

BMJ Open

BMJ Open is committed to open peer review. As part of this commitment we make the peer review history of every article we publish publicly available.

When an article is published we post the peer reviewers' comments and the authors' responses online. We also post the versions of the paper that were used during peer review. These are the versions that the peer review comments apply to.

The versions of the paper that follow are the versions that were submitted during the peer review process. They are not the versions of record or the final published versions. They should not be cited or distributed as the published version of this manuscript.

BMJ Open is an open access journal and the full, final, typeset and author-corrected version of record of the manuscript is available on our site with no access controls, subscription charges or pay-per-view fees (<http://bmjopen.bmj.com>).

If you have any questions on BMJ Open's open peer review process please email info.bmjopen@bmj.com

BMJ Open

Supporting future primary care workforce needs: learning from the transfer of a fellowship programme.

Journal:	<i>BMJ Open</i>
Manuscript ID	bmjopen-2018-023384
Article Type:	Research
Date Submitted by the Author:	05-Apr-2018
Complete List of Authors:	Bryce, Carol; University of Warwick Warwick Medical School, Unit of Academic Primary Care Russell, Rachel; University of Warwick Warwick Medical School, Unit of Academic Primary Care Dale, Jeremy; University of Warwick Warwick Medical School, Unit of Academic Primary Care
Keywords:	PRIMARY CARE, urgent care, QUALITATIVE RESEARCH, vocational training, cross-sector working, programme transferability

SCHOLARONE™
Manuscripts

Peer Review Only

1
2
3 **Supporting future primary care workforce needs: learning from the transfer of a**
4 **fellowship programme.**

5
6 **Carol Bryce¹, Rachel Russell¹ and Jeremy Dale¹**

7
8 **¹Unit of Academic Primary Care, Warwick Medical School, University of Warwick, United Kingdom**

9
10
11 **Corresponding author:**

12
13 Carol Bryce
14 Research Fellow
15 Division of Health Sciences
16 Warwick Medical School
17 University of Warwick
18 Coventry CV4 7AL
19 Email: c.bryce.1@warwick.ac.uk
20 Tel: 024 7657 3851 (office)
21
22

23 **Word Count: 4130**
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Abstract

Objectives

Service redesign, including workforce development, is being championed by UK health service policy as a way to enhance the roles of staff and encourage multi-professional portfolio working. New models of working are emerging across the country, but there has been little research into how innovative programmes are transferred to and taken up by different areas. This study investigates the transferability of a one-year post-CCT fellowship in urgent and acute care from a pilot in the West Midlands region of England to London and the South East.

Design

A qualitative study using semi-structured interviews supplemented by observational data of fellows' clinical and academic activities. Data were analysed using a thematic framework approach.

Setting and participants

Two cohorts of fellows along with key stakeholders, mentors, tutors and host organisations in London and the South East. The fellows had placements in primary and secondary care settings (general practice, emergency department, ambulatory care, urgent care and rapid response teams), together with academic training.

Results

Seventy-six interviews were completed with 50 participants, with observations in 8 clinical placements and 2 academic sessions. The fellowship programme was well received, with participants reporting similar benefits to those described in the pilot. Three fundamental adaptations evolved during transfer of the scheme: broadening the programme to include multi-professional fellows, changes to the funding model and the impact that had on available clinical placements. These were felt to be key to its adoption and adding to its longer term sustainability.

Conclusion

The evaluation demonstrates a model of training that is adaptable and transferable between NHS regions, taking account of changing national and regional circumstances, and has the potential to be rolled out nationally.

Keywords

Primary Care, urgent care, qualitative research, vocational training, cross-sector working, programme transferability.

Strengths and Limitations

- Few studies have evaluated the delivery of new training programmes for general practitioners and primary care professionals in terms of their transferability from one area to another.
- This study evaluated an innovative additional year of training, and had a high level of participation from the cohort eligible for inclusion, with their perspectives gathered at a number of stages of the programme.
- By including a wide range of individuals who worked with the fellows including stakeholders, host organisation leads and colleagues the study gained a broad perspective of the adoption of the fellowship programme and factors that influenced its transferability.

- Although the study was limited to two regions of England, together these cover 31.8% of the population of the country and two of the four Local Education Training Boards in England, so strengthening the generalisability of the findings.

INTRODUCTION

UK health service policy is looking to service redesign as a way of addressing the challenges facing the National Health Service (NHS).¹⁻³ Within primary care, training initiatives (including additional training in hard to recruit posts, the development of portfolio roles for both newly qualified staff and those reaching the end of their careers and workforce development in teams wider than General Practitioners (GPs)) are suggested as ways of enhancing the roles of staff, including nurses.^{3,4} This has included funding for 250 post CCT training posts in England, targeted at areas with the poorest GP recruitment, to enable GPs to access additional training in a specialism of interest whilst addressing local need.⁴ Such initiatives are important at a time when the numbers of GPs intending to reduce their hours or leave general practice is rising in the face of increasing workload.^{5,6} They offer experience of cross-sector working accompanied by skills enhancement that encompasses leadership and management training alongside clinical skills training that goes further than that included in the current three-year vocational training schemes.^{7,8} This mirrors the expanding remit of general practice, with recognition that traditional models of training and continuing professional development in general practice are no longer sufficient to prepare individuals for roles that cross boundaries of care.^{9,10}

Uptake of service innovation within the NHS is known to be slow with few formal mechanisms existing for spreading learning across services or different geographical areas.¹¹ Within primary care evidence suggests the fit between the innovation and the local context is crucial if implementation is to be successful.¹² Where innovation has been shown to be successful there has consistently been strong leadership or champion buy in and appropriate funding alongside perceived external and internal need.¹²⁻¹⁶ Much of the evidence that does exist focuses on facilitators and barriers to innovation with less evidence of how and why some are successful.¹²

We recently reported an evaluation of a one-year post-certificate of completion of training (CCT) fellowship programme developed by Health Education England, West Midlands that provided recently trained GPs with advanced skills training in urgent and acute care, leadership and academic practice.¹⁷ Details of the fellowship programme are shown in Box 1. The pilot scheme included seven GP fellows in total over two cohorts, and was delivered in one sub-region. Although positively evaluated, questions remained over scalability and transferability to more complex health service settings.¹⁷

Box 1. Aims and structure of fellowship programme in West Midlands

7 GPs within three years of post-CCT participated in the programme in the West Midlands

Aims

- To enhance the skills and experience of GPs in urgent/emergency care teams
- To enable GPs to apply enhanced urgent and acute skills to support the development of alternative community-based care pathways
- To raise GP interest in hybrid emergency/urgent and primary care roles
- To support the national policy drive for integration of primary, secondary and social care

Programme Structure

- 40% time in primary care: GP training practice
- 40% time in clinical attachments: 3 attachments each of 4 months' duration comprising: emergency department, a medical admissions unit and an ambulance service
- 20% academic study: undertaking a bespoke postgraduate certificate in Urgent and Acute Care and participation in an action learning set

In 2016, Health Education England, London and the South East (LaSE) decided to adopt the West Midlands fellowship programme throughout the region, so creating an opportunity to study its transferability to multiple contrasting areas. Whereas, the secondary care-based elements of the West Midlands' pilot were located in relatively small county hospitals, the LaSE scheme included large inner city hospitals in socially diverse settings. This allowed consideration of wider system factors that might influence the relevance, applicability and adoption of the scheme to different settings. This paper reports on a qualitative evaluation of the LaSE fellowship programme, and in particular focuses on how and why the scheme evolved during implementation and the implications that this has for further roll-out of such workforce initiatives.

METHODS

This is a qualitative study evaluating the implementation of a fellowship programme in urgent and acute care delivered in LaSE. Patients and public were not involved in this research as it was evaluating a fellowship programme for health care professionals.

Recruitment and Data Collection

All fellows in each of two cohorts of the programme implemented in LaSE in 2016 were invited to take part in the study, along with their mentors and key individuals they identified in each of their clinical placements. In addition, we identified key stakeholders involved in the implementation of the programme including HEE primary care leads, quality and performance managers and academic leads. All participants received study information and were consented.

Semi-structured interviews were conducted face to face or over the telephone, and lasted between 20 and 45 minutes. Initial interviews, conducted around 6 months into the fellowship, explored interviewee's aims, expectations and experiences of the fellowship programme. Second interviews were conducted on or after completion of the programme and focussed on the overall experience of the fellowship and its impact on career plans (fellows) and organisational impacts including capacity building (stakeholders and hosts).

Observations of fellows (ten in total) in clinical and academic locations were pragmatically chosen to cover all primary and secondary care settings in which the fellows were hosted and to minimise disruption to the teams. An observation checklist was used to record evidence of teamwork, integrated care working, communication across settings, teaching and academic activity.

Observations lasted between 4 and 7 hours during which time other members of the clinical team were asked to participate in short interviews.

Data analysis

All interviews were recorded, transcribed verbatim and anonymised. Unique identifiers were assigned to each participant according to the group to which they belonged (HEE = stakeholders and Health Education England staff members, M = fellow's mentor, F = fellow and H = key individual in the healthcare provider organisation). A thematic framework approach was used to interrogate the

data and identify key themes.¹⁸ Analysis was aided by the use of Nvivo11 software package. Initial codes were deductively drawn from the research questions and we read the transcripts inductively coding for any elements not previously captured. A thematic framework was devised using an iterative process until all the codes had been identified. Qualitative quotes were identified to illustrate each theme.

RESULTS

Participants and settings

Of the 17 eligible fellows 15 agreed to participate in the evaluation. In addition, 35 stakeholders, provider organisation clinical leads, GP tutors and mentors participated in planned interviews. Twenty participants were involved in a second interview and 6 were interviewed a total of 3 times, as shown in Table 1, giving a total of 76 interviews. The timing of data collection in relation to the contract duration of each Fellow determined the extent to which interviewees could be followed up.

Table 1: Interview Data Collection

Role	Initial interviews	Supplementary interviews	Total
HEE Staff and Stakeholders (including course tutor)	10	5	15
Host provider organisations	9	3	12
Fellows	15	18	33
Mentors/tutors	16		16
Total	50	26	76

An additional 27 interviews (each lasting between 5 and 15 minutes) were achieved opportunistically during observation sessions. These included members of GP, emergency department, ambulatory care, urgent care and rapid response teams.

Table 2 shows the mix of clinical placements that were experienced by the 15 participating fellows. While most had two days/week in general practice, the secondary care placements were highly variable and for one fellow included no direct patient contact.

Table 2: Fellows placement experience by profession

Profession	GP Placement	Secondary Care Placement
ANP	Unassigned but included ad hoc work in extended hours sessions	1 day / week stroke reduction project. 12 months 3 days / week working for local CEPN (community education provider network) on quality and clinical assurance. 12 months
ANP	None organised	Urgent care centre . 12 months
ANP	2 days /week 12 months	1 day emergency department. 12 months 1 day urgent care. 12 months
ANP	2 days /week two 6 month placements	2 days secondary care including ambulatory care, Acute Medical Unit, Integrated networks. 12 months
GP	2 days/week(incl 1	2 days ambulatory care including virtual ward outreach nursing

	day project work) 6 months. 2 days/week 6 months	team attachment. 6 months 2 days emergency department. 6 months
GP	Variable sessions over 12 months	2 days /week Urgent Care Walk In Centre. 12 months 2 days /week Community Independence Service – virtual ward. 12 months
GP	2 days/week. 12 months	2 days/week emergency department. 9 months. 2 days/week acute frailty project. 3 months.
GP	2 days/week. 12 months	2 days/week a week. 12 months. Including: - Emergency department Community geriatrics and rapid response. - Rapid Access Medical Unit and Ambulatory Medical Unit. - Acute Paediatrics including acute asthma nursing team.
GP	1 day/week 1 day nursing home (that practice managed). 12 months	2 days/week Rapid Response Intermediate Care Service. 12 months
GP	2 days/week (already working in surgery prior to fellowship)	No clinical placements in secondary care (Worked at CCG level developing a paediatrics fellowship initiative). 12 months
GP	2 days/week. 12 months	1 day/week ambulatory care. 12 months 1 day/week geriatrics and frailty – organisational service delivery project. 12 months
GP	2 days/week. 12 months	2 days/week urgent care. 12 months
GP	2 days/week. 12 months	1 day/week urgent care. 12 months 1 day/week CCG working on service improvement linked to urgent care placement. 12 months
GP	2 days/week. 12 months	1 day/week emergency department. 12 months 1 day/week urgent care. 12 months
GP	1 day/week. 12 months	1 day/week acute response team – multi professional team – in the clinical decision unit. 12 months 2 days/week medical consultants in ambulatory care. 12 months

While the West Midlands fellowship programme was administered across one HEE local area, in LaSE it was across four reflecting a more complex and varied administrative landscape. There was evident commitment between HEE partners in West Midlands and LaSE to share learning relevant to the transfer of the fellowship programme. HEE leads had met and discussed how the pilot programme was set up in the West Midlands, and this fed directly into the development of the LaSE programme.

Acceptability and experience of the scheme

The positive aspects of the fellowship that were described by participants were very similar to those that have been reported previously.¹⁷ As in the West Midlands pilot, the fellows felt positive about the programme and all would recommend it to colleagues. The stakeholders, mentors and hosts in

1
2
3 LaSE viewed the programme favourably, stating that they would be willing to host a fellow in the
4 future.

5
6 The importance of key individuals who led the commissioning and delivery of the programme was
7 also apparent and there was clear evidence that without them the success of the scheme would
8 have been compromised:

9
10 *I can't praise him [academic mentor] highly enough actually, I think his style as a programme
11 lead has been brilliant. So in terms of the academic days they're very good. F10*

12
13 The programme was also felt by most participants to be fulfilling expectations that it was preparing
14 fellows for portfolio careers, including leadership and academic roles:

15
16 *It [fellowship] helps in a number of ways. You can apply it to the academic side, you've got
17 the post-graduate certificate. You can apply it to the fact that you've got a range more of
18 experience in a variety of different fields. F07*

19
20 However, as described below, some elements of the scheme had experienced difficulties in their
21 adoption in certain settings, and this had resulted in less favourable experiences.

22 23 24 **Key themes on transferability**

25
26 The remainder of this paper focuses on how the fellowship programme evolved in its transfer from
27 the West Midlands to LaSE. These related to the broadening of the programme to include multi-
28 professional fellows, changes to the funding model that supported the scheme, and the impact that
29 this had on the clinical placements offered to fellows.

