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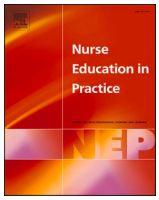

An ethnographic evaluation of a speciality training pathway for general practice nursing in the UK

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ABSTRACT

Aims: The aim of the study was to evaluate the implementation and impact of the General Practice Nurse – Specialty Training (GPN-ST) programme across seven sites in one geographical location in the UK. The objectives were to understand, describe and evaluate: 1) the implementation of the 'proof of concept' training scheme; 2) the learning undertaken during the training; and 3) the impact of the training scheme on individual nurses. These objectives offer the opportunity to describe the potential return on investment for General Practices supporting nurses new to General Practice through the programme.

Background: General Practice Nurses (GPNs) play a vital role in delivering primary and community care. In the UK there is a shortfall in the GPN workforce. Unlike training for other clinical professions there is currently no standardised training pathway or entry route for nurses wishing to work in General Practice.

An ethnographic evaluation was undertaken of a one-year speciality training programme (GPN-ST). The programme, aimed at nurses new to General Practice, included formal higher education training and funded supported learning and mentoring whilst in practice.

Methods: A qualitative ethnographic evaluation was undertaken. Observations were conducted of programme implementation, network and education meetings in the scheme. In-depth, semi-structured, interviews and focus groups were conducted with a wide range of professionals (n = 40) including nurse mentors, nursing students, academic providers, commissioners and the programme managers. These data were supplemented by documentary analysis of meeting notes, learning materials, internal student feedback and locally collected evaluation material in line with ethnographic approaches to research. Kirkpatrick's model for course evaluation and complimentary inductive emergent thematic analysis was used.

Findings: There is evidence of learning at every level of the Kirkpatrick model from reaction through to changes in behaviour and results in practice for patients. The speciality training route offered opportunities for deep learning for GPNs. The scheme offered a comprehensive career pathway to General Practice nursing which in turn benefited General Practices. Practices benefitted from confident, independent nurses who were able to contribute to patient care, practice safely and also contributed widely in the long-term for example in research, workforce development and mentoring.

Conclusions: General Practice needs to invest in developing a workforce of GPNs, there are significant benefits to investing in the development of GPNs through a training pathway. This scheme provides scope for application in other clinical settings as well in other countries where there is a gap in career progression into GP practices.

Tweetable abstract: GPNs play a vital role in delivering primary and community care. Unlike training for other clinical professions there is currently no standardised training pathway or entry route for nurses wishing to work in General Practice. There are significant benefits to investing in the development of GPNs through a training pathway

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1. Introduction

The role boundaries between doctors, nurses and other health professionals have been shifting for decades (World Health Organization, 2007). There are many recent works which draw attention to tasks which were previously undertaken by doctors which are now undertaken by nurses (Baird et al., 2018; Coster et al., 2018; Irvine and Irvine, 2018; Schot et al., 2020; Morris et al., 2021). There is evidence for the evolution of roles and that on occasion such as in cases of dementia or those requiring palliative care, GP preference is for referral as continuity of care in nursing often relates to develop empathy and trust over time (Robinson and Spilsbury, 2008; Rhee et al., 2020; Heron and Eisma, 2021).

2. Background

In the UK, primary care is the first point of contact with healthcare and includes General Practice and all other community-based services. In many countries, doctors are becoming more specialised and are less likely to work in Primary Care or in rural areas (Puertas et al., 2013). At the same time, in many countries, Primary Care remains the frontline of medical care where most patients will interact with the healthcare system (Green et al., 2001; Soh et al., 2021; Swerissen et al., 2018). Family medicine in different countries work with other Primary Care professionals in a variety of arrangements, often offering the only direct access to medical care for patients (Freund et al., 2015). Nurses are well positioned to respond to the need for community care and in particular to help with health promotion and disease prevention (All-Party Parliamentary Group AAPG on Global Health, 2016).

In the UK, increasing demand and a cultural change towards preventative over curative medicine ensured that the GPN role became upskilled and largely patient facing. From the early 1990s the Royal College of Nursing (RCN) campaigned for the recognition of Specialty Training for GPNs (Duncan and Hayes, 2017). There was further change in the sector in the early 2000s with the introduction of the Quality and Outcomes Framework (QOF) and the introduction of the Health Care Assistant (HCA) role, which further solidified the GPN role in the General Practice workforce skill mix and hierarchy (Bosley and Dale, 2008).

