taken using ethnographic techniques for the selection and analysis of data from the four component studies.<sup>3</sup> An ethnographic enquiry aimed to understand how this group of people interacted in the working system by trying to see things in the way they do and grasp the meanings they draw on to make sense of their experiences.<sup>4</sup> A system is defined as 'a group of objects (elements) with a group of relationships between those objects'. The boundaries of this system were defined by the input of the presentation of patients with orthopaedic problems and the output of satisfactory achievement of access to orthopaedic surgical or non-surgical interventions. The objectives of the study were to identify elements of this system such as the primary care groups and the orthopaedic services, and to examine the specific inter-relationship of these elements within the system of management of referrals to orthopaedic services.

#### Method

An initial scrutiny by one researcher of the full documented dataset identified major elements of the system to be: the patient groups; the primary care groups; the referral pathway; the orthopaedic department; and the health authority commissioning consortium (Figure 1). These were agreed amongst the research group, and sub-elements of this system identified as the individual patients with orthopaedic problems; the referring GPs; the referrals process; the members of the musculoskeletal assessment team; the orthopaedic consultants; and the rheumatology consultants. Purposeful sampling of data was undertaken from a number of sources in the dataset from each of the four studies. Sample data for analysis were selected from the data of each of these sub-elements of the system to ensure a full description of the working culture of referral. The sample comprised questionnaires on the health status and quality of life status of patients admitted to the system over 11 months, and at the two subsequent follow-ups; documents recording processes of accessing patients via health information systems; transcripts of interviews from GPs, patients and consultants; and documentary data from health authority meeting minutes and associated letters.

#### **Analysis**

Three research team members read and became familiar with the data. Similarities in cultural perspectives and activities within and across the data were then agreed and grouped together into categories that identified a range of potential referral pathways and a range of views of the system held by stakeholders. Conflicting perspectives were sought before emerging issues were summarised and verified within and across the data from the studies in a number of meetings of the research team. A theme of communication and information transfer was identified as predominating, which could be identified in: the decisions relating to



Key: 
→ Patient access ---- Health authority provision

**Figure 1** Elements of the access system of referrals to the orthopaedic department

the first referral; views of the system and knowledge transfer within it; and the self-perceived role of practitioners in relation to others in the system and their use of terminology.

Trustworthiness of this study was therefore provided by group members reaching consensus for selection of data. Analysis of data was verified among researchers for reliability. Validation and the integrity of findings was endorsed by a member of the primary care trust.

#### **Findings**

#### Decisions relating to the first referral

The network of referral routes reflected potential for a wide variation in decision making for patient care. At the first contact for consultation and the identification of an orthopaedic problem, GPs could refer the patient for orthopaedic intervention by a number of routes. The strategy used appeared to be individual for each GP (see examples of interview quotes in Box 1). From

### **Box 1** Example of referral access routes to orthopaedic care used by one GP

'I mean I have two routes for physio, three routes, no four routes':

- 1 Direct access physiotherapy at the district hospital for acute problems specifically in the last two weeks and not recurring problems 'probably used too much I don't know [laughs] for the resources available'. (\$3.95–102)
- 2 A local health partnership trust physiotherapy department for chronic patients because 'we have a relationship with her not sure how, or where she's receiving the patients from but, I don't know, we still use that resource ...'. (\$3.95–102)
- 3 The private sector, appropriate for some patients 'because that is what their expectation is, and their need, and so we use that including the osteopathy service'. (\$3.95–102)
- 4 The service which operates through the hospital outpatient service, although referral there is 'a complicated issue because when you refer to a rheumatologist [the patient] may be on the waiting list for physiotherapy, and will they go on the waiting list for hospital physiotherapists from the OP [outpatient] clinic? It seems that they wait longer for that service than they would do if I referred them to a [physiotherapy] service through a different route'. (S3.95–102)

this first point of referral to an orthopaedic or rheumatology consultant, that consultant could then refer the patient to others or directly to the MMAT team through the MMAT physician. The MMAT physician could then refer within the MMAT team and each member of the team could also decide to refer to other team members.

## Views of the referral system From the commissioning consortium

Details in written documents suggested the members of the commissioning consortium were united in concern to engage in an evaluation of the system. The importance of communication was stressed, as one GP noted '... this system will work if owned by everybody, i.e. hospital and general practitioners, and this ownership could be achieved by ongoing dialogue between the orthopaedic unit and the GPs through their PCG [primary care group] representative on the orthopaedic project'. Their concern was for waiting lists 'staying in balance' for the distribution of the estimated 5000 patients each year with orthopaedic problems, and for change in the views of waiting list management on both sides (primary and secondary care). GP referrals could be inappropriate and it was not seen as feasible to increase the demand for surgery without appropriate resources available (examples of interview quotes are given in Box 2).

