Community-based orthopaedic follow-up. Is it what doctors and patients want?

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ABSTRACT

INTRODUCTION The objective of this study was to investigate how patients, general practitioners (GPs) and orthopaedic trainees, feel about the proposed governmental changes to reduce orthopaedic out-patient clinics by having GPs and specialist nurses follow-up postoperative orthopaedic patients in the community.

SUBJECTS AND METHODS The design was a cross-sectional questionnaire study including a teaching hospital and general practitioners in the Norfolk primary care trust. Participants were 73 orthopaedic postoperative patients who attended out-patients over a 1-week period in July 2007 who all responded. Of 250 GPs, 239 responded. Of 38 orthopaedic trainees at the level of senior house officer (post MRCS) and specialist registrar (Eastern Deanery Rotation and Pott Rotation), 30 responded

RESULTS Of the 73 patients, 56 (77%) felt the surgeon was best suited to manage them postoperatively. Of these, 47 felt that it was very important that the surgical team saw them postoperatively. Also, 53 felt that their GP did not have sufficient knowledge and experience to deal with their current orthopaedic problem adequately. Only 12 GPs of 239 (5%) felt very confident assessing postoperative patients. Inadequate resources available to diagnose and treat postoperative complications was noted by 74% as the reason for not performing follow-up in primary care, and only 18% felt they should follow-up postoperative patients. All trainees felt that following up their own postoperative patients was important to their training.

CONCLUSIONS Most patients, GPs, and orthopaedic trainees had serious doubts about the proposed governmental changes to reduce orthopaedic out-patient clinics by having GPs and specialist nurses follow-up postoperative orthopaedic patients in the community.

KEYWORDS

Orthopaedics – Questionnaires – Health care surveys

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In order to deliver a maximum 18-week patient pathway by December 2008, the UK Department of Health published the Musculoskeletal Services Framework (MSF) in 2006.¹ The Framework promoted a service redesign that would enable health economies to avoid unnecessary patient attendances and elective admissions.² To achieve the aims of the MSF, clinical assessment and treatment (CAT) services were recommended by the Department of Health. These CAT services would bring together primary and secondary care professionals, so that assessment, diagnosis, and treatment or referral of certain patients could be organised more efficiently.¹

To increase efficiency in the overall patient pathway, reduction of orthopaedic hospital out-patient clinics has been proposed by having general practitioners (GPs) and specialist nurses follow-up postoperative orthopaedic patients in the community.

The aim of this study was to canvass the views of three different stakeholders (patients, GPs and trainees) about the proposed changes.

Subjects and Methods

A cross-sectional questionnaire survey was conducted by the Institute of Orthopaedics, Norfolk and Norwich University Hospital. In order to receive feedback and ascertain the possible implications of postoperative orthopaedic patients being followed-up in the community, questionnaires were formulated for trainees, GPs and patients.

Participants

Patient questionnaires were distributed to 73 postoperative patients who attended out-patient orthopaedic clinics of three different firms over 1 week in July 2007. Questionnaires were only distributed to follow-up patients. Questionnaires were e-mailed to 38 trainees, who worked or who had worked at Norfolk and Norwich University Hospital. The trainees included, specialist registrars (East Anglia Rotation, Pott Rotation) and senior house officers (post MRCS). Questionnaires were posted to 250 GPs, who

were provided with self-addressed envelopes. All the GPs had 5–25 years' experience and were chosen from a hospital database of GPs in the Norwich area. The data were gathered over the months of June and July 2007.

Study questionnaires

The questionnaires for each of the three participant groups were developed by orthopaedic surgeons and members of the Institute of Orthopaedics at the Norfolk and Norwich University Hospital. Direct questions were asked about what the participants thought about the proposed changes. In addition, statements were made regarding different aspects of the proposed changes and respondents were asked to record their strength of agreement on a Likert scale from 1 to 5 (Appendices 1–3).

Data analysis

Responses were transposed onto an Excel spreadsheet and tabulated.

Results

Patients

Completed questionnaires were received from all 73 patients. Of these patients, 55 preferred the surgeons to manage their care postoperatively (Fig. 1) and 53 thought that their GP did not have sufficient knowledge and experience to deal with their current appointment that day.