Further changes in the past decade, including a change of Government leading to the development of Clinical Commissioning Groups (CCGs), Higher Education England (HEE) and the Local Education and Training Boards (LET-Bs), added to demand for and upskilling of GPNs. At the same time there were declining numbers of new GP trainees and resources in the sector. The number of GPs per 100,000 head of population across England declined from 62 in 2009–59.5 in 2012 (NHS Information Centre, 2012). There are high levels of turnover in the nursing profession (Ipsos, 2016) and significant reductions in the available workforce (Buchan and Seccombe, 2018). Since the removal of a bursary for pre-registration training in England some claim a significant reduction in nursing trainees has occurred (Marsden, 2020). Overall, this has had a direct impact on the age profile of nurses and those working in General Practice in addition to a significant number who will retire in the next ten years (Queen's Nursing Institute (QNI), 2015). Given the increase in demand and reduction in supply, it has never been more important to focus on recruitment and retention of GPNs. The 'Forward View Report' (NHSE, 2016) and 'Ten-point plan' (NHSE, 2017) emphasised the importance of the GPN role to the NHS and their work in Primary Care.

Unlike other professions in medicine, pharmacy or physiotherapy, there has been no standardised pathway, training or entry route for nurses wishing to work in General Practice in the current UK structures. In addition, there are issues with GPN recruitment relating to business and employment structures and as a result there is wide variance of pay and conditions across the sector for nurses wishing to work in these clinical settings.

This evaluation is of a speciality training pathway for GPNs comprised of a University education programme supported by in practice mentoring offered in the UK during 2018–9.

The GPN course is classed as speciality training at postgraduate level (post pre-registration when a licence is granted) and targets newly qualified nurses wishing to develop or working in general practice. Those undertaking the course are registered nurses employed in general practice and throughout the training develop the skills required under the guidance of experienced general practice mentors. By the end of the course, they are qualified as an autonomous practitioner with skills relevant and designed for working in general practice.

This evaluation study is timely as General Practice and Primary Care (in the UK Primary Care includes General Practice and all other community-based services) is under significant increased demand, suffering from recruitment shortages coupled with changes in funding and support models and notwithstanding the current pandemic affecting all facets of health provision (McInnes et al., 2015). That said, this has the potential to be an exciting time for recruitment of nurses, with reported increased in pre-registration training courses in the UK (Haslam, 2021) as well as in other countries (see Loussouarn et al., 2021, Senior, 2008, Teljeur et al., 2014, Walker, 2006).

3. Methods

The study used an intensive ethnographic qualitative approach appropriate for evaluation of complex interventions or new roles in health contexts (Kirk et al., 2021; Morgan-Trimmer and Wood, 2016; Cruz and Higginbottom, 2013; Savage, 2006). Ethnography is a process focused on the experiences of a culture, or group with common goals, often used in education (Goodson and Vassar, 2011; Kearney et al., 2019) or healthcare settings (Cruz and Higginbottom, 2013; Savage, 2006). Ethnographic methods typically include data from a range of sources including qualitative interviews and observations over multiple time points.

In this study qualitative data were collected directly from observations and interviews during site visits to training providers, practice sites and stakeholder meetings, with underpinning evidence provided from documentary analysis. The ethnographic approach involves reflection, iteration and allows for triangulation of findings that contribute to this as a rigorous technique. This ethnographic evaluation used a wide range of approaches summarized in Tables 1 and 2. The ethnographic approach allowed the research team to be immersed into the research context for a short intense period to become familiar with the context from an 'outside-in' perspective.

Data were analysed using the NVivo analytical software package (version 12.0) and analysis was both planned and iterative based on emergent findings. The planned evaluation of classroom learning used a framework analysis approach based on the Kirkpatrick (2006) model of course evaluation. This is an established tool for evaluating the outcomes of educational programmes at various levels.

A further emergent deductive thematic analysis revealed key themes relating to learning beyond the classroom. These findings outline the benefits and challenges of implementation in relation to planning, execution and outcomes.

Inclusion criteria were all key stakeholders at sites including GPNs, teaching staff leading classroom learning in Higher Education Institute (HEIs), General Practitioners (GPs), GPN mentors, Practice Managers and Commissioners. Participants were recruited via invitation to all sites and informed consent was obtained prior to interview meetings. The WMA declaration of Helsinki – ethical principles for medical research involving human subjects and agreed for publishing of data for academic purposes was observed. This study was reviewed and given favourable opinion by The School of Pharmacy Research Ethics Committee (ref 007–2019).

In total there were 10 site visits to 7 different geographical areas, with 3 sites having multiple visits. At each site the education provider was the central visit site and this was supplemented at some sites with

Table 1
Complete data list.

