The surgical care practitioner: a feasible alternative. Results of a prospective 4-year audit at St Mary's Hospital Trust, London

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ABSTRACT

INTRODUCTION Surgical care practitioners (SCPs) are an expanding group of professionals, drawn from nursing and the allied health professions. Amongst other functions, SCPs can provide a range of surgical procedures including a 'minor surgical' service. The aim of this study was to audit the volume and outcomes related to the SCP service at St Mary's since its inception.

PATIENTS AND METHODS All prospectively collected data regarding SCP-managed patients between 2001 and 2005 were retrospectively audited. Volume, case mix, waiting times, complications and patient satisfaction were recorded and evaluated.

RESULTS In this 4-year period, the SCP performed 381 minor operative cases (year 1 to year 4: 32, 74, 114 and 161 cases, respectively). These included excision of lipomas, sebaceous cysts and suspicious naevi under local anaesthesia and 7 similar cases under general anaesthetic. There were 11 minor postoperative complications which included 7 wound infections which were all resolved with a short course of oral antibiotics, 2 seromas of which one needed aspiration under local anaesthetic and one minor wound dehiscence which was re-sutured the same day. Overall, 71% were seen within 1 month of referral, 16% within 1–2 months, 3% within 3 months and 10% within 6 months. In addition, 59% were seen and treated within 20 min of their appointed time, 15% within 30–60 min and 24% within 1–2 h. The 3-month patient perspective audit carried out between May and July 2004 included 59 completed patient questionnaires following surgery; 100% were totally satisfied with the care that they received; 98% were happy to see the SCP and 98% documented that they would recommend the SCP to others.

CONCLUSIONS The 4-year period of using an SCP at St Mary's shows that it is feasible and safe for minor operative procedures, that it contributes positively to waiting times and is acceptable to patients.

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Surgical care practitioner – Audit – Minor surgery

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Non-medically qualified practitioners have been working as assistants in surgical practice for more than two decades. Surgical care practitioners (SCPs) are an expanding group of professionals, drawn from nursing and the allied health professions. Amongst other functions, SCPs can provide a range of surgical procedures including a 'minor surgical' service, offering patients operative removal of a range of lesions including lipomas, sebaceous cysts and naevi. The need for this role has become apparent over several years

and has evolved for a number of reasons. The new UK National Health Service has created a range of new service developments including changes within the role of nurses which is taking place alongside changes to junior doctors' training.

The European Working Time Directive (EWTD) was implemented in August 2004 limiting maximum weekly hours for junior doctors to 58, which from 2009 will be decreased further to 48 h with additional restrictions on rest

time between shifts.¹ This has led to a re-definition of traditional roles and identified a need for additional non-medical practitioners to provide an extended range of services. Training programmes for several such roles (including peri-operative and surgical care practitioners) have been developed and evaluated within our institution.

In addition, there is continuing pressure to reduce waiting times for operative procedures at the same time as improving patient choice. Current statistics indicate that nationally in December 2004 there were 858,000 patients on the waiting list for an operation with an average wait of 9 months.² The UK Government's target is to reduce this wait to 6 months and eventually further to 18 weeks.

The nurse practitioner role is already well established in many fields with day-case pre-assessment clinics frequently nurse-led.^{3,4} Urology nurse practitioners have been shown to be effective in running cystoscopy lists^{5,6} and nurse-led endoscopy is now utilised within many hospital trusts with guidelines produced by a working party set up by the British Society of Gastroenterologists for nurse endoscopists.^{7,8} Surgical care practitioners are also used for saphenous vein harvesting in cardiothoracic surgery.^{9,10}

Over 1000 patients per year are referred for minor surgical procedures by general practitioners to St Mary's NHS Trust. This study describes the service provided by a surgical care practitioner who has been providing a rapid, one-stop 'see-and-treat' service since August 2001.