General practitioners

Out of 250 GPs, 239 (96%) responded to the questionnaires. Of these, only 12 felt very confident assessing postoperative patients (Fig. 2) and only 10 GPs felt very confident with dealing with postoperative complications. None of the GPs

could say they were absolutely confident with interpreting postoperative radiographs (e.g. hip or knee arthroplasties) and 134 stated that they were not confident at all. Fourteen of the 110 GPs stated they were confident in examining postoperative joints and 74% thought they did not have the adequate resources available to diagnose and treat postoperative complications (e.g. sepsis or deep vein thrombosis). In total, only 18% of GPs thought that they should follow-up postoperative patients (Fig. 3). Overall, 23% thought that they should be followed up by specialist nurses; however, the majority of the GPs questioned did comment on whether they felt that the follow-up should be a multidisciplinary task involving the surgeon, GPs and specialist nurses.

Trainees

Out of 38 trainees, 36 responded to the questionnaires. Of these, 24 stated that they should follow-up their own postoperative patients at least 50% of the time. The majority of

the trainees (29 of 38) thought that following up their own patients was very useful to their training, with no trainee stating that it is a waste of time. All 38 trainees would like to review postoperative complications and the majority thought that follow-up clinics were more beneficial to their training than journal clubs and appraisals. Again, the majority (30 of 38) thought that postoperative patients should be followed up by the surgical team (Fig. 4).

Discussion

Principal findings

We demonstrate here that postoperative follow-up of orthopaedic patients is important to both the patient and the surgeon. It provides an opportunity for the surgeon to detect complications, ensure a patient's prognosis is satisfactory, and allows the patient's ideas and expectations to be explored. Postoperative follow-up also enables surgeons to audit their work and it plays a large part in the training of junior doctors.

As all of the surgical trainees who responded to the questionnaire felt that following up their own postoperative patients was useful to their training, one must ask if reducing the number of hospital-based postoperative clinics will further reduce the opportunities for surgical trainees to acquire the skills that are needed to ensure patient safety. It can be argued that the ability to identify and treat complications that can arise from one's own practice is one of the most important aspects of being a surgeon.

Professor John Lowry, chairman of The Royal College of Surgeons of England said that 'surgery is a craft specialty' and that 'the skills that ensure patient safety cannot be acquired without a long period of experience and one-to-one teaching from consultants'. He further stated that 'training a surgeon takes time and that time must be spent in theatre, in out-patient clinics and on the ward'.⁵

It can be argued that there is no better teaching tool than

experience itself. We gain experience from seeing patients in clinics and, as we have treated the patients, we are able to learn from our mistakes and hence improve on our weaknesses. At a time when training is becoming more streamlined and there is a scarcity of time available to train a junior doctor, it is vital for trainees to make use of every given opportunity to improve further their knowledge and skill base.

It is also evident from our study that patients have more confidence in the operating team than their GP when it comes to postoperative management. Having performed an operation, a surgeon has detailed knowledge of exactly what to expect and how to deal with and pre-empt complications which may arise. It also provides patients with a sense of psychological satisfaction and re-assurance knowing that the team that provided the treatment are involved in the on-going management and supervision of their postoperative recovery.

However, for these services to be effective, GPs must be willing to shoulder the burden of these services. To introduce a CAT service, primary care trusts need to be aware of the resources that they will have to provide given that few GPs are confident in assessing these patients; the majority feel that it is a secondary care responsibility and this is backed up by the patients.

Weaknesses of study

A weakness of our study is that it only covers a rural area. The perspectives of different patients and other healthcare professionals working in inner city and other rural areas would be useful. Our data may also have been limited by the questionnaires as they were not pilot-tested. Further studies would have to ensure the validity and repeatability of their questionnaires.

Conclusions

Reducing postoperative follow-up also has implications on collecting data for clinical governance and research. The Orthopaedic Data Evaluation Panel (ODEP) requires data on hip prostheses. The National Institute for Health and Clinical Excellence defines an acceptable prosthesis when it 'relates to 10 or more years follow-up, from a number of centres',⁴ in order to establish their effectiveness. It could be argued that these data should be funded by the implant manufacturers, as is typical currently. However, this questions the true independence of these data.

It is essential to state that patients who have had uncomplicated operations do not require hospital-based follow-up in the majority of cases and that it is the more complicated operations such as joint replacements that are the concern. CAT services that reduce hospital out-patient clinics by having GPs and specialist nurses follow-up postoperative

orthopaedic patients in the community may reduce orthopaedic waiting times. This is especially true of many day-case procedures such as carpal tunnel decompression. However, it should be noted that often these procedures may be performed by surgical trainees, who need to follow-up their patients to review wounds and outcomes. Feedback from this study has highlighted three important points that will require consideration if CAT services are to be beneficial to patients:

1. It may not be in the patient's best interests for GPs to shoulder the burden of managing postoperative orthopaedic patients.
2. Surgical trainees may lose even more opportunities to acquire the skills that are required to ensure patient safety.
3. Perhaps most importantly, many patients felt that their GP did not have sufficient knowledge and experience to deal with their current orthopaedic health problem adequately.

