
Role Development: Emergency Care Practitioners

Quality Impact *Evidence Summaries*

Measurable evidence of the impact of policy interventions on quality

A rapid evidence review for
The Health Foundation

Laura Barrett, Elaine Robinson, Research Matters
Aoife Molloy, Policy Associate, The Health Foundation
February 2018

Quality Impact *Evidence Summaries*

Measurable evidence of the impact of policy interventions on quality

About Quality Impact *Evidence Summaries* (QIES)

Quality Impact *Evidence Summaries* (QIES) present measurable evidence of the impact of policy interventions within the NHS. Distinctively, impact is viewed through the lens of quality, using the Institute of Medicine (IOM) domains of quality as a framework.¹

QIES began as a series of structured reviews featured in [A Clear Road Ahead](#), a 2016 Health Foundation project delivered in collaboration with Professor Sheila Leatherman, to shape a quality strategy for the NHS.² The Health Foundation re-commissioned Research Matters in 2017-18 to develop the structured reviews further, with the aim of exploring the potential to develop a sustainable tool or service to support and promote evidence-based policy and decision making across the NHS in England.

Scope

QIES focus exclusively on national policy interventions in the English health care sector. Typically, these are centrally developed by the Department of Health, NHS England or other national bodies and rolled out nationally, albeit with local variations in implementation. Some interventions may have initiated at a local or institutional level and been adopted nationally. The time period for both policies reviewed and evidence used is from 1997 onwards.

NHS Taxonomy

As the scope and volume of relevant policy interventions is significant, a Taxonomy of Policy Interventions for the NHS in England was developed. Policies are grouped into four policy areas - governance, finance, delivery and improvement - split further into focus areas. Groups of policy interventions combine as policy levers, which forms a thematic basis for a series of QIES. Each individual QIES focuses on a single policy intervention as an example of the use of that policy lever. This enables groups of policy interventions which share conceptual or practical similarities to be described alongside each other, allowing for comparison about what works.

For further information, see the separate working paper: *Taxonomy of health care policy interventions for the NHS in England, Working paper for Quality Impact Evidence Summaries (QIES) project*, February 2018.³

Impact on quality

In assessing and presenting the impact on quality of policy interventions, we have used the Institute of Medicine (IOM) framework for the quality of health care.¹ This describes six domains (or aims), across which improvements in quality can occur. These are:

- **Safe:** avoiding harm to patients from the care that is intended to help them.
- **Effective:** decision-making and service provision based on clinical and scientific evidence and knowledge, as well as refraining from providing services to those not likely to benefit (avoiding underuse and misuse, respectively).
- **Patient-centred:** providing care that centres on the patient, respecting and responding to individual patient preferences, needs, and values and ensuring the patient is in control.
- **Timely:** reducing waits and delays for both those who receive and those who give care.
- **Efficient:** providing care that is cost-effective and avoids waste.
- **Equitable:** providing care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographic location, and socioeconomic status.

Evidence about a policy intervention is reviewed and findings which show impact against one or more domain of quality form the basis of results gathered and presented in a QIES. Assessments of the level of impact within each domain are made: impact on quality can be positive, uneven and can also be unintended.

Methodology

QIES identify the key and most relevant evidence, only where measurable impact on quality is demonstrated, resulting in a sufficiently secure evidence base for conclusions to be tested and drawn. The approach is time-limited and pragmatic and is not intended to be comprehensive or meet the academic standards of a systematic review.

For each policy intervention, a structured search of published literature is conducted using, key databases, such as NHS Evidence, PubMed and Cochrane Library, as well as relevant sources of grey literature and stakeholder reports. Searching combines database searching, reference scans, looking at recommended studies/authors and targeted desk research. Full texts of reports and studies are obtained and viewed for the majority of studies, but sometimes the abstract provides sufficient information.

A discussion of the evidence used describes the key sources used to produce the QIES, including the number of relevant studies and different evidence types. Results are presented thematically, based on the IOM domains and describe the measurable impact of the policy intervention on aspects of quality of care in the English NHS. This is supported by a summary table with judgements about the strength of the impact for each IOM domain.

About Research Matters

[Research Matters](#) is a small, well-established research company delivering high quality, client-focused research to tight time-scales for clients across many sectors. Our work is bespoke, pragmatic and insight driven and our style is always friendly, flexible and professional.

