An evaluation of a training placement in general practice for paramedic practitioner students: improving patient-centred care through greater interprofessional understanding and supporting the development of autonomous practitioners

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ABSTRACT

Objectives To report the extent to which the placement of paramedic practitioner students (PPSs) in accredited general practice (GP) training practices supported their development as autonomous, patient-centred practitioners and fostered interprofessional learning.

Design A case study method was used. Sources of data included semi-structured telephone interviews (eight PPSs, eight GP trainers), an online end of placement survey and placement and assessment documentation. Interview data were transcribed and analysed using the constant comparative method.

Setting Accredited training practices in South East England.

Results All respondents were positive that the placement provided a high-quality interprofessional learning environment which provided PPSs with learning opportunities based on assessed need, the support of experienced trainers and access to a wide range of patients and learning situations. The placement enabled PPSs to acquire the appropriate skills, knowledge and understanding to act as autonomous, patient-centred practitioners.

Conclusions The placement provides a sound model for expanding the skills of paramedic practitioners in order to meet the increasing demands for patient-centred, community based health care. It provided them with the skills to treat patients closer to home rather than automatically transporting them to hospital.

Keywords: accredited training practices, interprofessional, paramedic practitioners, patient centred
How this fits in with quality in primary care

What do we know?
Current UK health policy emphasises an ongoing shift towards community based primary and secondary care services. Increasing numbers of people who call the emergency line (999) have underlying chronic conditions which could potentially be treated in primary care. The Ambulance Service has the potential to ensure that patients get the right quality of care, at the right time and in the right place. To achieve this there is a need to develop highly trained autonomous practitioners capable of making clinical decisions in a variety of settings. Existing emergency care practitioner education and training programmes have had mixed success in achieving this to date.

What does this paper add?
This paper reports the evaluation of the placement of paramedic practitioner students (PPSs) in accredited general practice (GP) training practices in which they were provided with high-quality, interprofessional, learner-centred learning experiences. They demonstrated acquiring the skills and knowledge to act as autonomous, patient-centred practitioners with the potential to manage patients closer to home rather than automatically transporting them to hospital. The placement has the potential to support the increasing demands for patient-centred, community based health care.

Introduction

Current UK health policy emphasises an ongoing shift towards community based primary and secondary care services. Patients needing care, including urgent care, are expected to be treated closer to their homes.3 Urgent care has been defined as the range of responses that health and social care services provide to people who require – or who perceive the need for – urgent advice, diagnosis or treatment.2,3 Evidence suggests that the public find the current system for accessing urgent healthcare confusing and complex,4 and the Ambulance Service continues to act as an important gateway into healthcare despite the introduction of a range of alternative urgent care services, e.g. walk-in centres.3 During 2009 to 2010, 7.87 million people in England called 999 and of the 6.42 million incidents attended to, only 2.08 million (32%) were for life-threatening emergencies.5 Increasing numbers of people who dial 999 have underlying chronic conditions which could potentially be treated in primary care.5 Therefore, as a mobile health resource the Ambulance Service has the potential to ensure that patients get the right quality of care, at the right time and in the right place.5

To realise this potential there has been a gradual change in paramedic education away from the basic acquisition of clinical skills to the development of autonomous practice.6 This has included the establishment of a number of education and training programmes aimed at developing emergency care practitioners (ECPs) who are ‘advanced practitioners capable of assessing, treating and discharging/referring patients at the scene’.6 ECP training programmes have been variable in the settings in which the training has taken place and the length of training provided.7,9–12 Although a number of studies have shown that the care provided by ECPs reduced the need for referral to other services, and that in specific circumstances such as the care of wounds, stroke and older people with minor acute conditions, care was as safe as standard emergency care services,13 others have reported concerns about their safety in treating and discharging patients.9,11,14,15 Given this mixed evidence there is a need for more rigorous studies of the training, quality and safety of ECPs or paramedic practitioners.10,15,16

The Autonomous Practitioner programme provided by St George’s/Kingston University and the South East Coastal Ambulance Service (SECAmb) sought to address the limitations of the ECP programme. The curriculum was written in collaboration with the Kent, Surrey and Sussex Deanery (KSS) with paramedic practitioner students (PPSs) being developed under an apprenticeship learning model with accredited workplace-based teaching and assessment. In addition to placements in a variety of healthcare settings the programme included a pilot general practice (GP) training practice placement (a two-month placement followed by a final ‘sign off’ placement). The apprenticeship model is based on two of Vygotsky’s17 ideas. First, the zone of proximal development, which refers to the activities or tasks a learner is unable to complete without the assistance of an expert. Second, expert scaffolding, which represents a situation in which a learner experiences a particular cognitive activity in collaboration with an expert practitioner, first as a spectator with most of the cognitive work being done by the expert. Gradually the learner undertakes the activity under close supervision of the expert until they are capable of assuming full responsibility for the activity or task. The learner and expert engage in a
cooperative dialogue to enhance learning. The apprenticeship model within GP has been defined as education and service blended together for professional growth through legitimate peripheral participation in a community of practice. It offers modelling not only of skills but also of values: the transfer of learning takes place visually or subconsciously through watching good practice and leads to the reinforcement of basic principles, the integration of topics and the achievement of higher levels of complexity.

