

Evolution of the general practice pharmacist's role in England:

a longitudinal study

Abstract

Background

To address the growing GP workforce crisis, NHS England (NHSE) launched the Clinical Pharmacists in General Practice scheme in 2015. The NHSE scheme promotes a newer, patient-facing role for pharmacists and, currently, there is little insight into the role and activities undertaken. All scheme pharmacists are enrolled on the general practice pharmacist training pathway (GPPTP).

Aim

To investigate the role evolution and integration of clinical pharmacists in general practice in England.

Design and setting

Longitudinal survey of all phase 1 GPPTP registrants working in general practice at start of (T1) and 6 months into (T2) training.

Method

An online longitudinal survey was administered to all phase 1 GPPTP registrants ($n = 457$) at T1 and T2, measuring their perceived knowledge, skill, and confidence, activities performed, and perceptions of practice integration, environment, and support. Descriptive statistics and non-parametric tests were conducted.

Results

Response rates were 46% (T1) and 52% (T2); 158 participants completed both questionnaires. Perceived knowledge, skill, and confidence levels increased significantly from T1 to T2 for all areas, except for managing acute or common illness. Scope of practice increased significantly, particularly in patient-facing activities. Sharing office space with administrative staff was common and 13% of participants reported having no designated work area. Perceived integration at T2 was fairly high (median = 5 on a scale of 1–7) but GP clinical support was 'too little' according to one-third of participants.

Conclusion

Findings show not only patient-facing role expansion, but also practice environment and support issues. Pharmacists may appreciate more GP time invested in their development. Practices need to be realistic about this support and not expect an immediate reduction in workload.

Keywords

clinical pharmacists; general practice; general practice pharmacist training pathway; workload.

INTRODUCTION

NHS England (NHSE) is facing a growing GP workforce crisis, with continuing problems around GP recruitment, retention, and retirement rates.¹ Approximately 30% of GP partners have reported not being able to fill a GP vacancy in their practice for at least 12 months.² A growing older population, with an increase in long-term conditions and complex comorbidity, is said to be placing an increasing demand on primary care.¹ In the most recent GP worklife survey, GP job satisfaction has been found to be at its lowest level since 2001.³

In July 2015, as part of the *Five Year Forward View*⁴ and the new deal for general practice,⁵ NHSE launched the clinical pharmacists in general practice scheme to address issues of capacity. Pharmacists have worked in medicines management roles in general practice for more than a decade, often conducting safety audits and making drug switches with little direct patient contact.⁶ The intention of the NHSE scheme is for part-funded pharmacists to operate in patient-facing roles, carrying out, for example, polypharmacy or chronic disease medication reviews.⁷ The scheme initially provided £31 million funding to general practices to employ pharmacists over 3 years. Phase 1 of the scheme saw approximately 460 pharmacists employed at around 650 practices across 88 sites. In April 2016, NHSE confirmed expansion of

the scheme, with an additional £112 million for a further 1500 clinical pharmacist posts by 2020–2021.⁸

All pharmacists employed through the scheme are supported by the Health Education England-funded general practice pharmacist training pathway (GPPTP), an 18-month mandatory training programme delivered by the Centre for Pharmacy Postgraduate Education (CPPE) at the University of Manchester. The GPPTP provides a combination of study days, peer learning sets, assessments, and access to three support functions — an education supervisor (employed by CPPE, offering individualised educational support), a GP clinical supervisor (based in practice, offering day-to-day clinical support), and a clinical mentor (an experienced clinical pharmacist).⁹

As the clinical pharmacist in general practice role is relatively new, there are few studies exploring its nature and evolution. Little is known about the types of activities clinical pharmacists can and do perform in general practice, whether they are situated in patient-facing roles, and how integrated they are into practice. A qualitative study by Butterworth and colleagues in 2017, reporting on a localised training programme, revealed issues of role definition and clarity.¹⁰ By following the first cohort of clinical pharmacists (phase 1) to be employed through the NHSE

F Bradley, PhD, research fellow, Health Services Research Centre, Alliance Manchester Business School; **E Seston**, PhD, research fellow, Centre for Pharmacy Workforce Studies, Division of Pharmacy and Optometry; **C Mannall**, FFRPS, FRPharmS, national lead, Clinical Pharmacists in General Practice, Centre for Pharmacy Postgraduate Education, Division of Pharmacy and Optometry; **C Cutts**, DClinPharm, professor, Division of Pharmacy and Optometry, University of Manchester, Manchester.