Key		
GPN1	University	
GPN2	University	
GPN3	University	*Delivery partner to ST3*
GPN4	University	
GPN5	University	*Delivery partner to ST4*
GPN6	University	*Delivery partner to ST2*
GPN7	University	*Delivery partner to ST1*
STP 1	CCG/STP covering GP sites	Course delivered by GPN6
STP 2	CCG/STP covering GP sites	Course delivered by GPN7
ST2 3	CCG/STP covering GP sites	Course delivered by GPN3
ST4	CCG/STP covering GP sites	
Site	Int/FG/Doc	Cumulative total participants
	Primary Data	
GPN1	Staff interview (n = 2)	2
GPN1	Student interview (n = 1)	3
GPN2	Staff interview (n = 1)	4
GPN3	Staff interview (n = 2)	6
GPN4	Staff interview (4 n = 1)	7
GPN4	Staff interview (n = 1)	8
GPN4	Staff interview (n = 1)	9
GPN4	Staff interview (n = 1)	10
GPN5	Staff interview (n = 2)	12
GPN6	Staff interview (n = 1)	13
GPN7	Staff interview (n = 2)	15
GPN7	Student discussion / focus group interviews (n = 4)	19
STP2	STP Network meeting / focus group (n = 4)	23
STP2	CCG staff interview (n = 1)	24
STP1	Federation staff Interview (n = 1)	25
STP1	Practice staff Interview (n = 2)	27
STP1	Practice staff Interview (n = 1)	28
STP1	Student network meeting / focus group (n = 13)	41
STP1	Consultant staff interview	42
STP2	Student network meeting / focus group (n = 12)	54
STP3	CCG and training hub staff (n = 2)	56
Documentary / Secondary data	N = 119	
Meetings data	N = 79	M1-M79
Fieldnotes	N = 9	F1-F9
Site evaluation	N = 10	E1-E10
Site provided documents	N = 18	D1-D18
Stakeholder reflections	N = 3	R1-R3
Meetings dataoverviewM1-M79	N = 79	Feb 19April 19June 19Aug 19 Sept 19Oct 19Dec 19Feb 20March 20April 20

Table 1 (*continued*)

Key	
Fieldnotes	N = 9
F1 Launch meeting observation	
F2 Reflection on telephone interview	
F3 Meeting observation (CCG/HEE)	
F4 Meeting observation (CCG/Site)	
F5 GPN2 observation fieldnotes	
F6 STP2 visit fieldnotes	
F7 GPNE1 site visit Fieldnotes May June 2019	
F8 GPNE2 site visit Fieldnotes May June 2019	
F9 GPN3 site visit Fieldnotes July 2019	
Site evaluation	N = 10
E1 STP1 Federation level evaluation	
E2 GPN1 of Survey Nurses PLT – Analysis	
E3 GPN2 Framework and Competency Development Plan	
E4 GPN4 course feedback	
E5 GPN3 Review Discussion document	
E6 GPN2 Student Feedback	
E7 GPN5 Federation feedbacl	
E8 GPN2 Evaluation in-house	
E9 Cross site awards evaluation draft	
E10 STP3 written evaluation	
Site provided/ volunteered additional docs	N = 18
D1. Aug 19 new to practice fellowships	
D2. GPN5 Study Day Feedback	
D3. GPN3 Info for practice contact June 2019	
D4. GPN3 Programme Proposed changes	
D5 GPN1 Flyer	
D6 STP1 newsletter	
D7 STP4 Report	
D8 STP1 report	
D9 STP2 stakeholder reflection	
D10 GPN4 In-house paper	
D11 GPN4 in-house paper	
D12 GPN4 training guide	
D13 STP3 internal planning documentation	
D14 STP3 in-house presentation	
D15 STP3 in-house presentation	
D16 STP1 background documentation	
D17 STP1 planning document	
D18 STP1 Action Plan	
Stakeholder written programme reflections	N = 3
STP1 R1	
STP2 R2	
STP3 R3	

Table 2
GPNE Evaluation Participants.

No.	Job Title / Role	Qualitative Data Collection Method		
		Face to face individual interview	Face to Face Focus Group Interview (number participants)	Telephone individual interview
1	Course lead		X (2)	
2	Lecturer / Mentor		X (2)	
3	Student	x		
4	Course lead	x		
5	Course lead	x		
6	Manager			X
7	Course Lead	X		
8	CCG Nurse Lead / Mentor	X		
9	Lecturer	X		
10	Admin	x		
11	Course Lead		X (2)	
12	Lecturer / Mentor		X (2)	
13	Course Lead	x		
14	Course Lead		X (2)	
15	Head of Division		X (2)	
16	Student GPN		X (4)	
17	Student GPN		X (4)	
18	Student GPN		X (4)	
19	Student GPN		X (4)	
20	HEE STP		X (4)	
21	HEE STP		X (4)	
22	HEE STP		X (4)	
23	HEE STP		X (4)	
24	CCG	X		
25	Project Manager	X	X (14)	
26	Nurse Lead / Mentor		X (3)X (14)	
27	GPN ST student nurse		X (3)X (14)	
28	Practice Manager		X (3)	
29	GPN Area Lead		X (14)	
30	PC Lead		X (14)	
31	Mentor / ANP		X (14)	
32	Mentor / ANP		X (14)	
33	Mentor / ANP		X (14)	
34	Student GPN		X (14)	
35	Student GPN		X (14)	
36	Student GPN		X (14)	
37	Student GPN		X (14)	
38	Student GPN		X (14)	
39	Student GPN		X (14)	
40	Student GPN		X (14)	

Total primary data collection items = a total of 56 sources (some participants consented to be involved in more than one collection point (e.g. individually and as focus group participant)

visits to commissioners and local practice sites. In total 44 one to one interviews and five focus group interviews were conducted by two researchers of the evaluation team and were recorded and transcribed verbatim. Over 40 participants consented and contributed to this evaluation.

