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Year 5 Research Project write-up
20th April 2007

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Abstract

How has the role of the Emergency Care Practitioner impacted upon themselves and the medical members of the Emergency Care Team since its implementation?

Background; the role of the Emergency Care Practitioner (ECP) was developed in 1999. The ECP works mainly in the community setting making decisions regarding admission, using pre-hospital treatments for patients and working with the out-of-hours service. The role of the ECP was designed to support primary and secondary care settings to meet nationally set targets.

Aims; to evaluate the impact the role of the ECP has had upon those who are working within this field and the impact it has had upon the medical members of the emergency care team i.e. acute emergency care doctors working in hospital and General Practitioners (GPs) working in the out-of-hours service.

Method; postal questionnaires were devised from an already validated questionnaire. Ten ECPs, 5 acute emergency hospital doctors and 5 GPs were randomly selected to participate. The questionnaire responses were based upon a Likert-type scale and a free text option allowed participants to expand upon their responses.

Results; the results from the questionnaires were analysed. A second experienced reviewer validated the responses. Using descriptive statistics and content analysis, the results were analysed. It was found that the role of the ECP had a positive impact on those working as ECPs. Doctors felt that the role of the ECP had a negative impact on them.

Conclusion; the role of the ECP has had positive effects on those who are working as ECPs and negative effects on the medical members of the team. Four key recommendations from the emergent themes were made addressing; poor communication between the members of the team; a lack of understanding from the medical team as to the role of the ECP; more direction as to the future of the role of the ECP; and further training for the ECP. This research has identified that more work is needed within this area.

Keywords; Emergency Care Practitioner (ECP), United Kingdom

Abbreviations; Emergency Care Practitioner (ECP), General Practitioner (GP), out-of-hours service (OOH), Accident and Emergency department (A & E), National Health Service (NHS), East Anglian Ambulance NHS Trust (EAAT).

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How has the role of the Emergency Care Practitioner impacted upon themselves and the medical members of the Emergency Care Team since its implementation?

Introduction

The role of the Emergency Care Practitioner (ECP) has been seen as pivotal in enabling acute and primary care trusts to meet national targets, specifically the maximum four hour Accident and Emergency waiting times that contribute to elements of the annual health check[1,] and the ten high impact changes for service improvement and delivery launched by Sir Nigel Crisp, NHS Chief Executive, in September 2004[2]. In announcing the high impact changes it was claimed that the ECP role had led to a reduction in people taken to A & E from 70% to 57% in the first six months of the trial.

The role of the ECP emerged in 1999[3] after the Ambulance Service Association concluded that a practitioner in emergency care could bring together some of the skills traditionally undertaken by A&E doctors, nurses and paramedics, to provide care in a way which had never been done before. This would lead to professional boundaries being broken down and the clinical skills of paramedics improving, which would ultimately lead to closer working relationships within the multidisciplinary team and better outcomes for patients[4] [5] . A report of the Joint Royal Colleges Ambulance Liaison Committee (JCALC) recommended the development of practitioners in emergency care (PEC) [6].

Following this the Changing Workforce Programme, part of the NHS Modernisation Agency, was commissioned to lead the development of the ECP role[7]. The Changing Workforce Programme, a national initiative, was set up to redesign roles in healthcare; evaluate their efficacy through the development of tools and measurements; and to make recommendations for the roll out of those roles that were shown to be effective. The work on the role of the ECP began with the Emergency Care pilot in Coventry and Warwickshire[8].

Since the pilot project in Coventry and Warwickshire, the ECP has become a recognised member of the emergency care team[9]. It has been identified that they possess key skills, are autonomous in making decisions (within agreed protocols) about patients

and have the unique ability to work in all areas of acute medical care i.e. the pre-hospital setting, OOH setting with GP support and in the acute medical in-hospital area[10,11].

However, since the development of this role and integration into the mainstream NHS, little has been done to evaluate how the practising ECP feels this role has impacted upon themselves or how their role has impacted upon the medical members of the emergency/ acute medical team. Evaluating and assessing the way in which this role is impacting upon themselves (ECPs) and others is important in evaluating whether this role is working in practice and where it will develop in the future.

Aims and objectives

The rationale for this study comprised two parts. First, the ECP role has been implemented across the health economy with no significant empirical evidence of how the ECPs themselves perceive their role, nor how the wider medical healthcare team perceive their role. Second, in a Patient-led NHS with commissioning in future being undertaken by GPs, there is a dearth of evidence about the perceived efficacy of the role and what is needed to make the role more effective.