30 31 **The development of a multi-professional fellowship model**

32
33 While the West Midlands pilot programme only included GPs, at LaSE it was broadened to include
34 Advanced Nurse Practitioners (ANPs) and Physician Associates (PAs): two ANPs were included in
35 cohort 1, and 2 ANPs and 1 PA in cohort 2. Widening of the programme was driven by a view from
36 commissioners and the programme team that multi-professional working was a progressive
37 development:

38
39 *...the model for urgent and emergency care is predicated in the future on a mixed economy
40 of health professionals. H 04*

41
42 The move to include nursing fellows was welcomed as they have fewer professional development
43 opportunities for upskilling:

44
45 *So, [ANPs] do not have much opportunity to upskill clinically...there are quite a few
46 programmes geared towards GP trainers. Fellow 01*

47
48 Those involved in the teaching element of the programme valued the multi-professional mix:

49
50 *So one advantage of our programme is that we take all comers, not just GPs, and that's been
51 incredibly useful. Certainly I've noticed when teaching the group ... a very heterogeneous
52 group is always better to be teaching and working with. HEE02*

53
54 Although the multi-professional mix was generally well received there were some concerns raised
55 about the suitability of available clinical placements in acute settings. Some of the ANP and PA
56
57
58
59

1
2
3 fellows had difficulty in accessing suitable placements and some of the placement mentors were
4 unsure of how to best use the fellow:

5
6 *Trying to mix those three cohorts of clinicians who come from significantly different*
7 *backgrounds was going to be challenging...so there wasn't a clear syllabus about what they*
8 *needed to do, there wasn't clear competency documents that we would expect for signing off*
9 *for F2s or paramedics. Mentor 24*

10
11 The fellowship programme was not designed to be competency based which highlights the need for
12 all participants to have clear information on the role of the fellows and the programme purpose.
13 Concerns were also raised about the experience and qualification levels of the nursing fellows
14 compared to GP fellows who were viewed as being more standardised:
15

16 *They're so variable, because you just don't know what background they're coming with. So*
17 *you know, with the GPs traditional training, they've had two years in hospital medicine and a*
18 *year in general practice. With an ANP, it depends on what the training's been previously.*
19 *Mentor 22*

20
21 Placement difficulties also arose over uncertainty regarding ANPs indemnity in some settings:
22

23 *This is back to the different commissioners and who funds the services and who provides the*
24 *service...it wasn't even the funding, I think it was the cover, insurance or litigation. I wasn't*
25 *able to work there. Fellow 01*

26
27 Despite these difficulties, including ANPs and PAs in the fellowship programme was viewed
28 positively as a means of providing upskilling opportunities which would encourage individuals to
29 pursue more challenging roles:
30

31 *I think if we can get them to autonomous practising at urgent emergency care level then they*
32 *are a very, very employable asset. Mentor 23*

33 34 35 **Changes to the funding model**

36
37 While the initial pilot of the fellowship programme had been fully funded by HEE West Midlands, in
38 LaSE the funding climate did not allow this and alternative funding mechanisms were needed:
39

40 *In the West Midlands they were paying 100% of the salary of the individuals involved in the*
41 *fellowship, and we felt that actually that wasn't a model that would be sustainable as we*
42 *moved forwards. So we devised a different funding model which was a bursary based model*
43 *which then left the service element to be funded through service providers and clinical*
44 *commissioners. HEE05*

45
46 In LaSE the academic element of the fellowship continued to be funded through HEE, with the
47 remaining costs of the scheme being funded by the primary and secondary care organisations
48 providing clinical placements. While this enabled the inclusion of a larger number of fellows, it also
49 led to increasing variation in employers' expectations of the fellows. In addition, the complex
50 employment arrangements were time consuming to set up and manage:
51

52
53 *I've tried to be quite proactive and I've engaged the employers for several months*
54 *beforehand and tried to make really sure they know what they're offering and whose*
55 *responsibility is whose. HEE04*

1
2
3 The LaSE model of employment required a clinical commissioning group (CCG) or a GP
4 federation/partnership to host the fellow and act as their main employer, taking on responsibility to
5 ensure that the fellowship was financially viable, and cross charging for the time the fellows spent in
6 other clinical settings:
7

8 *If you take on somebody full time in a Fellowship position the salary cost is £100,000 and the*
9 *Fellowship grant is £30,000, so you have to balance the £70,000.....So we have to find them*
10 *projects to do with organisations that are happy for us to cross charge them for their clinical*
11 *time. Host 02*
12

13 While this funding model allowed for flexibility in the placements enabling fellows to build
14 programmes around their interests, for some fellows the necessity of their host to recoup costs left
15 them feeling they were not given the breadth of placements they had envisioned:
16

17 *I feel completely cheated. I feel like I've been used as a commodity.....for my year my key aim*
18 *was to have the clinical side of it and that hasn't happened and isn't going to. Fellow 10*
19

20 Stakeholders considered the financial commitment of host organisations central to their investment
21 and the programme's sustainability:
22

23 *Success means several things. One is it has required conversations across sectors. Second,*
24 *because service is not getting a freebee or a total freebee they are actually committed to*
25 *ensuring and investing in it to get the right thing for them as well as the programme itself. So it*
26 *is buy in. And thirdly, it is a model that can then be replicated across the system as it*
27 *demonstrates that providers recognise that this kind of approach is really important both for*
28 *developing future leadership service but also demonstrating an integrated approach to service*
29 *delivery. HEE05*
30

31 32 **Placement structure** 33

34 The programme in LaSE retained the same 40:40:20 proportions as in the West Midlands scheme, in
35 terms of sessions spent in GP, urgent care and academic activity. However, the funding model in
36 LaSE necessitated that the sessions linked to urgent and acute care were not prescribed and did not
37 follow the rotation pattern of the West Midlands pilot, instead: 'The exact nature and duration of
38 each placement will be determined locally by each LETB and the scheme is also tailored to meet local
39 needs and funding arrangements.'
40

41
42 The structure change meant that each fellow had more individualised clinical placements, see Table
43 2. Most fellows worked with their host organisation to set up secondary care clinical placements
44 relevant to urgent and acute care, generally valuing being able to build placements around their
45 particular interests. Host organisations also valued having fellows work in one specialism across a
46 number of settings.
47

48 *It's worked really well for me ... sorting things out myself and not just kind of fitting into a*
49 *programme that exists Fellow 11*
50

51 *Making sure that there's a bit of flexibility in it means that, particularly for the candidate,*
52 *they will get the best experience rather than just having a rigid 'you will do this, you will do*
53 *that'. Host 02*
54
55
56
57
58
59
60

1
2
3 *...it's also flexible for managers. I said to her after a while in ambulatory care, "look I'm not*
4 *sure I need to stay here for three months and you know, maybe I need to move somewhere*
5 *else."* Fellow 16
6

7 The main drawback was the variability in the fellows' opportunities leaving some without the
8 anticipated spectrum of exposure and experience. For example, some fellows were placed in one
9 service, such as an emergency department, for the year without opportunity to rotate around other
10 services. Clearly, there was a balance to be made between flexibility and creating the variety of
11 opportunities for experience that were advertised within the fellowship:
12

13 *I think the one thing, speaking to my other colleagues, is that there seems to be such*
14 *variability in how the posts are in the fellowship. So although that's a good thing because*
15 *you get to experience different things ... so it sounds like sometimes other fellows get to*
16 *rotate a bit more and I think I would have liked to have rotated into other posts as well.*
17 Fellow 13
18

19 *If you make it too rigid then you deny them the opportunity of opportunistic learning but if*
20 *you make it too fuzzy then everybody has a very individual experience.* HEE09
21

22 There were mixed feelings about the length of placements, but it was generally felt longer
23 placements enabled better embeddedness, particularly in general practice:
24

25 *I think being in one department for a whole year will perhaps give us more time to familiarise*
26 *ourselves and actually produce some meaningful project work I think as well.* Fellow 14
27

28 *If the GP placements could be sort of a whole year rather than six months because it sounds*
29 *a bit like our fellow just kind of got going and then had to move on.* Mentor 08
30

31 *I think, you know, the length of time is quite crucial if the learning process continues to be*
32 *substantive, I think I prefer the one year. Also if you are going to do a project, it gives you*
33 *time, and helps you to know that whatever, you know, the people who would help you with*
34 *your project, you get to know them a bit more.* Fellow 17
35
36
37

38 DISCUSSION

39 This study confirms many of the benefits of the fellowship programme that we have previously
40 reported^{6,17}, with fellows valuing the opportunity to develop academic and clinical experience and
41 skills that prepare them for new ways of working. The fellowship programme addresses the needs
42 expressed by many newly qualified GPs who feel underprepared in managing patients with multi
43 morbidities⁹, and lacking expertise in management, leadership and quality improvement.¹⁹⁻²² The
44 fellowship programme was able to address some of these needs through enabling fellows to access
45 placements in commissioning bodies and through their being involved in quality improvement
46 projects. While time will tell the extent to which the fellowship programme develops future leaders,
47 there was evidence from the West Midlands pilot¹⁷ that the programme was successful in achieving
48 this goal. Most of the fellows at LaSE stated they would be looking for future positions encompassing
49 clinical and leadership roles with some from the first cohort already securing them. Attracting and
50 retaining staff in hard to recruit to areas was an aim of the fellowship programme, but as recently
51 described in an evaluation of another fellowship programme may be difficult to achieve.²³ There
52 was some evidence from the LaSE evaluation that fellows intend to remain in the areas to which
53 they were recruited.
54
55
56
57
58
59
60

1
2
3 Research on innovation and service change in the NHS has shown that there are many, wide ranging,
4 factors that affect successful adoption, the complexity of which has been demonstrated.²⁴ Common
5 to many studies, is the need for champions who take the innovation forward, furthermore that the
6 likelihood of success is improved with more senior champions.^{11,15,16} NHS organisations often rely on
7 individuals taking on the role of champion as an additional task whereas innovation in other
8 industries tends to be seen as a specialism in its own right.²⁵ The need for adequately funded
9 innovation projects alongside investment in capacity, skills and leadership have also been found
10 crucial to successful adoption.^{26,27} The transfer of the fellowship from the West Midlands to LaSE
11 benefited from key senior champions within HEE who drove the project forward. Where there were
12 issues in securing placements these could potentially be overcome with better understanding of the
13 programme in secondary care and the co-opting of champions in host organisations. Another key
14 element of successful innovation is reported to be a programme open to adaptation, refinement or
15 modification.²⁴ This research showed how the programme could be adapted to suit local needs in
16 different areas without losing its core elements.
17
18

19 **Strengths and limitations**

20
21 The study had access to all the fellows that participated in the fellowship programme in 2016/17 in
22 LaSE, with fifteen of the seventeen fellows engaging with the evaluation; of the remaining two, one
23 was on long term leave during the data collection period. This gives strength to the
24 representativeness of the views reported. Fellows were followed up on a number of occasions
25 giving the opportunity to understand their expectations and experience at various stages of the
26 fellowship. The study successfully collected views and expectations from the perspective of a wide
27 range of individuals who worked with the fellows, giving depth to the findings.
28

29
30 Although the study was limited to assessing the transferability of the programme from one region to
31 another, the West Midlands and LaSE together cover 31.8% of the population of England²⁸ and
32 include five of the thirteen local areas within two of the four regional Local Education Training
33 Boards. Hence, it is likely that the findings have relevance to the rest of the country.
34

35 The financial model supporting the scheme was shown to be of fundamental importance to the
36 success of the programme, influencing the way that clinical placements were identified and
37 developed. However, it was beyond the scope of the study to undertake an economic evaluation of
38 the programme. While this is an important consideration, the costs and benefits of the scheme need
39 to be viewed over the medium to longer term in relation to how the fellowship is preparing clinicians
40 to meet future workforce requirements, in addition to the return that fellows give to host
41 organisations in the short term.
42

43 **Conclusion**

44
45 This study has established the transferability of the fellowship programme between regions in the
46 NHS. Key elements of its organisation and structure were retained, and similar benefits to those
47 described in the West Midlands pilot were reported.¹⁷ On the whole it was judged favourably by
48 fellows, stakeholders and host organisations, although there was some evidence of problems
49 associated with misunderstanding or miscommunication around clinical placements. Although areas
50 for improvement in the organisation and structure of the programme were identified, all fellows
51 valued the opportunities the year had given them and would recommend the programme to
52 colleagues.
53

54
55 There were necessary changes to its model of funding that resulted in concomitant changes to the
56 arrangements of secondary care placements, leading to both benefits and challenges. The funding
57
58
59

1
2
3 model should ensure the programme's sustainability, but meant that the programme had to meet
4 host organisations' expectations which sometimes negatively affected fellows' clinical placements.
5 While this resulted in flexibility in placement options, enabling some fellows to tailor placements to
6 their interests, it also led to others reporting a lack of breadth in their clinical experience or control
7 over where they were placed. The broadening of the programme to include multi-professional
8 fellows was welcomed with all groups seeing the benefits of cross disciplinary learning. However,
9 more guidance is required for host organisations on professional skill sets to maximise placement
10 opportunity and satisfaction, including the need to understand it is not intended to be a competency
11 based programme. It is evident that programmes can be successfully transferred where they allow
12 for flexibility to take account of regional variations.
13

14 **Implications for practice**

15
16 There is a clear need for training for GPs and other primary care professionals in order to prepare for
17 future NHS workforce needs. The evaluation of this fellowship programme demonstrates a model of
18 training that is well received and accepted by fellows and those who work with or employ them. It
19 appears to be suited to delivery within widely varying settings hence addressing the call for 250
20 fellowship placements to be made available across England.⁴ It could be modified to provide
21 experience in a range of other priority clinical areas, such as mental health or frailty. This study
22 highlights how it can be successfully adapted to fit with local funding and service requirements,
23 while maintaining the balance with academic and leadership training and general practice
24 experience. It has also shown the benefit of widening the programme to other primary care
25 professional groups, although identified that careful consideration needs to be given to the choice of
26 clinical placements. Cross-sector working will be increasingly important as more individuals with
27 multi-morbidity are treated in primary care, and programmes like this will be valuable in building
28 cross-sector and inter-professional understanding.
29
30
31

32 **Acknowledgements:** We would like to thank all the health service staff who participated in the
33 research along with staff at Health Education England.
34

35 **References**

- 36
37 1. NHS England. Five year forward view. Leeds: NHS England, 2014.
38 <https://www.england.nhs.uk/wp-content/uploads/2014/10/5yfv-web.pdf> (accessed 26
39 October 2017).
40 2. NHS England. New care models: Vanguard—developing a blueprint for the future of NHS and
41 care services. London: NHS England, 2016. [https://www.england.nhs.uk/wp-](https://www.england.nhs.uk/wp-content/uploads/2015/11/new_care_models.pdf)
42 [content/uploads/2015/11/new_care_models.pdf](https://www.england.nhs.uk/wp-content/uploads/2015/11/new_care_models.pdf) (accessed 26 Oct 2017).
43 3. NHS England. Building the Workforce—the New Deal for General Practice. Secondary Building
44 the workforce: the new deal for general practice. NHS England, 2015.
45 [https://www.england.nhs.uk/commissioning/wp-](https://www.england.nhs.uk/commissioning/wp-content/uploads/sites/12/2015/01/building-the-workforce-new-deal-gp.pdf)
46 [content/uploads/sites/12/2015/01/building-the-workforce-new-deal-gp.pdf](https://www.england.nhs.uk/commissioning/wp-content/uploads/sites/12/2015/01/building-the-workforce-new-deal-gp.pdf) (accessed 26
47 Oct 2017).
48 4. NHS England. General practice forward view. NHS England, 2016.
49 <https://www.england.nhs.uk/wp-content/uploads/2016/04/gpfv.pdf> (accessed 26 Oct 2017)
50 5. Gibson J, Checkland K, Coleman A, Hann M, McCall R, Spooner S, et al. *Eighth national GP*
51 *worklife survey*. University of Manchester, 2015.
52 6. Dale J, Potter R, Owen K, Parsons N, Realpe A, Leach J. Retaining the general practitioner
53 workforce in England: what matters to GPs? A cross-sectional study. *BMC Family Practice*.
54 2015; **16(1)**: 140.
55
56
57
58
59
60

