# Briefing Paper

# Extending the practice of allied health professionals in the NHS

This briefing paper presents the main findings of a review of the literature evaluating extended practice in five allied health professional (AHP) groups. The NHS Service Delivery and Organisation (SDO) Programme commissioned the review as part of its programme of research, evaluating innovations in the organisation and delivery of health services. **The five AHP groups, selected because they were professions in which the review team had particular expertise, were:** occupational therapists, paramedics, physiotherapists, radiographers and speech and language therapists.

The review was carried out by Kathryn McPherson, then Reader of Rehabilitation at the School of Health Professions & Rehabilitations Sciences at the University of Southampton with four colleagues from Southampton University: Paula Kersten, Steve George, Val Lattimer and Bridget Ellis; and Alice Breton of the Royal College of Surgeons, Edinburgh. The researchers were Dawn Kaur and Geoff Frampton. **It was completed in July 2004**.

The systematic review aimed for both breadth in searching and rigour in critique. It identified over 7,000 possible sources of which 355 contained information relevant to the topic and 22 were of sufficient quality to be considered for data extraction.

## Key messages

Extending the roles of NHS non-medical practitioners may help to solve medical workforce shortages and reduce waiting lists. This review concludes, however, that there is an urgent need to standardise training and to carry out research that evaluates the health outcomes and cost effectiveness of extended practice.

1. The Government wishes to encourage the extension and enhancement of AHP practice in the NHS where there is evidence of clear benefits.
2. The dearth of research providing such evidence is a limiting factor.
3. The lack of a common language to describe extended practice is also hampering the advancement of knowledge in the field.
4. The failure to provide coordinated training and education for AHPs undertaking extended practice is jeopardising the provision of standardised, high quality care.
5. Further investigation to find ways of overcoming these and other barriers to AHP extended practice is urgently needed.

DH Department of Health

sdo NHS Service Delivery and Organisation R&D Programme

## Who wants AHP extended practice?

Extending or enhancing the traditional role of AHPs, normally involving a substitution for the doctor's traditional role, is widely seen as 'a good thing'.

For the NHS, extended practice is a potential solution to a number of management issues including: waiting lists; the impending manpower crisis triggered by initiatives such as the New Deal European Working Time Directive (2003); and the need to create a more flexible workforce in line with Government policy. The Department of Health's policy document 'Ten Key Roles for AHPs' (2003) underlined the need for AHPs to 'extend and develop new roles and move towards new ways of working'. The NHS Modernisation Agency's Agenda for Change identified the development of a flexible workforce as a priority. The Agency's Changing Workforce Programme involves the facilitation of a number of pilot projects aimed at creating a baseline of information on AHP extended practice.

AHP groups themselves have a developing interest, fuelled by the experience in nursing where extended practice, and evidence for its impact, is more established. The perceived benefits include increased job satisfaction, a sense of autonomy and improved career prospects, with a knock-on effect on recruitment and retention. Several AHP professional bodies have developed, or are developing, a dedicated policy on extended practice, with interest groups, newsletters and conferences on the subject.

The public is generally considered to be in favour of AHP extended practice as a means of increasing access to services, though little, if any, research supports this view.

## Can AHPs undertake extended practice?

Evidence shows that, given sufficient training and resources, health staff can undertake many extended practices. This review has identified studies showing clear benefits in training AHPs to undertake specific tasks, traditionally performed by medical practitioners.

Much of the most robust research relates particularly to radiographers and paramedics, in both cases focusing on the ability of these practitioners to acquire and deliver specific skills. More limited research exists with other therapist groups. In the case of occupational therapy, this may be partly because the nature of the profession is already holistic. Also, recent professional enhancement within speech and language therapy means that a number of extended practice-type activities are considered part of routine practice.

## Is AHP extended practice a good thing?

The evidence base on extended practice is not universally positive. There remains clear concern on the part of some medical practitioners, particularly regarding AHPs undertaking invasive tests and diagnosis (Parker *et al*, 1972, Milligan 2003).

Further, the research base is not comprehensive. There has been a lack of systematic evaluation of the impact of extended role practitioners on health outcomes. Further, there has been little robust research to assess the impact of extended practice on other health professionals. The question of cost-effectiveness has been barely examined and the interpretation of what data does exist is frequently compromised by methodological limitations, such as short follow-up time and lack of blinding.

In an effort to explain this poor research record, researchers have commented that extended practice is being adopted haphazardly (Price *et al*, 2002) and that it is being driven by 'a political need for reduced waiting times rather than improved health outcomes' (Ellis and Kersten 2001).

In today's culture of evidence-based medicine and healthcare, this cannot be considered acceptable. There is a compelling and urgent need to evaluate:

**i.** health outcomes: the direct impact of AHP extended practice on the health, reduced disability and quality of life of patients;
**ii.** the comparative benefits of extended practice over routine management;
**iii.** the impact on other health professionals;
**iv.** the cost effectiveness of training AHPs to carry out extended roles, including the hidden cost of diverting senior practitioners from more traditional tasks.