For qualitative research to claim rigour, it must be transparent about methods and demonstrate techniques to achieve transferability of findings to alternative contexts. The full list of data and participants for the study is held in Tables 1 and 2. The ethnographic approach achieves validity and reliability through collection of a wide range of data through researcher immersion in context. This enables iterative triangulation of data across a wide sample of participants and over extended time periods. Data were analyzed and reviewed by multiple researchers to enhance inter-coder reliability.

4. Findings

Kirkpatrick (2006) evaluation framework for training and education has been used across many studies in nurse education to evaluate the real impact of learning on practice (Li et al., 2020; Johnston et al., 2018; Ahanchian et al., 2017; Clark etn al., 2014). Our study evaluated the GPNE using the four levels: reaction; learning; behaviour; and results. We were able to explore the impact of the learning that took place both in and beyond the classroom. Furthermore, using an emergent thematic analysis, we also identified key themes in learning beyond the classroom.

The Kirkpatrick framework is a useful mode of analysis since each level framework maps to a clear need for the course evaluation in the context of GPN learning. Students on the course are required to gain knowledge, apply learning and implement the benefits of the learning quickly in a real life setting autonomously as required by the role on a day to day basis and General Practice broadly.

The first level in the framework measures 'Reaction' and speaks to how the students feel about and respond to the course. This is vital baseline data for the evaluation to contextualize the student experience. Reactions give an indication of the student's engagement and learning which will have an impact on their ability to progress through further levels of learning in the framework.

At the second level the study considers 'knowledge' and using an ethnographic approach to learning evaluation allows the consideration of not only the knowledge intended to be shared and the knowledge gained but any drivers for the types of knowledge within the learning scheme.

For GPNE postgraduate students the ability to act on the new knowledge is the most important aspect of the course and the Kirkpatrick model begins to evaluate this as behaviour change at level 3 of the framework.

At the highest level of the framework, evaluation can identify the results of the behaviour change and it is this evidence which is crucial for the research to identify and disseminate as it speaks to the key aims of the scheme and identifies the fundamental ways learners become autonomous specialist trained general nurse practitioners by the end of the scheme.

4.1. Level 1 reaction

At the first level the model considers evidence of participants' response to the course. Data considered to measure reaction to learning included module and course evaluations, focus group discussions and individual interviews with course leads and GPN students. The data showed high levels of course satisfaction with minor negative reactions to university processes over course content or delivery. Each site had mechanisms for feedback and active engagement with learners to gauge reaction and improve learning.

Recruitment and retention can be considered a measure of reaction to a course. Recruitment to all courses is steady and all courses fully

recruit despite accepted time to build momentum in the nursing and General Practice community. This is evidenced through low rates overall in the initial stages rapidly increasing as the local community develops an awareness and understanding of the programme. Whilst course retention is steady at 90%, a 10% loss is financially significant, especially in the event of upscaling course cohort size or intakes. It is therefore worth understanding causes of attrition to potentially consider measures to increase retention. Data suggests that the reasons students leave the course are related to leaving their training post such as alternative jobs being available at much higher pay and increasing pressures in the GP workplace making it a difficult environment in which to thrive.

4.2. Level 2 learning

This level of evaluation relates to knowledge and skills gain in students and how these maps to the programme or learning objectives. The research considered learning objectives and assessments used to measure these. While learning objectives were consistent and mapped to Royal College of General Practice (RCGP) competencies, there was variance in additional content, levels and depths of delivery. There was also great variance in assessment methods. For example, one course requires detailed academic essays, whilst another requires students to pass exams in interpreting blood results. Oral presentations are used at multiple sites, ranging from peer group presentations, individual one-to-one presentations and OSCE-style mini-group consultations. Each of these approaches is defended by the institution as an appropriate method of measuring their learning objectives.

Portfolios are used to evidence skills development against the RCGP competencies across all sites. Whilst this encourages a level of standardisation between courses, there is also clear differentiation. For example, the extent to which portfolios are used varies between a record of observations, through to a fully reflective document. Some course leaders feel that the course should offer a level of education beyond simple skills acquisition:

> I think the fact that we are actually getting Practice Nurses together and they are getting a rounded education rather than just skill based, I think it is the difference between training and education, they are now getting the education rather than just being trained to do a task. Course Lead, Site 5.

In some courses all assessments are clearly linked to course competencies. Therefore, whilst there is a standardised skill level set by the competencies, the depth to which these competencies are achieved varies by course. Notwithstanding this variation, there is evidence of learning which meets the RCGP required standards across all courses meaning that all students meet level 2 of the Kirkpatrick (2006) learning model.