7. Primary Care Workforce Commission. The future of primary care: creating teams for tomorrow. London: Health Education England, 2015.
<https://www.hee.nhs.uk/sites/default/files/documents/The%20Future%20of%20Primary%20Care%20report.pdf> (accessed 23 Nov 2017).
8. Greenaway D. Securing the future of excellent patient care. London: Shape of Training. 20¹³.
https://www.shapeoftraining.co.uk/static/documents/content/Shape_of_training_FINAL_Report.pdf_53977887.pdf (accessed 26 Oct 2017).
9. Sabey A, Hardy H. Views of newly-qualified GPs about their training and preparedness: lessons for extended generalist training. *Br J Gen Pract*. 2015; **65(633)**: e270-e7.
10. Gilbert H. Supporting integration through new roles and working across boundaries: King's Fund; 2016. https://www.kingsfund.org.uk/sites/default/files/field/field_publication_file/Supporting_integration_web.pdf (accessed 26 Oct 2017).
11. Collins B. Adoption and spread of innovation in the NHS. London: The King's Fund, 2018.
https://www.kingsfund.org.uk/sites/default/files/2018-01/Adoption_and_spread_of_innovation_NHS_0.pdf (accessed 24 Jan 2018).
12. Lau R, Stevenson F, Ong BN, et al. Achieving change in primary care—causes of the evidence to practice gap: systematic reviews of reviews. *Implementation Science* 2015;**11**(1):40
13. Pace LE, Dolan BM, Tishler LW, et al. Incorporating long-acting reversible contraception into primary care: A training and practice innovation. *Women's Health Issues* 2016;**26**(2):131-34
14. Ono SS, Crabtree BF, Hemler JR, et al. Taking Innovation To Scale In Primary Care Practices: The Functions Of Health Care Extension. *Health Affairs* 2018;**37**(2):222-30
15. Greenhalgh T, Stramer K, Bratan T, et al. Introduction of shared electronic records: multi-site case study using diffusion of innovation theory. *Bmj* 2008;**337**:a1786
16. Lord L, Dowswell G, Hewison A. 'The team for both sides?' A qualitative study of change in heart failure services at three acute NHS Trusts. *Health & social care in the community* 2015;**23**(2):121-30
17. Dale J, Russell R, Harkness F, et al. Extended training to prepare GPs for future workforce needs: a qualitative investigation of a 1-year fellowship in urgent care. *Br J Gen Pract* 2017;**67**(662):e659-e67
18. Gale NK, Heath G, Cameron E, et al. Using the framework method for the analysis of qualitative data in multi-disciplinary health research. *BMC medical research methodology* 2013;**13**(1):117
19. Riley B, Howe A. Pushing for victory: where next for 4-year GP training?: *British Journal of General Practice*, 2015. DOI: <https://doi.org/10.3399/bjgp15X683341>
20. Taylor C, Turnbull C, Sparrow N. Establishing the continuing professional development needs of general practitioners in their first five years after training. *Education for Primary Care* 2010;**21**(5):316-19
21. Dale J, Russell R, Scott E, et al. Factors influencing career intentions on completion of general practice vocational training in England: a cross-sectional study. *BMJ open* 2017;**7**(8):e017143
22. Foundation H. Quality improvement training for healthcare professionals. London: The Health Foundation, 2012.
<http://www.health.org.uk/sites/health/files/QualityImprovementTrainingForHealthcareProfessionals.pdf> (accessed 24 Jan 2018).
23. Melvyn MJ, Bashir N, Purushotham N, et al. Universities and primary care organisations working together to recruit GPs: a qualitative evaluation of the Enfield clinical teaching fellow programme. *BJGP Open* 2018:bjgpopen18X101361
24. Greenhalgh T, Robert G, Macfarlane F, et al. Diffusion of innovations in service organizations: systematic review and recommendations. *The Milbank Quarterly* 2004;**82**(4):581-629
25. Heitmueller A, Bull A, Oh S. Looking in the wrong places: why traditional solutions to the diffusion of innovation will not work. *BMJ Innovations* 2016:bmjinnov-2015-000106

- 1
2
3 26. Kelly CJ, Young AJ. Promoting innovation in healthcare. *Future Hospital Journal*
4 2017;**4**(2):121-25
5 27. Parris S, Cochrane G, Marjanovic S, et al. Galvanising the NHS to Adopt Innovation: The
6 Feasibility and Practicality of Recommendations from the Interim Report of the Accelerated
7 Access Review. *Rand health quarterly* 2016;**6**(1)
8 28. ONS. Annual Small Area Population Estimates. Fareham: Office for National Statistics, 2017.
9 <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/datasets/clinicalcommissioninggroupmidyearpopulationestimates> (accessed 22
10 Feb 2018).
11
12

13 **Footnotes:**

14 **Author contributions:** The study was designed by JD with CB and RR taking responsibility for the
15 data collection. All were involved in the analysis. CB drafted the first version of the paper with JD
16 and RR contributing to revisions of the article.
17

18 **Funding:** This study was carried out with funding from NHS Health Education England
19

20 **Competing interests:** None of the authors have competing interests.
21

22 **Ethics approval:** University of Warwick's Biomedical Sciences Research Ethics Approval was
23 obtained: REGO-2016-1828 AM02
24

25 **Data sharing statement:** No additional data are available.
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Reporting checklist for qualitative study.

Based on the SRQR guidelines.

Instructions to authors

Complete this checklist by entering the page numbers from your manuscript where readers will find each of the items listed below.

Your article may not currently address all the items on the checklist. Please modify your text to include the missing information. If you are certain that an item does not apply, please write "n/a" and provide a short explanation.

Upload your completed checklist as an extra file when you submit to a journal.

In your methods section, say that you used the SRQR reporting guidelines, and cite them as:

O'Brien BC, Harris IB, Beckman TJ, Reed DA, Cook DA. Standards for reporting qualitative research: a synthesis of recommendations. *Acad Med.* 2014;89(9):1245-1251.

	Reporting Item	Page Number
	#1 Concise description of the nature and topic of the study identifying the study as qualitative or indicating the approach (e.g. ethnography, grounded theory) or data collection methods (e.g. interview, focus group) is recommended	1
	#2 Summary of the key elements of the study using the abstract format of the intended publication; typically includes background, purpose, methods, results and conclusions	2
Problem formulation	#3 Description and significance of the problem / phenomenon studied: review of relevant theory and empirical work; problem statement	3
Purpose or research question	#4 Purpose of the study and specific objectives or questions	4
Qualitative approach and research paradigm	#5 Qualitative approach (e.g. ethnography, grounded theory, case study, phenomenology, narrative research) and	4

guiding theory if appropriate; identifying the research paradigm (e.g. postpositivist, constructivist / interpretivist) is also recommended; rationale. The rationale should briefly discuss the justification for choosing that theory, approach, method or technique rather than other options available; the assumptions and limitations implicit in those choices and how those choices influence study conclusions and transferability. As appropriate the rationale for several items might be discussed together.

1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14	Researcher	#6	Researchers' characteristics that may influence the	NA
15	characteristics and		research, including personal attributes, qualifications /	
16	reflexivity		experience, relationship with participants, assumptions	
17			and / or presuppositions; potential or actual interaction	
18			between researchers' characteristics and the research	
19			questions, approach, methods, results and / or	
20			transferability	
21				
22				
23				
24				
25	Context	#7	Setting / site and salient contextual factors; rationale	4
26				
27				
28	Sampling strategy	#8	How and why research participants, documents, or	4
29			events were selected; criteria for deciding when no	
30			further sampling was necessary (e.g. sampling	
31			saturation); rationale	
32				
33				
34				
35	Ethical issues pertaining	#9	Documentation of approval by an appropriate ethics	14
36	to human subjects		review board and participant consent, or explanation for	
37			lack thereof; other confidentiality and data security issues	
38				
39				
40	Data collection methods	#10	Types of data collected; details of data collection	4
41			procedures including (as appropriate) start and stop	
42			dates of data collection and analysis, iterative process,	
43			triangulation of sources / methods, and modification of	
44			procedures in response to evolving study findings;	
45			rationale	
46				
47				
48				
49				
50	Data collection	#11	Description of instruments (e.g. interview guides,	4
51	instruments and		questionnaires) and devices (e.g. audio recorders) used	
52	technologies		for data collection; if / how the instruments(s) changed	
53			over the course of the study	
54				
55				
56				
57	Units of study	#12	Number and relevant characteristics of participants,	5
58			documents, or events included in the study; level of	
59				
60				

		participation (could be reported in results)	
1			
2			
3	Data processing	#13 Methods for processing data prior to and during analysis,	4
4		including transcription, data entry, data management and	
5		security, verification of data integrity, data coding, and	
6		anonymisation / deidentification of excerpts	
7			
8			
9	Data analysis	#14 Process by which inferences, themes, etc. were identified	4
10		and developed, including the researchers involved in	
11		data analysis; usually references a specific paradigm or	
12		approach; rationale	
13			
14			
15			
16	Techniques to enhance	#15 Techniques to enhance trustworthiness and credibility of	5
17	trustworthiness	data analysis (e.g. member checking, audit trail,	
18		triangulation); rationale	
19			
20			
21	Syntheses and	#16 Main findings (e.g. interpretations, inferences, and	6-10
22	interpretation	themes); might include development of a theory or	
23		model, or integration with prior research or theory	
24			
25			
26			
27	Links to empirical data	#17 Evidence (e.g. quotes, field notes, text excerpts,	6-10
28		photographs) to substantiate analytic findings	
29			
30			
31	Intergration with prior	#18 Short summary of main findings; explanation of how	10
32	work, implications,	findings and conclusions connect to, support, elaborate	
33	transferability and	on, or challenge conclusions of earlier scholarship;	
34	contribution(s) to the field	discussion of scope of application / generalizability;	
35		identification of unique contributions(s) to scholarship in a	
36		discipline or field	
37			
38			
39			
40	Limitations	#19 Trustworthiness and limitations of findings	11
41			
42			
43	Conflicts of interest	#20 Potential sources of influence of perceived influence on	14
44		study conduct and conclusions; how these were	
45		managed	
46			
47			
48	Funding	#21 Sources of funding and other support; role of funders in	14
49		data collection, interpretation and reporting	
50			
51			

The SRQR checklist is distributed with permission of Wolters Kluwer © 2014 by the Association of American Medical Colleges. This checklist was completed on 04. April 2018 using <http://www.goodreports.org/>, a tool made by the [EQUATOR Network](#) in collaboration with [Penelope.ai](#)

BMJ Open

Learning from the transfer of a fellowship programme to support primary care workforce needs in the UK: a qualitative study

Journal:	<i>BMJ Open</i>
Manuscript ID	bmjopen-2018-023384.R1
Article Type:	Research
Date Submitted by the Author:	13-Jul-2018
Complete List of Authors:	Bryce, Carol; University of Warwick Warwick Medical School, Unit of Academic Primary Care Russell, Rachel; University of Warwick Warwick Medical School, Unit of Academic Primary Care Dale, Jeremy; University of Warwick Warwick Medical School, Unit of Academic Primary Care
Primary Subject Heading:	General practice / Family practice
Secondary Subject Heading:	Medical education and training
Keywords:	PRIMARY CARE, urgent care, QUALITATIVE RESEARCH, vocational training, cross-sector working, programme transferability

SCHOLARONE™
Manuscripts

1
2
3 **Learning from the transfer of a fellowship programme to support primary care workforce**
4 **needs in the UK: a qualitative study.**

5
6 **Carol Bryce¹, Rachel Russell¹ and Jeremy Dale¹**

7
8 **¹Unit of Academic Primary Care, Warwick Medical School, University of Warwick, United Kingdom**

9
10
11 **Corresponding author:**

12
13 Jeremy Dale
14 Professor of Primary Care
15 Division of Health Sciences
16 Warwick Medical School
17 University of Warwick
18 Coventry CV4 7AL
19 Email: Jeremy.Dale@warwick.ac.uk
20 Tel: 024 7652 2891 (office)
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

1
2
3 Abstract

4 **Objectives**

5
6 Service redesign, including workforce development, is being championed by UK health service policy.
7 It is allowing new opportunities to enhance the roles of staff and encourage multi-professional
8 portfolio working. New models of working are emerging, but there has been little research into how
9 innovative programmes are transferred to and taken up by different areas. This study investigates
10 the transferability of a one-year post-CCT fellowship in urgent and acute care from a pilot in the
11 West Midlands region of England to London and the South East.
12

13
14 **Design**

15 A qualitative study using semi-structured interviews supplemented by observational data of fellows'
16 clinical and academic activities. Data were analysed using a thematic framework approach.
17

18
19 **Setting and participants**

20 Two cohorts of fellows (15 in total) along with key stakeholders, mentors, tutors and host
21 organisations in London and the South East (LaSE). Fellows had placements in primary and secondary
22 care settings (general practice, emergency department, ambulatory care, urgent care and rapid
23 response teams), together with academic training.
24

25
26 **Results**

27 Seventy-six interviews were completed with 50 participants, with observations in eight clinical
28 placements and two academic sessions. The overall structure of the West Midlands programme was
29 retained and the core learning outcomes adopted in LaSE. Three fundamental adaptations were
30 evident: broadening the programme to include multi-professional fellows, changes to the funding
31 model and the impact that had on clinical placements. These were felt to be key to its adoption and
32 longer term sustainability.
33

34
35 **Conclusion**

36 The evaluation demonstrates a model of training that is adaptable and transferable between NHS
37 regions, taking account of changing national and regional circumstances, and has the potential to be
38 rolled out widely.
39
40

41
42 **Keywords**

43
44 General practice, urgent care, qualitative research, vocational training, cross-sector working,
45 programme transferability.
46

47
48 **Strengths and Limitations**

- 49
- Few studies have evaluated the delivery of new training programmes for general practitioners and primary care professionals in terms of their transferability from one area to another.
 - This study evaluated an innovative additional year of training, and had a high level of participation from the cohort eligible for inclusion, with their perspectives gathered at a number of stages of the programme.
- 50
51
52
53
54
55
56
57
58
59
60

- By including a wide range of individuals who worked with the fellows including stakeholders, host organisation leads and colleagues the study gained a broad perspective of the adoption of the fellowship programme and factors that influenced its transferability.
- Although limited to two regions, together these cover 31.8% of the population of the country and two of the four Local Education Training Boards in England, so strengthening the generalisability of the findings.

