Evaluation of the NHS Changing Workforce Programme’s Emergency Care Practitioners Pilot Study in Warwickshire

Short Report
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INTRODUCTION

1. Purpose of the Evaluation

The role of emergency care practitioner (ECP) has been created in response to a number of important driving factors within the NHS. These include the need to:

- Modernise emergency care
- Find ways of providing out of hours care in the wake of the new general practitioner (GP) contract
- Implement NHS human resource management policy.

A variety of different service models have been developed within the last three years in the United Kingdom (UK), depending on local service needs. Models vary according to the professional backgrounds of recruited ECPs, the length of training and educational programmes, and the ways in which ECPs are deployed. The NHS Changing Workforce Programme’s (CWP’s) pilot study in Warwickshire involved cross-training paramedics and nurses with an accident and emergency (A&E) care background, and educating the recruited practitioners to degree level. The purpose of the pilot study was to develop and field test the role in a number of different clinical settings – in pre-hospital care, A&E departments, walk-in centres, minor injury units and general practice.

2. PROJECT PROCESS

The vision for the NHS Changing Workforce Programme’s Emergency Care Practitioner Pilot study was to create experienced, multi-skilled practitioners who would be able to function confidently and independently, (within agreed protocols), both within the pre-hospital and the emergency care settings. Indeed, it was intended that the practitioners would work across the primary and secondary care interfaces flexibly during their working hours. This would enable them to accompany patients along their care pathways, to provide continuity, reduce duplication of care and to avoid multiple ‘hand offs’.
It was also intended that ECPs would have the necessary knowledge and skills to assess patients in the pre-hospital setting, and to either discharge them home or else refer them to more appropriate health care practitioners – either in primary, community or secondary care. This should reduce inappropriate admissions to A&E.

The pilot study was originally planned to run for just over 2 years – between May 2002 and June 2004, but plans changed after the first year. Due to urgent political pressures to roll the ECP role out nationally following a shorter training programme, the NHS Changing Workforce Programme foreclosed the pilot in August 2003. By contrast, the evaluation continued to follow the progress of this first cohort of ECPs until September 2004.

2.1 Recruitment to the Pilot

In May 2002 six student ECPs were recruited to the pilot study via a national advertisement. Three of the students were from a nursing background and 3 were paramedics. The recruited individuals were of a very high calibre, befitting a national pilot study. All had at least 2 years post-registration professional experience, but most had considerably more, as well as a range of further educational qualifications and experience of working in other settings.

2.2 Education and Training

The 2-year programme contained both joint and profession-specific elements. The nurses underwent training in emergency care driving and also achieved the IHCD Paramedic Award under the auspices of Warwickshire Ambulance Services. Paramedics, on the other hand, undertook level 2 modules in Emergency Care Nursing in minor injuries and minor illness, provided by Coventry University. By the end of the course, the nurses achieved dual professional registration, but the paramedics did not.

The joint elements of the programme consisted of rotational placements in the pre-hospital and A&E settings, to acquire the necessary experiential learning; training in clinical assessment skills; a level 2 module in Autonomous Practice and a level 3 module in Research Methods and Statistics. At the end of the 2-year period, all the
students had achieved a Diploma in Autonomous Practice and a BSc in Emergency Care. In addition, students received an intensive 4-week training in clinical assessment skills, provided by an independent company, M&K Training. Towards the end of the first year, the students were facilitated to use the experiences they had gained in developing the ECP role to design the new 15 week course to be rolled out nationally.

2.3 Pre-Hospital Despatch Procedure

During the course of the pilot study, the pre-hospital despatch procedure was established. ECPs were to be mobilised to attend Category B and C calls, and Category A calls along with ambulance back-up. It was envisaged that the first two categories of calls would result in ECPs either treating and referring patients, or else simply referring them for further assistance. However, some Category B calls and Category A calls would require urgent or immediate removal to A&E (see Figure 1).
2.4 Formal Scope of Service

The purpose of the pilot study was to test the ECP role across the range of clinical settings, and to establish its optimal clinical functions. Towards the end of the first year, the vision of the Steering Group was that these would comprise:

- Patient assessment
- Making direct patient referrals
- Providing protocol-based treatment
- Prescribing and administering antibiotics, tetanus injections and simple analgesics
- Wound closure and dressing
- Catheterisation
- Ordering X-rays and certain other diagnostic tests
- Taking blood samples
- Providing an alternative response vehicle and re-prioritisation of the second responding vehicle for category A calls.