Address for correspondence

Fay Bradley, Alliance Manchester Business School, University of Manchester, Oxford Road, Manchester M13 9SS, UK.

Email: fay.bradley@manchester.ac.uk

Submitted: 30 January 2018; **Editor's response:** 12 February 2018; **final acceptance:** 16 April 2018.

©British Journal of General Practice

This is the full-length article (published online 29 Aug 2018) of an abridged version published in print. Cite this version as: **Br J Gen Pract 2018; DOI: <https://doi.org/10.3399/bjgp18X698849>**

How this fits in

NHS England (NHSE) has invested a significant amount of money in the Clinical Pharmacists in General Practice scheme and associated training programme, with the intention of easing GP workload and improving patient access. Two years into the scheme and little is known about the current role of the NHSE phase 1 Clinical Pharmacists in General Practice. This is the first study to provide national insight into their role, including their perceived competencies, scope of practice, practice environments, levels of integration, and support needs. The findings demonstrate not only a marked increase over time into more patient-facing roles, but also highlight concerns around pharmacists' practice environment and lack of clinical support.

scheme and undertake the GPPTP, this longitudinal study aimed to provide the first national insight into the role evolution and integration of clinical pharmacists in general practice in England.

METHOD

Data reported in this article are drawn from a mixed-method evaluation of the GPPTP, which included a longitudinal survey following the GPPTP phase 1 cohort and qualitative interviews with clinical pharmacists, GP supervisors, and education supervisors. This article reports the results from the longitudinal survey, specifically the first and second questionnaires. The first questionnaire was administered early on in the training pathway, and is referred to as T1 (time 1); the second questionnaire, referred to as T2 (time 2), was administered at least 6 months later. Both questionnaires were administered online via email to all GPPTP registrants, who were assigned a unique ID number to enter at the start of each questionnaire, in order to link responses. Three reminder emails were sent to non-responders.

Longitudinal survey

T1 questionnaire. Once in their NHSE scheme-funded post and registered on the GPPTP, pharmacists attended a 4-day residential induction. The T1 questionnaire was designed to capture baseline information as close to induction as possible. However, delays in practice employment necessitated the periodic running of several induction events over 12 months. Consequently, a staggered approach to questionnaire distribution was

adopted: first, in July 2016 to all those who had attended induction by that point ($n=315$), then again in November 2016 to those attending inductions in September–October 2016 ($n=142$). In addition to induction attendance, pharmacists at that time point would have met with their CPPE education supervisor to start personal development planning and identification of learning needs. The T1 questionnaire asked responders to rate their perceived level of knowledge, skill, and confidence on eight key topics of the pathway, using a 7-point Likert-type scale (where 1 = very low to 7 = very high). Responders were also presented with 21 'typical' activities and asked which they had performed in their NHS scheme-funded general practice role in the last 6 months to measure their scope of practice. Responders were asked to reflect on the previous 6 months to avoid capturing overlap at both T1 and T2. Due to the staggered employment start dates, some pharmacists, at T1, had been employed in post 6 months or more, whereas others had only just started in post. Previous pharmacy sector experience was also collected.

T2 questionnaire. Responders received the second questionnaire at least 6 months later (May–June 2017). At this time point, pharmacists would have had access to a number of study days, attended local monthly learning sets with their peers, reviewed progress and needs with their education supervisor, and received work-based support from their GP clinical supervisor. The T2 questionnaire repeated the same measures of knowledge, skill, and confidence, and scope of practice, to enable longitudinal measurement. It also asked responders about their practice environment (proportion of practice meetings attended, whether they had received an appraisal, and type of workspace), how integrated they felt, and satisfaction with the support they received.

Questionnaire development. Both questionnaires were developed through discussions with the training provider CPPE to evaluate perceived competency around key areas and establish scope of practice to identify any unmet need and inform future training resources. Knowledge, skill, and confidence questions were adapted using definitions from Huijg and colleagues' theoretical domains framework questionnaire.¹¹ Qualitative interviews with six pathway pharmacists were conducted to inform questionnaire design;

the same pharmacists also piloted the questionnaire. Scope of practice activities were drawn from existing job specifications or guidelines,^{12,13} and were also generated by interviewees. Interviewees raised issues around integration, workspace, inclusion in practice meetings, and level of support that informed development of the T2 questionnaire.