## **Box 2** Perspectives within the commissioning consortium of the aims of the project to evaluate the referral system:

#### GP representatives' views:

- '... to get the patients seen' and 'all consultants and surgeons committed to making the DMS [demand management system] work'. (12.3.99)
- a reduction in 'gumming up the orthopaedic clinics'. (1.4.3)
- '... freeing the surgeons'. (1.4.15–16)

#### Acute trust representatives' views:

- '... they [GPs] pass the buck' and now they will have to be more specific'. (HA3)
- '... it will help primary care get a smarter system and stop GPs and consultants dumping on each other'. (HA3)
- '... we can't do more operations in a year without massive extra funding ... we haven't got extra capacity lying around doing nothing'. (S1)

#### Patients' views

The patients, from both rural and town settings, did not have a well-defined idea of the system in which they were of central concern, or a view of the size of demand for orthopaedic services. They were not aware of potential alternative options open to them, nor had they an understanding of their rights in a healthcare system. They had a clear idea of what they wanted from the service and when it should be offered. Their views reflected pressures on clinic time and blocks in the wider orthopaedic service related to the referral system (an example is given in Box 3).

## **Box 3** Views of the orthopaedic care system from one patient who had suffered a knee problem for three years

He first went to the GP at the point of not being able to get up a kerb. The GP 'just made the appointment for the orthopaedic consultant' but gave no information about the operation. The patient was seen by an orthopaedic consultant in two to three weeks following the referral. He waited three months to see the surgeon and another nine months for the operation from which there were some complications of infection.

#### Views of the GP

'You're a bit afraid to say too much to a doctor.'

#### The hospital

'... well I thought ... you know with hospitals, they know what they're doing and what they're saying, and you know you can question them so far but you're not always going to get the answers that you expect are you?'

#### The follow-up appointment

'It was such a long time waiting for my appointment ... it was 3 o'clock before ... I was sitting there – before I saw him and he took just two minutes ... that was all it took for him to look at it and to say it was doing alright, leave the dressing off ... I can't understand why they make these appointments and keep people waiting so long.' (\$4.19.361)

#### GPs' views

Although any managed demand system had not yet begun, some GPs commented on the proposed system as being to do 'with appropriateness – seeing the most appropriate person at the most appropriate time' and important 'to look more closely so we have a more appropriate service and use of resources to best effect ... at the moment it has been developed patchy and

each person doesn't know what the other is doing and expertise that is there is not used appropriately'.

GPs in the control area of the evaluative study, did not know 'what demand management is'. Across GPs in both project and control areas there was concern over the perceived gap between primary care and secondary care understandings and priorities. Some GPs were under the impression that the MMAT initiative was 'a "fobbing off" system where patients can only see semi-specialists — only a filtering system'. There was a general lack of awareness of any guideline development for GPs and some suspicion of the consultant role in the system (quotes from interviews are given in Box 4).

## **Box 4** Some GP perspectives of the referral system (direct quotes from GP interviews)

- '... we are shouting at each other from across a very wide gap we have built this little bridge across and we now trying to get some steel joists in the form of communication ... the only thing is that some people think these steel joists should be made of jelly, because jelly tastes nice so what you have to do is build the bridge and show them that it actually works.' (\$1.40)
- One GP held back from referring because 'it takes too long and patients will go privately or not bother'.
- Guideline development was '... helpful as long as it is constructed with some GP input not entirely by the orthopaedic consultant and his physiotherapy colleague ... there must be some input from GPs ... otherwise you perpetuate one way of looking at things'. (\$3.156–9)
- 'Consultants should relinquish the control they have on the referral system.' (S1.4.31–32)
- '... all have something to gain the consultant if he can let go of that clinical responsibility thing ... or has confidence in the staff of the team he is running anyway, can let go and therefore free himself up to deal with appropriate things ... and then GPs feel a little more empowered to help the patient, and the patient hopefully gets more of an appropriate service.' (S1.4.334–349)
- Trouble lay with '... people who have been empire building or coping with their problems without taking such an overview'. (\$1.352–6)

### Views within the multidisciplinary musculoskeletal assessment team

The MMAT physicians saw the initiative as successful for patients with large lower limb joint problems who

could be assessed so that those clearly unsuitable for surgery could be more promptly discharged. They referred to the higher numbers of patients coming to surgery as showing that the 'strike rate was more efficient' as was the application of treatment. MMAT was considered '... a bit of a balancing up to the system', such that if patients did need surgery they could be placed with the surgeon with the shortest list. Equally, however, it was observed that patients could lose their place in an operating list if inappropriately referred to MMAT. The important thing was for the patient to have '... confidence in the orthopaedic surgeon that the right decision is being made on their behalf'. Several thought the MMAT was 'fending people off' although not knowing 'how long they are staying out of the system for or whether we are successfully treating and discharging and not seeing the patient again'.