The aim of this study was to evaluate the role of the ECP. ECPs cover the entire emergency care area of NHS Direct, the ambulance service, A & E departments, hospital-based assessment units, NHS walk-in services, intermediate care, community and social service areas.

This study aimed to examine how the role of the ECP has impacted upon practising ECP's themselves and how their role is perceived by the other main medical members of the emergency care team, specifically secondary care doctors working in the acute emergency setting (A & E and medical admissions) and GPs who work the OOH service in Norwich and the surrounding area.

The objectives of the study were:

1. To conduct a review of the literature relating to the emergent role of the ECP, including the policy drivers that led to the implementation of the role, formulating a literature based review of the research[12,13].
2. To adapt a previously validated tool to provide a means of gathering data.

3. To develop a sampling strategy to provide an unbiased sample of ECPs, A & E doctors and GPs working within Norwich and the surrounding area.
4. To question the respective samples about the impact of the ECP , ensuring that the research is ethical and had relevant approvals.
5. To analyse data and make recommendations.

Literature review

A review of existing literature was carried out as part of this research. A computerised search using MEDLINE, Google Scholar and Cochrane was performed. The references of identified papers were then scrutinised to identify further research. Searches were limited to English language only. The search was originally carried out for the research protocol in 2005 and was up-dated in 2007. Search terms were Emergency Care Practitioner and United Kingdom.

Literature that surrounds the subject of the ECP is limited. Since the role evolved in 1999[3] with the original paper from the Ambulance Service Association, research that was carried out has focused upon the effectiveness the ECP has had, the economics of the ECP and the implementation of the role within the NHS. Many papers focus upon the role of the Advanced Nurse Practitioner who possesses similar skills as the ECP and much focus has been on the integration of the nurse into the acute emergency care settings in primary or secondary care[14, 15, 16].

Original work on the development of the ECP was very relevant for this research as it was important to understand the vision behind the role of the ECP[1, 3, 17, 18]. The original pilot study carried out in Coventry and Warwickshire has thorough literature written around it and from this more focused policy has emerged.

The phase 1 and phase 2 evaluation of the ECP by the University of Sheffield published in 2004[10,11] has produced a national evaluation of the role of the ECP. Phase 1 focused upon the first wave pilot sites and phase 2 was a national evaluation of the clinical effectiveness and economic appraisal of the ECP. These papers recommended the future for the ECP was to develop partnerships and strengthen already established links between services.

A paper by Doy and Turner[19] specifically looked at the role of the ECP in the East Anglian area. This paper, published five years after the initial development of the role of the ECP, focused upon the training programme for the ECP at the University of East Anglia. Doy and co-author Turner work within the University of East Anglia and the EAAT. Their paper focused upon the development of the programme that the ECP would follow prior to qualification in this role. This paper set out the structure and perceived objectives that the ECP working within the East Anglian region would be trained within.

A more recent paper by Mason *et al*[20], published in the Journal of Emergency Medicine in 2007 examined the effectiveness of ECP's working within existing healthcare models. This paper examined the economic impact the ECP role has had on the NHS and the impact the ECP has had on the health service setting. In addition to this, the paper evaluated the impact the ECP has had on themselves and other healthcare professionals and stakeholders. The paper conducted this aspect of their study using a qualitative approach. Their evaluation was via telephone interview with five ECP's, five other healthcare professionals and six stakeholders. Their results were positive. The key recommendations from this paper were around effective partnerships, good communication, clinical supervision and a need for continued professional development as being vital in expanding the role of the ECP. Other papers of a similar type have looked at the role of the ECP with different objectives[21, 22, 23] and this paper is the only one found that has looked at the impact the role has had on the ECP themselves.

The Department of Health publication[25] 'Taking Healthcare to the patients; transforming NHS; transforming NHS ambulance services' has again highlighted the future for the ambulance service in the United Kingdom. The vision for the service will be to have a seamless co-ordinated provision that allows the patient more mobile healthcare and access to an increasing range of service within the pre-hospital setting. This paper is likely to move the ECP into breaking new boundaries when providing an emergency healthcare service.

Methods and Materials

The research received ethical approval from the Suffolk Research Ethics committee and approval by the Norwich Research and Development Office and followed the Research Governance framework for carrying out research within the NHS[26, 27].

The research approach used in this study was quantitative and the design of this study was a non-experimental social survey. Polit *et al*[28] classify surveys as falling within the quantitative paradigm and the social survey allows the production of numerical description about aspects of a study population. Surveys allow a broad, systematic review of topics and allow empirical data to be collected, which made them an appropriate tool for this piece of research[29].