Analysis

Analysis includes cross-sectional analysis of all T2 responses and longitudinal analysis of responses from those who completed both T1 and T2 questionnaires. As the main purpose of T1 was to record baseline data for longitudinal measurement, cross-sectional analysis of T1 responses are not presented in this article.

Median scores and interquartile ranges were calculated for all Likert-type scale questions. Wilcoxon's signed rank test was used to examine differences in median knowledge, skill, and confidence scores between T1 and T2. McNemar's test was performed to test differences in the proportion of participants conducting activities between T1 and T2. The Mann-Whitney U test was performed to explore differences in integration score between groups. A 5% significance level was set

for all tests ($P < 0.05$). Missing values were excluded from analysis. All analysis was conducted in SPSS (version 22).

RESULTS

Responders

The response rate for T1 was 46% ($n = 211/457$) and for T2 was 52% ($n = 236/458$). Between T1 and T2, 19 pharmacists withdrew and 20 pharmacists joined the pathway, giving a total of 458 registrants at T2. A total of 158 responders completed both questionnaires.

Table 1 shows the characteristics of the T2 cross-sectional responders and T1 and T2 longitudinal responders compared with the whole GPPTP registrant cohort. For gender and previous pharmacy sector background, both responder samples are reflective of the whole GPPTP cohort. However, differences in age group were found to be significant ($P < 0.001$). Responders from the youngest age group appear to be over-represented and those aged 30–39 years appear to be under-represented; date of birth was, however, missing for around 20% of entries in the GPPTP registrant data.

Under the NHSE scheme, pharmacists are appointed at either senior or non-senior level. In both responder samples there are around twice the proportion of senior pharmacists compared with the national figure; these differences were significant ($P < 0.001$). It is unclear whether questionnaire responders have classified themselves as 'senior' because of their level of experience rather than appointment, or whether 'seniors' are over-represented among responders. The latter possibility needs consideration when interpreting the following results.

Changes in knowledge, skill, and confidence

Across the longitudinal cohort, median levels of perceived knowledge, skill, and confidence increased from T1 to T2 for all topic areas, except managing acute and common illness. Differences between T1 and T2 were found to be significant ($P < 0.05$).

Table 2 shows that undertaking clinical medication reviews with patients and working in a multidisciplinary team saw the largest increase in perceived knowledge, skill, and confidence.

Scope of practice

Figure 1 indicates that, at T2, the top three activities performed were providing telephone support to patients (95.8%, $n = 226$), medicines reconciliation (91.9%, $n = 217$), and requests for biochemistry/

Table 1. Characteristics of questionnaire responders compared with whole GPPTP cohort (%)

Variable	T2 cross-sectional responders, % ($n = 236$)	T1 and T2 longitudinal responders, % ($n = 158$)	All GPPTP registrants ^a , % ($n = 457$)
Male	28.8	29.7	31.2
Female	71.2	70.3	68.8
Age groups, years	^b	^b	^c
≤29	18.4	17.1	6.2
30–39	41.4	39.2	56.4
40–49	26.5	31.6	24.4
50–59	12.0	10.1	11.7
60–64	1.7	1.9	1.4
Primary sector experience			^d
Community pharmacy	55.7	50.6	54.3
Hospital pharmacy	20.3	20.3	15.5
Primary care organisation	5.9	5.1	9.5
General practice	5.5	6.3	7.1
Other/mixed sector	12.6	17.8	13.6
Level of experience	^b	^b	
Senior pharmacist	31.6	34.2	17.0

^aGender and age data were provided by pharmacists when registering with the Centre for Pharmacy Postgraduate Education (CPPE) for the training pathway. Sector and level of experience data were collected internally by CPPE during the pathway. ^bThe difference between the sample proportion and whole-population proportion for age

and level of experience was found to be significant ($P < 0.001$) using χ^2 goodness of fit. ^c89 missing values for age.

^d8 missing values for sector. GPPTP = general practice pharmacist training pathway. T1 = time 1. T2 = time 2.

