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Ormrod, Graham

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# The effectiveness of nurse-led surgical pre-assessment clinics

Recent health initiatives have put the focus on patient-centred care, with the result that an ever greater number of nurses now provide a high-quality patient-focused service through a variety of roles in surgical pre-assessment. This article charts the development of this role and the concomitant models of surgical pre-assessment that have evolved in the NHS

Deborah Casey, MA (Health), BSc (Hons), RGN, RNT, Cert Ed, Nurse Teacher; Graham Ormrod, BA (Hons), MSc (Health Professional Education), RGN, Nurse Teacher, Professional Development Department, Leeds Teaching Hospital, Leeds

SURGICAL PRE-ASSESSMENT,  
NURSE SPECIALISTS,  
PATIENT-CENTRED CARE

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**P**re-operative pre-assessment has this summer been the subject of National Institute for Clinical Excellence (NICE) guidance (see Box 1). However, in a review of pre-assessment clinics, Clinch (1997) states that, before 1990, there was little published formal research on pre-assessment, with most accounts being descriptive, anecdotal and aimed at sharing the experience of organising such services. Box 2 shows the traditional pathway for patients requiring elective surgery in the UK.

There is significant evidence to indicate that this is an inefficient way of managing patient processes. Research suggests that it results in high rates of cancellation and postponement, as patients are often not fit for surgery or because there has been inadequate time for investigations, with the result that test results are not ready or acted on before surgery (Thompson, 1991). Research suggests that poor emotional preparation of patients and the length of time between the original outpatients appointment and date of surgery may also lead to some patients to fail to attend for surgery (Livingstone et al, 1993).

## Key functions of surgical pre-assessment

The early 1990s in the UK saw the introduction of the concept of the pre-admission assessment of patients, usually within dedicated clinics, in an attempt to provide a more effective and efficient model of care. According to Livingstone et al (1993) general surgical pre-assessment clinics have three key functions:

- To assess the patient's fitness for anaesthesia
- To undertake a physical examination, take a medical history and carry out the 'clerking' procedure in advance of admission
- To undertake or arrange any necessary tests or investigations.

Several studies have retrospectively reviewed waiting lists over six-month periods and have concluded that pre-assessment clinics lead to increased admission rates, resolve problems that might preclude or delay surgery (Kerridge et al, 1995) and reduce non-attendance rates (Tibble and Przemioslo, 1999).

## Medicine or nursing?

Much of the literature concerning the benefits of pre-assessment falls into two categories:

- Those that describe the pre-assessment processes as undertaken by medical staff
- Those that describe nurse-led pre-assessment.

The papers focusing on nurse-led pre-assessment are, on the whole, more recent: they include the work of Jones et al (2000) and Reed et al (1997). Both papers describe audits that demonstrate the efficacy of nurse-led pre-assessment clinics. The latter study, in particular, demonstrates reduction in cancellations of surgery on the day of admission by 5%, while Jones et al reports fewer complications among patients who were clerked by nurse specialists than those clerked by medical staff.

Similarly, Stilwell (1991) suggests that a nurse-led service should seek to do the following: >

### Box 1. National Institute for Clinical Excellence guidance on pre-operative tests

New national guidelines on pre-operative tests have been launched by NICE.

These have major implications for nurses working in the specialty of the pre-assessment of surgical patients. They provide the basis for reviewing existing practice and revising existing relevant local guidelines, care pathways and protocols accordingly.

Ultimately, the guidelines should also enable the pre-assessment nurse to ensure that patients are more fully informed about the nature of pre-operative tests carried out, and be confident that they are achieving best practice in pre-operative screening.

Source: NICE, 2003

### Box 2. The traditional surgery pathway

- Patient seen in outpatients by surgeon
- Listed for surgery on waiting list
- Contacted by post with date for admission
- Admission to ward on the day before surgery
- Clerking, investigations, nursing assessment, anaesthetic assessment and preparation

### Box 3. Measurable improved patient outcomes with nurse-led services

- Length of patient stay
- Health status
- Psychological well-being
- Dependence after discharge
- Reduced readmission rates
- Reduced mortality
- Greater patient satisfaction
- Increased patient knowledge about their conditions

Source: Spilsbury and Meyer, 2001

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- Provide patients with direct access to nurse-led care
- Enable competent assessment of a patient's physical, mental and emotional health states
- Incorporate health promotion in consultations
- Enable nurses to advise and carry out appropriate nursing treatments.