The target population for the study was all practising ECPs employed by the EAAT, A & E/ emergency medical unit doctors from the Norfolk and Norwich University NHS Trust and GPs who work for the OOH service in Norwich and the surrounding area. A & E/ emergency medical unit doctors from the Norfolk and Norwich University NHS Trust Hospital were all practising consultants in either A & E or the Emergency Medical Unit.

The sampling strategy that was developed to identify participants for the study involved identifying all possible participants and randomly selecting a sample[27] from each of the three groups (ECPs, A & E/emergency medical unit doctors, and GPs working in the OOH service). Ten ECP's, five acute medical doctors and five OOH GP's were selected as potential participants from the target population.

Criteria for inclusion were that ECP's had to be working in this role at the time of the study and for the EAAT. There were no inclusion criteria for the medical members of the team. There were no exclusion criteria for either group. The simple inclusion criteria and lack of exclusion was to allow as many potential participants to be included as possible.

The sampling strategy aimed to be as representative of these three groups as possible. However, aspects such as health service experience, experience of contact with ECPs and time employed were identified as having the potential to affect the opinions of the participants of the research. Therefore, the questionnaires included a number of

demographic-type questions to ascertain the influence of these potential extraneous variables.

ECP recruits were selected randomly from the data base of ECPs working within the EAAT. At the start of the research project, there were thirty-seven ECP's employed by the EAAT (this number has subsequently risen due to the merger of ambulance trusts in East Anglia to form one service). The OOH GPs were selected randomly by the OOH service, which distributed the questionnaires to five randomly selected GP's. The A & E department at the Norfolk and Norwich University NHS Trust has only five consultants. The incorporation of the two consultants from the acute medical assessment unit took place to try and gain a greater understanding of the impact the ECP has on all areas of acute emergency medicine. In addition to this, the ECP could make direct referrals to this service from the pre-hospital setting so it was felt appropriate that these members of the medical team were involved. This meant a total of seven hospital doctors could participate and as for the GPs five were randomly selected.

Recruitment for the study took place in January 2007. With consent, participants returned their completed questionnaires by 31st January 2007 to allow time for analysis. In total, ten ECP's were invited to participate and seven returned questionnaire, three accident and emergency department consultants, two acute medical consultants were invited to contribute and three returned their questionnaire and five GPs who worked at the OOH service in the community setting were invited to participate, and three returned questionnaires.

The data collection method used to gather data for the study was by postal questionnaires. Two questionnaires were adapted from the tools developed by the Changing Workforce Programme, to make them specific to the role of the ECP. Two adaptations were made to these existing tools: the first was to the questionnaire that was used with the ECPs themselves to ascertain views about how they perceive their role; the second adaptation was to the questionnaire that was used among the wider emergency care team medical members to explore their perceptions of the ECP role.

The questionnaires took approximately ten minutes to complete. The questionnaire was based upon a Likert type measuring scale (see results section). This

type of measuring tool is simplistic and was used so to avoid any confusion when participants answered the questions[26]. Participants were encouraged to expand their thoughts about ECPs in free text. This gave the results a further dimension as participants who felt that they had a point to make that was not addressed in the questionnaire could freely express their points in this section.

The outcome measures for the ECP's included training and development of skills, communication between the emergency care team, satisfaction of the job and perceived patient views of the ECP (see Table 1). The outcome measures for the medical team were similar to those of the ECP measures and included the training and development of the ECP and whether this was satisfactory, patient outcomes, communication and satisfaction overall of the ECP role to the medical team (see Tables 2 and 3).

The analysis of the data used descriptive statistics to articulate the results. The additional 'free-text' comments made by any participant were examined using a content analysis process and were incorporated into the results as qualitative data.

Results

The results are presented using the questionnaires sent to the participants as a template. The results section is divided into the following;

Table 1- ECP results

Table 2- A & E / emergency medical unit doctor's results

Table 3- OOH GP results

In addition, at the start of each of the three sections, brief demographic information from the questionnaires has been provided. Following each of the tables, the analysis from the 'free-text' sections is provided.

Results from the Emergency Care Practitioners

The results from the ECPs (see Table 1) show that four of seven have been working in this role for three years. One ECP has been working for two years six months, one ECP for one year nine months and one ECP did not state the length of time they had worked.