Table 2. Median knowledge, skills, and confidence scores at T1 and T2 (n = 158)

	Knowledge, median (IQR)		Wilcoxon's signed rank test -Z score (P-value)	Skill, median (IQR)		Wilcoxon's signed rank test -Z score (P-value)	Confidence median (IQR)		Wilcoxon's signed rank test -Z score (P-value)
	T1	T2		T1	T2		T1	T2	
Undertaking clinical medication review	4.0 (3.0-5.0)	6.0 (5.0-7.0)	-9.634 (<0.001)	4.0 (3.0-5.0)	6.0 (5.0-6.0)	-9.350 (<0.001)	4.0 (3.0-5.0)	6.0 (5.0-7.0)	-9.636 (<0.001)
Managing complex multimorbidity	4.0 (3.0-5.0)	5.0 (4.0-6.0)	-7.871 (<0.001)	4.0 (3.0-5.0)	5.0 (4.0-6.0)	-7.038 (<0.001)	4.0 (2.0-4.0)	5.0 (4.0-6.0)	-7.273 (<0.001)
Managing specific long-term conditions	4.0 ^b (3.0-5.0)	5.0 ^b (5.0-6.0)	-8.894 (<0.001)	4.0 ^b (3.0-5.0)	5.0 ^b (4.0-6.0)	-8.750 (<0.001)	4.0 ^b (3.0-5.0)	5.0 (4.0-6.0)	-8.050 (<0.001)
Undertaking face-to-face patient consultations	5.0 ^b (4.0-6.0)	6.0 ^b (5.0-6.0)	-7.647 (<0.001)	5.0 (4.0-6.0)	6.0 ^b (5.0-6.0)	-7.403 (<0.001)	5.0 (3.0-6.0)	6.0 ^b (5.0-7.0)	-8.523 (<0.001)
Managing acute common ailments	4.0 ^a (3.0-5.0)	4.0 (2.0-5.0)	-0.766 (0.362)	3.5 ^a (2.0-5.0)	3.0 ^a (2.0-5.0)	-1.341 (0.155)	3.0 (2.0-5.0)	3.5 ^a (2.0-5.0)	-0.095 (0.796)
Demonstrating leadership in general practice	3.0 (2.0-4.0)	4.0 (4.0-6.0)	-8.213 (<0.001)	3.0 ^b (2.0-4.0)	4.0 ^b (3.0-5.0)	-7.280 (<0.001)	3.0 (2.0-4.0)	4.0 ^b (3.0-6.0)	-7.336 (<0.001)
Working in a multidisciplinary team in GP	4.0 ^a (2.0-5.0)	6.0 (5.0-7.0)	-9.416 (<0.001)	4.0 ^b (2.0-5.0)	6.0 ^b (5.0-6.0)	-8.672 (<0.001)	4.0 ^b (3.0-5.0)	6.0 (5.0-7.0)	-8.182 (<0.001)
Collaborating with community pharmacy	5.0 (4.0-6.0)	6.0 (5.0-7.0)	-6.664 (<0.001)	5.0 ^a (4.0-6.0)	6.0 ^a (5.0-7.0)	-6.209 (<0.001)	5.0 ^a (4.0-6.0)	6.0 (5.0-7.0)	-6.650 (<0.001)

^aOne missing value. ^bTwo missing values. ^cThree missing values. IQR = interquartile range. T1 = time 1. T2 = time 2.

other test results (89.4%, n = 211).

Among the longitudinal cohort, scope of practice was seen to increase (from T1 to T2) for all 21 activities (see Table 3), which might be expected as pharmacists familiarise themselves with their roles. The largest increases in scope of practice were seen in running clinics with patients, managing specific long-term conditions, and Quality and Outcomes Framework (a reward and incentive programme for all GP surgeries in England that aims to improve quality of care) and Quality, Innovation, Productivity and Prevention (a range of programmes with associated targets that aim to save costs and improve efficiency and quality of care) support. Differences between the two time points were found to be significant for all activities except managing acute or common illnesses and supervising other GP clinical pharmacists.

Integration into practice

T2 responders were also asked to report how integrated they felt within their GP practice on a 7-point scale (from 1 = not at all to 7 = very much so). Responders reported relatively high levels of integration, with a median value of 5 (interquartile range = 2). A Mann-Whitney U test indicated significant differences in integration scores between pharmacists with ≥12 months' general practice experience (median = 6) and those with <12 months' experience (median = 5); U = 8765.5, P<0.001. The same pattern was evident for 'senior' (median = 7) versus 'non-senior' clinical pharmacists (median = 5); U = 7644.5, P<0.001. Differences were also significant between those with a predominantly community pharmacy background (median = 5) and pharmacists from other sectors (median = 6); U = 8404, P = 0.002, and those who worked in one GP practice (median = 6) versus those who worked in two or more practices (median = 5); U = 5049.5, P = 0.001.