4.3. Level 3 behaviour

There is an inextricable link between learning and behaviour change. This is particularly true in health professions where there is little value in new knowledge and skills attained if they do not result in a change in behaviour. As mentioned in the previous section GPN skills are assessed in practice by observations conducted by a more experienced mentor. The success of learning therefore requires a close relationship between HEIs and GPNs which was evident at all observed sites. The course also provides an opportunity for ongoing consolidation of learning through peer group and expert discussion directly related to their own current practice. The University learning community also provides additional feelings of community and support for students working in an isolated clinical setting:

> *At least at the university we are giving them some clinical governance if you like, we are giving them some clinical supervision too really, but they are not necessarily getting that, certainly in the single-handed practices where they are the only nurse on duty…. it is giving them another avenue to culminate support from. Course Lead, Site 2.*

There is evidence from most programmes that they encourage nurses to develop critical thinking skills and an awareness of evidence-based practice (EBP), aspiring them to apply these skills and attributes to their future clinical settings. For the postgraduate students this represented a significant change in behaviour demanded by the need to work autonomously in General Practice. Multiple students gave examples of feeling more confident to challenge practice or enforce boundaries using an EBP. One example given during discussions at site 5 related to a trainee being asked to treat a patient who had taken the depo contraceptive injection which is usually given every 12 weeks. A GP had seen the patient for irregular bleeding, advised the next depo earlier at 8 weeks and had booked her in with the (trainee) GPN. The trainee refused to give it because it was outside of the guidance and there were no notes to support this treatment. The patient and reception staff were not happy with the trainee but she had followed the correct, evidence-based procedure with the safety of the patient in mind as she had been educated to do. The educators praised this student for her important and safe decision making. Developing strength, resilience and confidence was highlighted by all educators as to the importance and added value of the GPNE beyond tacit skills development:

> *We do stress to them, it is about confidence leadership, the assertiveness, being able to challenge practice even though they are employed by the person they might be challenging. That is a real part that is probably not even articulated anywhere. Course Lead, Site 5.*

Our findings show that changes in behaviour extend beyond changes in skills ability and into the domain of changes in values and attitudes. Students discussed gaining more from their education in terms of behaviour change related to leadership. Educators and mentors agreed that over time GPNs demonstrated culture change as they acclimatise to the Primary Care culture and their role in it:

> We often signpost them to Public Health England's vaccine update for instance and we ask them, part of your homework today is we've done theoretical underpinning for immunisation, one of your pieces of homework, is for you to register for Public Health England's vaccine update. So that comes into your inbox. Lecturer, Site 2.

There is evidence that successful deep learning courses which feature leadership and evidence-based practice approaches facilitate changes in values and attitudes that will have long term benefits for Primary Care and patients.

4.4. Level 4 Results

Results of this new educational pathway has the potential to have an impact on patients, practices and future workforce development. Direct influence of any aspect of patient care is challenging to measure due to the variability of clinical settings that patients might access for any given condition. However, our findings do demonstrate that the scheme had an impact on patients by increasing the number of skilled staff working in General Practice:

> I guess one of the biggest problems we have always had is recruiting to post with a fully qualified skill set.Practice Manager, Site 6.

> Nursing recruitment is starting to change, there were things being talked about, now things are happening. The changes with the nursing recruitment, when we took [Previous GPN-ST trainee] on as a trainee nurse, that is the first time I think I was able to convince our Practice Manager and the practice that we could do it…prior to that

we were looking for like ex district nurses and things, the skills that they came with and everything. GPN Mentor, Data source 18.

Several mentors and Practice Managers emphasised the benefits of the role on capacity, thereby having an impact on patient satisfaction:

What we are going to get with [GPN-ST trainee] is a massive benefit to us, they are going to be a qualified nurse with all of the Primary Care experience and skill set that we need. It's an opportunity for practices…. With some time and effort, we don't begrudge that in any way because we know at the end of it we are going to get a fully competent team member who we hope, we create an environment that they want to stay in, will stay with us and we can then develop that further forward. It is our future. If we can't support that we are doing something wrong. Practice Manager, Site 6.

This Practice Manager hosting a GPN-ST trainee would like to see the scheme rolled out more widely for broader benefit:

Having something like this that is rolled out Nationally and the impetus for it going forward to remain full would benefit everybody in General Practice. Practice Manager, Site 6.

Benefits for practices relate to the return on investment they achieve from engaging in the programme. We noted a wide inconsistency in the levels of mentoring, financial and time support offered by practices to nurses along with wide variances in workforce retention. Whilst work has been undertaken to validate the hypothesis for investment in the workforce (Verma et al., 2016) this has not been applied to the nursing workforce in General Practice.