Like any nurse-led service, pre-assessment services have the potential to fulfil these criteria. The development of nurse-led pre-assessment services also needs to be viewed in the context of the development and increasing acceptance of the value of nurse-led services in all specialties. A literature review on the nursing contribution to patient outcomes found that a large number of robust studies published in the 1990s suggested that nurse-led services provide better care for patients (Box 3) (Spilsbury and Meyer, 2001).

Similar positive outcomes are noted by Kinley et al (2001). They undertook a multicentred randomised controlled trial to ascertain whether appropriately trained nurses could undertake pre-operative assessment to the same standard as pre-registration house officers, with the conclusion that they could. Pre-operative assessments by nurses were judged to be equivalent to those performed by pre-registration house officers, and semistructured interviews showed that patients found pre-assessment by nurses acceptable. The authors concluded, however, that further research was warranted into the extent and type of training needed for staff taking on this role.

Despite the significant evidence of positive outcomes with regard to nursing pre-assessments, it is likely that some early nurse-led pre-admission clinics were developed simply because nurses were perceived as cheaper and more readily available than medical staff. However, while there appears to be no doubt that nurses can provide a service of similar standard following appropriate education, the assumption that nurses are a cheaper substitute for medics may be flawed. For example, nurses tend to spend significantly more time with patients in an advice and counselling role.

Richardson et al (1998) refer to 'service enhancement by nurses rather than substitution' — it cannot be presumed that nurses undertaking work previously done by medics will provide care in exactly the same way and may identify needs that were unmet in the past. The nursing literature on pre-assessment appears to provide a more holistic concept of pre-assessment than medical papers.

This is exemplified by Newton (1996), who

distributed questionnaires to 120 orthopaedic patients at a nurse-led pre-assessment clinic to evaluate the differences. Her findings suggested that nurse-led therapeutic interventions brought major benefits to patients, resulting in reduced anxiety levels. She also found that nurse-led pre-assessment played a key role in enhancing discharge planning.

Neither of these objectives was mentioned in Livingstone's key functions of a pre-assessment clinic cited above. This, perhaps, reflects the different philosophies and models of practice espoused by nursing and medicine. Livingstone takes a medical perspective with the emphasis on physical preparation, ignoring wider holistic aspects of assessment.

### Patients' perceptions of nurse-led pre-assessment

Malkin (2000) explored patient perceptions of nurse-led pre-assessment and found that such services relieved anxiety — the caring environment, individual care and efficiency were major factors in improving the quality of the patient experience.

This clearly has implications when considering issues such as training and education needs in nurse-led pre-assessment. Reducing anxiety, for example, is not simply about information-giving. This is supported by Clinch (1997) who carried out both a patient satisfaction questionnaire and observational analyses of what nurses did. Her study, carried out in four pre-assessment clinics at one hospital, found that patients were satisfied with the service, and that information-giving and health promotion took place 'almost naturally' in clinics, with nurses using a significant range of communication skills.

Health promotion is rarely mentioned in the medical literature on pre-assessment, although it is seen as a key function of all health professionals. A randomised, controlled trial, undertaken by Haddock and Burrows (1997), showed the effectiveness of a nurse-led smoking cessation programme in a pre-assessment clinic.

Other studies have looked at clinical outcomes and found nurse-led pre-assessment to be safe and effective. Koay and Marks (1996) audited the effectiveness of nurse assessment for 445 patients and found that, on admission, only three had symptoms that were picked up at pre-admission screening. However, they researchers concluded that nurses tended to slightly over-order investigations.