Practice environment and support

Sixty-one per cent of T2 responders (n = 144) had attended ≥50% of the practice's meetings since starting their post. Just over half (53.6%, n = 126/235) had received an appraisal or had one arranged; 35.7% (n = 84/235) had not been offered any appraisal. The remainder (10.6%, n = 25/235) had been offered an appraisal but it had not yet been arranged.

Over one-third of responders (37.9%, n = 89/235) worked in their own private office or room in their practice, with a similar proportion (34.0%, n = 80/235) sharing an office or room with colleagues.

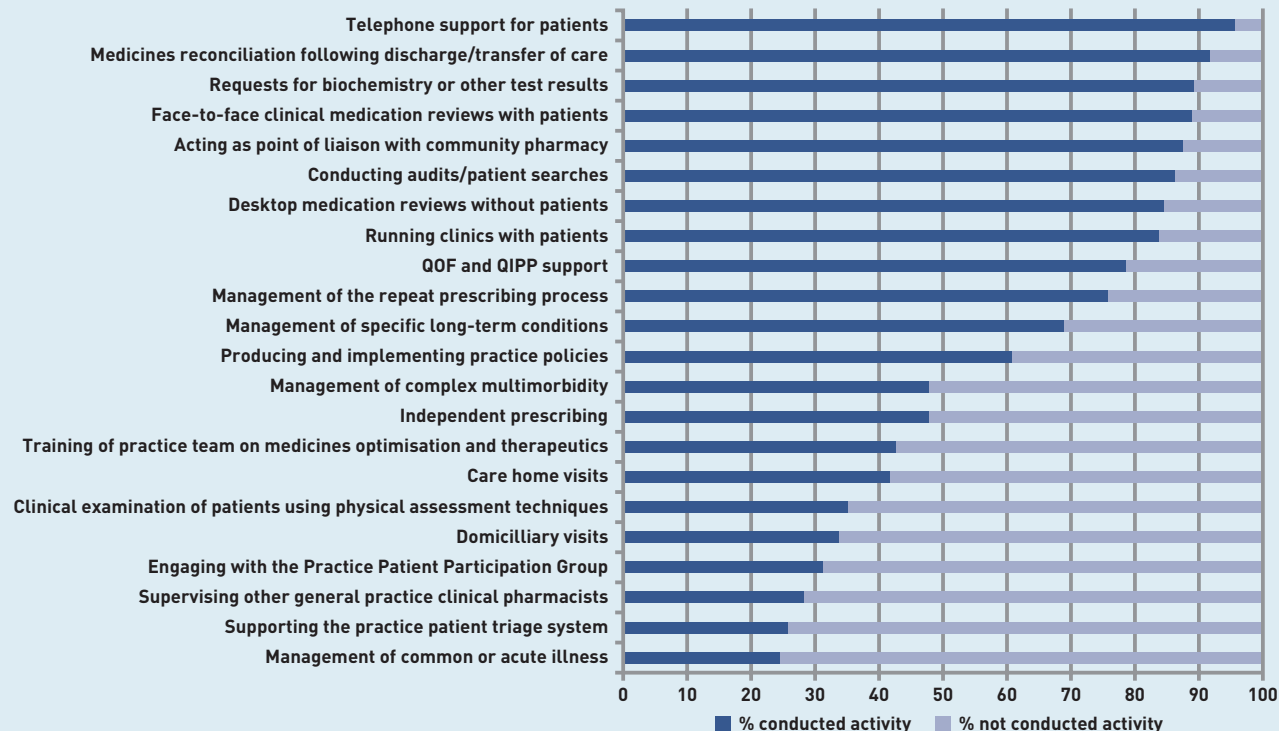


Figure 1. Activities performed by clinical pharmacists in GP practices at T2 (n = 236). QIPP = Quality, Innovation, Productivity and Prevention. QOF = Quality and Outcomes Framework.