The prominence of the various roles within the team was seen has having changed over time, and gaps in provision were identified (examples of quotes from interviews are given in Box 5).

### **Box 5** Physicians' views of the MMAT team structure

- '... certainly you could run that system and you could probably, almost as some other units do, run it entirely through physiotherapists ... or a combination of physiotherapists and nurses.' (\$3.283-289)
- 'Doctors and physios are trained the whole way through as independent practitioners ... nurses are not trained in that style and therefore find it much harder to work in that way.' (\$3.66)
- Nurses can ensure that patients 'having been accepted onto the waiting list and are waiting say six months or even a year for an operation, actually remain fit during that process'. (S3. 80–83)
- '... continuously over the last year, we've been trying to chisel away at getting more physiotherapy time, more OT and a bit of dietician time.' (S3.106–7)

#### Consultants' views

The consultants had some apprehensions about consequences of an increase in what they termed the 'hit rate' of patients coming for surgery. Initially there had been a reduction in numbers, but this had been followed by yet more referrals. There was also concern about the long-term outcomes of surgery, and the need to track patients who although not coming back to them with a problem, may still have had one. The

service was under-resourced and they were acutely aware of the protracted waiting times for the first clinical consultations. In their view, the bottlenecks in progress through the orthopaedic service were caused by an unmanaged referral system that included allocation of theatre time and availability of beds, and factors that could limit exit from the service such as the availability of allied health staff and community services. A demand management system would only tinker at the edges and would not significantly reduce patient access time for major joint surgery (quotes from an interview with one consultant are given in Box 6).

### **Box 6** A consultant's views of the referral system

- '... patients seeing us surgeons will be presifted, so the "hit-rate" for actually needing surgery will actually be higher ... which means that if we were to continue to see the same number of referrals in the clinics we would be overdoing what we can cope with for surgery, so there is a paradox.' (\$1.29.3)
- '... we can't do more operations in a year without massive funding we haven't got extra capacity lying around doing nothing.' (\$1.26.1).
- '... at the end of the day we are not doing it for anything other than the lot of the patient ... that is our motivation despite suspicions of all others, there is no other reason why we are doing it.' (S1.27.3)
- More money was needed: 'I am very clear about that, I don't know if everybody else is, I think some of the GP partners are. One wouldn't want people to take this project for what it isn't it is not the answer to the whole thing'. (S1.1)

## Implications for clinical governance of building capacity resources and quality-assured patient-focused care

Establishing and maintaining a successful system of referral relied on access to, and application of, information sources within it such as knowledge of the size of the demand, knowledge of alternative routes of referral, and knowledge of guidelines for referral. Knowledge of processes for accessing basic information to carry out audit and monitoring of referrals was central.

## Quality assurance through monitoring and auditing the system

A lack of important information transfer and feedback through the system was identified at critical points from patients' first contact with the GP, and patients' and GPs' ability to monitor the progress of their referrals; the quality of patients' understanding of the system at their point of entry; GPs' and patients' understanding of the range and conditions of routes of referral; GPs' understanding of the ways in which data about the processes of their practice were or could be gathered for purposes of monitoring or audit (see examples in Box 7).

#### Box 7 GPs' knowledge of the system

- '... we are supposedly tracking how our referral rates are going, we ought to know how things are doing ....' (\$3.208–9)
- '... I am not sure how you get hold of those stats you will have to work those out. I'm sure the IT department could do it if you took them a list of names.' (S3.214–16)
- '... a lot of them [GPs] are happy once they realise that the faster route is actually via MMAT and they use that and get a patient quickly assessed ....' (\$3.276–78)
- It is 'perfect sense to access people more quickly' but 'the bit that is missing is the educational side that comes back to the GPs ... there is probably a lot we could do about altering our referral behaviour ... not only because of resources but knowledge we have about how to act appropriately ....' (S3. 119)
- '... one could then get to the point where the path of the patient wasn't necessarily through the GP more efficient for people to be able to access that service differently.' (\$3.132–6)

The selection of GP clinics for tracking orthopaedic referrals in the evaluation study had been carried out via hospital waiting lists through Hospital Information Systems (HIS) and medical records. Research logs noted that records and systems of storing records varied widely between hospitals, and often reflected the preferences of an individual HIS officer. A lack of coding or indexing made it difficult to identify suitable patients with peripheral joint problems without hand searches.

