





BMJ Open Consultation skills development in general practice: findings from a qualitative study of newly recruited and more experienced clinical pharmacists during the COVID-19 pandemic

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ABSTRACT

Objective The new structured medication review (SMR) service was introduced into the National Health Service in England during the COVID-19 pandemic, following a major expansion of clinical pharmacists within new formations known as primary care networks (PCNs). The aim of the SMR is to tackle problematic polypharmacy through comprehensive, personalised medication reviews involving shared decision-making. Investigation of clinical pharmacists' perceptions of training needs and skills acquisition issues for person-centred consultation practice will help better understand their readiness for these new roles.

Design A longitudinal interview and observational study in general practice.

Setting and participants A longitudinal study of 10 newly recruited clinical pharmacists interviewed three times, plus a single interview with 10 pharmacists recruited earlier and already established in general practice, across 20 newly forming PCNs in England. Observation of a compulsory 2-day history taking and consultation skills workshop.

Analysis A modified framework method supported a constructionist thematic analysis.

Results Remote working during the pandemic limited opportunities for patient-facing contact. Pharmacists new to their role in general practice were predominantly concerned with improving clinical knowledge and competence. Most said they already practiced person-centred care, using this terminology to describe transactional medicines-focused practice. Pharmacists rarely received direct feedback on consultation practice to calibrate perceptions of their own competence in person-centred communication, including shared decision-making skills. Training thus provided knowledge delivery with limited opportunities for actual skills acquisition. Pharmacists had difficulty translating abstract consultation principles into specific consultation practices.

Conclusion SMRs were introduced when the dedicated workforce was largely new and being trained. Addressing problematic polypharmacy requires structural and organisational interventions to enhance the communication skills of clinical pharmacists (and

STRENGTHS AND LIMITATIONS OF THIS STUDY

- ⇒ This study provides a rigorous, in-depth, qualitative investigation of the views of clinical pharmacists on their training needs and person-centred skills development for patient-facing work in primary care.
- ⇒ The sampling approach captured perspectives from pharmacists new to and familiar with working in a general practitioner practice setting across 20 diverse primary care networks in England.
- ⇒ The study has limitations common to exploratory qualitative studies and the COVID-19 pandemic placed limitations on pharmacists' capacity for patient-facing work, training delivery and data collection in primary care.
- ⇒ Comparison with observation of actual rather than reported consultation practice is needed to further ground the findings in the empirical realities of practice.
- ⇒ Studies of this nature could be complemented by investigations of the perspectives of patients receiving observed structured medication reviews.

other health professionals), and their use in practice. The development of person-centred consultation skills requires much more substantial support than has so far been provided for clinical pharmacists.

BACKGROUND

In the UK, the pharmacy profession has been increasingly encouraged to take on more patient-facing roles, thus extending the traditional dispensing role involving short, instrumental, transactional and patient interactions.¹ Standards and other forms of professional organisation for a growing pharmacy role in general practitioner (GP) practices have been slowly emerging.^{2,3} The move towards these more clinically focused primary care pharmacist roles, involving consulting with and treating patients directly, coexists with a longer tradition



of pharmacists employed by some individual GP practices for a range of medicines optimisation work. Evaluation of the 2015 pilot scheme, 'Clinical Pharmacists in General Practice', launched by National Health Service (NHS) England, found wide variability in the understanding of the clinical role and a mismatch between what GPs expected of pharmacists and what pharmacists said they felt ready and able to do.⁴ Pharmacists recognised gaps in their knowledge and skills for this particular role, but were not always able to identify specific learning needs.⁴

Building on this earlier clinical pharmacy pilot,⁵ a clinical patient-facing pharmacist role has been introduced into GP practices in England while new primary care network (PCN) structures were forming.⁶⁻⁸ This coincided with the COVID-19 pandemic. PCNs comprised a group of GP practices collaborating locally, which allowed them to access additional funding distributed at PCN level for extra staff under the NHS Additional Roles Reimbursement Scheme (ARRS). The purpose was to deliver enhanced services to improve population health locally. The clinical pharmacist role was one of the first ARRS roles funded in this way and was soon followed by a contractually required PCN structured medication review (SMR) service.