INTRODUCTION

UK health service policy is looking to service redesign as a way of addressing the challenges facing the National Health Service (NHS).¹⁻³ Within primary care, training initiatives (including additional training in hard to recruit posts, the development of portfolio roles for both newly qualified staff and those reaching the end of their careers and workforce development in teams wider than General Practitioners (GPs)) are suggested as ways of enhancing the roles of staff, including nurses.^{3,4} This has included funding for 250 post CCT training posts in England, targeted at areas with the poorest GP recruitment, to enable GPs to access additional training in a specialism of interest whilst addressing local need.⁴ Such initiatives are important at a time when the numbers of GPs intending to reduce their hours or leave general practice is rising in the face of increasing workload.^{5,6} They offer experience (cross-sector working, skills enhancement including leadership and management training, and clinical skills training) that goes further than that included in the current three-year vocational training schemes.^{7,8} This mirrors the expanding remit of general practice, with recognition that traditional models of training and continuing professional development in general practice are no longer sufficient to prepare individuals for roles that cross boundaries of care.^{9,10}

Uptake of service innovation within the NHS is known to be slow with few formal mechanisms existing for spreading learning across services or different geographical areas.¹¹ Within primary care, evidence suggests the fit between the innovation and the local context is crucial if implementation is to be successful.¹² Where innovation has been shown to be successful there has consistently been strong leadership or champion buy in and appropriate funding alongside perceived external and internal need.¹²⁻¹⁶ Much of the evidence that does exist focuses on facilitators and barriers to innovation with less evidence of how and why some are successful.¹²

We recently reported an evaluation of a one-year post-CCT fellowship programme, developed and piloted by Health Education England, West Midlands, that provided recently trained GPs with advanced skills training in urgent and acute care, leadership and academic practice.¹⁷ Details of the fellowship programme are shown in Box 1. Although positively evaluated, questions remained over scalability and transferability to more complex health service settings.¹⁷

Box 1. Aims and structure of fellowship programme in West Midlands

Seven GPs within three years of post-CCT participated in the programme in the West Midlands

Aims

- To enhance the skills and experience of GPs in urgent/emergency care teams
- To enable GPs to apply enhanced urgent and acute skills to support the development of alternative community-based care pathways
- To raise GP interest in hybrid emergency/urgent and primary care roles
- To support the national policy drive for integration of primary, secondary and social care

Programme Structure

- 40% time in primary care: GP training practice
- 40% time in clinical attachments: 3 attachments each of 4 months' duration comprising: emergency department, a medical admissions unit and an ambulance service
- 20% academic study: undertaking a bespoke postgraduate certificate in Urgent and Acute Care and participation in an action learning set

In 2016, Health Education England, London and the South East (LaSE) adopted the West Midlands fellowship programme throughout the region, so creating an opportunity to study its transferability to multiple contrasting areas. Whereas, the secondary care-based elements of the West Midlands' pilot were located in relatively small county hospitals, the LaSE scheme included large inner city hospitals in socially diverse settings. Hence, the relevance, applicability and adoption of the fellowship scheme, in particular focuses on how and why it evolved, in order to draw out implications for the further roll-out of such workforce initiatives.

METHODS

This qualitative study comprised interviews with key individuals, along with observations of fellows in a cross section of workplace settings, to gain in-depth understanding of views and experiences relating to the transfer of a workforce programme from one setting to another.

Recruitment and Data Collection

All fellows in each of two cohorts of the one-year urgent/emergency care fellowship programme implemented in LaSE in 2016 were invited to take part in the study, along with their mentors and key individuals they identified in each of their clinical placements. In addition, we invited key stakeholders responsible for the implementation of the programme, including HEE primary care leads, quality and performance managers and academic leads.

All eligible individuals received written study information and were consented. They were also informed what the data would be used for and that confidentiality would be assured. All data was anonymised with unique identifiers assigned to each participant according to the group to which they belonged (HEE = stakeholders and Health Education England staff members, M = fellow's mentor, F = fellow and H = key individual in the healthcare provider organisation).

Semi-structured interviews were conducted face-to-face or over the telephone and lasted between 20 and 45 minutes. Initial interviews, conducted around six months into the fellowship, explored interviewee's aims, expectations and experiences of the fellowship programme. Second interviews were conducted on or after completion of the programme and focussed on the overall experience of the fellowship and its impact on career plans (fellows) and organisational impacts, including capacity building (stakeholders and hosts).

Observations of fellows (ten in total) were pragmatically chosen to cover all primary and secondary care settings in which the fellows were hosted, as well as academic days, and to minimise disruption to clinical teams. An observation checklist was used to record evidence of teamwork, integrated care working, communication across settings, teaching and academic activity. Observations lasted between 4 and 7 hours during which time members of the clinical team with whom they were located were opportunistically asked to participate in short interviews.

Data analysis

All interviews were recorded, transcribed verbatim, anonymised and checked for accuracy by CB and RR. Analysis was aided by the use of Nvivo11 software package. Initial codes were deductively drawn from the research questions and we read the transcripts inductively coded for any elements not previously captured. A thematic framework was devised using an iterative process until all the codes had been identified.¹⁸ Qualitative quotes were identified to elucidate each theme.

Patient and public involvement

Patients and public were not directly involved in this study.

RESULTS

Participants and settings

Of 17 eligible fellows 15 agreed to participate in the evaluation; one had personal circumstances that prevented them from doing so. In addition, 35 stakeholders, provider organisation clinical leads, GP tutors and mentors participated in planned interviews. Twenty participants were involved in a second interview and six were interviewed a total of 3 times, as shown in Table 1, giving a total of 76 interviews. The timing of when data collection occurred, in relation to the employment period of each of the fellows, determined the extent to which they could each be followed up.

Table 1: Interview Data Collection

Role	Initial interviews	Supplementary interviews	Total
HEE Staff and Stakeholders (including course tutor)	10	5	15
Host provider organisations	9	3	12
Fellows	15	18	33
Mentors/tutors	16		16
Total	50	26	76

An additional 27 interviews (lasting between 5 and 15 minutes) were completed opportunistically during observation sessions. These included members of GP, emergency department, ambulatory care, urgent care and rapid response teams.

Table 2 shows the mix of clinical placements that were experienced by the 15 participating fellows. While most had two days/week in general practice, the secondary care placements were highly variable and for one fellow included no direct patient contact.

Table 2: Fellows placement experience by profession

Profession	GP Placement	Secondary Care Placement
ANP	Unassigned but included ad hoc work in extended hours	1 day / week stroke reduction project. 12 months 3 days / week working for local CEPN (community education provider network) on quality and clinical assurance. 12 months

	sessions	
ANP	None organised	Urgent care centre. 12 months
ANP	2 days /week 12 months	1 day emergency department. 12 months 1 day urgent care. 12 months
ANP	2 days /week two 6 month placements	2 days secondary care including ambulatory care, Acute Medical Unit, Integrated networks. 12 months
GP	2 days/week (incl 1 day project work) 6 months. 2 days/week 6 months	2 days ambulatory care including virtual ward outreach nursing team attachment. 6 months 2 days emergency department. 6 months
GP	Variable sessions over 12 months	2 days /week Urgent Care Walk In Centre. 12 months 2 days /week Community Independence Service – virtual ward. 12 months
GP	2 days/week. 12 months	2 days/week emergency department. 9 months. 2 days/week acute frailty project. 3 months.
GP	2 days/week. 12 months	2 days/week a week. 12 months. Including: <ul style="list-style-type: none"> - Emergency department Community geriatrics and rapid response. - Rapid Access Medical Unit and Ambulatory Medical Unit. - Acute Paediatrics including acute asthma nursing team.
GP	1 day/week 1 day nursing home (that practice managed). 12 months	2 days/week Rapid Response Intermediate Care Service. 12 months
GP	2 days/week (already working in surgery prior to fellowship)	No clinical placements in secondary care (Worked at CCG level developing a paediatrics fellowship initiative). 12 months
GP	2 days/week. 12 months	1 day/week ambulatory care. 12 months 1 day/week geriatrics and frailty – organisational service delivery project. 12 months
GP	2 days/week. 12 months	2 days/week urgent care. 12 months
GP	2 days/week. 12 months	1 day/week urgent care. 12 months 1 day/week CCG working on service improvement linked to urgent care placement. 12 months
GP	2 days/week. 12 months	1 day/week emergency department. 12 months 1 day/week urgent care. 12 months
GP	1 day/week. 12 months	1 day/week acute response team – multi professional team – in the clinical decision unit. 12 months 2 days/week medical consultants in ambulatory care. 12 months

Comparison with and learning from the West Midlands pilot

Interviewees described a high level of commitment between HEE partners in West Midlands and LaSE to share learning relevant to the transfer of the fellowship programme, particularly during the year prior to the LaSE fellowship launch. Respondents also highlighted the key role that programme

1
2
3 champions in LaSE (from regional level to local clinical educators) played in its successful
4 implementation.

5
6 The overall aims and structure of the West Midlands programme were retained by LaSE (see Box 1).
7 LaSE adopted the same core learning outcomes, adding a further two covering understanding of
8 ambulatory care and working towards admission avoidance strategies. While the West Midlands
9 fellowship programme was administered across one HEE local area, in LaSE it was across four
10 reflecting a more complex and varied administrative landscape. There was evident commitment
11 between HEE partners in West Midlands and LaSE to share learning relevant to the transfer of the
12 fellowship programme. HEE leads had met and discussed how the pilot programme was set up in
13 the West Midlands, and this fed directly into the development of the LaSE programme.

14
15 We identified three clear areas of adaptation which will now be explored in more detail.

16 17 **Acceptability and experience of the scheme**

18
19 The stakeholders, mentors and hosts in LaSE viewed the programme favourably, stating that they
20 would be willing to host a fellow in the future.

21
22 *I can't praise him [academic mentor] highly enough actually, I think his style as a programme
23 lead has been brilliant. So in terms of the academic days they're very good. F10*

24
25 The programme was also felt by most participants to be fulfilling expectations that it was preparing
26 fellows for portfolio careers, including leadership and academic roles

27
28 *It [fellowship] helps in a number of ways. You can apply it to the academic side, you've got
29 the post-graduate certificate. You can apply it to the fact that you've got a range F07*

30 31 **The development of a multi-professional fellowship model**

32
33 While the West Midlands pilot programme only included GPs, at LaSE it was broadened to include
34 Advanced Nurse Practitioners (ANPs) and Physician Associates (PAs): two ANPs were included in
35 cohort 1, and 2 ANPs and 1 PA in cohort 2. Commissioners and the programme team drove this
36 change as they considered multi-professional working a progressive development:

37
38 *...the model for urgent and emergency care is predicated in the future on a mixed economy
39 of health professionals. H 04*

40
41 Nursing fellows welcomed as they described a lack of professional development or upskilling
42 opportunities.

43
44 *So, [ANPs] do not have much opportunity to upskill clinically...there are quite a few
45 programmes geared towards GP trainers. Fellow 01*

46
47 The teaching element of the programme valued the multi-professional mix:

48
49 *So one advantage of our programme is that we take all comers, not just GPs, and that's been
50 incredibly useful. Certainly I've noticed when teaching the group ... a very heterogeneous
51 group is always better to be teaching and working with. HEE02*

52
53 Although the multi-professional mix was generally well-received there were some concerns raised
54 about the suitability of non-GPs and the available clinical placements in acute settings. Some of the
55 ANP and PA fellows had difficulty in accessing suitable placements and some of the placement
56 mentors were unsure of how to best use the fellow:

1
2
3 *Trying to mix those three cohorts of clinicians who come from significantly different*
4 *backgrounds was going to be challenging...so there wasn't a clear syllabus about what they*
5 *needed to do, there wasn't clear competency documents that we would expect for signing off*
6 *for F2s or paramedics. Mentor 24*
7

8 This highlights the need for all participants in the scheme to have clear information on the role of
9 the fellows and the programme purpose. While the fellowship programme was not designed to be
10 competency-based, concerns were raised about the experience and qualification levels of the
11 nursing fellows compared to GP fellows.
12

13 *They're so variable, because you just don't know what background they're coming with. So*
14 *you know, with the GPs traditional training, they've had two years in hospital medicine and a*
15 *year in general practice. With an ANP, it depends on what the training's been previously.*
16 *Mentor 22*
17

18 Placement difficulties also arose over uncertainty regarding ANPs' indemnity in some settings:
19

20 *...it wasn't even the funding, I think it was the cover, insurance or litigation. I wasn't able to*
21 *work there. Fellow 01*
22

23 Despite these difficulties, including ANPs and PAs in the fellowship programme was generally viewed
24 positively as a means of providing upskilling opportunities, encouraging individuals to pursue more
25 challenging roles and to increase capacity.
26

27 *I think if we can get them to autonomous practising at urgent emergency care level then they*
28 *are a very, very employable asset. Mentor 23*
29

30 **Changes to the funding model**

31 While the initial pilot of the fellowship programme had been fully funded by HEE West Midlands, in
32 LaSE the funding climate did not allow this and alternative funding mechanisms were needed:
33

34 *In the West Midlands they were paying 100% of the salary of the individuals involved in the*
35 *fellowship, and we felt that actually that wasn't a model that would be sustainable as we*
36 *moved forwards. So we devised a different funding model which was a bursary based model*
37 *which then left the service element to be funded through service providers and clinical*
38 *commissioners. HEE05*
39
40

41 In LaSE, the academic element of the fellowship continued to be funded through HEE, with the
42 remaining costs of the scheme being funded by the primary and secondary care organisations
43 providing clinical placements. While this enabled the inclusion of a larger number of fellows, it also
44 led to increasing variation in employers' expectations of the fellows. In addition, the complex
45 employment arrangements were time consuming to set up and manage:
46

47 *I've tried to be quite proactive and I've engaged the employers for several months*
48 *beforehand and tried to make really sure they know what they're offering and whose*
49 *responsibility is whose. HEE04*
50

51 The LaSE programme required a clinical commissioning group (CCG) or a GP federation/partnership
52 to host the fellow and act as their main employer, taking on responsibility to ensure that the
53 fellowship was financially viable, and cross-charging for the time the fellows spent in other clinical
54 settings:
55
56
57
58
59
60

1
2
3 *If you take on somebody full time in a Fellowship position the salary cost is £100,000 and the*
4 *Fellowship grant is £30,000, so you have to balance the £70,000.....So we have to find them*
5 *projects to do with organisations that are happy for us to cross charge them for their clinical*
6 *time. Host 02*
7

8 While this funding model allowed for flexibility, enabling most fellows to build placements around
9 their interests, a few fellows cited the necessity of their host to recoup costs as the main reason they
10 lacked the breadth of experience they had envisioned:

11
12 *I feel completely cheated. I feel like I've been used as a commodity.....for my year my key aim*
13 *was to have the clinical side of it, and that hasn't happened and isn't going to. Fellow 10*
14

15 Organisational stakeholders considered that host organisations' investment in the programme was
16 central to its relevance and sustainability:

17
18 *Because service is not getting a freebee or a total freebee they are actually committed to*
19 *ensuring and investing in it to get the right thing for them as well as the programme itself. So it*
20 *is buy in... it is a model that can then be replicated across the system as it demonstrates that*
21 *providers recognise that this kind of approach is really important both for developing future*
22 *leadership service but also demonstrating an integrated approach to service delivery. HEE05*
23
24

25 **Clinical placement experience**

26
27 While the programme in LaSE retained the same 40:40:20 proportions as in the West Midlands
28 scheme (see Box 1), the organisation of clinical placements differed. In the West Midlands' pilot
29 fellows worked in one GP practice and rotated through three service placements, each lasting 4
30 months. In LaSE, each fellow had to work with their employing organisation to arrange their
31 placements both in GP, urgent care, resulting in a variety of lengths of placement and experience.
32 This change meant that each fellow had more individualised programme as shown in Table 2.
33

34 *It's worked really well for me ... sorting things out myself and not just kind of fitting into a*
35 *programme that exists Fellow 11*
36

37 *Making sure that there's a bit of flexibility in it means that, particularly for the candidate,*
38 *they will get the best experience rather than just having a rigid 'you will do this, you will do*
39 *that'. Host 02*
40

41 Most fellows viewed this adaptation positively, but some without the anticipated spectrum of
42 exposure and experience; for example, placed in one service, such as an emergency department, for
43 the year without opportunity to rotate around other services. There was a balance to be made
44 between flexibility and creating the variety of opportunities for experience that were expected.
45

46 *I think the one thing, speaking to my other colleagues, is that there seems to be such*
47 *variability in how the posts are in the fellowship...other fellows get to rotate a bit more and I*
48 *think I would have liked to have rotated into other posts as well. Fellow 13*
49

50 *If you make it too rigid then you deny them the opportunity of opportunistic learning but if*
51 *you make it too fuzzy then everybody has a very individual experience. HEE09*
52

53 There were mixed feelings about the length of placements, but it was generally felt longer
54 placements enabled better embeddedness and in-depth learning, particularly in general practice:
55
56
57
58
59

1
2
3 *I think being in one department for a whole year will perhaps give us more time to familiarise*
4 *ourselves and actually produce some meaningful project work I think as well. Fellow 14*

5
6 *If the GP placements could be sort of a whole year rather than six months because it sounds*
7 *a bit like our fellow just kind of got going and then had to move on. Mentor 08*

8
9 Overall participants felt positive about the fellowship programme, evidenced by their willingness to
10 consider participating in future programmes or recommending it to colleagues. Fellows reported
11 that the programme largely met their expectations, in line with its aims (Box 1), in particular helping
12 them with leadership skills, system understanding and upskilling them in urgent care. The positive
13 aspects that were described were very similar to those reported for the West Midlands' pilot.¹⁷ As in
14 the West Midlands pilot, all the fellows stated that they would recommend it to colleagues.
15

16 *Yes, absolutely.[recommend it to others] I think it offers good experience in terms of just*
17 *more variety to the GP work and good learning from the academic point of view and*
18 *working with the CCGs. F12*
19

20 Negative feedback centred on frustrations over lengthy contracting issues, relating to funding
21 alterations, and the changes to placements discussed above.
22
23

24 **DISCUSSION**

25
26 This study has shown that a one year urgent/emergency care fellowship programme, developed in
27 one region to address workforce challenges facing the NHS, can be successfully transferred to other
28 contrasting areas. Through retaining core elements of the programme but being flexible in their
29 implementation, fellows experienced a more variable but, in the main, equally valuable experience.
30 In so doing, the programme appears to be successfully addressing the needs expressed by many
31 newly qualified GPs who feel underprepared in managing patients with multi morbidities⁹, and
32 lacking expertise in management, leadership and quality improvement.¹⁹⁻²²
33
34

35 The changes to the funding model resulted in concomitant changes to the arrangements of
36 placements, leading to benefits and challenges. The new funding model should ensure the
37 programme's sustainability, but a consequence was that greater priority is now placed on meeting
38 host organisations' expectations and at times this negatively affected fellows' clinical placements.
39 Increased flexibility in placement options enabled some fellows to tailor placements to their
40 interests, however others reported a lack of breadth in their clinical experience or control over
41 where they were placed. Including access to placements in commissioning bodies and through being
42 involved in quality improvement projects, the programme gave fellows experiences that go beyond
43 the scope of GP vocational training. While time will tell the extent to which the fellowship
44 programme develops future leaders, participants felt that the scheme was relevant to achieving this
45 aim in the same way as had been evidenced by the West Midlands pilot¹⁷. Most of the fellows at
46 LaSE stated they would be looking for future positions encompassing clinical and leadership roles,
47 with some from the first cohort already securing them.
48
49

50 The broadening of the programme to include multi-professional fellows was welcomed with all
51 groups seeing the benefits of cross-disciplinary learning. However, more guidance is required for
52 host organisations on professional skillsets to maximise placement opportunity and satisfaction,
53 including the need to understand it is not intended to be a competency based programme.
54
55
56
57
58
59

1
2
3 Research on innovation and service change in the NHS has shown that there are many, wide ranging,
4 factors that affect successful adoption, the complexity of which has been demonstrated.²³ Common
5 to many studies is the need for champions who take the innovation forward whilst the likelihood of
6 success is improved with more senior champions.^{11,15,16} NHS organisations often rely on individuals
7 taking on the role of champion as an additional task whereas innovation in other industries tends to
8 be seen as a specialism in its own right.²⁴ The need for adequately funded innovation projects
9 alongside investment in capacity, skills and leadership have also been found crucial to successful
10 adoption.^{25,26} The transfer of the fellowship from the West Midlands to LaSE benefited from key
11 senior champions within HEE who drove the project forward. Where there were issues in securing
12 placements these could potentially be overcome with better understanding of the programme in
13 secondary care and the co-opting of champions in host organisations. Another key element of
14 successful innovation is reported to be a programme open to adaptation, refinement or
15 modification.²³ This research showed how the fellowship programme could be adapted to suit local
16 needs in different areas without losing its core elements.
17
18

19 **Strengths and limitations**

20
21 The study had access to all the fellows that participated in the fellowship programme in 2016/17 in
22 LaSE, with fifteen of the seventeen fellows engaging with the evaluation. This gives strength to the
23 representativeness of the views reported. Fellows were followed up on a number of occasions giving
24 the opportunity to understand their experience at various stages of the fellowship. The study
25 successfully collected views and expectations from the perspective of a wide range of individuals
26 who worked with the fellows, giving depth to the findings.
27

28 Although the study was limited to assessing the transferability of the programme from one region to
29 another, the West Midlands and LaSE together cover 31.8% of the population of England²⁷ and
30 include five of the thirteen local areas within two of the four regional Local Education Training
31 Boards. Hence, it is likely that the findings have relevance to the rest of the country.
32

33 The financial model supporting the scheme was shown to be of fundamental importance to the
34 success of the programme, influencing the way that clinical placements were identified and
35 developed. However, it was beyond the scope of the study to undertake an economic evaluation of
36 the programme. While this is an important consideration, the costs and benefits of the scheme need
37 to be viewed over the medium to longer term in relation to how the fellowship is preparing clinicians
38 to meet future workforce requirements, in addition to the return that fellows give to host
39 organisations in the short term.
40
41

42 **Implications for practice**

43
44 There is a clear need for training for GPs and other primary care professionals in order to prepare for
45 future NHS workforce needs. The evaluation of this fellowship programme demonstrates a model of
46 training that is well received and accepted by fellows and those who work with or employ them. It
47 appears to be suited to delivery within widely varying settings hence addressing the call for 250
48 fellowship placements to be made available across England.⁴ It could be modified to provide
49 experience in a range of other priority clinical areas, such as mental health or frailty. This study
50 highlights how it can be successfully adapted to fit with local funding and service requirements,
51 while maintaining the balance with academic and leadership training and general practice
52 experience. It has also shown the benefit of widening the programme to other primary care
53 professional groups, although identified that careful consideration needs to be given to the choice of
54 clinical placements. Cross-sector working will be increasingly important given growing numbers of
55
56
57
58
59
60

individuals with multi-morbidity and complex health needs being treated in primary care, and programmes like this will be valuable in building cross-sector and inter-professional understanding.

In conclusion we have shown that a one year fellowship programme can be successfully transferred from one NHS region to another if flexibility and adaptation are enabled. The broader benefits that such fellowship schemes have to the participating health service organisations needs further investigation.

Acknowledgements: We would like to thank all the health service staff who participated in the research along with staff at Health Education England.

1. NHS England. Five year forward view. Leeds: NHS England, 2014. <https://www.england.nhs.uk/wp-content/uploads/2014/10/5yfv-web.pdf> (accessed 26 October 2017).
2. NHS England. New care models: Vanguard—developing a blueprint for the future of NHS and care services. London: NHS England, 2016. https://www.england.nhs.uk/wp-content/uploads/2015/11/new_care_models.pdf (accessed 26 Oct 2017).
3. NHS England. Building the Workforce—the New Deal for General Practice. Secondary Building the workforce: the new deal for general practice. NHS England, 2015. <https://www.england.nhs.uk/commissioning/wp-content/uploads/sites/12/2015/01/building-the-workforce-new-deal-gp.pdf> (accessed 26 Oct 2017).
4. NHS England. General practice forward view. NHS England, 2016. <https://www.england.nhs.uk/wp-content/uploads/2016/04/gpfv.pdf> (accessed 26 Oct 2017)
5. Gibson J, Checkland K, Coleman A, Hann M, McCall R, Spooner S, et al. *Eighth national GP worklife survey*. University of Manchester, 2015.
6. Dale J, Potter R, Owen K, Parsons N, Realpe A, Leach J. Retaining the general practitioner workforce in England: what matters to GPs? A cross-sectional study. *BMC Family Practice*. 2015; **16(1)**: 140.
7. Primary Care Workforce Commission. The future of primary care: creating teams for tomorrow. London: Health Education England, 2015. <https://www.hee.nhs.uk/sites/default/files/documents/The%20Future%20of%20Primary%20Care%20report.pdf> (accessed 23 Nov 2017).
8. Greenaway D. Securing the future of excellent patient care. London: Shape of Training. 20¹³. https://www.shapeoftraining.co.uk/static/documents/content/Shape_of_training_FINAL_Report.pdf_53977887.pdf (accessed 26 Oct 2017).
9. Sabey A, Hardy H. Views of newly-qualified GPs about their training and preparedness: lessons for extended generalist training. *Br J Gen Pract*. 2015; **65(633)**: e270-e7.
10. Gilbert H. Supporting integration through new roles and working across boundaries: King's Fund; 2016. https://www.kingsfund.org.uk/sites/default/files/field/field_publication_file/Supporting_integration_web.pdf (accessed 26 Oct 2017).
11. Collins B. Adoption and spread of innovation in the NHS. London: The King's Fund, 2018. https://www.kingsfund.org.uk/sites/default/files/2018-01/Adoption_and_spread_of_innovation_NHS_0.pdf (accessed 24 Jan 2018).
12. Lau R, Stevenson F, Ong BN, et al. Achieving change in primary care—causes of the evidence to practice gap: systematic reviews of reviews. *Implementation Science* 2015;**11(1)**:40
13. Pace LE, Dolan BM, Tishler LW, et al. Incorporating long-acting reversible contraception into primary care: A training and practice innovation. *Women's Health Issues* 2016;**26(2)**:131-34
14. Ono SS, Crabtree BF, Hemler JR, et al. Taking Innovation To Scale In Primary Care Practices: The Functions Of Health Care Extension. *Health Affairs* 2018;**37(2)**:222-30

15. Greenhalgh T, Stramer K, Bratan T, et al. Introduction of shared electronic records: multi-site case study using diffusion of innovation theory. *Bmj* 2008;**337**:a1786
16. Lord L, Dowswell G, Hewison A. 'The team for both sides?' A qualitative study of change in heart failure services at three acute NHS Trusts. *Health & social care in the community* 2015;**23**(2):121-30
17. Dale J, Russell R, Harkness F, et al. Extended training to prepare GPs for future workforce needs: a qualitative investigation of a 1-year fellowship in urgent care. *Br J Gen Pract* 2017;**67**(662):e659-e67
18. Gale NK, Heath G, Cameron E, et al. Using the framework method for the analysis of qualitative data in multi-disciplinary health research. *BMC medical research methodology* 2013;**13**(1):117
19. Riley B, Howe A. Pushing for victory: where next for 4-year GP training?: *British Journal of General Practice*, 2015. DOI: <https://doi.org/10.3399/bjgp15X683341>
20. Taylor C, Turnbull C, Sparrow N. Establishing the continuing professional development needs of general practitioners in their first five years after training. *Education for Primary Care* 2010;**21**(5):316-19
21. Dale J, Russell R, Scott E, et al. Factors influencing career intentions on completion of general practice vocational training in England: a cross-sectional study. *BMJ open* 2017;**7**(8):e017143
22. Foundation H. Quality improvement training for healthcare professionals. London: The Health Foundation, 2012. <http://www.health.org.uk/sites/health/files/QualityImprovementTrainingForHealthcareProfessionals.pdf> (accessed 24 Jan 2018).
23. Greenhalgh T, Robert G, Macfarlane F, et al. Diffusion of innovations in service organizations: systematic review and recommendations. *The Milbank Quarterly* 2004;**82**(4):581-629
24. Heitmueller A, Bull A, Oh S. Looking in the wrong places: why traditional solutions to the diffusion of innovation will not work. *BMJ Innovations* 2016:bmjinnov-2015-000106
25. Kelly CJ, Young AJ. Promoting innovation in healthcare. *Future Hospital Journal* 2017;**4**(2):121-25
26. Parris S, Cochrane G, Marjanovic S, et al. Galvanising the NHS to Adopt Innovation: The Feasibility and Practicality of Recommendations from the Interim Report of the Accelerated Access Review. *Rand health quarterly* 2016;**6**(1)
27. ONS. Annual Small Area Population Estimates. Fareham: Office for National Statistics, 2017. <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/datasets/clinicalcommissioninggroupmidyearpopulationestimates> (accessed 22 Feb 2018).

Footnotes:

Author contribution: The study was designed by JD with CB and RR taking responsibility for the data collection. All were involved in the analysis, drafting and revision of the article.

Funding: This study was carried out with funding from NHS Health Education England

Competing interests: None of the authors have competing interests.

Ethics approval: University of Warwick's Biomedical Sciences Research Ethics Approval was obtained: REGO-2016-1828 AM02

Data sharing statement: No additional data are available.

Reporting checklist for qualitative study.

Based on the SRQR guidelines.

Instructions to authors

Complete this checklist by entering the page numbers from your manuscript where readers will find each of the items listed below.

Your article may not currently address all the items on the checklist. Please modify your text to include the missing information. If you are certain that an item does not apply, please write "n/a" and provide a short explanation.

Upload your completed checklist as an extra file when you submit to a journal.