We have completed a number of rapid evidence reviews for the Health Foundation, as well as developed a methodology for Quality Impact Evidence Summaries and an NHS taxonomy to facilitate a structured approach to producing of evidence reviews. Most recently, we have completed a review on retention in the health and social care workforce.

* * *

Role Development: Emergency Care Practitioners

In this Quality Impact Evidence Summary (QIES), we examine the impact on quality of the Emergency Care Practitioner (ECP) role. This policy intervention sits within the policy lever of Role Development within the NHS Taxonomy.

NHS Taxonomy: Positioning of Policy Intervention

Policy area	Policy focus	National policy levers
Governance		
Finance		
Delivery	Service provision	
	Workforce strategy	Workforce planning
		Role development <i>Adjustments to NHS roles, including developing existing roles, task shifting and creating new roles</i>
		Team-based-working and collaboration
	Patient involvement	
Public health programmes		
Improvement		

Related evidence summaries within the policy lever of role development are: Clinical Pharmacists, Modern Matrons, Community Matrons, Physician Associates and Clinical Nurse Specialists.

Description of intervention

Role description

An Emergency Care Practitioner (ECP) is a clinical role filled by someone with either a paramedic or nursing background, whose skills have been extended so they can work across the traditional boundaries of emergency and unplanned care. They are able to assess, diagnose, treat, refer and discharge certain patients without reference to a doctor. ECPs can work in different settings, including urgent care centres, ambulatory response services, and primary care out-of-hours services or in control centres responding/advising by phone.

The main focus of the ECP role is to improve the patient experience and pathway of care, particularly by discharging patients at the scene or by referring to the most appropriate service, with the effect of reducing unnecessary attendances at A&E departments or avoidable inpatient admissions.

Policy context and implementation

The ECP role evolved through the *Changing Workforce Programme*, with the aims of increasing care quality and operational efficiency, while at the same time reducing waiting times and A&E attendances. The 2003 *Emergency Care Practitioner Trials*, funded by the Department of Health (DoH) and piloted across 17 sites,⁴ helped establish the role. After a positive first phase evaluation, national roll-out began in earnest. Local models were developed, varying according to the professional backgrounds of recruited ECPs, training and educational programmes, and the ways in

which ECPs were deployed. A Skills for Health competency framework was developed and published in 2007, outlining the knowledge, skills and core competences which all ECPs must achieve at the point of qualification.⁵

By 2007 there were 25 schemes operating in England and Wales, employing over 650 ECPs, with a further 210 in training.⁶ Numbers peaked in 2010 at 780 ECPs, but dropped after that – latest figures show 688 ECPs in 2014, representing a small proportion of paramedics.⁷

Implementation issues included lack of clarity and consistency over the role description, use of the job title and also whether the role sat within the paramedic or broader urgent care career paths. The use of the role in different settings and varied professional backgrounds lead to some uncertainty over how to deploy ECPs. It was never a registered or protected title, and is no longer supported by the College of Paramedics.⁸ Indications are that the role has gradually been rebranded or redefined as Specialist Paramedic, Paramedic Practitioner or as Critical Care Practitioner.⁹

Funding

The DoH provided funding for the initial trial and then supported a second phase national rollout, channelled via Strategic Health Authorities and allocated on a ‘fair share’ basis. Otherwise, implementation was designed and resourced at a local level.

Discussion of evidence

22 relevant studies were identified and reviewed for the QIES, with most research looking at impact between 2004-09, when the ECP role was being established and promoted. Key sources of evidence include:

- Independent, DoH funded evaluation of 17 national ECP pilots. This led to a main report, several accompanying articles and a report by the Modernisation Agency summarising the research.^{4,10-12}
- Strand of work focusing on London ECPs. This was a series of qualitative studies, interviewing ECPs and patients about their experiences. They were relatively small scale as a result of the newness of the role in London and research design.¹³⁻¹⁵
- Larger, NIHR funded ‘whole system’ evaluation comprising five study streams within a mixed methods framework.^{6,16-19}

Other evidence included smaller studies and case studies^{20,21} and more recently, a systematic review summarising the available evidence.²²

Variations in local implementation and settings meant the impacts measured were not comparable, which was noted in NIHR research.⁶ Other research issues included inconsistency over the role definition and use of the title, making comparisons of evidence difficult, as well as poor understanding of the way different mixes of cases affected referral rates.^{21,23} Also, much of the empirical work was undertaken when ECPs were relatively new, small in number and still embedding.^{4,24}