The surgical care practitioner at St Mary's

The SCP at St Mary's Hospital has been running the rapid-access, one-stop clinic alongside the already established consultant-led service since August 2001. The SCP's background is as an experienced theatre sister in general and laparoscopic surgery who has completed a university-based course which allows experienced theatre practitioners to take an extended role at the operating table, providing skilled surgical assistance under the direct supervision of the surgeon. In addition, an intensive in-house educational programme at Imperial College was formulated by the surgical team to a level comparable to that of a newly qualified house officer. Other courses attended for training purposes include the Basic Surgical Skills course at The Royal College of Surgeons of England and the course for Autonomous Practice for Nurses. Validation is also continuing by current surgical consultants in our Trust. This is achieved using several different methods:

Observational – both clinical and simulated environment

Simulated patient and reality setting

DVD recorded

Feedback from observer and simulated patient

Questionnaires.

Following the inception of the National Association of Assistants in Surgical Practice (NAASP) in 2001, it was recognised that there were a growing number of non-medically qualified practitioners developing with a lack of equitable training. In 2003, the National Surgical Practitioner Core Syllabus¹⁵ was developed to provide a structured and common core education based training to support practitioners fulfilling such roles.

The aim at St Mary's was to expand the role of the SCP to include decision making and to carry out minor surgical procedures independently under the direct supervision of a surgical consultant. The SCP works as a member of the surgical team not as an independent practitioner in a one-stop setting. Prior to performing any surgical intervention, the SCP prepares the patient appropriately by obtaining a past medical history including any current medications; a pre-operative physical assessment is also undertaken to determine patient fitness and suitability for the surgical procedure. Informed consent is obtained and, by liaising with members of the multidisciplinary team, the SCP performs any necessary pre-operative investigations to ensure that the appropriate operative procedure can be performed safely. Post-surgery discharge follows a satisfactory wound assessment and provision of a discharge letter that contains departmental contact details should follow-up be required. A post-surgery follow-up call is also routinely undertaken to assess patient satisfaction.

In recent years, the SCP has offered six intensive training courses at our institution for other multidisciplinary nurses wishing to develop skills in minor surgery. On the wider national stage, training centres for surgical care practitioners have piloted structured programmes. The St Mary's SCP currently has two operating sessions per week where about 10–12 patients in total are booked.

Patients and Methods

All data regarding SCP-managed patients were prospectively collected. Between 2001 and 2005, the SCP performed a range of minor surgical procedures including excision of lipomas, sebaceous cysts and suspicious naevi under local anaesthesia. Data were collected to determine surgical outcomes, complications and histology findings, including unexpected malignancy, as well as the need for referral to a specialist or for general anaesthesia.

In addition, the SCP performed a 3-month audit (May–July 2004) where each patient was asked to complete a patient satisfaction questionnaire on the day of procedure which detailed level of satisfaction, waiting time for appointment and time in waiting room on day; the questionnaire also assessed patients' understanding of the condition, the local anaesthetic and the proposed procedure. Questions were also asked regarding the role of the SCP

Table 1 Summary of cases performed by St Mary's surgical care practitioner

Procedure	August 2001–March 2002	April 2002–March 2003	April 2003–March 2004	April 2004–Feb. 2005
Epidermoid cyst	11	23	35	72
Naevi	6	3	12	15
Skin tag	7	16	25	24
Basal cell papilloma	6	12	10	17
Lipoma	–	4	15	22
Others	2	10	17	25
Total	32	74	114	161
Consultations	–	7	11	17
Total referrals	–	1	10	4
General anaesthetic	–	1	4	2
*Specialist	–	–	6	2

*Denotes that a patient was referred for a specialist surgical opinion.

including satisfaction with the SCP and whether they would see the SCP again. Each question was scored using a Likert type scale 1 to 5 with 1 representing 'not at all satisfied' and 5 representing 'totally satisfied' (Appendix 1). In addition, each patient received a follow-up telephone call from the SCP at 14 days after the procedure. This established any problems or concerns following the procedure and assessed the need for further review together with histopathology results.

Results

The SCP performed a total of 381 procedures between August 2001 and February 2005 (Table 1).

Between August 2001 and March 2002, 32 procedures were performed. The case mix included 11 sebaceous cysts, 6 naevi, 7 skin tags, 6 basal cell papillomas and 2 cases recorded as 'other'.

Between April 2002 and March 2003, 74 procedures were performed. The case mix included 29 sebaceous cysts, 3 moles, 16 skin tags, 4 lipomas, 12 basal cell papillomas and 10 others. In addition, there were 7 consultations and one referral for a general anaesthetic.