The purpose of the GP placement was to support PPSs to:

- become autonomous practitioners with the appropriate skills, knowledge and understanding to be able to work effectively within primary care
- be exposed to a wide spectrum of patients and conditions
- gain an understanding of the work and ethos of the primary healthcare team (PHCT)
- develop their diagnostic, assessment, consulting and communication skills
- collaborative working in GP.

Eight PPSs were placed in KSS GP Deanery accredited training practices for two months. A GP trainer within each practice was selected and inducted to look after the PPSs and to act as an educational supervisor. They were responsible for managing the educational experience and, together with the SECamb clinical education management team, ensuring that the objectives were being met. The teaching and assessment was provided by a range of members of the PHCT. The learning opportunities were designed to include some or all of the following: patient assessment, differential diagnosis and management, developing clinical management plans, consultation skills and teamwork.

The placement was mapped against PPSs’ required competencies. The PPSs were responsible for ascertaining the teaching and learning ethos of the practice and making effective use of the learning opportunities provided, which included shadowing clinicians within the practice, sitting in on GP surgeries with GP trainers, GP speciality training registrars (GPStr), practice nurses and practice managers. They were expected to maintain a reflective learning diary, contribute to weekly tutorials and undertake a range of formal work-based assessments.

This paper draws on the findings from the evaluation of the value, acceptability and appropriateness of the KSS GP training practice placement for PPSs. It focuses on the quality of the placements in supporting the development of autonomous, patient-centred practitioners and in fostering interprofessional understanding.

Methods

A case study method was used – a case study is an empirical inquiry that investigates a contemporary phenomenon within its real life context, particularly when the boundaries between phenomenon and context are not clearly evident. Sources of data included telephone interviews, an online survey and documentation.

Participants and procedures

Paramedic practitioner students

Eight PPSs were interviewed in 2009 towards the end of their first placement, in order to provide sufficient time for them to experience a wide range of learning situations. They were asked whether they felt their learning needs had been identified and addressed and whether they had gained competence in communication and consultation skills, practising holistically, data gathering and interpretation of data. They were also asked about the learning opportunities provided by the placement, interprofessional working and learning and whether they felt it had contributed to their development as autonomous practitioners. The tape-recorded interviews took 40 minutes.

GP educational supervisors

Eight GP educational supervisors (GP trainers) who were responsible for the PPSs were interviewed by telephone during the last two weeks of the placement. They were asked the same questions as the PPSs, in addition to questions about the success of the scheme, what worked well and what might need to be modified, how the scheme had contributed to enhancing their teaching skills and how confident they felt in ‘managing’ the experiential learning when the PPSs were treating patients outside the surgery. These tape-recorded interviews lasted between 45 and 60 minutes.

Online survey

Each student completed an end of placement online survey which included questions about the acceptability of the placement, whether they felt supported and how many patients they had had the opportunity to assess.

Data analysis

Tapes were transcribed verbatim and analysed using the constant comparative method to identify categories of data, concepts and relations between variables. The data from all sources were then synthesised to provide an overall picture of the value, acceptability and effectiveness of the placement.
Results

All respondents were positive about the value and success of the placement. Table 1 shows the way in which learning occurred. Evidence indicated that PPSs had acquired the appropriate skills, knowledge and understanding to work effectively in general practice and potentially to avoid hospital admissions:

‘It certainly has \textit{(improved skills)}, as a paramedic you work treating everything very rapidly, erm ... because they phone 999 it’s generally an emergency so you see the very worst end whereas in general practice you don’t. So it’s certainly helped diagnosis skills as to not to throw my hands up in the air and bolt somebody off to hospital. To be able to say ‘Okay, we’ll try this, we’ll try that and we’ll see how it goes in two or three days time, if it gets worse then we’ll send you to your doctor’ type thing.’ PPS (1)

‘A much greater understanding of how a GP operates ... and the different avenues of care – it’s a wider care setting for the patient. Personal benefits of being able to practice within the GP practice have been excellent, er, and they’ve developed my understanding, my knowledge base, I’ve had tutorials and educational opportunities, which, um, which have improved my knowledge of primary care. The benefits – I could go on forever listing the benefits!’ PPS (3)

‘(he) now is able to take a longer term view and think more in terms of community management for a patient’s problems with avoiding hospital admission or hospital involvement.’ GP (8)