The aim of the ARRS scheme was to 'grow additional capacity through new roles' to help solve the workforce shortage in general practice.⁹ There was disquiet about the level of funding to meet the expected PCN workload prior to the pandemic.¹⁰ Early research indicates huge variation in how ARRS roles, including the new clinical pharmacist role, were being implemented and integrated into primary care teams¹¹ and a lack of agreement about whether clinical pharmacists should prioritise the requirements of the PCN contract or the 'core' work of general practice.⁸ As unincorporated networks of practices, PCNs were not legal entities and so could not employ staff themselves.⁸ This resulted in a range of operational models; some ARRS pharmacists were working in teams shared across practices in a PCN, some were based solely in individual GP practices while others were contracted through third-party agencies.⁸

New ARRS PCN clinical pharmacists must enrol in or have qualified from an accredited training pathway, a revised version of the training provided on the 'General Practice Pharmacist Training Pathway' (GPPTP) in the 2015 pilot scheme.¹² The 18-month 'Primary Care Pharmacy Education Pathway' (PCPEP), run by the Centre for Pharmacy Postgraduate Education (CPPE), provides a combination of 28 study days, peer learning sets, assessments and access to three support functions—an education supervisor (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). After the PCPEP is completed, those pharmacists who are not already prescribers undertake 6-month independent prescriber training, totalling 2 years to complete the pathway and become a prescriber.

A review into the extent of NHS overprescribing, particularly in primary care, and ways to reduce this, has identified the SMR as, 'an ideal tool to help people with problematic polypharmacy'.¹³ Problematic polypharmacy has been identified as a 'wicked' problem adding to the treatment burden experienced by patients,^{14 15} and as a relational challenge involving decision-making under circumstances of complexity and uncertainty.¹⁶ The contract specification for the new PCN SMR service described a patient-centred, outcome-focused approach to medicines optimisation comprising an invited, personalised, holistic review of all medicines for people at risk of medicines-related harm, lasting 30 min or more.¹⁷ Target groups included those taking 10 or more medicines; using potentially addictive pain management medication; on medicines commonly associated with medication errors; living in care homes; or with severe frailty and recent hospital admissions or falls. SMRs were required to be attentive to health literacy and conducted in line with the principles of shared decision-making by pharmacists who have, or are in training for, a prescribing qualification and have advanced assessment and history-taking skills.¹⁷

Interchangeable use of the terms patient-centred and person-centred occurs within pharmacy, as in other healthcare professions,¹⁸ with some preferring 'person-centred' because it connotes broader identities and social contexts than a recipient in a healthcare encounter.¹⁹ 'Health literacy' is another concept used in the SMR specification which invites multiple interpretations.²⁰ Different conceptualisations of person-centred care concur on the importance of communication and relationships between patients and healthcare professionals.¹⁸ Shared decision-making is recognised as a core component of NHS personalised, patient-centred care.²¹ This requires effective engagement between health professionals who possess expertise in the effectiveness, probable benefits and potential harms of treatment options and patients willing to share 'expertise' in their social circumstances, values, preferences and attitudes to illness and risk. Guidelines on shared decision-making are published by the National Institute for Health and Care Excellence.²² The aim is to replace unwarranted variation with warranted variation arising from the goals and preferences of informed patients.²³

Research outside of pharmacy shows the practical and ethical tensions inherent in translating rhetoric about person-centred support and shared decision-making into actual healthcare practice.²⁴⁻²⁶ Few studies have focused on health professionals' perceptions of specific communication behaviours necessary for shared decision-making,²⁷ and little is known about the effectiveness of strategies for communicating uncertainties in clinical practice.²⁸ Similarly, there is little evidence to show that the specific standards and guidance available on pharmacy consultation skills support pharmacists' delivery of person-centred care in practice.²⁹ Studies of pharmacist medication review services, including those described in person-centred terms, have shown a pragmatic medication focus rather

than a person-centred approach, with reviews simplified and adapted to facilitate delivery within time-pressured organisational constraints, largely comprising pharmacist-led information provision.³⁰⁻³⁴

This study explores the perspectives of clinical pharmacist working in forming PCNs on consultation training provision and skills acquisition for the new SMR service, with a particular focus on person-centred consultation practice. It forms part of a research programme to develop and evaluate person-centred and clinically appropriate ways of highlighting alcohol within pharmacist reviews of medications.³⁵ It is one of a number of studies seeking to understand pharmacist medication review practice and skills as a potential site for intervention^{30 36 37} and find better ways to manage alcohol in general practice.³⁸⁻⁴⁰ Findings on early implementation of the SMR have been reported elsewhere.⁴¹ These showed that while some PCNs with more established pharmacists were making progress in developing a distinct SMR service, others were mainly fulfilling a variety of routine medicines-related tasks in response to backlogs, some of which were labelled as SMRs, if they were with patients in the SMR target groups.⁴¹ Findings on clinical pharmacists' experience of and confidence in discussing alcohol with patients in their new role are reported elsewhere.⁴²

METHODS

The intrinsic nature of the acquisition of complex skills required for person-centred medication review practice called for a longitudinal design; the study therefore followed ARRS clinical pharmacists over time as they undertook PCPEP training and became established in the role. Study recruitment procedures were informed by consultation with CPPE and the research programme's Pharmacy Practitioner group. A purposive sample of general practices across PCNs in Northern England was established using pharmacist workforce and SMR activity data, and researchers telephoned existing and new PCN contacts to recruit pharmacists into the study. Ten newly appointed ARRS pharmacists in 10 PCNs in Northern England were interviewed three times between September 2020 and February 2022 (n=30 interviews). Final interviews took place during the spread of the Omicron variant. A compulsory PCPEP 2-day history-taking and consultation skills workshop conducted by video conference in 2020 was observed with permission from CPPE providers and the attending group of ARRS participants. Contemporaneous notes were taken. Direct observation of consultation training informed interview topic guides and provided empirical data on content and pharmacist participation in the workshop for triangulation with reports of consultation training in interviews.