2.5 Project Management

The ECP pilot study was overseen by a multidisciplinary project steering group chaired by an Associate Designer of the NHS Changing Workforce Programme. Members of the group were drawn from across the 5 participating acute NHS Trusts, Warwickshire Ambulance Services NHS Trust, the West Midlands South Workforce Development Confederation, North Warwickshire PCT and the Universities of Coventry and Warwick. In addition, representatives from the University of Swansea and the Welsh Ambulance Service were included. The Steering Group met every 2 months during the life of the ECP pilot study between May 2003 – August 2004, to assess progress, to advise and to drive the pilot forward.

The direct project management role changed hands several times during the pilot. At the outset of the pilot study, a project manager was appointed to supervise the ECPs directly and to co-ordinate the pilot. The individual appointed had a paramedical background.
A large part of the project manager’s responsibilities at the local level included setting up training, education and clinical placements for the ECPs. He also convened regular (at least) monthly meetings with the ECPs to deal with on-going issues arising out of being part of a national pilot study and at the forefront of change in emergency care service provision.

Within a year, the original project manager moved to another part of the country to take up a new post. The project management role then passed to the newly appointed clinical practice facilitator, who had a nursing background. She fulfilled the dual role for a few months, prior to taking on national responsibilities with the NHS Changing Workforce Programme, leading the fifteen-week ECP strategy nationally. At this juncture, at the end of June 2003, one of the student ECPs themselves took over as Project Manager. In August 2003 the West Midlands South Workforce Development Confederation employed a project manager, but this individual was also tasked with getting the new local fifteen-week training course up and running. No further dedicated project managers were appointed.

3. EVALUATION CRITERIA

The purpose of the evaluation was to track progress in role testing and to assess the impact of the role on two key service outcomes:

- the destination of 999 calls
- patient ‘processing’ time.

In addition, the evaluation sought to explore the experiences of the 6 pioneering ECPs and stakeholders’ views by collecting information about ECPs’:

- acceptance within the multidisciplinary emergency care team
- ability to develop their role
- ability to practice autonomously,

and stakeholders’ views about how ECPs influence:

- service provision
- the quality of care provided for patients’
and about ECPs’:

- fitness for purpose.

4. EVALUATION METHODS

A multi-method approach was used to capture information about different types of impacts made by the ECPs on emergency care service provision. Evaluation methods comprised:

- Individual semi-structured interviews with ECPs

- Individual semi-structured interviews with key stakeholders (A&E and pre-hospital service managers, educationalists, Project Managers, Clinical Facilitators, Workforce Development Confederation representatives)

- Focus groups with health and social care professionals working alongside ECPs in A&E and pre-hospital settings.

- Analysis of audit data collected by Warwickshire Ambulance Services NHS Trust

- Analysis of audit data collected by the ECPs themselves

- Analysis of ECPs’ clinical decision-making compared with a matched sample of A&E nurses and paramedics (to be reported in a forthcoming paper)

5. KEY FINDINGS

5.1 Enacting the Vision – Developing the ECP Role

While the NHS Changing Workforce Programme had a vision about what an ECP could be; in practice, the role was dynamic and evolving. No specific ECP job description existed at the outset of the pilot – this was to be defined by the process
and outcomes of the study. Questions about the key elements and purpose of the role reverberated throughout the pilot, and can be summarised as follows. Is the role of the ECP about:

- Improving the quality of care in the pre-hospital setting?
- Working in A&E?
- Integrating both of the above?
- Providing out-of-hours (OOH) care?
- Providing emergency or general health and social care?
- Career development for paramedics?
- Educating Others?

Due to lack of support, the ECPs were not deployed to work in primary care, as originally envisaged. However, overall, the core elements of the role – working in A&E and in the pre-hospital environment – were accepted by all of the project stakeholders as helping to achieve better integration and more patient-centred emergency and primary care services. Questions about the precise nature of ECP work and deployment remained throughout however, and there was recognition that in reality, the ECP role would continue to change and expand, particularly in relation to providing OOH care.

5.2 Enacting the Formal Scope of Practice

Patient Processing Time

Analysis of variance revealed that significantly more time was spent on scene by the ECPs compared with ambulance crews (14 min vs 22 min respectively; p<0.001). This was due to ECPs spending more time giving advice, reassuring patients, and attending to a wider range of patients’ care needs. However, overall time with the patient, i.e. from the time on scene to the time available for the next call, was not significantly different. This may be due to ECPs’ inability to transport some patients to hospital, because of being a single responder.
Destination of 999 Calls

In terms of patient destinations, ECPs had a sense that they were leaving only a few more patients at home compared with normal ambulance crews. This was borne out by our analysis, which indicated that all of the patients taken to hospital by the study para-ambulance during data collection were referred to the A&E department, whereas a small number of the ECP patients taken to hospital were referred to the Medical Admissions Unit or the Emergency Admissions Unit.