High-quality learning opportunities

All PPSs felt that the learning opportunities provided by the practices were of high quality and that the style of teaching and supervision provided a sound work-based, experiential learning experience. Their programme was based on their assessed needs and individual learning styles in contrast to other placements they had been on where there tended to be only one method of learning. The PPSs reported that the placement had cemented their theoretical learning by enabling them to put into practice what they had learned at university. The placement created an environment in

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<thead>
<tr>
<th>Learning opportunities within the placement</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Learning from the expert</strong></td>
<td></td>
</tr>
<tr>
<td>Shadowing GPs, practice nurses, practice managers, health visitors, district nurses, physiotherapists and other wider PHCT members in:</td>
<td>Learning in context from wide range of experts</td>
</tr>
<tr>
<td>• clinics</td>
<td>Exposure to a wide range of patients, conditions and professional perspectives on how to assess and treat patients and conditions</td>
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<tr>
<td>• home visits</td>
<td>Gaining an understanding of the purpose of different professional roles in patient management and care</td>
</tr>
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<td>• meetings</td>
<td>Mutual learning of what the PPS does and does not know</td>
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<td><strong>Action under supervision</strong></td>
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<tr>
<td>History taking</td>
<td>Expert tailors learning to individual need through explanation, demonstration and verbal prompts</td>
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<tr>
<td>Decision making</td>
<td>Expert and learner share actions</td>
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<tr>
<td>Clinical management</td>
<td>Immediate feedback on actions</td>
</tr>
<tr>
<td>Problem solving</td>
<td>Learning patient-centred perspective</td>
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<td><strong>Taking control – working autonomously</strong></td>
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<td>Running clinics</td>
<td>Learning to manage uncertainty</td>
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<td>Home visits</td>
<td>Mutual learning and co-operation</td>
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<td>Opportunity to undertake actions alone but under guidance of expert when needed</td>
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which PPSs were able to be self-directed learners and to achieve their competencies.

Four key themes emerged in relation to the quality of the placement in enabling the PPSs to deliver care autonomously in a patient-centred, interprofessional way.

1 The GP supervisors were qualified trainers and provided dedicated time to support the PPSs:

   ‘It’s been very well organised, I’ve felt right at home. On this placement you’ve got one-on-one, you’ve always got a contact point with a GP. The difference here (compared with non-general practice placements) is that we’ve actually got qualified trainers and having the support and understanding of learning is good.’ PPS (4)

   ‘It’s very good in terms of constant reviews and I was able to approach Dr ... with any patient if I wasn’t sure on the condition, he’d review it for me. We had tutorials, we’d go through each patient and look at the way I’d doctored them ... There’s no time I’d go about unsupervised – I could approach the other doctors, I was introduced to every doctor ... I always felt I had the support there to help me.’ PPS (2)

2 The supervisors also considered that they had played a key role in increasing the skills base of the PPSs. They suggested that training practices were the ideal setting for PPSs’ training because of the practices’ experience of training GPsSTRs, medical and non-medical students. They considered that they had the systems in place and could provide a sound educational experience:

   ‘I’ve got a post graduate diploma in education, em, and I thought well, you know, I could probably apply the same principles OK, he came with a folder about all the assessments and um, I’m very familiar with all the assessments really, because they’re the same as the GP registrars.’ GP (6)

3 The placement provided the PPSs with access to a wide range of patients and conditions and the opportunity to learn by conducting consultations and watching other health professionals at work:

   ‘The best thing is seeing volumes of patients. Being there where you can see the most patients in the most time. And because that’s the way you are going to learn, whether you are doing the actual consultation or whether you’re observing, you’re learning, because every patient is different and then after a while you probably start seeing repeats of the same. The type of problems GPs deal with is amazing.’ PPS (4)

   ‘The district nurses are doing mainly the wound care side of things, so I’ve learned a lot about wound care from them. The practice nurses I’d say it’s more information gathering, so if I get a patient who say is a new diabetic and doesn’t know what a diabetic check involves, I now know exactly what it involves because I’ve sat in with the practice nurses. Or spirometry, so I’ve now got the ability to explain first hand. And the GP’s it’s certainly the treatment side of things that I’ve learnt. So all different areas that I’ve worked in I’ve learned different lines of medicine from them.’ PPS (1)

4 PPSs learned new ways of communicating and consulting with patients that enabled them to be more patient centred:

   ‘Yes I have been introduced to consultation skills in a way that are very different to how we would do things as a paramedic. Erm, and into sort of more how GPs tend to consult and talking to patients about their ideas, concerns and expectations and erm, more collaborative care planning with the patient.’ PPS (3)