# **Research** *into extended practice by AHP group*

## Radiographers

**Positive signs:**

- Trained radiographers are able to use X-rays as a diagnostic tool (Berman *et al*, 1985, Hughes *et al*, 1996).
- Trained radiographers are competent to 'dual read' mammograms along with radiologists (Pauli *et al*, 1996).
- Trained radiographers appear to be able to report verification films once training is provided (Suter *et al*, 2000).
- The complication rate for radiographers, who had attended a training course on performing barium enemas, was low and similar to that for radiologists (Bewell *et al*, 1996).

**Concerns:**

- Radiographers, trained to acquire pattern recognition techniques in chest X-rays, tended to over-report, causing a higher level of false positives (Hughes *et al*, 1996).
- The 'Dose Area Product' in barium enemas carried out by radiographers was significantly higher than when the procedure was carried out by radiologists (Crawley *et al*, 1998).
- By having to take on too many extra jobs, radiographers could sense unreasonable management expectations rather than opportunities for role development (Price *et al*, 2000).

## Physiotherapists

**Positive signs:**

Trained physiotherapists are as competent at assessing orthopaedic outpatients as post-fellowship junior orthopaedic surgeons. Patients experienced a higher rate of satisfaction when seen by physiotherapists, and physiotherapy consultations generated lower hospital costs because fewer X-rays and surgery referrals were ordered (Daker-White *et al*, 1999).

**Concerns:**

- A qualitative review of physiotherapists' experiences working in orthopaedic clinics found that success and satisfaction in the post was dependent on the relationship with the consultant and the medical team (Dawson 2002).
- While extended practice services appeared to decrease waiting times for physiotherapy (and occupational therapy) hand therapists, this development was likely to be compromised as the clinics filled up with referrals from other sources (Hattam 2002, Ellis & Kersten 2002, Milligan 2003).
- Both physiotherapists (and occupational therapists) and doctors reported concerns in terms of: litigation; lack of confidence and fear of adverse reactions when using injection skills; variations in training and the notion that an extended practice service is 'only as good as the therapist employed' (Atkins 2003, Milligan 2003, Ellis & Kersten 2002).

## Occupational therapists

**Positive signs:**

Given the holistic approach within occupational therapy, extended practice is already 'almost endemic' (Howard 2002).

**Concerns:**

- While extended practice services appeared to decrease waiting times for occupational therapy (and physiotherapy) hand therapists, this development was likely to be reversed as the clinics filled up with referrals from other sources (Hattam 2002, Ellis & Kersten 2002, Milligan 2003).
- Both occupational therapists (and physiotherapists) and doctors reported concerns that an extended practice service is 'only as good as the therapist employed' (Ellis & Kersten 2002).

## Paramedics

**Positive signs:**
Trained paramedics are able to correctly identify those people who have suffered a heart attack and who will benefit from pre-hospital thrombolysis, resulting in a significant reduction in 'call-to-needle' time. (Weaver *et al*, 1990, Morrison *et al*, 2000, Pedley *et al*, 2003, Pitt 2002, Claridge 2003).

**Concerns:**
- Endotracheal intubation, performed outside hospital by paramedics, had only a 57 per cent success rate, with some groups of patients more likely to die or to suffer brain damage as a result. This practice was stopped as a result of the study (Gausche *et al*, 2000).
- Telephone triage of emergency calls by paramedics resulted in ten per cent of patients, triaged as non-urgent, subsequently requiring hospital admission (Dale 2003).

## Speech and language therapists

**Positive signs:**
A randomised controlled trial comparing the effectiveness and efficiency of traditional voice therapy with voice therapy using fibreoptic video-laryngeal endoscopy (VLE) for which speech therapists were specially trained, concluded that therapy augmented by VLE was more efficient (Rattenbury *et al*, 2003).

**Concerns:**
When involved with procedures for sedated patients, there has been a suggestion that there is a need for speech and language therapists to:
- clarify their scope of practice as identified by state licensing agencies;
- make more use of protocols;
- ensure medical or dental practitioners are at hand, should complications arise.

(American Speech Language Hearing Association 1992).

# Further barriers *to AHP extended practice*

The following weaknesses and omissions relating to the development of AHP extended practice were considered by the review team to militate against the development of a standardised, high quality service:

### i. Appropriate methods of researching extended practice

Research evaluating extended practice is potentially hampered by:
- a lack of dedicated time and funding;
- the complexity of research governance procedures in clinical practice;
- the time required for ethical review, potentially preventing the evaluation of patients' perspectives of new services (as happened in pilot projects run by the Changing Workforce Programme);
- a lack of research skills within the AHP community.