Table 1

Questions	Strongly Agree	Agree	Do not know	Disagree	Strongly disagree
I enjoy my job	2	4		1	
I feel my treatment of patients has a positive effect on their care.	4	3			
I always know what is expected of me from the medical team.		5	1	1	
My comments about the way the patient is cared for are listened to by the medical team.	1	5		1	
I am encouraged to develop my skills.	2	4			1
It would be better for the patients if a different type of worker undertook parts of my job		2	1	4	
My training adequately prepared me for my practice.		5	1	1	
There are good opportunities to keep up to date with new developments in practice.		3	2	1	1
I feel valued by members of the ambulance and medical teams.		2	2	3	
I feel that I have the right skills & knowledge to do my job well.		6		1	
Communication with the doctors I work with is good.	3	3	1		
There is sufficient variety in my job to make it interesting.	2	4	1		
I need more training to be able to do my job better.	2	5			
There are opportunities for me to progress my career if I want to.	1	1	1	3	1
I have just about the right amount of responsibility.		4	1	2	

The comments made by some ECPs in the ‘free text’ area include ambulance service politics that some feel has put too much pressure on developing the role of the ECP and this has a negative impact upon those having taken on the role.

‘’*... the title ECP actually means different things depending on who and where you work’’*

‘’Ambulance service politics, with a lack of direction and encouragement in developing the ECP role fully to cross organisational boundaries.’

Others commented about the ‘*filling of the gaps’* or a ‘*misdirection’* of what the ECP should be doing especially when there were staff shortages or ECPs were new to an area.

Results from the Emergency Care hospital doctors

Three of the five hospital doctors who work in either A & E or the acute medical assessment unit participated in the study (see Table 2). One doctor withdrew from the study as he/she did not work with ECPs. One doctor had worked with ECPs for three years and two doctors did not state the length of time they had been working with them but commented that he/she had 'minimal involvement with ECP training.'

Table 2

Questions	Strongly agree	Agree	Do not know	Disagree	Strongly disagree
I enjoy working with ECP's.			1	1	1
I feel the treatment of patients by ECP's has a positive effect on their care.		1	1		1
I think ECP's know what the medical team expect of them.			1	1	1
The comments by ECP's about the care of patients are listened to by doctors.			1	1	1
ECP'S develop their skills and keep up-to-date.			1	1	1
It would be better for the patients if other members of the healthcare team other than an ECP cared for them.	1	2			
My workload has reduced since ECP's started.				1	2
ECP's are valued members of the emergency care team.		1	1	1	
ECP's value what the medical team do for the patients.		1	1		1
I feel that ECP's have the right skills & knowledge to do their job well.			1	1	1
Communication with the ECP's I work with is good.		2			1
Doctors know what ECP's should be doling.		1		1	1
ECP's need more training to be able to do their job better.	2	1			
ECP's have a positive effect on my job.			1	1	1
ECP's have just about the right amount of responsibility.			1		2

The comments of one hospital doctor in the free text section were similar to those of the ECP's themselves about 'filling in gaps' and saw ECPs as

'... a ?cheap ?Convenient alternative to GP assessment in primary care.'

Results from the GP's in the out-of-hours service

Three of five GPs who work for the out-of-hours emergency service in the community participated in the study (see Table 3). Two GPs had been working with ECPs for three years and one for fifteen months.

Table 3

Questions	Strongly agree	Agree	Do not know	Disagree	Strongly Disagree
I enjoy working with ECP's.		2		1	
I feel the treatment of patients by ECP's has a positive effect on their care.		1	1	1	
I think ECP's know what the medical team expect of them.		1	2		
The comments by ECP's about the care of patients are listened to by doctors.		2			
ECP'S develop their skills and keep up-to-date.		3			
It would be better for the patients if other members of the healthcare team other than an ECP cared for them.		1	2		
My workload has reduced since ECP's started.				3	
ECP's are valued members of the emergency care team.		2	1		
ECP's value what the medical team do for the patients.		3			
I feel that ECP's have the right skills & knowledge to do their job well.			2	1	
Communication with the ECP's I work with is good.		2		1	
Doctors know what ECP's should be doling.		2			1
ECP's need more training to be able to do their job better.	1	2			
ECP's have a positive effect on my job.		1		1	1
ECP's have just about the right amount of responsibility.		1	1	1	

One doctor did not answer the question regarding comments about the ECP being listened to by the medical team hence only two responses for this question were included in Table 3.

In the free text section comments made by GPs in the OOH service included concerns about knowledge and skills –

'*I am not entirely confident in their skills and knowledge – who is responsible if litigation arises and I simply triaged the call?'*

Similar comment was made by the GP out-of-hours doctors as to those working in the hospital setting '*…the ECP represents cheap labour and is another example of cost cutting in the NHS.'*

Discussion

The results of the study have shown that the majority of ECPs questioned feel positive about the impact the role of the ECP (see Table 1). The principal negative finding is that ECPs appear unsure about where their job can progress in the future. There is a degree of variance between how valued ECP's are by their colleagues in the ambulance service and by members of the medical team with some ECPs feeling valued and others disagreeing with this.

