Extended scope of nursing practice

# Extended scope of nursing practice: a multicentre randomised controlled trial of appropriately trained nurses and pre-registration house officers in pre-operative assessment in elective general surgery


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## *Executive summary*


*Health Technology Assessment* 2001; Vol. 5: No. 20

**Health Technology Assessment**
**NHS R&D HTA Programme**

# Executive summary

## Objectives

- To determine whether pre-operative assessment carried out by an appropriately trained nurse (ATN) is equivalent in quality to that carried out by a pre-registration house officer (PRHO).
- To assess whether pre-assessments carried out by ATNs and PRHOs are equivalent in terms of cost.
- To determine whether assessments carried out by ATNs are acceptable to patients.
- To investigate the quality of communication between senior medical staff and ATNs.

## Design

The study design was principally a prospective randomised equivalence trial but was accompanied by additional qualitative assessment of patient and staff perceptions, and an economic evaluation.

## Setting

The study was carried out at four NHS hospitals, three of which were teaching hospitals, in three NHS Trusts in Southampton, Sheffield and Doncaster.

## Subjects

All patients attending at one site for assessment prior to general anaesthetic for elective general, vascular, urological or breast surgery were potentially included in the study. Of 1907 patients who were randomised, 1874 completed the study with a full evaluation.

## Interventions

The intervention consisted of a pre-operative assessment carried out by either an ATN or a PRHO. Of the patients who completed the study with a full evaluation, 926 patients were randomised to the PRHO arm of the trial and 948 to the ATN arm. Three ATNs took part in the study, one from each centre, together with a total of 87 PRHOs.

## Main outcome measures

Immediately following the initial assessment of a patient by a PRHO or an ATN, one of a number of clinical research fellows, all specialist registrars in anaesthetics, repeated the assessment and recorded it on a study form, together with a list of investigations required. The clinical research fellow then evaluated the competency of the initial assessor by comparing the quality of their assessment with their own. Any deficiencies in ordering of investigations and referral to other specialities were met in order to maximise patient care. Three areas of ATN and PRHO performance were judged separately, history taking, examination and ordering of tests, and each was graded into one of four categories, the most important of which was under-assessment, which would possibly have affected peri-operative management. In the case of ordering of tests, it was possible to have both over- and under-assessed a patient on different tests.

## Results

The pre-operative assessments carried out by the ATNs were essentially equivalent to those performed by the PRHOs in terms of under-assessment that might possibly have affected peri-operative management, although there was variation between the ATNs in terms of the quality of history taking. This may be related to the low number of patients seen at one study site.

PRHOs ordered significantly more unnecessary tests than the ATNs. The substitution of ATNs for PRHOs was calculated to be cost neutral.

The results of the qualitative assessment showed that the use of ATNs for pre-operative assessment was acceptable to patients; however, there was no evidence that communication between senior medical staff and those carrying out pre-operative assessments was improved by their introduction.

## Conclusions

This study demonstrated no reason to inhibit the development of fully nurse-led pre-operative assessment, provided that the nurses are appropriately trained and maintain sufficient workload to retain skills.

### Implications for the health service

ATNs provide an acceptable and efficient alternative to PRHOs for the purposes of routine pre-operative assessment. Consideration will have to be given, however, to the positions of these nurses within the surgical team, and also to their career structure.

### Recommendations for future research

Further research is needed in the following areas:

- the extent and type of training needed for nurses undertaking the pre-operative assessment role
- the use, costs and benefits of routine pre-operative testing.

## Publication

Kinley H, Czoski-Murray C, George S, McCabe C, Primrose J, Reilly C, *et al.* Extended scope of nursing practice: a multicentre randomised controlled trial of appropriately trained nurses and pre-registration house officers in pre-operative assessment in elective general surgery. *Health Technol Assess* 2001;**5**(20).

# NHS R&D HTA Programme

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Initially, six HTA panels (pharmaceuticals, acute sector, primary and community care, diagnostics and imaging, population screening, methodology) helped to set the research priorities for the HTA Programme. However, during the past few years there have been a number of changes in and around NHS R&D, such as the establishment of the National Institute for Clinical Excellence (NICE) and the creation of three new research programmes: Service Delivery and Organisation (SDO); New and Emerging Applications of Technology (NEAT); and the Methodology Programme.

This has meant that the HTA panels can now focus more explicitly on health technologies ('health technologies' are broadly defined to include all interventions used to promote health, prevent and treat disease, and improve rehabilitation and long-term care) rather than settings of care. Therefore the panel structure has been redefined and replaced by three new panels: Pharmaceuticals; Therapeutic Procedures (including devices and operations); and Diagnostic Technologies and Screening.

The HTA Programme will continue to commission both primary and secondary research. The HTA Commissioning Board, supported by the National Coordinating Centre for Health Technology Assessment (NCCHTA), will consider and advise the Programme Director on the best research projects to pursue in order to address the research priorities identified by the three HTA panels.

The research reported in this monograph was funded as project number 94/40/38.



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http://www.ncchta.org ISSN 1366-5278