Table 3. Comparison of activities performed by GP clinical pharmacists at T1 and T2 (n = 158)

Activities	T1, %	T2, %	% change	t* (P-value)
Running clinics with patients	46.8	85.4	38.6	49.315 (<0.001)
Management of specific long-term conditions (diabetes, asthma)	34.2	70.9	36.7	47.779 (<0.001)
QOF and QIPP support	48.1	79.1	31.0	41.891 (<0.001)
Face-to-face clinical medication reviews with patients	63.9	89.2	25.3	31.688 (<0.001)
Requests for biochemistry or other test results	67.1	91.1	24.0	29.761 (<0.001)
Producing and implementing practice policies	41.8	65.8	24.0	22.817 (<0.001)
Management of complex multimorbidity	25.9	48.7	22.8	23.558 (<0.001)
Telephone support for patients	75.3	95.6	20.3	25.289 (<0.001)
Care home visits	22.2	42.4	20.2	19.220 (<0.001)
Independent prescribing	27.8	46.8	19.0	22.132 (<0.001)
Clinical examination of patients using physical assessment techniques	19.6	38.0	18.4	17.422 (<0.001)
Training practice team on medicines optimisation and therapeutics	23.4	41.8	18.4	18.233 (<0.001)
Medicines reconciliation following discharge/transfer of care	75.3	93.0	17.7	22.781 (<0.001)
Management of the repeat prescribing process	60.1	77.2	17.1	15.022 (<0.001)
Desktop medication reviews without patients	70.9	87.3	16.4	14.881 (<0.001)
Domiciliary visits	17.1	32.9	15.8	15.568 (<0.001)
Acting as a point of liaison with community pharmacy	73.4	86.7	13.3	12.903 (<0.001)
Conducting audits/patient searches	72.8	85.4	12.6	12.033 (0.001)
Supporting the practice patient triage system	19.0	26.6	7.6	4.321 (0.038)
Supervising other general practice clinical pharmacists	22.2	29.1	6.9	3.704 (0.054)
Management of common or acute illness	22.2	24.7	2.5	0.346 (0.556)

*McNemar's test. QIPP = Quality, Innovation, Productivity and Prevention. QOF = Quality and Outcomes Framework. T1 = time 1. T2 = time 2.

Table 4. Attitudes towards sources of support (T2) (n = 236)

Role	How useful was the support you received? ^a Median (IQR)	Level of support, %		
		Too little	About right	Too much
Education supervisor	5 (4–6) ^b	20.8	76.7	2.5
GP clinical supervisor	6 (4–6) ^b	34.8	64.8	0.4
Clinical mentor (pharmacist)	5 (3–6) ^c	29.7	69.9	0.4 ^c
Other clinical pharmacists	6 (4–7) ^d	12.7	86.4	0.9

^aMeasured on a 7-point scale, where 1 = not useful at all and 7 = very useful. ^bOne missing value. ^cFour missing values. ^dTwo missing values. IQR = interquartile range.

Fifteen per cent ($n=36/235$) had to 'hot desk' and 12.8% ($n=30$) had no current designated workspace.

Of those sharing an office or room, 63.7% ($n=51$) shared with administrative staff, 26.3% ($n=21$) with one or more GPs, 22.5% ($n=18$) with other clinical pharmacists, and 16.3% ($n=13$) with nurses. The remainder shared with other staff including physician associates, midwives, and prescription clerks [23.8%, $n=19$]. One participant reported that their desk was in a communal staff area 'so everyone wanders through'.

At T2, responders were also asked how useful they had found the various support roles on the GPPTP and whether support received from these sources was 'too little', 'about right', or 'too much'. GP clinical supervisors and fellow clinical pharmacists were perceived to be the most useful sources of support. However, over one-third reported that their GP clinical supervisor support was 'too little' (Table 4).

DISCUSSION

Summary

This study explored the current role of the NHSE phase 1 Clinical Pharmacists in General Practice, including their perceived competencies, scope of practice, practice environments, levels of integration, and support needs. Longitudinal measurement has demonstrated a significant increase in scope of practice and perceived competency levels in most areas. However, findings also indicate issues around the pharmacists' practice environment and lack of clinical support from GPs.

Strengths and limitations

This study is the first to provide insight into the role of NHSE phase 1 clinical pharmacists at a national level. A major strength is the longitudinal design, enabling measurement of role evolution, albeit over a short time period. One

limitation is response rate: around half the phase 1 cohort did not respond to the questionnaires and, longitudinally, the sample suffered 25% attrition from T1 to T2. When compared with the overall phase 1 cohort, responder samples are similar for gender and previous sector background, but significantly different in relation to age and experience, which may have introduced bias. Clinical pharmacists with more experience could have higher levels of knowledge, skill, and confidence, a wider scope of practice, and, as the findings indicate, feel more integrated into practice. Level of experience may also affect the evaluation of the support received.