Between April 2003 and March 2004, 114 procedures were performed. The case mix included 35 sebaceous cysts, 12 moles, 25 skin tags, 15 lipomas, 10 basal cell papillomas and 17 others. There were 11 consultations, 4 referrals for general anaesthetic and 6 specialist referrals, to ENT, gynaecology, plastic surgery and dermatology.

Between April 2004 and February 2005, 161 procedures were performed. The case mix included 72 sebaceous cysts, 15 moles, 24 skin tags, 22 lipomas, 17 basal cell papillomas

and 25 others. In addition there were 17 consultations, 2 referrals for general anaesthetic and 2 referrals to ENT and plastic surgery.

Outcome data were not recorded for the first period. For the period April 2002 and March 2003 there were two patients who were recorded as 'apprehensive of the SCP's role' but post-procedure follow-up recorded both as 'extremely pleased' and there were no further problems reported.

Between April 2003 and March 2004, one patient developed a wound infection which was treated with antibiotics and the patient was reviewed in clinic by the SCP. One patient reported that their sutures 'fell out' and another reported an 'all-over' body rash on the following day with a possible reaction to local anaesthesia.

In the period April 2004 to February 2005, three malignant melanomas were detected following histology. Two of these had completely clear excision margins and were thus curative; however, one included the lateral resection margin and, therefore, was followed up for wider excision. Six patients reported wound infection. Three of these were treated successfully with antibiotic therapy prescribed by the GP. The SCP and consultant reviewed one patient who returned back to the day surgery unit with a possible infection but review revealed erythema and no infection and they were re-assured. Two patients are reported to have developed seromas and one visited accident and emergency for this.

The 3-month patient perspective audit recorded the following results: 59 patients completed the questionnaire following surgery; 100% were totally satisfied with the care that they received; 71% were seen within 1 month of referral,

16% within 1–2 months, 3% within 3 months and 10% within 6 months.

Overall, 59% were seen and treated within 20 min of their appointed time, 15% within 30–60 min, and 24% within 1–2 h.

When questioned regarding their understanding of their condition, 88% were totally happy representing a maximum score of 5, 6% scored 4, and 5% scored 3. Regarding awareness of the SCP performing the surgery, 67% were aware that it would be the SCP and 33% were not aware. However, 98% of patients felt that it would have made no difference if a doctor had performed the surgery with only 1% not sure.

Of the 59 patients questioned, 98% would be happy to see the SCP again giving a maximum score 5 and 98% would recommend the SCP to others again giving a maximum score of 5.

No formal scoring system was used for the 14-day follow-up telephone consultation but feedback was positive with the majority of patients finding it extremely pleasing.

Discussion

The SCP role at St Mary's is now well established and has been shown to work over a 4-year period. Our data indicate that not only is the SCP able to perform a wide range of minor surgical procedures but that patient satisfaction is high. It impacts positively on patient waiting time and, as such, represents a useful addition to the consultant-run day surgery unit.

The SCP follows up a patient's histopathological results and any found to be suspicious are discussed with the team. The SCP completes the necessary referral to the relevant specialist and GP to inform them of the follow-up in progress. The SCP also contacts the patient and discusses the pathology findings and the forthcoming referral and management plan. The SCP remains contactable by the patient at all times.

There is an increased demand for rapid assessment and treatment of minor surgical lesions with pressure on service provision to reduce waiting times and for primary care physicians to provide increased choice. The *Hospital Episode Statistics* in the UK for 2003–2004 recorded 189,400 skin lesions excised in the NHS (excluding those included as plastic surgical cases).¹¹ In the past, it has often been junior doctors (senior house officer and registrar grades) who have run the minor surgery lists. With the implementation of the Foundation years and ultimately a move to earlier specialising training, their role in this area becomes uncertain.

We recognise that the issue of SCPs is a controversial one.¹² However, for the SCP role to become fully integrated within the new NHS there may still need to be attitude changes by existing medical staff, including junior doctors who might feel that operative experience traditionally

assigned to them is being transferred elsewhere resulting in a negative effect on their training and also from nursing staff reluctant to consider taking on additional roles.