Patient Assessment

ECPs placed much emphasis on the importance of acquiring good clinical assessment skills. They requested additional training in this area, developed new assessment sheets for the Ambulance Service and made assessment skills a core part of the 15-week training programme they developed. Early results from the decision-making study also demonstrate ECPs’ superior abilities in this area, compared with a control group of A&E nurses and paramedics, who had not undergone ECP training. They suggest that ECPs elicit considerably more information whilst assessing patients, and are better able to articulate and justify the intended and potential interventions they would carry out. (Full details will be available in a forthcoming paper).

Direct patient Referrals

The ECPs had had some successes and some failures in making direct patient referrals, despite being well prepared for this function, particularly by the M&K course. In practice, their success in referring patients was very ad-hoc and depended on the hospital and the individual health professionals they were dealing with. Prior to the pilot, no formal referral pathways had been established, and the ECPs felt unable to negotiate any.

Protocol-based Treatment

The pilot was particularly hampered by a lack of proper clinical governance arrangements – including protocols, guidelines and PGDs being in place to enable ECPs to fulfil their formal scope of practice. This meant that the ECPs were never
able to develop and test their role at full capacity. There was a consensus amongst all of the ECPs that they could have done a lot more for patients had these missing elements of infrastructure been in place. Lack of resources, including necessary kit and equipment, and a dedicated vehicle, was a particular and persistent problem throughout the pilot.

ECPs estimated that in approximately ninety-five per cent of cases they could have done something more for patients, even if it were something as simple as taking a blood sample that could be conveyed with them to save time in hospital.

Indeed, ECPs’ frustration at the lack of equipment, protocols, guidelines and PGDs inspired them to collect their own audit data about what could have been done for patients if all the necessary approvals had been in place. Forms were developed specifically for this purpose. Findings demonstrated significant differences ECPs could have made to patients’ care if they had had the necessary agreements and access to a 12 lead ECG, and to appropriate wound closure equipment and advice cards. Had these resources been available, ECPs claimed that more patients could have been referred to self-care, received pain relief and experienced better outcomes of care.

Despatch Issues

It was anticipated that ECPs would be despatched to respond to all categories of calls, working independently with their own vehicles, and with the authority to downgrade second ambulances responding to category A and B calls (see figure 1). In reality, ECPs were despatched much less often than had been anticipated, due to a combination of insecurity and lack of understanding amongst ambulance control room staff about what ECPs could be trusted to deal with, and simple resistance to change.

As part of the evaluation process, audit forms were also developed by the ECPs to record information about whether or not, in their view, a second responding ambulance could have been down-graded, up-graded or cancelled. These findings do not necessarily indicate what actually happened in practice, because again ECPs were hampered by the lack of appropriate protocols to assist their decision-making. However, data were collected to indicate likely service outcomes if the ECP role was
fully operational. In ECPs’ opinion, in 80% of cases a second emergency vehicle was not required during the data collection period.

6. Key Recommendations

Future pilot studies of this nature would benefit from a stronger management process, particularly from having:

- A dedicated project management team;
- Better representation of key stakeholders - GPs and other allied health professionals - on the Steering Group, to facilitate clinical placements, referrals and collaborative working;
- A more concerted programme of change management across all clinical placement areas, and particularly involving ambulance services control room staff, prior to implementation.

Detailed forward planning and sufficient lead-in time is also crucial for rolling out any new role in practice. In particular, the following need to be in place before new practitioners take up their posts:

- Clear clinical governance arrangements
- Employment contracts relating to all clinical placement settings
- Patient group directives for prescribing
- Practice protocols and guidelines.

In terms of educational requirements, the pilot clearly demonstrates the importance for ECPs of having:

- Sufficiently detailed teaching inputs on clinical assessment skills.

Finally, with regard to evaluating new roles in practice, it is important that:

- Roll-out is informed by evaluation findings
- More sophisticated methods are developed for discriminating between the service impacts of ECPs prepared within different service models.
We contend that our forthcoming work on ECPs’ clinical decision making processes represents such a method.

7. Acknowledgements:
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