A number of studies, including the early evaluations highlighted the need for a whole system approach to evaluate the impact of ECPs, as the implications were often wide ranging, complex and difficult to isolate from broader service redesign.²¹ There was agreement that randomised trials were not always the best methodological approach because randomising some patients failed to capture the whole system effect: *“The evaluation of new roles such as the ECP is challenging and requires new ways of measuring their effect. Research has to take into account the ‘whole system effects’ of a changing workforce innovation in the settings in question. This includes taking into account the effects on patients, services and the workforce themselves.”*⁶

Gaps in evidence

Evaluations were unable to measure clinical outcomes or examine cost-effectiveness adequately:^{14,16} *“positive findings remain tentative in the absence of analyses on two key factors which were planned for inclusion in the present study, namely the clinical outcome of care, and the cost of care provided by different practitioner groups.”*¹³

Cost benefit analysis was challenging because of the need to account for cost impact across the full pathway, including factors such as reduced referral/conveyance rates or increased time at the scene.²³ This was seen to limit overall positive conclusions: *“a comprehensive judgment on the commissioning of ECP services cannot yet be made in absence of evidence of delivery of care across the whole patient episode.”*²²

Strength of evidence

A good spread of studies and evaluations, with robust methodological approaches, provides secure and valuable insight into the impact on quality of many aspects of the ECP role. However, inconsistent evaluation of patient outcomes and limited estimates of cost effectiveness makes it hard to draw firm conclusions about overall impact.

Impact on quality

Evidence on the ECP role found them to be as safe, appropriate and effective as the roles they were substituting, with an identified strength in decision-making and supporting decisions made. Lower rates conveyance to hospital or other services were demonstrated or implied as an efficiency, which in part contributed to high levels of patient satisfaction. The relationships established with patients and nature of communications were also noted as patient-centred. Impact on timeliness was complex to measure and as a result, did not show clear impact on quality.

Safety

Research addressing the safety of ECPs reported that they were no less safe than other practitioners. One study found *“no evidence that care provided by an ECP was less safe than the care provided by the control providers.”*⁴ Later research confirmed *“earlier findings that in the UK, the overall care provided by ECPs is at least equally as safe as the care provided by non-ECPs in similar settings.”*¹⁶ The safety of ECP decisions to treat some elderly patients at home rather than transfer them, was found to be *“in the most part, safe and did not lead to a significant increase in re-attendance rates or death of these patients, representing a very important clinical finding.”*²⁵ There was also some evidence that ECPs performed well at specific tasks which supported safety, such as quality of records.^{6,16}

Effectiveness

The ECP role was seen to be appropriate and effective, and in some evaluations, more effective than decisions by other practitioners. An audit of nearly ~4,700 patients seen by an ECP found that the majority of referrals to the emergency department were appropriate – with just 2.4% deemed as inappropriate.²⁶ A 2014 systematic review of the activity and impact of ECPs found *“a number of studies of high methodological quality describing care processes (diagnosis, investigations instigated and treatment initiated) provided by ECPs as equivalent to or better to that provided by practitioners with traditional roles.”*²² Other research looked at the decision making of London ECPs and found that *“both patients and clinical reviewers judged appropriateness of ECPs’ decisions making and the care pathway decisions ECPs made, to be more appropriate than those of their medically qualified colleagues.”*¹³ Following their review, the Modernisation Agency concluded that *“there is a consensus view that the development of ECPs will dramatically improve the provision of unscheduled and emergency care services. ECPs will ensure that patients receive the most appropriate care at the most appropriate time and in the most appropriate place.”*¹⁰

Evaluations looking at the effectiveness of ECP’s care for specific patient groups also saw a positive impact, particularly when dealing with older patients. This meant that more patients were treated appropriately at home or referred to a specific service rather than taken hospital: *“Paramedics with extended skills can provide a clinically effective alternative to standard ambulance transfer and treatment in an emergency department for elderly patients with acute minor conditions.”*²⁷

One study noted that large differences in clinical effectiveness were unlikely, as this implied that ECPs were providing better care than their counterparts.⁶

The additional training and education ECPs had undertaken was found to improve decision making and develop confidence.²³ In addition, the early pilot identified a further small effect on communication skills, suggesting that ECPs elicited more information from patients and articulated their conclusions more clearly.²⁴

Efficiency

Two key measures of efficiency were explored in evaluations of the impact of ECPs. Evidence of decreases in conveyance rates were a consistent feature, but overall cost effectiveness was much harder to isolate.