In your methods section, say that you used the SRQR reporting guidelines, and cite them as:

O'Brien BC, Harris IB, Beckman TJ, Reed DA, Cook DA. Standards for reporting qualitative research: a synthesis of recommendations. *Acad Med.* 2014;89(9):1245-1251.

	Reporting Item	Page Number
	#1 Concise description of the nature and topic of the study identifying the study as qualitative or indicating the approach (e.g. ethnography, grounded theory) or data collection methods (e.g. interview, focus group) is recommended	1
	#2 Summary of the key elements of the study using the abstract format of the intended publication; typically includes background, purpose, methods, results and conclusions	2
Problem formulation	#3 Description and significance of the problem / phenomenon studied: review of relevant theory and empirical work; problem statement	3
Purpose or research question	#4 Purpose of the study and specific objectives or questions	4
Qualitative approach and research paradigm	#5 Qualitative approach (e.g. ethnography, grounded theory, case study, phenomenology, narrative research) and	4

guiding theory if appropriate; identifying the research paradigm (e.g. postpositivist, constructivist / interpretivist) is also recommended; rationale. The rationale should briefly discuss the justification for choosing that theory, approach, method or technique rather than other options available; the assumptions and limitations implicit in those choices and how those choices influence study conclusions and transferability. As appropriate the rationale for several items might be discussed together.

1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14	Researcher	#6	Researchers' characteristics that may influence the	NA
15	characteristics and		research, including personal attributes, qualifications /	
16	reflexivity		experience, relationship with participants, assumptions	
17			and / or presuppositions; potential or actual interaction	
18			between researchers' characteristics and the research	
19			questions, approach, methods, results and / or	
20			transferability	
21				
22				
23				
24				
25	Context	#7	Setting / site and salient contextual factors; rationale	4
26				
27				
28	Sampling strategy	#8	How and why research participants, documents, or	4
29			events were selected; criteria for deciding when no	
30			further sampling was necessary (e.g. sampling	
31			saturation); rationale	
32				
33				
34				
35	Ethical issues pertaining	#9	Documentation of approval by an appropriate ethics	4 & 13
36	to human subjects		review board and participant consent, or explanation for	
37			lack thereof; other confidentiality and data security issues	
38				
39				
40	Data collection methods	#10	Types of data collected; details of data collection	4
41			procedures including (as appropriate) start and stop	
42			dates of data collection and analysis, iterative process,	
43			triangulation of sources / methods, and modification of	
44			procedures in response to evolving study findings;	
45			rationale	
46				
47				
48				
49				
50	Data collection	#11	Description of instruments (e.g. interview guides,	4
51	instruments and		questionnaires) and devices (e.g. audio recorders) used	
52	technologies		for data collection; if / how the instruments(s) changed	
53			over the course of the study	
54				
55				
56				
57	Units of study	#12	Number and relevant characteristics of participants,	5
58			documents, or events included in the study; level of	
59				
60				

		participation (could be reported in results)	
1			
2			
3	Data processing	#13 Methods for processing data prior to and during analysis, including transcription, data entry, data management and security, verification of data integrity, data coding, and anonymisation / deidentification of excerpts	4
4			
5			
6			
7			
8			
9	Data analysis	#14 Process by which inferences, themes, etc. were identified and developed, including the researchers involved in data analysis; usually references a specific paradigm or approach; rationale	4
10			
11			
12			
13			
14			
15			
16	Techniques to enhance trustworthiness	#15 Techniques to enhance trustworthiness and credibility of data analysis (e.g. member checking, audit trail, triangulation); rationale	5
17			
18			
19			
20			
21	Syntheses and interpretation	#16 Main findings (e.g. interpretations, inferences, and themes); might include development of a theory or model, or integration with prior research or theory	5-10
22			
23			
24			
25			
26			
27	Links to empirical data	#17 Evidence (e.g. quotes, field notes, text excerpts, photographs) to substantiate analytic findings	5-10
28			
29			
30			
31	Intergration with prior work, implications, transferability and contribution(s) to the field	#18 Short summary of main findings; explanation of how findings and conclusions connect to, support, elaborate on, or challenge conclusions of earlier scholarship; discussion of scope of application / generalizability; identification of unique contributions(s) to scholarship in a discipline or field	10-11
32			
33			
34			
35			
36			
37			
38			
39			
40	Limitations	#19 Trustworthiness and limitations of findings	11
41			
42			
43	Conflicts of interest	#20 Potential sources of influence of perceived influence on study conduct and conclusions; how these were managed	14
44			
45			
46			
47			
48	Funding	#21 Sources of funding and other support; role of funders in data collection, interpretation and reporting	14
49			
50			
51			

The SRQR checklist is distributed with permission of Wolters Kluwer © 2014 by the Association of American Medical Colleges. This checklist was completed on 04. April 2018 using <http://www.goodreports.org/>, a tool made by the [EQUATOR Network](#) in collaboration with [Penelope.ai](#)

BMJ Open

Learning from the transfer of a fellowship programme to support primary care workforce needs in the UK: a qualitative study

Journal:	<i>BMJ Open</i>
Manuscript ID	bmjopen-2018-023384.R2
Article Type:	Research
Date Submitted by the Author:	22-Nov-2018
Complete List of Authors:	Bryce, Carol; University of Warwick Warwick Medical School, Unit of Academic Primary Care Russell, Rachel; University of Warwick Warwick Medical School, Unit of Academic Primary Care Dale, Jeremy; University of Warwick Warwick Medical School, Unit of Academic Primary Care
Primary Subject Heading:	General practice / Family practice
Secondary Subject Heading:	Medical education and training
Keywords:	PRIMARY CARE, urgent care, QUALITATIVE RESEARCH, vocational training, cross-sector working, programme transferability

SCHOLARONE™
Manuscripts

1
2
3 **Learning from the transfer of a fellowship programme to support primary care workforce**
4 **needs in the UK: a qualitative study.**
5

6 **Carol Bryce¹, Rachel Russell¹ and Jeremy Dale¹**
7

8 **¹Unit of Academic Primary Care, Warwick Medical School, University of Warwick, United Kingdom**
9

10
11
12 **Corresponding author:**
13

14 Jeremy Dale
15 Professor of Primary Care
16 Division of Health Sciences
17 Warwick Medical School
18 University of Warwick
19 Coventry CV4 7AL
20 Email: Jeremy.Dale@warwick.ac.uk
21 Tel: 024 7652 2891 (office)
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Abstract

Objectives

Service redesign, including workforce development, is being championed by UK health service policy. It is allowing new opportunities to enhance the roles of staff and encourage multi-professional portfolio working. New models of working are emerging, but there has been little research into how innovative programmes are transferred to and taken up by different areas. This study investigates the transferability of a one-year post-Certification of Completion of Training (CCT) fellowship in urgent and acute care from a pilot in the West Midlands region of England to London and the South East.

Design

A qualitative study using semi-structured interviews supplemented by observational data of fellows' clinical and academic activities. Data were analysed using a thematic framework approach.

Setting and participants

Two cohorts of fellows (15 in total) along with key stakeholders, mentors, tutors and host organisations in London and the South East (LaSE). Fellows had placements in primary and secondary care settings (general practice, emergency department, ambulatory care, urgent care and rapid response teams), together with academic training.

Results

Seventy-six interviews were completed with 50 participants, with observations in eight clinical placements and two academic sessions. The overall structure of the West Midlands programme was retained and the core learning outcomes adopted in LaSE. Three fundamental adaptations were evident: broadening the programme to include multi-professional fellows, changes to the funding model and the impact that had on clinical placements. These were felt to be key to its adoption and longer term sustainability.

Conclusion

The evaluation demonstrates a model of training that is adaptable and transferable between National Health Service (NHS) regions, taking account of changing national and regional circumstances, and has the potential to be rolled out widely.

Keywords

General practice, urgent care, qualitative research, vocational training, cross-sector working, programme transferability.

Strengths and Limitations

- Few studies have evaluated the delivery of new training programmes for general practitioners and primary care professionals in terms of their transferability from one area to another.
- This study evaluated an innovative additional year of training, and had a high level of participation from the cohort eligible for inclusion, with their perspectives gathered at a number of stages of the programme.

- By including a wide range of individuals who worked with the fellows including stakeholders, host organisation leads and colleagues the study gained a broad perspective of the adoption of the fellowship programme and factors that influenced its transferability.
- Although limited to two regions, together these cover 31.8% of the population of the country and two of the four Local Education Training Boards in England, so strengthening the generalisability of the findings.

INTRODUCTION

UK health service policy is looking to service redesign as a way of addressing the challenges facing the National Health Service (NHS).¹⁻³ Within primary care, training initiatives (including additional training in hard to recruit posts, the development of portfolio roles for both newly qualified staff and those reaching the end of their careers and workforce development in teams wider than General Practitioners (GPs)) are suggested as ways of enhancing the roles of staff, including nurses.^{3,4} This has included funding for 250 post CCT training posts in England, targeted at areas with the poorest GP recruitment, to enable GPs to access additional training in a specialism of interest whilst addressing local need.⁴ Such initiatives are important at a time when the numbers of GPs intending to reduce their hours or leave general practice is rising in the face of increasing workload.^{5,6} They offer experience (cross-sector working, skills enhancement including leadership and management training, and clinical skills training) that goes further than that included in the current three-year vocational training schemes.^{7,8} This mirrors the expanding remit of general practice, with recognition that traditional models of training and continuing professional development in general practice are no longer sufficient to prepare individuals for roles that cross boundaries of care.^{9,10}

Uptake of service innovation within the NHS is known to be slow with few formal mechanisms existing for spreading learning across services or different geographical areas.¹¹ Within primary care, evidence suggests the fit between the innovation and the local context is crucial if implementation is to be successful.¹² Where innovation has been shown to be successful there has consistently been strong leadership or champion buy in and appropriate funding alongside perceived external and internal need.¹²⁻¹⁶ Much of the evidence that does exist focuses on facilitators and barriers to innovation with less evidence of how and why some are successful.¹²

We recently reported an evaluation of a one-year post-CCT fellowship programme, developed and piloted by Health Education England (HEE), West Midlands, that provided recently trained GPs with advanced skills training in urgent and acute care, leadership and academic practice.¹⁷ Details of the fellowship programme are shown in Box 1. Although positively evaluated, questions remained over scalability and transferability to more complex health service settings.¹⁷

Box 1. Aims and structure of fellowship programme in West Midlands

Seven GPs within three years of post-CCT participated in the programme in the West Midlands

Aims

- To enhance the skills and experience of GPs in urgent/emergency care teams
- To enable GPs to apply enhanced urgent and acute skills to support the development of alternative community-based care pathways
- To raise GP interest in hybrid emergency/urgent and primary care roles
- To support the national policy drive for integration of primary, secondary and social care

Programme Structure

- 40% time in primary care: GP training practice
- 40% time in clinical attachments: 3 attachments each of 4 months' duration comprising: emergency department, a medical admissions unit and an ambulance service
- 20% academic study: undertaking a bespoke postgraduate certificate in Urgent and Acute Care and participation in an action learning set

Core learning outcomes

- Demonstrate the ability to diagnose and assess urgent presentations in long term illnesses.
- Formulate, implement and evaluate current pathways of care according to best evidence.
- Show understanding of frailty and complex co-morbidities, particularly in the elderly and how such patients are appropriately managed.
- Demonstrate competence in the interpretation and evaluation of evidence and the application of appropriate treatment and assessment.
- Apply knowledge and skills to the management of urgent care.
- Critically interpret and evaluate the current evidence behind urgent care.

In 2016, Health Education England, London and the South East (LaSE) adopted the West Midlands fellowship programme throughout the region, so creating an opportunity to study its transferability to multiple contrasting areas. Whereas, the secondary care-based elements of the West Midlands' pilot were located in relatively small county hospitals, the LaSE scheme included large inner city hospitals in socially diverse settings. Hence, the aims of this evaluation were to consider the transferability and implementation of the fellowship scheme, in particular looking at how and why it evolved, in order to draw out implications for the further roll-out of such workforce initiatives.

METHODS

This qualitative study comprised interviews with key individuals, along with observations of fellows in a cross section of workplace settings, to gain in-depth understanding of views and experiences relating to the transfer of a workforce programme from one setting to another.

Recruitment and Data Collection

All fellows in each of two cohorts of the one-year urgent/emergency care fellowship programme implemented in LaSE in 2016 were invited to take part in the study, along with their mentors and key individuals they identified in each of their clinical placements. In addition, we invited key stakeholders responsible for the implementation of the programme, including HEE primary care leads, quality and performance managers and academic leads.

All eligible individuals received written study information and were verbally consented. They were also informed what the data would be used for and that confidentiality would be assured. All data was anonymised with unique identifiers assigned to each participant according to the group to which they belonged (HEE = stakeholders and Health Education England staff members, M = fellow's mentor, F = fellow and H = key individual in the healthcare provider organisation).

Semi-structured interviews were conducted face-to-face or over the telephone and lasted between 20 and 45 minutes. Initial interviews, conducted around six months into the fellowship, explored interviewee's aims, expectations and experiences of the fellowship programme. Second interviews were conducted on or after completion of the programme and focussed on the overall experience of the fellowship and its impact on career plans (fellows) and organisational impacts, including capacity building (stakeholders and hosts).

Observations of fellows (ten in total) were pragmatically chosen to cover all primary and secondary care settings in which the fellows were hosted, as well as academic days, and to minimise disruption to clinical teams. An observation checklist was used to record evidence of teamwork, integrated care working, communication across settings, teaching and academic activity. Observations lasted between 4 and 7 hours during which time members of the clinical team with whom they were located were opportunistically asked to participate in short interviews.

Data analysis

All interviews were recorded, transcribed verbatim, anonymised and checked for accuracy by CB and RR. Analysis was aided by the use of Nvivo11 software package. Using a thematic framework approach to interrogate the data and identify key themes,¹⁸ initial codes were deductively drawn from the research questions. Through further reading of the transcripts we inductively coded for any elements not previously captured. A thematic framework was devised using an iterative process until all the codes had been identified.¹⁸ CB and JD met regularly to discuss the analysis and identification of emergent themes. Illustrative quotes were identified to elucidate each theme.

Patient and public involvement

Patients and public were not directly involved in this study.

RESULTS

Participants and settings

Of 17 eligible fellows 15 agreed to participate in the evaluation; one had personal circumstances that prevented them from doing so. In addition, 35 stakeholders, provider organisation clinical leads, GP tutors and mentors participated in planned interviews. Twenty participants were involved in a second interview and six were interviewed a total of 3 times, as shown in Table 1, giving a total of 76 interviews. The timing of when data collection occurred, in relation to the employment period of each of the fellows, determined the extent to which they could each be followed up.

Table 1: Interview Data Collection

Role	Initial interviews	Supplementary interviews	Total
HEE Staff and Stakeholders (including course tutor)	10	5	15
Host provider organisations	9	3	12
Fellows	15	18	33
Mentors/tutors	16		16

Total	50	26	76
--------------	-----------	-----------	-----------

An additional 27 interviews (lasting between 5 and 15 minutes) were completed opportunistically during observation sessions. These included members of GP, emergency department, ambulatory care, urgent care and rapid response teams.