The questionnaire has highlighted that the majority of ECPs questioned enjoy their job, feel listened to by the medical members of the team and think that they know what the medical team members expect them to do. All ECP's questioned felt that their role had a positive effect on patient care.

The training that ECPs undertake appears to have given them the correct amount of knowledge they feel they need to perform their role and that their skill/knowledge base is adequate enough to perform their role. However, all ECPs felt that they needed more training to improve their role, which concurs with the findings of previous research[21,22].

The questionnaires completed by the medical members of the team produced different results. Those who worked with ECPs in secondary care felt that the role of the ECP had a negative impact since it was developed. The principal findings from this group were that hospital doctors did not know what ECPs role was, that they needed more training, their views on patient care were not listened to and ECPs need more training. Since the implementation of the role, the doctor's workload had not reduced and it would be better if another healthcare professional was seeing the patients ECPs saw (see Table 2).

The results from the GPs were more positive than the hospital doctors. The OOH doctors enjoyed working with ECPs and valued them within the team. They listen to their comments on patient care and felt they kept up-to-date with their skills. They did not know if ECPs had the correct skills or knowledge level to carry out their role but did feel that ECPs communicated with the team well. All doctors felt they knew what an ECP was and what they should be able to do within this role.

ECPs had not reduced the workload of the GPs working for the OOH service and had not had a positive effect on the doctor's role. It was felt that they needed more training to perform their job better.

There were no notable differences within any of the three groups when demographic information was correlated with responses.

The results of this study have shown that ECPs and the medical members of the emergency healthcare team view each other in very different ways. Although similarities exist in terms of training skills and what the future is for the ECP role, it appears that a lack of education and understanding of what an ECP can do is the fundamental problem.

Strengths and Weaknesses

Limitations on time and resources did restrict the data that this study could produce. Ideally, the sample size of this piece of research would have incorporated all working ECPs within the East Anglian Ambulance NHS Trust and a greater number of GPs.

The format of the questionnaire did limit the amount of information that could be gathered and if time and resources would have allowed, ideally interviews using the questions from the questionnaire in a semi-structured style would have been carried out. The amount of information gathered from the questionnaires in the 'free text' has eluded that some participants have strong views on the impact that ECPs have either on themselves or the medical team and it is felt that these would have been better expanded upon in an interview situation.

The results of the study have to be viewed in context. The sample size was small and the format of the questionnaire limited the results to a simplistic scale. The data are therefore only representative of the group examined and although some themes have emerged, due to the sample size they cannot be generalised to the greater population of ECPs.

However, the questionnaire was previously validated and the 'free text' option did allow for some expansion by participants. The questions attempted to look at all aspects of the ECP role and did explore an alternative angle, which is the effect on the medical team members which had not been looked at before. The themes that have emerged from this evaluation are similar to those by the previous paper by Mason [21,22].

Although the number of participants was small, the overall participation rate of thirteen from twenty has to be viewed as a strength of this piece of work especially given that it was a postal questionnaire and no reminder of participation was sent out.

The results of the study have produced some themes which will need addressing (see recommendations). However, due to the sample size, more research needs to be carried out between these groups before these results could be generalised to the wider ECP and medical team populations.

Recommendations

The key recommendations from this research project are as follows;

1- More integration of the ECP role within the accident and emergency care department and/or acute medical assessment unit is needed.

2- Emergency care practitioners need further guidance on where their role can develop and what taking on this role means to their career progression.

3- Education of the medical team needs to occur as many doctors still have a 'negative' view of what ECPs do in practice.

4- Further training for the ECP is required.

Conclusion

The role of the ECP has impacted not only upon those that have taken on the role but also those who work in the acute emergency care settings. The results from this study have shown three main themes that are;

1- communication between professionals needs addressing
2- education of all the acute medical team members could be improved

3- ECPs feel that they need some direction with regards to their training and the future of their role.

Overall, the results have shown that the ECP role appears to have had a positive impact upon those who are now working within this field. ECPs and OOH GPs appear to have had a positive effect on each other since the role began. The role of the ECP has had a negative effect on those working in hospital. It is clear that there are issues between acute medical emergency doctors and ECPs which should be addressed.

Key recommendations have been identified from this piece of research. Little previous work has been carried out within the area of the ECP and the other professionals who work with them. Further work is warranted.

Additional information

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