At St Mary's, this has proved not to be the case as the SCP clinic is run in parallel (under proximal supervision) with the consultant-led day surgical unit where junior medical staff still assist with no intention for it to function in isolation. Interestingly, in the review by Gidlow *et al.*⁶ of nurse-led cystoscopy, the authors highlight that junior doctors often have inadequate supervision and training regarding cystoscopy. This is also often the case with minor surgical procedures and the trainees may indeed benefit from an in-house educational programme similar to that provided for the SCP.

There have also been concerns regarding patient acceptance of the SCP in a role that is traditionally considered exclusively that of a doctor. This appears not to be the case for the patients questioned at St Mary's, as all were satisfied at being treated by an SCP and all would be pleased to be treated by the same individual again. The SCP works independently but as part of a team with supervision or help readily available should this be necessary. In addition, the SCP also provides an easily accessible point of access for patients should they need it following surgery.

The implications for nurse training are potentially great, but this may not ultimately need to follow an initial period of nurse training and could, in fact, function in isolation by training for an allied medical profession comprising of practitioners who were qualified not as nurses but as SCPs. As such, they would potentially have an equally valid teaching role to junior doctors and to nurses.

Currently, the outcomes of all procedures carried out by a consultant surgeon are subject to audit and as part of assessment for clinical governance these may then be published. Members of the consultants' teams performing procedures under their supervision will have their results expressed as part of the consultants and not separately, as whilst in training they are ultimately their responsibility. However, as SCPs are functioning independently with their operating lists under proximal supervision of the consultant responsible for the patients, then the same audit and clinical governance rules may need to apply to the SCP as for the consultant and ultimately their results may be publishable.

The SCP may also provide an important role in the new treatment centres. These centres where patients can be referred directly for specific procedures and followed up independently of the patients' local trust represent an important step in the plan for separating elective from acute medical care. As such, the SCP would potentially be able to have several minor 'see-and-treat' lists within the treatment centre which could function alongside medically run day-surgery lists but, ultimately, could allow surgeons to concentrate more on acute surgical care if they wish.

Conclusions

The 4-year period of using an SCP at St Mary's shows that it is feasible and safe, that it contributes positively to waiting times and is acceptable to patients. It raises some questions regarding junior doctor training but highlights the need for minor surgical training programmes available to surgical trainees, general practitioners interested in minor surgery and to nurses considering becoming SCPs. The presence of an SCP should not itself deprive surgical trainees of opportunities to learn. Indeed, an SCP list could represent a valuable source of training for a surgical trainee as SCP lists tend to be smaller and comprise the more simple surgical lesions.

SCPs may also have an important place in the new NHS especially with regard to good provision of service within treatment centres.

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APPENDIX 1 [see next page]

SURGICAL CARE PRACTITIONER MINOR SURGERY CLINIC AUDIT

APPENDIX 1

SURGICAL CARE PRACTITIONER MINOR SURGERY CLINIC AUDIT

Dear Patient

We would very much appreciate, if you would complete this short questionnaire to help us to maintain, and improve the service, which we provide. Please tick or circle the appropriate box.

Were you satisfied with your surgical care received today?

1	2	3	4	5
Not at all	Satisfactory	Totally		

How long did you have to wait to attend for this appointment?

1–2 months	3–6 months	6–9 months	9–12 months
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How long did you have to wait in the waiting room?

0–20 min	30–60 min	1–2 h	2–3 h
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Did you understand your consultation about:

(a) Your condition?

1	2	3	4	5
Not at all		Satisfactory		Totally

(b) The local anaesthetic?

1	2	3	4	5
Not at all		Satisfactory		Totally

(c) The operation?

1	2	3	4	5
Not at all		Satisfactory		Totally

Were you aware that a surgical care practitioner would perform your operation?

Yes	No
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Do you think it would have made any difference if a doctor had performed your operation?

Yes	No
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If 'Yes' please explain why _____

Were you happy with the treatment you received from the surgical care practitioner?

1	2	3	4	5
Extremely disappointed		Satisfactory		Extremely pleased

If you had a similar condition, would you be happy to be seen by the surgical care practitioner again?

1	2	3	4	5
Not at all		Possibly		Definitely

Would you recommend the surgical care practitioner to others?

1	2	3	4	5
Not at all		Possibly		Definitely

We would be happy to receive any further comments/suggestions _____