Table 2 shows the mix of clinical placements that were experienced by the 15 participating fellows. While most had two days/week in general practice, the secondary care placements were highly variable and for one fellow included no direct patient contact.

Table 2: Fellows placement experience by profession

Profession	GP Placement	Secondary Care Placement
ANP	Unassigned but included ad hoc work in extended hours sessions	1 day / week stroke reduction project. 12 months 3 days / week working for local CEPN (community education provider network) on quality and clinical assurance. 12 months
ANP	None organised	Urgent care centre. 12 months
ANP	2 days /week 12 months	1 day emergency department. 12 months 1 day urgent care. 12 months
ANP	2 days /week two 6 month placements	2 days secondary care including ambulatory care, Acute Medical Unit, Integrated networks. 12 months
GP	2 days/week (incl 1 day project work) 6 months. 2 days/week 6 months	2 days ambulatory care including virtual ward outreach nursing team attachment. 6 months 2 days emergency department. 6 months
GP	Variable sessions over 12 months	2 days /week Urgent Care Walk In Centre. 12 months 2 days /week Community Independence Service – virtual ward. 12 months
GP	2 days/week. 12 months	2 days/week emergency department. 9 months. 2 days/week acute frailty project. 3 months.
GP	2 days/week. 12 months	2 days/week a week. 12 months. Including: <ul style="list-style-type: none"> - Emergency department Community geriatrics and rapid response. - Rapid Access Medical Unit and Ambulatory Medical Unit. - Acute Paediatrics including acute asthma nursing team.
GP	1 day/week 1 day nursing home (that practice managed). 12 months	2 days/week Rapid Response Intermediate Care Service. 12 months
GP	2 days/week (already working in surgery prior to fellowship)	No clinical placements in secondary care (Worked at CCG* level developing a paediatrics fellowship initiative). 12 months
GP	2 days/week. 12 months	1 day/week ambulatory care. 12 months 1 day/week geriatrics and frailty – organisational service delivery project. 12 months

GP	2 days/week. 12 months	2 days/week urgent care. 12 months
GP	2 days/week. 12 months	1 day/week urgent care. 12 months 1 day/week CCG working on service improvement linked to urgent care placement. 12 months
GP	2 days/week. 12 months	1 day/week emergency department. 12 months 1 day/week urgent care. 12 months
GP	1 day/week. 12 months	1 day/week acute response team – multi professional team – in the clinical decision unit. 12 months 2 days/week medical consultants in ambulatory care. 12 months

*Clinical commissioning group

Comparison with and learning from the West Midlands pilot

Interviewees described a high level of commitment between HEE partners in West Midlands and LaSE to share learning relevant to the transfer of the fellowship programme, particularly during the year prior to the LaSE fellowship launch. Respondents also highlighted the key role that programme champions in LaSE (from regional level to local clinical educators) played in its successful implementation.

The overall aims and structure of the West Midlands programme were retained by LaSE (see Box 1). LaSE adopted the same core learning outcomes, adding a further two covering understanding of ambulatory care and working towards admission avoidance strategies. While the West Midlands fellowship programme was administered across one HEE local area, in LaSE it was across four reflecting a more complex and varied administrative landscape. There was evident commitment between HEE partners in West Midlands and LaSE to share learning relevant to the transfer of the fellowship programme. HEE leads had met and discussed how the pilot programme was set up in the West Midlands, and this fed directly into the development of the LaSE programme.

We identified three clear areas of adaptation which will now be explored in more detail.

Acceptability and experience of the scheme

The stakeholders, mentors and hosts in LaSE viewed the programme favourably, stating that they would be willing to host a fellow in the future.

I can't praise him [academic mentor] highly enough actually, I think his style as a programme lead has been brilliant. So in terms of the academic days they're very good. F10

The programme was also felt by most participants to be fulfilling expectations that it was preparing fellows for portfolio careers, including leadership and academic roles

It [fellowship] helps in a number of ways. You can apply it to the academic side, you've got the post-graduate certificate. You can apply it to the fact that you've got a range F07

The development of a multi-professional fellowship model

While the West Midlands pilot programme only included GPs, at LaSE it was broadened to include Advanced Nurse Practitioners (ANPs) and Physician Associates (PAs): two ANPs were included in cohort 1, and 2 ANPs and 1 PA in cohort 2. Commissioners and the programme team drove this change as they considered multi-professional working a progressive development:

1
2
3 *...the model for urgent and emergency care is predicated in the future on a mixed economy*
4 *of health professionals. H 04*
5

6 Nursing fellows welcomed the broadening of the scheme as they described a lack of professional
7 development or upskilling opportunities.
8

9 *So, [ANPs] do not have much opportunity to upskill clinically...there are quite a few*
10 *programmes geared towards GP trainers. Fellow 01*
11

12 The teaching element of the programme was seen to be enhanced by the multi-professional mix:
13

14 *So one advantage of our programme is that we take all comers, not just GPs, and that's been*
15 *incredibly useful. Certainly I've noticed when teaching the group ... a very heterogeneous*
16 *group is always better to be teaching and working with. HEE02*
17

18 Although the multi-professional mix was generally well-received there were some concerns raised
19 about the suitability of non-GPs and the available clinical placements in acute settings. Some of the
20 ANP and PA fellows had difficulty in accessing suitable placements and some of the placement
21 mentors were unsure of how to best use the fellow:
22

23 *Trying to mix those three cohorts of clinicians who come from significantly different*
24 *backgrounds was going to be challenging...so there wasn't a clear syllabus about what they*
25 *needed to do, there wasn't clear competency documents that we would expect for signing off*
26 *for F2s or paramedics. Mentor 24*
27
28

29 This highlights the need for all participants in the scheme to have clear information on the role of
30 the fellows and the programme purpose. While the fellowship programme was not designed to be
31 competency-based, concerns were raised about the experience and qualification levels of the
32 nursing fellows compared to GP fellows.
33

34 *They're so variable, because you just don't know what background they're coming with. So*
35 *you know, with the GPs traditional training, they've had two years in hospital medicine and a*
36 *year in general practice. With an ANP, it depends on what the training's been previously.*
37 *Mentor 22*
38
39

40 Placement difficulties also arose over uncertainty regarding ANPs' indemnity in some settings:
41

42 *...it wasn't even the funding, I think it was the cover, insurance or litigation. I wasn't able to*
43 *work there. Fellow 01*
44

45 Despite these difficulties, including ANPs and PAs in the fellowship programme was generally viewed
46 positively as a means of providing upskilling opportunities, encouraging individuals to pursue more
47 challenging roles and to increase capacity.
48

49 *I think if we can get them to autonomous practising at urgent emergency care level then they*
50 *are a very, very employable asset. Mentor 23*
51

52 **Changes to the funding model**

53 While the initial pilot of the fellowship programme had been fully funded by HEE West Midlands, in
54 LaSE the funding climate did not allow this and alternative funding mechanisms were needed:
55

56 *In the West Midlands they were paying 100% of the salary of the individuals involved in the*
57 *fellowship, and we felt that actually that wasn't a model that would be sustainable as we*
58
59
60

1
2
3 *moved forwards. So we devised a different funding model which was a bursary based model*
4 *which then left the service element to be funded through service providers and clinical*
5 *commissioners. HEE05*
6

7 In LaSE, the academic element of the fellowship continued to be funded through HEE, with the
8 remaining costs of the scheme being funded by the primary and secondary care organisations
9 providing clinical placements. While this enabled the inclusion of a larger number of fellows, it also
10 led to increasing variation in employers' expectations of the fellows. In addition, the complex
11 employment arrangements were time consuming to set up and manage:
12
13

14 *I've tried to be quite proactive and I've engaged the employers for several months*
15 *beforehand and tried to make really sure they know what they're offering and whose*
16 *responsibility is whose. HEE04*
17
18

19 The LaSE programme required a clinical commissioning group (CCG) or a GP federation/partnership
20 to host the fellow and act as their main employer, taking on responsibility to ensure that the
21 fellowship was financially viable, and cross-charging for the time the fellows spent in other clinical
22 settings:
23

24 *If you take on somebody full time in a Fellowship position the salary cost is £100,000 and the*
25 *Fellowship grant is £30,000, so you have to balance the £70,000.....So we have to find them*
26 *projects to do with organisations that are happy for us to cross charge them for their clinical*
27 *time. Host 02*
28
29

30 This funding model allowed for flexibility, enabling most fellows to build placements around their
31 interests, however a few fellows cited the necessity of their host to recoup costs as the main reason
32 they lacked the breadth of experience they had envisioned:
33

34 *I feel completely cheated. I feel like I've been used as a commodity.....for my year my key aim*
35 *was to have the clinical side of it, and that hasn't happened and isn't going to. Fellow 10*
36
37

38 Organisational stakeholders considered that host organisations' investment in the programme was
39 central to its relevance and sustainability:
40

41 *Because service is not getting a freebee or a total freebee they are actually committed to*
42 *ensuring and investing in it to get the right thing for them as well as the programme itself. So it*
43 *is buy in... it is a model that can then be replicated across the system as it demonstrates that*
44 *providers recognise that this kind of approach is really important both for developing future*
45 *leadership service but also demonstrating an integrated approach to service delivery. HEE05*
46
47

48 **Clinical placement experience**

49

50 Although the programme in LaSE retained the same 40:40:20 proportions as in the West Midlands
51 scheme (see Box 1), the organisation of clinical placements differed. In the West Midlands' pilot
52 fellows worked in one GP practice and rotated through three service placements, each lasting 4
53 months. In LaSE, each fellow had to work with their employing organisation to arrange their
54 placements both in GP and urgent care, resulting in a variety of lengths of placement and
55 experience. This change meant that each fellow had more individualised programme as shown in
56 Table 2.
57
58
59
60

1
2
3 *It's worked really well for me ... sorting things out myself and not just kind of fitting into a*
4 *programme that exists* Fellow 11
5

6 *Making sure that there's a bit of flexibility in it means that, particularly for the candidate,*
7 *they will get the best experience rather than just having a rigid 'you will do this, you will do*
8 *that'.* Host 02
9

10 Most fellows viewed this adaptation positively, but some were left without the anticipated spectrum
11 of exposure and experience; for example, some fellows were placed in one service, such as an
12 emergency department, for the year without opportunity to rotate around other services. There was
13 a balance to be made between flexibility and creating the variety of opportunities for experience
14 that were expected.
15
16

17 *I think the one thing, speaking to my other colleagues, is that there seems to be such*
18 *variability in how the posts are in the fellowship...other fellows get to rotate a bit more and I*
19 *think I would have liked to have rotated into other posts as well.* Fellow 13
20

21 *If you make it too rigid then you deny them the opportunity of opportunistic learning but if*
22 *you make it too fuzzy then everybody has a very individual experience.* HEE09
23

24 There were mixed feelings about the length of placements, but it was generally felt longer
25 placements enabled better embeddedness and in-depth learning, particularly in general practice:
26

27 *I think being in one department for a whole year will perhaps give us more time to familiarise*
28 *ourselves and actually produce some meaningful project work I think as well.* Fellow 14
29

30 *If the GP placements could be sort of a whole year rather than six months because it sounds*
31 *a bit like our fellow just kind of got going and then had to move on.* Mentor 08
32
33

34 Overall participants felt positive about the fellowship programme, evidenced by their willingness to
35 consider participating in future programmes or recommending it to colleagues. Fellows reported
36 that the programme largely met their expectations, in line with its aims (Box 1), in particular helping
37 them with leadership skills, system understanding and upskilling them in urgent care. The positive
38 aspects that were described were very similar to those reported for the West Midlands' pilot.¹⁷ As in
39 the West Midlands pilot, all the fellows stated that they would recommend it to colleagues.
40

41 *Yes, absolutely. [recommend it to others] I think it offers good experience in terms of just*
42 *more variety to the GP work and good learning from the academic point of view and*
43 *working with the CCGs.* F12
44
45

46 Negative feedback centred on frustrations over lengthy contracting issues, relating to funding
47 alterations, and the changes to placements discussed above.
48
49

50 51 **DISCUSSION**

52 This study has shown that a one year urgent/emergency care fellowship programme, developed in
53 one region to address workforce challenges facing the NHS, can be successfully transferred to other
54 contrasting areas. Through retaining core elements of the programme but being flexible in their
55 implementation, fellows experienced a more variable but, in the main, equally valuable experience.
56 In so doing, the programme appears to be successfully addressing the needs expressed by many
57 newly qualified GPs who feel underprepared in managing patients with multi morbidities⁹, and
58 lacking expertise in management, leadership and quality improvement.¹⁹⁻²²
59
60

1
2
3 The changes to the funding model resulted in concomitant changes to the arrangements of
4 placements, leading to benefits and challenges. The new funding model should ensure the
5 programme's sustainability, but a consequence was that greater priority is now placed on meeting
6 host organisations' expectations and at times this negatively affected fellows' clinical placements.
7 Increased flexibility in placement options enabled some fellows to tailor placements to their
8 interests, however others reported a lack of breadth in their clinical experience or control over
9 where they were placed. Including access to placements in commissioning bodies and through being
10 involved in quality improvement projects, the programme gave fellows experiences that go beyond
11 the scope of GP vocational training. While time will tell the extent to which the fellowship
12 programme develops future leaders, participants felt that the scheme was relevant to achieving this
13 aim in the same way as had been evidenced by the West Midlands pilot¹⁷. Most of the fellows at
14 LaSE stated they would be looking for future positions encompassing clinical and leadership roles,
15 with some from the first cohort already securing them.
16
17
18

19 The broadening of the programme to include multi-professional fellows was welcomed with all
20 groups seeing the benefits of cross-disciplinary learning. However, more guidance is required for
21 host organisations on professional skillsets to maximise placement opportunity and satisfaction,
22 including the need to understand it is not intended to be a competency based programme.
23
24

25 Research on innovation and service change in the NHS has shown that there are many, wide ranging,
26 factors that affect successful adoption, the complexity of which has been demonstrated.²³ Common
27 to many studies is the need for champions who take the innovation forward whilst the likelihood of
28 success is improved with more senior champions.^{11,15,16} NHS organisations often rely on individuals
29 taking on the role of champion as an additional task whereas innovation in other industries tends to
30 be seen as a specialism in its own right.²⁴ The need for adequately funded innovation projects
31 alongside investment in capacity, skills and leadership have also been found crucial to successful
32 adoption.^{25,26} The transfer of the fellowship from the West Midlands to LaSE benefited from key
33 senior champions within HEE who drove the project forward. Where there were issues in securing
34 placements these could potentially be overcome with better understanding of the programme in
35 secondary care and the co-opting of champions in host organisations. Another key element of
36 successful innovation is reported to be a programme open to adaptation, refinement or
37 modification.²³ This research showed how the fellowship programme could be adapted to suit local
38 needs in different areas without losing its core elements.
39
40
41
42