The impact of this educational pathway on workforce development can be clearly identified. Analysis of the data collected shows that on this scheme in the last 5 years over 250 skilled and trained work ready nurses have become employed in UK Primary Care rather than leave the profession or work in other functions.

The Practice Managers, GPNs and GPs interviewed (n = 9) agreed that this GPN programme has provided staff of a high calibre, with sought after skills and requisite knowledge fit for the role and demands of working in General Practice.

4.5. Learning beyond the classroom

The benefits of the training pathway extend beyond the learning that can be categorised by Kirkpatrick (2006) framework and it is vital that these elements are incorporated when considered by other regions and countries. There is evidence that a significant proportion of deep learning occurs in conjunction with learning beyond the classroom. The previous section outlined the importance of classroom learning aligning with context and workplace mentoring and with the wider community of General Practice. Four aspects were identified: Practice of Safety, Workforce Development, Community of Practice and Practice Barriers.

4.5.1. Practice of Safety

A surprising emergent finding was how this programme afforded extrinsic benefits for those attending in relation to a practice of safety. Several students who had experience of working in Primary Care felt that their education gave them insights into better evidence-based practices and therefore improved safe practice:

I do a lot of wound care and a couple of weeks ago we had a wound care session didn't we and I learnt so much, I was probably putting half the dressings on wrong.Student, Site 7.

An earlier example highlighted a student asked to administer a depo without the appropriate time gap. Several students reported being asked to prescribe without being a prescriber:

It happens a lot. It happened all the time when I was a nurse in General Practice, but it was never on anybody's agenda, the CQC weren't around. Now the quality assurance in General Practice is tightening up and that means nurses are going to have to stop and think about their practices. There are some really unsafe practices out there. GPs need to re-learn that they can't just ask a Practice Nurse to add a prescription to a monitor when they are not a prescriber. Lecture, Site 6.

There was also evidence that safety extended to understanding boundaries and resilience in the context of working in the Primary Care environment:

Autonomous practice, getting to grips with that. Learning boundaries because you have lost your hierarchy so there is no Matron, no Chief of Nursing who is going to tell you what to do. General Practice is very much about finding your own feet in terms of what is safe practice. Students really struggle with that especially newly qualified. Because they are so used to being told this is what you do and don't do, when they get to General Practice, they have got to think for themselves. Course Lead, Site 5.

(NB: The Newly Qualified Nurses are also referenced as students throughout the research, as they are registered postgraduate University students through their participation in the GPN training scheme as opposed to nurses for which they are qualified.).

4.5.2. Workforce Development

The following data emerged in documentary analysis and provides a useful oversight of the aims of the GPN speciality training pathway:

The purpose of the GPN Ten Point Plan is to ensure a reliable and sustainable supply of suitably trained GPNs but innovatively, it encourages non-reliance on traditional solutions and provides an opportunity to tackle a long-standing problem with relatively small amount of funding.

Without a pipeline of new GPNs, many of the actions within the Ten Point Plan will be redundant. 'GPN Specialty training' offers a 'way in' to General Practice nursing for both newly qualified nurses and those wanting to make the transition from other nursing fields.Stakeholder Feedback, Documentary Analysis.

Staff involved with delivering the training courses and pathways recognise the benefits of the course on workforce development. One course lead suggested that traditionally most students would leave University and go immediately into working in hospitals but now have an important alternative route directly into Primary Care:

I think it is having a big impact, I think it is giving practices the confidence to train nurses who have not done practice nursing before rather than just poach off each other. Course Lead, Site 6.

There is evidence from our analysis to suggest that due to the nature of the independent business model as developed since the 1990 s in the UK, General Practice has aligned itself with the development of employees, those employed directly by a practice as opposed to the overall workforce in general:

I know some surgeries struggle to recruit which is what we say if they could even work as a collaborative workforce, if you got more nurses in, those that are doing well, you train them, and they stay and then you have got a workforce. But often they work in silos. Course Lead Site 3.

Furthermore, exemplified by those working in practice and delivering the programmes:

> They [nurses] have got to be in it for the long-term gain and we know from all the surveys, that nurses feel better valued if they know they have been supported in terms of their education and training. If the practice actually thinks of it as a long-term career pathway, the nurses that we have seen will stay if not they will move practices. CCG Nurse Site 4.

4.5.3. Community of practice

GPNs have previously worked in silos which in this every changing landscape is not fit for purpose. This research identified evidence that this education programme, in offering a scaffolded approach by experienced mentors as well as access to a network, can be defined as a 'community of practice' as a group who share cultural experiences and a shared aim. The course plays an important stabilising role and source of updated information at a time where Primary Care roles and culture is evolving. There is evidence across all courses that students gain significant benefits from being part of a learning community who benefit from the opportunity to discuss and consolidate learning and share learning experience with peers at the same stage of development:

> I felt quite isolated at the beginning, I was entirely on my own. Just doing a course and then I would be off and up and running. You do feel quite vulnerable because you desperately want to protect your Pin [UK registration], you also want to do your job, so you do feel a little bit vulnerable. I think also having other people do the course, so you have a bit of a buddy system. Student GPN Site 4.