Acknowledgement

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Appendix 1: GP questionnaire

Norfolk and Norwich University Hospital, Trauma and Orthopaedic Department

A recent proposal from the Government is to abolish potentially some of the hospital out-patient's clinics and to get general practitioners and specialist nurses to follow-up patients in the community. We are keen to find out how you feel about this as a GP and would appreciate it if you could kindly spend a few moments to complete the form and return it in the self-addressed envelope provided.

Practice name: _____ Doctor's name: _____

Grade of GP: _____ Qualifications: _____ Years of experience: _____

What do you understand by the term 'postoperative follow up'? _____

As a GP, do you feel confident assessing postoperative patients?

Very confident 5 4 3 2 1 Not confident

As a GP, do you feel confident dealing with postoperative complications?

Very confident 5 4 3 2 1 Not confident

How confident are you interpreting postoperative radiographs, *i.e.* knee/hip arthroplasties?

Very confident 5 4 3 2 1 Not confident

As a GP, do you feel confident examining joints postoperatively. *i.e.* knee/hip? _____

Do you feel GPs have adequate resources available to diagnose and treat acute postoperative complications (*e.g.* DVT, sepsis?) Yes/No

Who do you feel should follow-up postoperative patients?

District nurse Practice nurse Nurse specialist GP Surgeon

Do you feel that postoperative follow-ups would contribute to your/trainees professional development? Yes/No

Any further comments: _____

I consent to these data being recorded for research and audit purposes (please tick)

Mr Shahzad Ilyas, Dr Tom Markham, Ms Jane Webber, Mr Keith Tucker, and the whole Orthopaedic Department at the Norfolk and Norwich University Hospital

Appendix 2: Patient questionnaire**Norfolk and Norwich University Hospital, Trauma and Orthopaedic Department**

A recent proposal from the Government is to abolish potentially some of the hospital out-patient's clinics and to get general practitioners and specialist nurses to follow-up patients in the community. We are keen to find out how you feel about this as a patient and would appreciate it if you could kindly spend a few moments to complete the form.

Please circle your preferences below.

Who would you prefer to manage you after the operation?

Surgeon GP Specialist nurse Don't know

Who do you think is best suited to manage you after the operation?

Surgeon GP Specialist nurse Don't know

How important do you think it is that you see the surgical team that operated on you?

Extremely useful 5 4 3 2 1 Waste of time

If you had developed a complication after the operation, who do you think should have managed you?

Surgeon GP Specialist nurse Don't know

Do you think your GP has sufficient knowledge and experience to adequately deal with your appointment today?

Yes/No

Any further comments: _____

I consent to these data being recorded for research and audit purposes (please tick)

Mr Shahzad Ilyas, Dr Tom Markham, Ms Jane Webber, Mr Keith Tucker, and the whole Orthopaedic Department at the Norfolk and Norwich University Hospital

Appendix 3: Trainee questionnaire**Norfolk and Norwich University Hospital, Trauma and Orthopaedic Department**

With the introduction of MMC, surgical training is becoming more stream-lined, hence making it vital to highlight and make use of all available training resources. Recently, proposals by the Government, in order to save resources, could potentially jeopardise these training opportunities as well as compromise quality of patient care. We are keen to find out how you feel about this as a surgical trainee and would appreciate it if you could kindly spend a few moments to complete the form.

Level of trainee: _____ Qualifications: _____ Specialty: _____

How often to you personally follow-up your own postoperative patients in clinic?

Always 100% 75% 50% 25% 0% Never

How useful do you feel it is to your training to follow-up your own postoperative patients?

Extremely useful 5 4 3 2 1 Waste of time

Would you rather just review postoperative complications, instead of all postoperative patients? Yes/No

Please grade the following according to how beneficial they are to your training (10 = extremely beneficial; 0 = not beneficial). Appraisal ___ Exams ___ Follow-up clinics ___ Journal clubs ___ Teaching sessions ___

Who do you feel should follow-up postoperative patients?

District nurse Practice nurse Nurse specialist GP Surgeon

Any further comments: _____

I consent to these data being recorded for research and audit purposes (please tick)

Mr Shahzad Ilyas, Dr Tom Markham, Ms Jane Webber, Mr Keith Tucker, and the whole Orthopaedic Department at the Norfolk and Norwich University Hospital