## Communication of a common understanding of the MMAT project

There was a lack of common understanding of the MMAT and as one GP suggested, a lack of clarity

about what the whole initiative did in terms of the patient. The MMAT team wanted to look at whether waiting lists were affected by the longevity of patients' condition or their expectations, or by inappropriate referrals and to verify the validity of GP criticism that they were just delaying patients. They needed confirmation that they were providing a good service.

### Patient-focused guidelines and information

Orthopaedic surgeons admitted that patients in the project area were now coming to surgery fitter, better advised and were beginning to get there sooner with 'background treatment done so it frees things up'. MMAT was 'already taking pressure from the consultants' and as one said '... I can see one day that specialists will only see people who definitely need operations'. It was estimated that about 30% of patients would go back out of the system without seeing an orthopaedic consultant, while many were seen to be 'going round the circuit again'. There was some sense of resignation that some patients would try to live with their health problems with little provision made within the current system to increase information to the patient that might help them maintain their independence and perhaps avoid the need for them to call on orthopaedic services.

#### Discussion

It is made increasingly clear by the Commission for Healthcare Audit and Inspection (2005) that the patient experience is fundamental to the clinical governance agenda and one of the most important criteria against which healthcare services will be assessed is their capacity to collect, analyse, respond to and learn from information about their own organisation. This orthopaedic initiative was conceived before primary care groups were established and analysed in the primary care trust era (post-April 2002). It embraced the process of listening to the patient's voice, but after the project was implemented. If repeated today, it would more probably involve patients before starting the project.

This working system was based on a linear view of patients being managed through a system that takes them from GP to the orthopaedic consultant. Any ability or knowledge to exercise choice resided more with the GPs and consultants than with the patient. Despite patients consequently being seen more appropriately and with greater timeliness which might increase health outcomes and quality of life, it was recognised that 'the bit that's missing is the educational

side, that comes back to the GPs'. The level of information to patients as to when they should initially consult a GP or about their condition or how they could best maintain the quality of their life was limited. They did not have any understanding of what the operation might entail prior to surgery, nor of viable alternatives to it. There was little to suggest that the patient group was educated to consider at what point they should decide how or when to make a first contact with primary care; neither was there much evidence of purposeful information transfer to patients to help them monitor their condition or about health promotion activities to help them increase their understanding of their joint problem and of how to maintain a quality of life to help limit further deterioration. All of this has a bearing on the capability of services to provide a quality-assured service.

Where it was clear that non-surgical interventions such as injections or physiotherapy are indicated, then it was suggested there is no need for a consultant to be involved and it made sense to many to have GP specialists. As one GP remarked 'expertise amongst GPs is diluted ... also from a career point of view it would be subtly useful to actually plan to have GPs specialising to some extent for one or two sessions a week'. Another noted that 'one could then get to the point where the path of the patient wasn't necessarily through the GP – more efficient for people to be able to access that service differently'. A further GP suggested it could equally be possible to locate 'physio in the community – if there is the space and you've got the money to provide the space and you've got the staffing ... why should it be sited at the hospital necessarily?'. Such perspectives on referral practices point to a changing vision of health services by many stakeholders, that could be channelled into a radical re-conceptualisation of orthopaedic management that more closely involves patients as partners in care, and places management of chronic disease services within a more relevant setting.

The findings of this longitudinal overview resonate with the notion expressed by a senior researcher in management studies that 'clinical governance turns on its head the concept of clinical autonomy and the assumption that the doctor-patient relationship can operate distinctly and separately from managerial processes and accountabilities'.7 It is suggested that individual practitioners in teams with a shared understanding of how each directly or indirectly affects the delivery of care to patients, and with some overview of the workings of the total system of access, could appreciate more clearly how their decisions can affect the pathological progress of orthopaedic problems and the quality of patients' lives. Opening up strategic communication channels between hospitals and community with clinical and information workgroups could identify gaps in service delivery and the importance of integrated information transfer to quality clinical care.<sup>8</sup>

#### Conclusion

Clinical Governance is a 'framework through which NHS organisations are accountable for continually improving the quality of their services and safeguarding high standards of care by creating an environment in which excellence in clinical care will flourish'. The findings of this study demonstrate many benefits to be gained in taking a systematic wider look at the scope for supporting responsiveness to patients in an orthopaedic care system. Doing this has identified a need to improve system communication to underpin cultural change that can enhance patient care in the community, through surgical and non-surgical interventions, and in returning to the community in a continuum of delivery of lifelong care.

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#### **CONFLICTS OF INTEREST**

None.

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