Several studies showed that ECPs had lower rates of conveyance and dealt with more patients at the scene or at home. These included:

- NHS Modernisation Agency/DoH publication which reported that *“ECPs are only transporting 45% of patients to A&E, compared to a traditional ambulance response, which transports 70%-77% of patients to A&E;”*¹⁰
- Case study from an ambulance trust which saw *“30% fewer patients transferred to an emergency department.”* Looking specifically at elderly fall patients, the study found that 48% did not need admitting following attendance by an ECP.²⁸
- Evaluation of the ECP role in London, which found that ECPs convey significantly fewer patients to the A&E (57%) compared to paramedic colleagues.¹³
- Controlled observational study found that patients were significantly more likely to be discharged home by an ECP without referral on to another service, and similarly, less likely to require transfer to A&E or be admitted.⁴
- More recent systematic review, which found that pre-hospital practitioners were less likely to convey patients to A&E and more likely to discharge at the scene than conventional ambulance crews.²⁰

Some evidence showed that conveyance rates varied by the setting or service model where the ECP worked.²² An evaluation across multiple sites and settings showed that ECPs in mobile settings had more impact on A&E attendance and hospital admission than those based in urgent care centres or out of hours care services. In these static setting, ECPs discharged less people than usual care givers.^{6,17} The skill level of the role being substituted by ECPs also seemed to have a bearing on impact. One study identified that *“where usual care providers have a higher or comparable level of skill (such as a GP, nurse practitioner) the impact of the ECP is lessened,”* implying increased value added when an ECP provided a higher level of care than previously existed.⁶

Evidence seen reflected the need to determine the most appropriate types of case for ECPs to attend, to achieve the greatest impact from their different knowledge, experience and approach to decisions.¹³ The NAO report into ambulance services suggested that ECPs were not always used in the most efficient and effective way, often due to the processes that were in place. For example, *“evidence suggests that the call categorisation system currently in use in most services is not sophisticated enough to direct practitioners to the most suitable calls.”*²⁹

Evidence about cost effectiveness of ECPs was much less clear, with the systematic review reflecting *“a paucity of evidence available for a comparison of ECP cost-effectiveness.”*²² The review found four studies comparing costs of ECPs with other providers (ambulance service, A&E, or 'usual care'). Three studies found cost savings associated with use of ECPs, but study methods varied and the estimated savings differed widely across studies. One evaluation of cost-effectiveness found *“strong evidence that ECPs can reduce costs when operating in mobile schemes”* but less significant differences in other settings.⁶ The review concluded that *“differences in study populations and research methods made it impossible to draw firm conclusions about their cost-effectiveness.”*

Patient-centred

Consistent evidence of increased patient satisfaction was seen when an ECP attended. The systematic review found that *“five high quality studies found greater overall patient satisfaction in patients seen by an ECP.”*²² One study identified the elements underpinning patient satisfaction as *“genuine concern and respect for the patient characterised by being compassionate, empathetic, considerate and non-judgemental.”*⁶

There was specific evidence that efforts to establish a rapport or close relationship with patients had a positive impact. Patients valued the approach taken by ECPs in terms of diligence and explaining options: *“in two areas (“thoroughness of assessment” and “explaining what would happen next”), the care provided by ECPs was*

experienced as considerably better. These differences were partly explained by considerably fewer patients from ECPs being conveyed to the emergency department, suggesting that empowering ECPs to explore and explain alternatives to the emergency department improves patient satisfaction.”¹⁴ In addition, as well as the nature of interaction with the ECP, a link was seen between lower rates of conveyance and increased patient satisfaction.

Timeliness

Timeliness of care from ECPs was explored, but the outcomes measured varied and views were mixed on this. Several studies reported that ECPs spent more time at the scene than ambulance crews: the early pilot estimated an average of 22 minutes on scene for an ECP compared with the 14 minutes by ambulance crews.⁶ This may have been because of *“ECPs spending more time giving advice, reassuring patients, and attending to a wider range of patients’ care needs.”* Time from one call to availability to the next call was not significantly different for ECPs versus other ambulance staff.²⁴ However, another study highlighted improved timeliness when compared to GPs in an out-of-hours service - in this assessment, ECPs responded typically in 1 hour 10 minutes compared to 3 hours 7 minutes by GPs.¹⁰

Equity

Availability of ECPs to provide out of hours care was associated with *“improving access and equity for ‘hard to reach’ groups such as those not registered with a GP, people living in rural areas remote from urgent care services, or those dealing with difficult social problems.”⁶* However, local funding and variable implementation led to uneven provision and availability of ECPs, implying a less positive impact on equity.