Students and course leads shared the benefits of per supported learning:

> We all talk and we all say about our experiences, what we have done each week, what changes we have come across really. Student/ Trainee GPN site 2.

> The benefit of having a course, they have got one another to bounce ideas from and also hear what is being done in other practices. Course Lead site 2.

Learning then becomes contextualised in the broader community and in the arena of Primary Care rather than being localised to the practice where the GPN is based is valued:

> They get so much more as well, they get networking, interaction, this is going on in my practice' (Course lead site 1) 'So things like the university days, it is never ever to the taught content, it is about the peer network, it is about the WhatsApp™ group. What shall I do about this? I have this patient with x or y, no-one knows what to do, what shall I do? It's that shared, that journey, walking that journey together and I think we are really involved in that. It is never us and them, we really feel like we are in it together.' Course lead site 5.

All courses recognise the benefits of the community of practice to the GPN trainees and actively facilitate opportunities for broad sharing of knowledge and experiences:

> 'They need support, absolutely, they need to be not left alone. They need a mentor in practice when they are starting off, they need a supportive team around them. Otherwise, unfortunately, General Practice can break people. Lecturer site 4.

> They get a comradeship; they get to network which is really important. Course Lead site 6.

The community of practice and especially the support provided by the course enables students to navigate the complex employment system operated in Primary Care:

> The benefit of coming into a structured programme where they have got a) benefits of academics and that experience but also getting that peer network because that gives them real strength. Connecting with each other and realising that they are not on their own and actually they are experiencing the same things so what do they do about it as a group. CCG Nurse site 4.

Course leads and mentors recognised the depth of support networks required by GPN trainees. The community of practice in local areas is actively growing as nurses pursue a pathway through GPN education. Several early GPNs on the pathway have already progressed to Masters programmes or act as a mentor to new GPNs.

4.5.4. Practice barriers

Practice barriers emerged from the research as the most significant unplanned theme from the participants narratives. There is evidence of wide variation in GP response to the initiative and often a lack of financial or time support from practice for GPN education and lack of understanding or support for the training role. Due to the nature of Primary Care and General Practice as independent businesses there can be wide variation in salary, reward and support between practices and GPN trainees:

> *They don't recognise Agenda for Change, so you are employed by the GPs. There is no power on earth that can force them to say because you and I know full well that somebody down the road has a very similar job spec to me, who will be paid £ 4–5 an hour more. That's the reality and moving from the Acute Sector into Primary Care, that is the reality. We don't have Agenda for Change, there are very few practices in the UK that support that, because there is a cost implication. You can take advice from NHS scales but there is no parity. Student / Trainee GPN – Site 7.*

There can be lack of time allocated for mentoring, or an underestimation of the real time required to provide suitable mentoring, or there can be work pressures which interfere with best practice mentoring in the workplace. As a result of these practice barriers, GPNs on the speciality training pathway need to develop resilience and confidence:

> *The worst thing for me is the lack of practice support. So, it is the student who is all enthusiastic, wants to learn and you see them actually get knocked down in practice. I see them get disheartened, they cry, they come to tutorials in tears, they are having an awful time in practice and it is all around lack of support. Practice just wanting them to work rather than seeing the educational needs of the student.* Course Lead, Site 6.

5. Discussion

Our research highlights that this pilot appears successful in providing upskilled autonomous nurse practitioners ready to work in general practice. In many western countries autonomous practice by nurses, particularly in general practice, is actively supported and promoted (Hoare et al., 2012; Choi et al, 2016). Our findings demonstrate the required expectations on students to develop high level independent skills, critical thinking and confidence fit for the general practice environment.

A range of approaches are taken to develop critical thinking in undergraduate nurse education in the UK (Chan, 2013; Markey and Okantey, 2019; Cleary et al., 2018) and can be seen in the international literature (Kim et al., 2018, Shizari and Heidari, (2019) Tiwari et al., 2006). It is broadly concluded that critical thinking is approached superficially in undergraduate nurse education and needs to be embedded in further ongoing experiences and education (Marañón and Pera, 2019). Clark et al. (2015) work in the UK suggests that nurses who engage in postgraduate study are more likely to have improved critical thinking skills. This underpins and aligns with our evidence that students felt ill-prepared for general practice work on completion of

undergraduate education. They confirmed that they had developed some knowledge of critical thinking skills but that these were developed and evolved over their speciality training routes, thus enabling them to apply this to their new workplaces and autonomous independent practice.