Comparison with existing literature

Being a new scheme and role, there is little existing UK literature on role evolution. Internationally, the 2009 Canadian IMPACT study provides qualitative insight into the early integration experiences of pharmacists working in family practice teams. At months 3 and 4, pharmacists' narrative reports indicated a shift from feeling like an outsider to being part of the team.¹⁴ Pottie and colleagues concluded that, at this point, the pharmacists were beginning to gain greater confidence in their skills and to formulate their professional identities.¹⁴ This journey mirrors the current findings, with one of the largest increases in knowledge, skill, and confidence over 6 months seen in multidisciplinary team working in general practice. The current study suggests there are problems with practice environment in terms of physical space, although further work is required to explore what, if any, impact this may have on role development. A study of general practice nurse role expansion in Australia found that physical space in the practice was perceived to be the main barrier to this, with many nurses not having their own workspace.¹⁵ The current study

also indicates that some pharmacists experienced a lack of clinical support from GPs. Again there may be parallels here with general practice nurses: a UK survey of general practice nurses by the Queen's Nursing Institute found that 41% did not have access to clinical supervision in their practice.¹⁶

Implications for research and practice

Findings show a significant increase in patient-facing activities over 6 months, with most phase 1 pharmacists now involved in this work. What the survey does not measure is the frequency of the activities performed. We currently do not know the proportion of time spent on patient-facing versus non-patient-facing activities and what has influenced this expansion in role. During the GPPTP, pharmacists were required to gain patient-facing experience and CPPE education supervisors worked with practices to facilitate this; whether practices were responding to this training requirement or a genuine identified patient need is not known, and is an area for future research. This highlights the question of the longevity of the patient-facing role for general practice pharmacists once the pharmacist completes the GPPTP or the NHSE scheme funding ceases, and practices face decisions about funding pharmacists from their own budgets.¹⁷

In terms of competency, the only topic that did not see a significant increase was the management of acute and common ailments, and less than 25% of pharmacists reported performing this activity. This is clearly one area that is yet to be encompassed into the role. Reasons for this could include not all the cohort being qualified as independent prescribers (a requirement by the end of the GPPTP) and the GPPTP content not covering this area in much depth at the point the survey was carried out. It may also be related to traditional professional domains. Once the domain of the GP and now increasingly that of the nurse practitioner, there may be little need for the general practice pharmacist to enter this domain. However, this may shift in the future because the NHS is also facing a shortage of practice nurses, with

approximately one-third planning to retire by 2020.¹⁶ Further research could therefore explore the need and appropriateness of this role for GP pharmacists.

Although overall integration levels were high for the phase 1 cohort, sub-group analysis suggests that, initially, integration may be more challenging for those working across several practices, those with a community pharmacy background, or those with less experience. These groups may require greater targeted support. The IMPACT project in Canada implemented a formalised mentoring programme, pairing pharmacists with experienced primary care pharmacist mentors, which was reported to have facilitated integration.¹⁸ The GPPTP also allocated pharmacist mentors to the cohort, but nearly one-third felt their support was too little; this mentoring support function may need strengthening for future phases and could potentially draw on the phase 1 cohort as an important resource.

The current study also highlights issues for practices to consider around the practice environment and level of GP support. Some responders reported not having a designated workspace, which could constrain their role development,¹⁵ and most of those sharing a workspace did so with administrative staff. Although this arrangement may facilitate integration into the practice team, it does not necessarily promote and reinforce the clinical role of the practice pharmacist. Capacity to provide GP clinical support also needs further consideration. Unlike the GP trainer role, the GP clinical supervisor role is unfunded and will require an investment of GP time alongside existing responsibilities. With much of the NHSE scheme rhetoric focusing on its potential to ease GP workload, the findings from this study indicate that this pharmacist cohort would appreciate more GP time invested in their development. Given the low level of previous general practice experience among the cohort, these support needs are understandable. Practices therefore need to be realistic and not expect immediate gains in terms of a reduction in GP workload.

Funding

The study was funded through the Centre for Pharmacy Postgraduate Education, at the University of Manchester.

Ethical approval

The study received ethical approval from the University of Manchester Research Ethics Committee 4 (ref. no. 16295).

Provenance

Freely submitted; externally peer reviewed.

Competing interests

Ceinwen Mannall works for the Centre for Pharmacy Postgraduate Education (CPPE) and is National Lead for Clinical Pharmacists in General Practice education. Chris Cutts is a former Director of CPPE.

Open access

This article is Open Access: CC BY-NC 4.0 licence (<http://creativecommons.org/licenses/by-nc/4.0/>).