   ‘I think he was used to working to protocols and patient directives and he understood that. I mean normally he said that he would come in, you’ve called an ambulance, we sort you out. Whereas, he took a much more patient-centred approach by the end of it, you know, and he understood about ideas, concerns and expectations and having a negotiated outcome, asking patients what they wanted from this.’ GP (7)

Central to being patient-centred was the ability to cope better with uncertainty:

   ‘I think I’ve been learning to balance the difference between a degree of uncertainty and the point at which it tips over into unsafe practice. And that sort of dividing line has been quite a key learning point for me ... With the way GPs work there is, there tends to be an element of uncertainty sometimes ... For paramedics it is more protocol driven and there’s always the fall-back of if you’re not sure you can take them to hospital.’ PPS (3)

The placement enabled PPSs to gain a better understanding of general practice and the roles occupied by members of the PHCT. This was considered to have the potential to foster interprofessional working and learning.

   ‘Very useful seeing how people work and what responsibility they have with patients. Um, particularly, as obviously if the community matron or the district nurse is involved with a patient there’s a fairly high likelihood that as paramedic practitioners we may come across that patient, um, it’s useful to have an understanding of their role. And how we can perhaps work with them to help to manage that patient better.’ PPS (3)

   ‘Um, I think having people like him who is a locally based paramedic who has got to know and meet and discuss with a lot of people around the surgery and the wider PHCT will improve multidisciplinary working and improve relationships ... and pay benefits in terms of patient care.’ GP (1)

In particular PPSs felt that they would now be able to speak the same ‘language’ as the primary healthcare professionals and would be able convince them that they knew what they were talking about.
Autonomous practitioners

Overall, the placement was considered to have developed the PPSs’ skills to the extent that they would be able to act as effective, autonomous practitioners within a general practice:

‘Yeah, we are autonomous practitioners. It (the placement) has given me, er, the confidence side to dealing with it autonomously, but it’s also going to make me, erm, much more able and willing to seek advice and refer in the right lines. So even though I’m dealing with the patient myself which is fine, I then have much more understanding of where to ping them next.’ PPS (1)

‘I wouldn’t see any problem with him being an autonomous practitioner by the time he has finished ... And I think most of us who’ve worked with him in the practice would probably have a high level of trust in him in that if he was a paramedic ringing us up out of the blue and he said ‘Hi, it’s me’. We would have a pretty firm idea that he was likely to be along the right lines.’ GP (1)

Discussion

In order to meet the increasing demands for patient-centred, community based health care there has been a recognition of the need to expand the clinical skills of existing health professionals and to reorganise the current healthcare structures.7,21,22 Mason and Snooks3 argue that this will require a whole systems approach and true collaborative working unopposed by professional, geographical and organisational boundaries. Cooper et al, in their examination of the impact of ECPs, identified a number of factors that prevented effective collaborative working between ECPs and other health professionals.8,23 These included communication and language failings, lack of clinical supervision, poor leadership and team work and cultural barriers. Indeed a number of the ECP schemes reported difficulties engaging with general practice and protectionist attitudes among primary care staff.24–26

The evaluation of the KSS Deanery Pilot Paramedic Placement programme suggests that the placement addressed a number of these barriers and was successful in providing PPSs with the skills and knowledge needed to act as autonomous, patient-centred practitioners able to work within an interprofessional context. The most important features of the placement were as follows:

- PPSs were exposed to a wide range of patients and learning situations. They also learned how other health professionals manage care and the part a paramedic practitioner could play in the multi-disciplinary team.
- PPSs learned patient-centred communication skills that enabled them to cope with uncertainty. These in turn provided them with skills necessary for working as autonomous practitioners and treating the patient closer to home rather than automatically transporting them to hospital.
- GP trainers have a role and responsibility for assisting in collecting the evidence and quality assuring workplace-based assessments. The educational quality of the placement was recognised by PPSs.
- KSS GP training practices are accredited and quality assured to provide a suitable learning environment for education and training and many are also involved in the interprofessional training of a range of other health professionals such as practice nurses. They have an ethos of learner-centred learning, a well established and effective model of experiential learning and an apprenticeship model of teaching and learning.

The pilot placement provided a high-quality learning environment and successfully achieved its aims. In addition, GPs and other members of the PHCT were perceived to have learned from the PPSs. However, as this was a new placement it was expected that there would be lessons to be learned which would help in improving and streamlining it. From the perspective of the PPSs the whole programme was considered to be valuable and of high quality – they suggested that any paramedics that did not have the opportunity to undertake the placement would be considerably disadvantaged. The GP educational supervisors were very positive and all said that they would be happy to have PPSs in the future, but they identified a number of potential barriers. The most notable were the remuneration levels provided for training and perceived lack of ‘service’ value of having PPSs in their practices, although the latter was expected to improve following the second part of the placement.

REFERENCES


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