A similar audit concluded likewise that nurses were as effective as medical staff in preventing cancellations through pre-admission clerking. There were actually fewer complications among patients

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**Box 4. The development of nurse-led pre-operative assessment clinics**

The development of the nursing role in pre-assessment undeniably stems from the publication of the new deal for doctors (NHSME, 1991) and *The Scope of Professional Practice* (UKCC, 1992) (now NMC). It is clear that both these documents have acted as catalysts for nurses to develop their roles in many significant ways including pre-assessment (Cameron, 2000).

The new deal, for example, gave explicit government support to widening the scope of nursing practice in order to cut junior doctors' hours. Financial resources were also made available to support initiatives to enable nurses to undertake interventions that were previously the domain of medics (Levenson and Vaughan, 1999).

This was complemented by publication of *The Scope of Professional Practice* (UKCC, 1992), which set out six principles to underpin practice development for nurses and midwives, with the emphasis on knowledge, judgement, accountability and skill. This can be seen as

processed by the nurse compared with those dealt with by medical staff (Jones et al, 2000).

**Types of nurse-led pre-assessment service**

Two types of nurse-led pre-assessment services are differentiated in the literature: those where nurses carry out a full clerking procedure, including physical examination of patients, and those where this task remains the responsibility of medical staff, either in the clinic or on admission.

The literature on pre-assessment lacks discussion or underlying rationale of these two exclusive models. The fact that nurses in pre-assessment clinics usually work within guidelines or protocols is sometimes mentioned (Kinley et al, 2001) but there is little debate about the remit of nurses' practice. The only mention is in guidance from the Association of Anaesthetists of Great Britain and Ireland (2001), which states that it is important to be clear about '... the boundaries between the remit of the pre-anaesthetic screening team and the responsibilities of the anaesthetists'.

Malkin (2000) briefly acknowledges the degree of 'autonomous decision-making' in pre-assessment but does not explore this in terms of diagnostic skills, interventions or referrals made by the nurse. Jones et al (2000) may be alluding to this in stating that the use of protocols for pre-assessment can be difficult — '... [they] cannot account for individual situations or incorporate clinical judgement'.

**Skill mix**

Another omission seems to be the lack of discussion on the grade, experience or skill mix of

acknowledgement by the UKCC of the dynamic nature of nursing, which must be relevant and responsive to patient needs, and be able to adjust to changing circumstances.

These principles had the potential to equip nurses and their employers '... with the means to develop responsive and flexible services into the 21st century' (UKCC, 2000). They replaced the guidelines set out in an earlier Department of Health circular, which stated that nurses could extend their role only in an emergency or on delegation by a doctor, '... who has been assured of the competence of the individual nurse concerned' (Department of Health and Social Security, 1977).

Subsequently subsumed into the updated *Code of Professional Conduct* (Nursing and Midwifery Council, 2002), the six principles were nevertheless highly significant when first published, as they made explicit the cultural shift from the concept of delegation to greater professional autonomy.

nurses in pre-assessment clinics. Jones et al (2000) refer to nurse specialists undertaking the role in urology, but they do not define the criteria that assign the role to this grade of staff.

There is a general perception that nurses working in pre-assessment should be experienced, but this is not elaborated upon in the literature. It seems likely that, as pre-assessment is clearly a major adjustment to nurses' scope of professional practice, in order to undertake the role effectively, they must have as a minimum a sound knowledge of the specialty within which they work, on top of well-developed assessment skills. It is likely that the grading of the role should reflect the experience and specialist skills needed.

**Conclusion**

The development of nurse-led pre-assessment appears to have been driven by a need to reduce costs, cut doctors' hours, improve the efficiency of the administrative process and improve waiting-list management (Box 4). The literature reveals that pre-assessment of surgical patients in a range of specialties can not only be safely and effectively carried out by nurses, but is also well accepted by patients.

Much research points to high patient satisfaction, possibly because nurse-led clinics are characterised by a wider social and emotional assessment to meet patients' postoperative and discharge needs, and offers additional interventions such as teaching and information-giving. The literature demonstrates that nurse-led pre-assessment offers a more holistic approach to pre-operative screening and preparation than the traditional medical model. □

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