43 **Strengths and limitations**

44 The study had access to all the fellows that participated in the fellowship programme in 2016/17 in
45 LaSE, with fifteen of the seventeen fellows engaging with the evaluation. This gives strength to the
46 representativeness of the views reported. Fellows were followed up on a number of occasions giving
47 the opportunity to understand their experience at various stages of the fellowship. The study
48 successfully collected views and expectations from the perspective of a wide range of individuals
49 who worked with the fellows, giving depth to the findings.
50
51

52 One limitation of the study was the small number of non-GP fellows which precluded the separate
53 analysis of this group. A further limitation was the time period over which the work was undertaken
54 as we were unable to follow up fellows over a long period of time after their programme had ended,
55 therefore, cannot report how they were able to apply their experience in subsequent practice.
56
57

58 Although the study was limited to assessing the transferability of the programme from one region to
59 another, the West Midlands and LaSE together cover 31.8% of the population of England²⁷ and
60

1
2
3 include five of the thirteen local areas within two of the four regional Local Education Training
4 Boards. Hence, it is likely that the findings have relevance to the rest of the country.
5

6 The financial model supporting the scheme was shown to be of fundamental importance to the
7 success of the programme, influencing the way that clinical placements were identified and
8 developed. However, it was beyond the scope of the study to undertake an economic evaluation of
9 the programme. While this is an important consideration, the costs and benefits of the scheme need
10 to be viewed over the medium to longer term in relation to how the fellowship is preparing clinicians
11 to meet future workforce requirements, in addition to the return that fellows give to host
12 organisations in the short term.
13
14

15 **Implications for practice**

16
17 There is a clear need for training for GPs and other primary care professionals in order to prepare for
18 future NHS workforce needs. The evaluation of this fellowship programme demonstrates a model of
19 training that is well received and accepted by fellows and those who work with or employ them. It
20 appears to be suited to delivery within widely varying settings hence addressing the call for 250
21 fellowship placements to be made available across England.⁴ It could be modified to provide
22 experience in a range of other priority clinical areas, such as mental health or frailty. This study
23 highlights how it can be successfully adapted to fit with local funding and service requirements,
24 while maintaining the balance with academic and leadership training and general practice
25 experience. It has also shown the benefit of widening the programme to other primary care
26 professional groups, although identified that careful consideration needs to be given to the choice of
27 clinical placements. Cross-sector working will be increasingly important given growing numbers of
28 individuals with multi-morbidity and complex health needs being treated in primary care, and
29 programmes like this will be valuable in building cross-sector and inter-professional understanding.
30
31

32
33 In conclusion we have shown that a one year fellowship programme can be successfully transferred
34 from one NHS region to another if flexibility and adaptation are enabled. The broader benefits that
35 such fellowship schemes have to the participating health service organisations needs further
36 investigation.
37
38

39 **Acknowledgements:** We would like to thank all the health service staff who participated in the
40 research along with staff at Health Education England.
41
42

- 43
44 1. NHS England. Five year forward view. Leeds: NHS England, 2014.
45 <https://www.england.nhs.uk/wp-content/uploads/2014/10/5yfv-web.pdf> (accessed 26
46 October 2017).
- 47 2. NHS England. New care models: Vanguard—developing a blueprint for the future of NHS and
48 care services. London: NHS England, 2016. [https://www.england.nhs.uk/wp-](https://www.england.nhs.uk/wp-content/uploads/2015/11/new_care_models.pdf)
49 [content/uploads/2015/11/new_care_models.pdf](https://www.england.nhs.uk/wp-content/uploads/2015/11/new_care_models.pdf) (accessed 26 Oct 2017).
- 50 3. NHS England. Building the Workforce—the New Deal for General Practice. Secondary Building
51 the workforce: the new deal for general practice. NHS England, 2015.
52 [https://www.england.nhs.uk/commissioning/wp-](https://www.england.nhs.uk/commissioning/wp-content/uploads/sites/12/2015/01/building-the-workforce-new-deal-gp.pdf)
53 [content/uploads/sites/12/2015/01/building-the-workforce-new-deal-gp.pdf](https://www.england.nhs.uk/commissioning/wp-content/uploads/sites/12/2015/01/building-the-workforce-new-deal-gp.pdf) (accessed 26
54 Oct 2017).
- 55 4. NHS England. General practice forward view. NHS England, 2016.
56 <https://www.england.nhs.uk/wp-content/uploads/2016/04/gpfv.pdf> (accessed 26 Oct 2017)
- 57 5. Gibson J, Checkland K, Coleman A, Hann M, McCall R, Spooner S, et al. *Eighth national GP*
58 *worklife survey*. University of Manchester, 2015.
59
60

6. Dale J, Potter R, Owen K, Parsons N, Realpe A, Leach J. Retaining the general practitioner workforce in England: what matters to GPs? A cross-sectional study. *BMC Family Practice*. 2015; **16**(1): 140.
7. Primary Care Workforce Commission. The future of primary care: creating teams for tomorrow. London: Health Education England, 2015. <https://www.hee.nhs.uk/sites/default/files/documents/The%20Future%20of%20Primary%20Care%20report.pdf> (accessed 23 Nov 2017).
8. Greenaway D. Securing the future of excellent patient care. London: Shape of Training. 20¹³. https://www.shapeoftraining.co.uk/static/documents/content/Shape_of_training_FINAL_Report.pdf_53977887.pdf (accessed 26 Oct 2017).
9. Sabey A, Hardy H. Views of newly-qualified GPs about their training and preparedness: lessons for extended generalist training. *Br J Gen Pract*. 2015; **65**(633): e270-e7.
10. Gilbert H. Supporting integration through new roles and working across boundaries: King's Fund; 2016. https://www.kingsfund.org.uk/sites/default/files/field/field_publication_file/Supporting_integration_web.pdf (accessed 26 Oct 2017).
11. Collins B. Adoption and spread of innovation in the NHS. London: The King's Fund, 2018. https://www.kingsfund.org.uk/sites/default/files/2018-01/Adoption_and_spread_of_innovation_NHS_0.pdf (accessed 24 Jan 2018).
12. Lau R, Stevenson F, Ong BN, et al. Achieving change in primary care—causes of the evidence to practice gap: systematic reviews of reviews. *Implementation Science* 2015;**11**(1):40
13. Pace LE, Dolan BM, Tishler LW, et al. Incorporating long-acting reversible contraception into primary care: A training and practice innovation. *Women's Health Issues* 2016;**26**(2):131-34
14. Ono SS, Crabtree BF, Hemler JR, et al. Taking Innovation To Scale In Primary Care Practices: The Functions Of Health Care Extension. *Health Affairs* 2018;**37**(2):222-30
15. Greenhalgh T, Stramer K, Bratan T, et al. Introduction of shared electronic records: multi-site case study using diffusion of innovation theory. *Bmj* 2008;**337**:a1786
16. Lord L, Dowswell G, Hewison A. 'The team for both sides?' A qualitative study of change in heart failure services at three acute NHS Trusts. *Health & social care in the community* 2015;**23**(2):121-30
17. Dale J, Russell R, Harkness F, et al. Extended training to prepare GPs for future workforce needs: a qualitative investigation of a 1-year fellowship in urgent care. *Br J Gen Pract* 2017;**67**(662):e659-e67
18. Gale NK, Heath G, Cameron E, et al. Using the framework method for the analysis of qualitative data in multi-disciplinary health research. *BMC medical research methodology* 2013;**13**(1):117
19. Riley B, Howe A. Pushing for victory: where next for 4-year GP training?: *British Journal of General Practice*, 2015. DOI: <https://doi.org/10.3399/bjgp15X683341>
20. Taylor C, Turnbull C, Sparrow N. Establishing the continuing professional development needs of general practitioners in their first five years after training. *Education for Primary Care* 2010;**21**(5):316-19
21. Dale J, Russell R, Scott E, et al. Factors influencing career intentions on completion of general practice vocational training in England: a cross-sectional study. *BMJ open* 2017;**7**(8):e017143
22. Foundation H. Quality improvement training for healthcare professionals. London: The Health Foundation, 2012. <http://www.health.org.uk/sites/health/files/QualityImprovementTrainingForHealthcareProfessionals.pdf> (accessed 24 Jan 2018).
23. Greenhalgh T, Robert G, Macfarlane F, et al. Diffusion of innovations in service organizations: systematic review and recommendations. *The Milbank Quarterly* 2004;**82**(4):581-629
24. Heitmueller A, Bull A, Oh S. Looking in the wrong places: why traditional solutions to the diffusion of innovation will not work. *BMJ Innovations* 2016:bmjinnov-2015-000106

- 1
2
3 25. Kelly CJ, Young AJ. Promoting innovation in healthcare. *Future Hospital Journal*
4 2017;**4**(2):121-25
5
6 26. Parris S, Cochrane G, Marjanovic S, et al. Galvanising the NHS to Adopt Innovation: The
7 Feasibility and Practicality of Recommendations from the Interim Report of the Accelerated
8 Access Review. *Rand health quarterly* 2016;**6**(1)
9
10 27. ONS. Annual Small Area Population Estimates. Fareham: Office for National Statistics, 2017.
11 <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/datasets/clinicalcommissioninggroupmidyearpopulationestimates> (accessed 22
12 Feb 2018).
13

14 **Footnotes:**

15
16 **Author contribution:** The study was designed by JD with CB and RR taking responsibility for the data
17 collection. All were involved in the analysis, drafting and revision of the article.
18

19 **Funding:** This study was carried out with funding from NHS Health Education England
20

21 **Competing interests:** None of the authors have competing interests.
22

23 **Ethics approval:** University of Warwick's Biomedical Sciences Research Ethics Approval was
24 obtained: REGO-2016-1828 AM02
25

26 **Data sharing statement:** No additional data are available.
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Reporting checklist for qualitative study.

Based on the SRQR guidelines.

Instructions to authors

Complete this checklist by entering the page numbers from your manuscript where readers will find each of the items listed below.

Your article may not currently address all the items on the checklist. Please modify your text to include the missing information. If you are certain that an item does not apply, please write "n/a" and provide a short explanation.

Upload your completed checklist as an extra file when you submit to a journal.

In your methods section, say that you used the SRQR reporting guidelines, and cite them as:

O'Brien BC, Harris IB, Beckman TJ, Reed DA, Cook DA. Standards for reporting qualitative research: a synthesis of recommendations. *Acad Med.* 2014;89(9):1245-1251.

	Reporting Item	Page Number
	#1 Concise description of the nature and topic of the study identifying the study as qualitative or indicating the approach (e.g. ethnography, grounded theory) or data collection methods (e.g. interview, focus group) is recommended	1
	#2 Summary of the key elements of the study using the abstract format of the intended publication; typically includes background, purpose, methods, results and conclusions	2
Problem formulation	#3 Description and significance of the problem / phenomenon studied: review of relevant theory and empirical work; problem statement	3
Purpose or research question	#4 Purpose of the study and specific objectives or questions	4
Qualitative approach and research paradigm	#5 Qualitative approach (e.g. ethnography, grounded theory, case study, phenomenology, narrative research) and	4

guiding theory if appropriate; identifying the research paradigm (e.g. postpositivist, constructivist / interpretivist) is also recommended; rationale. The rationale should briefly discuss the justification for choosing that theory, approach, method or technique rather than other options available; the assumptions and limitations implicit in those choices and how those choices influence study conclusions and transferability. As appropriate the rationale for several items might be discussed together.

1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14	Researcher	#6	Researchers' characteristics that may influence the	NA
15	characteristics and		research, including personal attributes, qualifications /	
16	reflexivity		experience, relationship with participants, assumptions	
17			and / or presuppositions; potential or actual interaction	
18			between researchers' characteristics and the research	
19			questions, approach, methods, results and / or	
20			transferability	
21				
22				
23				
24				
25	Context	#7	Setting / site and salient contextual factors; rationale	4
26				
27				
28	Sampling strategy	#8	How and why research participants, documents, or	4
29			events were selected; criteria for deciding when no	
30			further sampling was necessary (e.g. sampling	
31			saturation); rationale	
32				
33				
34				
35	Ethical issues pertaining	#9	Documentation of approval by an appropriate ethics	4 & 13
36	to human subjects		review board and participant consent, or explanation for	
37			lack thereof; other confidentiality and data security issues	
38				
39				
40	Data collection methods	#10	Types of data collected; details of data collection	4
41			procedures including (as appropriate) start and stop	
42			dates of data collection and analysis, iterative process,	
43			triangulation of sources / methods, and modification of	
44			procedures in response to evolving study findings;	
45			rationale	
46				
47				
48				
49				
50	Data collection	#11	Description of instruments (e.g. interview guides,	4
51	instruments and		questionnaires) and devices (e.g. audio recorders) used	
52	technologies		for data collection; if / how the instruments(s) changed	
53			over the course of the study	
54				
55				
56				
57	Units of study	#12	Number and relevant characteristics of participants,	5
58			documents, or events included in the study; level of	
59				
60				

		participation (could be reported in results)	
1			
2			
3	Data processing	#13 Methods for processing data prior to and during analysis,	4
4		including transcription, data entry, data management and	
5		security, verification of data integrity, data coding, and	
6		anonymisation / deidentification of excerpts	
7			
8			
9	Data analysis	#14 Process by which inferences, themes, etc. were identified	4
10		and developed, including the researchers involved in	
11		data analysis; usually references a specific paradigm or	
12		approach; rationale	
13			
14			
15			
16	Techniques to enhance	#15 Techniques to enhance trustworthiness and credibility of	5
17	trustworthiness	data analysis (e.g. member checking, audit trail,	
18		triangulation); rationale	
19			
20			
21	Syntheses and	#16 Main findings (e.g. interpretations, inferences, and	5-10
22	interpretation	themes); might include development of a theory or	
23		model, or integration with prior research or theory	
24			
25			
26			
27	Links to empirical data	#17 Evidence (e.g. quotes, field notes, text excerpts,	5-10
28		photographs) to substantiate analytic findings	
29			
30			
31	Intergration with prior	#18 Short summary of main findings; explanation of how	10-11
32	work, implications,	findings and conclusions connect to, support, elaborate	
33	transferability and	on, or challenge conclusions of earlier scholarship;	
34	contribution(s) to the field	discussion of scope of application / generalizability;	
35		identification of unique contributions(s) to scholarship in a	
36		discipline or field	
37			
38			
39			
40	Limitations	#19 Trustworthiness and limitations of findings	11
41			
42			
43	Conflicts of interest	#20 Potential sources of influence of perceived influence on	14
44		study conduct and conclusions; how these were	
45		managed	
46			
47			
48	Funding	#21 Sources of funding and other support; role of funders in	14
49		data collection, interpretation and reporting	
50			
51			

The SRQR checklist is distributed with permission of Wolters Kluwer © 2014 by the Association of American Medical Colleges. This checklist was completed on 04. April 2018 using <http://www.goodreports.org/>, a tool made by the [EQUATOR Network](#) in collaboration with [Penelope.ai](#)