### ii. Inadequate training and standardisation

The dominant training model was found to be an ad hoc approach with practitioners either pursuing their own postgraduate training at masters or clinical doctorate level or else dependent on an enthusiastic consultant or academic for training. Researchers involved in the following studies raised concerns about this ad hoc approach, which may undermine potentially successful extended practice:
- The success and satisfaction rates of physiotherapists, working in orthopaedic clinics, were highly dependent on the relationship with the consultant and the medical team (Dawson, 2004).
- Both therapists and clinicians expressed concerns about variability in training standards and the fact that the extended practice service is 'only as good as the therapist employed' (Atkins 2003, Milligan 2003, Ellis & Kersten 2001).
- While trained radiographers, carrying out barium enemas, had as low a rate of complications as consultant radiologists (Bewell 1996), conflict ensued once the training was completed. Radiographers reported that they found themselves in conflict with their consultant radiologists because of differences between the procedures used by trainers and those suggested by the consultants.

Examples of developments set to change this include:

- The Society of Radiographers now requires that members attain a recognised postgraduate qualification to establish core competencies before taking on extended practice. This follows the recognition that radiographers need a deeper level of knowledge in order to practice some of the extended skills that may previously have been taught 'on the job'.
- The British Paramedic Association has called for a fundamental move from 'training' to 'education' for paramedics to enable advanced skills of diagnosis, screening and assessment to be used safely and appropriately.
- Wessex Deanery and Hampshire & Isle of Wight Workforce Development initiative to develop and support advanced practitioner/consultant therapist posts and education.

### iii. A common language

Variability in terminology is at the root of a failure to share experience of extended work practices, thereby hampering the advancement of knowledge in the field. Terms used to describe practitioners undertaking extended practice include: Consultant Practitioner, Specialist Practitioner, Practitioner with Special Interests, Clinical Specialists including Orthopaedic Practitioner and Rheumatology Practitioner. The term 'Extended Scope Practice' (ESP), widely used by AHP groups, may in itself be problematic and confusing as it is difficult to ascertain when extended scope practice no longer involves an extension of conventional skills.

### iv. Legal issues

Professional accountability and liability is an issue of general concern within the NHS. However, AHP extended practice appears to present particular problems which are likely to persist, despite attempts to regularise its legal basis.

The main responsibility for ensuring competence of practitioners rests with their professional bodies, many of which have produced position statements regarding competence and how it should be assessed. In addition, the Health Professions Council (HPC) has produced two documents with relevance to AHPs, while not giving advice on extended practice *per se*. These documents are 'The Standards of Performance' and 'Conduct & Ethics and the Standards of Proficiency' and can be downloaded from the HPC website.

However, by definition, some aspects of extended practice will lie beyond the remit of individual professionals and AHP extended practice overall may require across the board standards for monitoring competency issues, with input from an extra professional body.

## The way forward

Provided there are clear and proven benefits, it can be argued that extended practice should be encouraged as a way of helping to solve current workforce problems and improve practitioner flexibility within the NHS. However, a series of weaknesses and omissions need to be urgently addressed. Only then, can this development can be confidently pursued, with potential benefit maximised and opportunity costs limited.

### Research

Research that investigates health outcomes is a major priority, and is identified as such by both practitioners and researchers. Consideration of less immediately obvious NHS outcomes, such as the impact of senior practitioners leaving routine services to undertake these roles, is also required. AHP research skills need to be sharpened to make it easier for practitioners to evaluate their own extended practice treatments and interventions. A partnership between healthcare practitioners, academics, research funding bodies and policy makers should be established to ensure that, once appropriate qualitative and quantitative evaluations are produced, the findings are applied to current strategies.

### Language

Specific emphasis should be directed at identifying a common language that is easily interpreted and shared within and across AHP groups.

### Law

Across the board standards for monitoring competency issues relating to extended practice, with input from an 'extra' professional body, should be considered as a means of providing greater security for both practitioners and patients.

## Training and standardisation

Despite progress in establishing core competencies in specific skills and an education structure for extended practice, the considerable variation in the quality of training is hampering the delivery of safe and timely services. The objective should be to achieve standardised, high quality care while making allowances for local differences in service requirements.

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The full report and details of current SDO research in the field can be downloaded at: www.sdo.lshtm.ac.uk/evaluatingmodels.htm#mcpherson

### About the SDO Programme

The SDO R&D Programme is a national research programme managed by the National Co-ordinating Centre for NHS Service Delivery and Organisation Research and Development (NCCSDO) under contract from the Department of Health's R&D Division.

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## Addendum

This document was published by the National Coordinating Centre for the Service Delivery and Organisation (NCCSDO) research programme, managed by the London School of Hygiene and Tropical Medicine.

The management of the Service Delivery and Organisation (SDO) programme has now transferred to the National Institute for Health Research Evaluations, Trials and Studies Coordinating Centre (NETSCC) based at the University of Southampton. Prior to April 2009, NETSCC had no involvement in the commissioning or production of this document and therefore we may not be able to comment on the background or technical detail of this document. Should you have any queries please contact sdo@southampton.ac.uk