Evaluation of innovation is important to understand if a model can scale successfully. This evaluation takes a 'proof of concept' approach seeking to establish a theory of change for the culture of GPN education and identify processes and key areas of success and development from early empirical evidence of implementing the model in practice. There is evidence that all the GPN educational pathways sites in our study contributed to learning at all levels of Kirkpatrick' (2006) evaluation model and student GPNs progressed quickly though learning cycles of knowledge acquisition through applying knowledge in their work-based context enabling long term behaviour change. Our data has parallels with Murray et al. (2019) review Benner's model of 'from novice to expert' and Duscher's 'Stages of transition theory' to explain the movement of critical thinking in newly registered nurses.

The ethnographic approach to evaluation allowed us to explore in some depth how nurses on the GPN-ST move through acquiring knowledge to applying theory to practice and developing behaviour change. The data presented underpinned the importance of clear pedagogy and the value of mentoring. The data presented, in particular in relation to behaviour change, demonstrates that learners benefit from learning mapped to clearly defined competencies including reflective practice to develop critical thinking and clinical confidence over a one year or longer period. The study shows the importance of this process facilitated by scaffolded support from both educators in university and mentors in the workplace.

Our study showed the value of scaffolding by both lecturers, peers and mentors in the workplace. Scaffolding is an important approach to support learning evidenced by data from this study and supported by recent studies in this field such Gallegos et al. (2020), Kantar et al. (2020) and Visser et al. (2020). Visser et al. (2020) suggest that scaffolding of health care workers is essential to support the development of critical reasoning skills. Murrayet al. (2019) study of newly registered nurses showed the importance of clear mentoring to support experiential learning and the development of both skills in practice, but also to ensure safe practice and retention of staff.

A specialty training route is used in a range of professions, most notably for trainee Doctors. There is significant evidence of the benefits of the specialty training model (McNaughton, 2006). The RCGP General Practice Foundation (2012) has developed a strong framework and underpinning support mechanism for specialty training. The GPN-ST route is based on the evidence based pedagogic framework which underpins the specialty training route for trainee GP Doctors, so why is this not routinely the case for nurses wishing to work in General Practice? Rizany et al. (2018) systematic review examined factors affecting nurse competency development and concluded across several studies that combined work experience and education contribute to the ongoing development of critical thinking skills.

An ethnographic evaluation of this scope has been able to clearly demonstrate that appropriate pedagogy and mentorship over extended time can ensure newly qualified nurses receive education and develop reflective and critical thinking practices that prepared them for making clinical judgements in the general practice setting.

The introduction to this paper outlined some key problems in workforce development in General Practice and specifically in General Practice Nursing. We have outlined some of the key barriers arising from the nature of General Practice that the course seeks to mitigate. Having a speciality training pathway contributes to the development of behaviour change in newly qualified nurses and therefore offers the potential to add much needed workforce capacity with highly skilled, professional autonomous nurses to the UK General Practice workforce.

Notwithstanding the above, this pilot study evaluation provides useful insights and transferable learning into a developing area of speciality training for nurses in general practice that can usefully inform future development in this field. In particular we note the commitment in England to the GP Fellowship program and delivery in 2021/2, which has many parallels with the GPNE-ST scheme. We recommend further work and larger studies to inform further growth in this field. We have shown that the ethnographic approach can usefully provide triangulated data for in-depth evaluation.

6. Conclusion

The evidence presented demonstrates the key benefits and barriers experienced during evaluation of a speciality training pathway for GPNs. The multifaceted ethnographic approach is a rigorous qualitative approach which allowed for us to present rich data about the experiences of those participating in, delivering and supporting the pilot speciality training pathway. We have demonstrated the importance of a pathway to critical thinking benefit clinical reasoning and evidence-based practice. Workplace mentors play a key role in scaffolding learning in the workplace. Relationships across GPN and links between HEIs and practice networks are vital.

If nurse education and in this context GPN, wishes to move forward to secure a robust, thriving skilled workforce then there will be a need to consider the current model for recruiting and training the next cohort of nurse's keen to work in General Practice. It is important to recognise that this new developmental pathway is a first step towards cultural change. Developing a model of education that has the potential to develop nurse roles in General Practice as well as providing advanced level clinical practice, mentoring and leadership should be a consideration for any commissioners and education providers. Overall, the speciality training pathway is a vital and important part of developing General Practice Nursing.

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CRediT authorship contribution statement

Claire Mann: Conceptualization, Methodology, Data collection, Data analysis, Writing – review & editing. **Kathryn Hinsliff-Smith**: Data curation, Writing – original draft, Writing – review & editing. **Matthew Boyd:** Conceptualization, Methodology, Writing – review & editing. **Heidi Davis**: Concept of the study, and study supervision and validation, Writing – review & editing. **Gillian Beardmore:** Concept of the study, Supervision, Validation, Writing – review & editing.

Conflict of interest statement

The five authors declare no conflict of interest but note that two authors (HD, GB) were employed by Health Education England at the time of the research, and both were involved in commissioning this work and therefore were invited to be contributing authors to the draft and subsequent iterations of this submission.

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