Other impacts

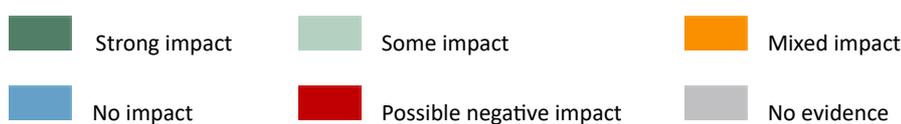
Improved career development from the introduction of this extended role was noted in the national evaluation, with many newly appointed ECPs seeing the role as *“enhancing their career options and retaining trained paramedics and nurses within the NHS, and welcomed the new challenges.”⁴*

In summary ...

- Evidence, much of which was small scale, showed that ECPs had localised impact on referral rates and improved conveyance levels. They were also valued by patients who appreciated the extra time ECPs spent with them and being treated at home.
- However, relatively small numbers of ECPs limited any potential for significant system-level impact.
- The flexibility of the role, its ability to cross organisational boundaries and different local funding models resulted in wide variations in implementation. Clarity over role descriptions, career paths and professional regulation, as well as guidance about how to effectively embed ECPs within services could have helped promote understanding of the role and potentially increased adoption. Newer advanced practitioners, specialist and advanced paramedics and paramedic practitioner roles have meant that some trusts have moved away from ECPs.

Summary of evidence of impact on quality: Emergency Care Practitioners

Domains of quality	Impact
Safe	<ul style="list-style-type: none"> • Found to be <u>at least</u> as safe as roles they substituted • ECPs performed better at some specific aspects of safety such as quality of records
Effective	<ul style="list-style-type: none"> • Evidence that care processes are as good or better than roles they substitute • ECPs make appropriate care decisions
Efficient	<ul style="list-style-type: none"> • Conveyance rates to ED reduced in some settings, specifically mobile • Lack of robust evidence of cost-effectiveness with estimates varying widely depending on research methods and study populations
Patient-centred	<ul style="list-style-type: none"> • Strong evidence of increased patient satisfaction associated with value placed on reduced conveyance • Patients appreciated time and approach taken by ECPs to assess and explain
Timely	<ul style="list-style-type: none"> • Several studies showed longer time spent on scene with patients • Some evidence of improved responsiveness compared to out of hours GPs
Equity	<ul style="list-style-type: none"> • Some improved equity associated with improved access for 'hard to reach' groups • Variation in implementation resulted in uneven geographic access to services
Strength of evidence	<ul style="list-style-type: none"> • Lack of research looking at changes in outcomes
Funding	<ul style="list-style-type: none"> • No central funding provided. Paid for locally