Discuss this article

Contribute and read comments about this article: bjgp.org/letters

REFERENCES

1. Centre for Workforce Intelligence. *In-depth review of the general practitioner workforce*. 2014. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/507493/CfWI_GP_in-depth_review.pdf [accessed 27 Jul 2018].
2. ICM Unlimited. *British Medical Association survey of GPs in England: full report*. 2016. <https://www.bma.org.uk/-/media/files/pdfs/collective%20voice/influence/key%20negotiations/training%20and%20workforce/bma-survey-of-gps-in-england-final-report.pdf?la=en> [accessed 20 Aug 2018].
3. Gibson J, Checkland K, Coleman A, *et al*. *Eighth national GP workforce survey*. 2015. <http://www.population-health.manchester.ac.uk/health/economics/research/Reports/EighthNationalGPWorklifeSurveyreport/EighthNationalGPWorklifeSurveyreport.pdf> [accessed 20 Aug 2018].
4. NHS. *Five year forward view*. 2014. <https://www.england.nhs.uk/wp-content/uploads/2014/10/5yfv-web.pdf> [accessed 20 Aug 2018].
5. Royal College of General Practitioners, British Medical Association, NHS England. *Building the workforce — the new deal for general practice*. 2015. <https://www.england.nhs.uk/commissioning/wp-content/uploads/sites/12/2015/01/building-the-workforce-new-deal-gp.pdf> [accessed 20 Aug 2018].
6. Silcock J, Raynor DK, Petty D. The organisation and development of primary care pharmacy in the United Kingdom. *Health Policy* 2004; **67**(2): 207–214.
7. British Medical Association. *Working with clinical pharmacists*. 2016. <https://www.bma.org.uk/advice/employment/gp-practices/quality-first/working-at-scale/clinical-pharmacists> [accessed 20 Aug 2018].
8. NHS England. *General practice forward view*. 2016. <https://www.england.nhs.uk/wp-content/uploads/2016/04/gp-fv.pdf> [accessed 20 Aug 2018].
9. Centre for Pharmacy Postgraduate Education. *General practice pharmacist training pathway: supporting GP pharmacists of the future*. 2016. <https://www.cppe.ac.uk/wizard/files/general-practice/gpptp-promo-brochure.pdf> [accessed 20 Aug 2018].
10. Butterworth J, Sansom A, Sims L, *et al*. Pharmacists' perceptions of their emerging general practice roles in UK primary care: a qualitative interview study. *Br J Gen Pract* 2017; DOI: <https://doi.org/10.3399/bjgp17X691733>.
11. Huijg JM, Gebhardt WA, Dusseldorp E, *et al*. Measuring determinants of implementation behavior: psychometric properties of a questionnaire based on the theoretical domains framework. *Implement Sci* 2014; **9**: 33.
12. Royal Pharmaceutical Society. *General practice based pharmacist: job purpose*. 2016. <https://www.rpharms.com/Portals/0/RPS%20document%20library/Open%20access/Policy%20statements/practice-based-pharmacist-job-spec-final.pdf?ver=2016-10-13-101708-230> [accessed 20 Aug 2018].
13. Primary Care Pharmacists' Association. *A guide for GPs considering employing a practice pharmacist*. 2016. <http://www.doncasterlmc.co.uk/Guide%20for%20GPs%20employing%20pharmacy%20staff.pdf> [accessed 1 Aug 2018].
14. Pottie K, Haydt S, Farrell B, *et al*. Pharmacist's identity development within multidisciplinary primary health care teams in Ontario: qualitative results from the IMPACT project. *Res Social Adm Pharm* 2009; **5**(4): 319–326.
15. Senior E. How general practice nurses view their expanding role. *Aust J Adv Nurs* 2008; **26**(1): 8–15.
16. Queen's Nursing Institute. *General practice nursing in the 21st century: a time of opportunity*. 2015. https://www.qni.org.uk/wp-content/uploads/2016/09/gpn_c21_report.pdf [accessed 20 Aug 2018].
17. Avery AJ. Pharmacists working in general practice: can they help tackle the current workload crisis? *Br J Gen Pract* 2017; DOI: <https://doi.org/10.3399/bjgp17X692201>.
18. Farrell B, Dolovich L, Austin Z, Sellors C. Implementing a mentorship program for pharmacists integrating into family practice: practical experience from the IMPACT project team. *Can Pharm J* 2010; **143**(1): 28–36.