Date reviewed: January 2018

References

1. Institute of Medicine & Committee on Quality of Health Care in America. *Crossing the Quality Chasm: A New Health System for the 21st Century*.
2. Aoife Molloy, Sara Martin, Sheila Leatherman, and Tim Gardner. *A Clear Road Ahead: Creating a coherent quality strategy for the English NHS*. The Health Foundation, <https://www.health.org.uk/sites/health/files/AClearRoadAhead.pdf> (July 2016).
3. Laura Barrett, Elaine Robinson, Research Matters, Dr Aoife Molloy, Policy Associate, Health Foundation. Taxonomy of health care policy interventions for the NHS in England Working paper for Quality Impact Evidence Summaries (QIES) project, <http://www.research-matters.co.uk/wp-content/uploads/2018/11/NHS-taxonomy-of-policy-interventions-RM-March-2018.pdf> (2018).
4. Mason S, O’Keeffe C, Coleman P, et al. *A national evaluation of the clinical and cost effectiveness of Emergency Care Practitioners (Phase two)*. 2005.
5. ECP Team, Skills for Life. *The Competence and Curriculum Framework for the Emergency Care Practitioners*. Department of Health, June 2007.
6. Mason S, O’Keeffe C, Coleman P, et al. *A Multi-Centre Community Intervention Trial to Evaluate the Clinical and Cost Effectiveness of Emergency Care Practitioners. Report for the National Institute for Health Research Service Delivery and Organisation programme*.
7. Health and Social Care Information Centre. NHS Workforce Statistics in England, Non-medical staff 2004-2014, *NHS Hospital and Community Health Services: Ambulance staff by type 2004-2014*.
8. College of Paramedics. Paramedic Curriculum Guidance 4th Edition.
9. Pete Roberts, Prehospital Clinical Fellow Review. *The role of specialist paramedics in reforming emergency care*. 5 June 2014.
10. Modernisation Agency. *The ECP Report; Right Skill, Right Time, Right Place*. Department of Health, 26 October 2004.
11. Mason S, Coleman P, Ratcliffe J, et al. *A national evaluation of the clinical and cost effectiveness of Emergency Care Practitioners; Phase one: Final Report*. Medical Care Research Unit School of Health and Related Research University of Sheffield, 2004.
12. Mason S, Coleman P, O’Keeffe C, et al. The evolution of the emergency care practitioner role in England: experiences and impact. *Emerg Med J* 2006; 23: 435–439.
13. Halter M, Ellison G. *Evaluation of the emergency care practitioner role in London: a study of the processes and outcomes of clinical decision making*. Faculty of Health and Social Science, Kingston University.
14. Halter M, Marlow T, Tye C, et al. Patients’ experiences of care provided by emergency care practitioners and traditional ambulance practitioners: a survey from the London Ambulance Service. *Emerg Med J* 2006; 23: 865–866.
15. Halter M, Marlow T, Mohammed D, et al. A patient survey of out-of-hours care provided by Emergency Care Practitioners. *BMC Emerg Med*; 7.
16. O’Hara R, O’Keeffe C, Mason S, et al. Quality and safety of care provided by emergency care practitioners. *Emerg Med J* 2012; 29: 327–332.
17. Mason S, O’Keeffe C, Bradburn M, et al. A pragmatic quasi-experimental multi-site community intervention trial evaluating the impact of Emergency Care Practitioners in different UK health settings on patient pathways. *Emerg Med J* 2012; 29: 47–53.
18. O’Keeffe C, Mason S, Knowles E. Patient experiences of an extended role in healthcare: comparing emergency care practitioners (ECPs) with usual providers in different emergency and urgent care settings. *Emerg Med J* 2014; 31: 673–674.
19. Centre for Reviews and Dissemination. *Evidence to Inform Urgent and Emergency Care Systems*. University of York, [http://www.york.ac.uk/inst/crd/pdf/Evidence to inform urgent and emergency care systems.pdf](http://www.york.ac.uk/inst/crd/pdf/Evidence%20to%20inform%20urgent%20and%20emergency%20care%20systems.pdf). (March 2014).
20. Tohira H, Williams TA, Jacobs I, et al. The impact of new prehospital practitioners on ambulance transportation to the emergency department: a systematic review and meta-analysis. *Emerg Med J* 2014; 31: 88–94.
21. Network EMAHS. *In-car Emergency Care Practitioner (ECP) led services*. SPARKLERS, 2016.

22. Hill H, McMeekin P, Price C. A systematic review of the activity and impact of emergency care practitioners in the NHS. *Emerg Med J* 2014; 31: 853–860.
23. Cooper S, Barrett B, Black S, et al. The emerging role of the emergency care practitioner. *Emerg Med J* 2004; 21: 614–618.
24. Adams A, Wright K, Cooke M. *Evaluation of the NHS Changing Workforce Programme's Emergency Care Practitioners Pilot Study in Warwickshire. Short Report*. Centre for Primary Health Care Studies, Division of Health in the Community Medical School, University of Warwick, 2005.
25. Mason S, Knowles E, Freeman J, et al. Safety of paramedics with extended skills. *Acad Emerg Med* 2008; 15: 607–612.
26. Gaisford M. An audit of 4679 consecutive emergencies for an emergency care practitioner. *Journal of Paramedic Practice* 2014; 6: 28–36.
27. Mason S, Knowles E, Colwell B, et al. Effectiveness of paramedic practitioners in attending 999 calls from elderly people in the community: cluster randomised controlled trial. *BMJ* 2007; 335: 919.
28. Skills for Health. ECP Case Study - New role has 'phenomenal' effect on Emergency Departments, http://www.skillsforhealth.org.uk/index.php?option=com_mtree&task=att_download&link_id=58&cf_id=24.
29. Comptroller and Auditor General. *Transforming NHS ambulance services*. National Audit Office, <https://www.nao.org.uk/wp-content/uploads/2011/06/n10121086.pdf> (2012).