In addition, 10 clinical pharmacists in 10 other PCNs across England already established in GP practices, were interviewed once between February and May 2021 (total interviews n=40). Interviews sought perspectives on the skills and training required for the new SMR service and

how their role fitted with new ARRS colleagues. Recruitment here used opportunistic sampling and snowballing recruitment techniques. A leaflet describing the study and inviting pharmacists to contact the research team was distributed via national pharmacy organisations and on social media. This group provided further data on SMR implementation and skills development from pharmacists already employed by individual GP practices pre-ARRS and prepandemic who were now working with or adjacent to new ARRS pharmacists in the PCN environment. Interviews lasting between 35 and 70 min were conducted via video call by one of two researchers (MM, TGM) using a semistructured topic guide (available as an appendix). This was developed iteratively and individually tailored in follow-up ARRS interviews. Audiorecordings were professionally transcribed and pseudonymised.

A modified framework method was used to organise and present data from transcripts and field notes.⁴³ This supported a constructionist thematic analysis.⁴⁴ With the topic guide forming the initial framework, interview transcripts were coded in NVivo V.1.0 to produce a list of initial descriptive themes identifying current perspectives on person-centred practice and consultation skills development and training and noting changes in these over the course of the interviews. Comparative analyses identified common, recurring and conflicting perspectives, paying attention to the ways in which accounts were constructed. Rather than being a comparative study of two distinct cohorts (ARRS and GPPTP recruits), the key analytic focus was on understanding factors impacting individual skills development for SMRs within the dynamic and emerging primary care landscape. This focus also reflected the extent of observed heterogeneity within the two groups, and we make some comparisons between the groups within the elaboration of study findings. Preliminary analysis of sample scripts, subthemes and the final analytic narrative were discussed with coinvestigators. Reporting follows standard for reporting qualitative research (SRQR) guidelines.⁴⁵ Findings will inform further development of a complex intervention.³⁰

Patient and public involvement

The study sits within a research programme working with an experienced patient and public involvement (PPI) group who were consulted throughout the research process. Programme coproduction and PPI practices have been reported at length elsewhere.⁴⁶ PPI members on the project steering group took part in discussions about these findings.

RESULTS

The pandemic entailed changes to anticipated patient-facing services and working practices. Implementation of the SMR service during the course of the study was slow, and often delegated to ARRS pharmacists in training on the PCPEP, that is mostly without a prescribing qualification or advanced assessment and history-taking skills.⁴¹



All pharmacists in the study were currently working with patients remotely, by telephone, with most of the new ARRS pharmacists yet to meet a patient face-to-face other than at a COVID-19 vaccine clinic. Pharmacist experience and training prior to working in the new PCN setting was varied within and between the cohorts, as were current PCN working conditions. Individual GP practices were in the process of determining any distinctions between the role of ARRS clinical pharmacists and existing GP practice pharmacists.

Only 1 of the 10 pharmacists newly employed into an ARRS clinical pharmacy role had prior experience in a GP practice. Three were appointed at senior or lead pharmacist level, two of these had been qualified for 4 years and one for 30 years. Two of these, including the one qualified for 30 years, were on the PCPEP pathway, and the one with prior GP experience had completed it. Two out of the 10 ARRS pharmacists were prescribers. One was provisionally registered as a pharmacist, completing this by the third interview. One continued to study for a clinical pharmacy diploma while on the PCPEP pathway; another had completed this while in hospital pharmacy. Eight had applied for their PCN position from community pharmacy, one from hospital pharmacy and the one from a GP practice pharmacist position. Some were working within one GP practice, while others split their time across the PCN. Most had pharmacist colleagues within the PCN, but others were the sole pharmacist. Two moved to a different PCN during the study, one of these had three different posts during the life of the study, starting at senior PCN level and moving to a more autonomous post within a specific GP practice.

All 10 established GP practice pharmacists were prescribers, and most were in or taking on senior and leadership roles in PCNs and Integrated Care Systems (new structures of partnership developed after PCNs with a view to integrating health and care services⁴⁷). Nine had completed the GPPTP pilot training scheme, launched in 2016–2017.⁴ One, working half time in community pharmacy and a prescriber, was currently on the new PCPEP pathway along with pharmacists she was supervising. Others had indirect contact with the PCPEP through working with or supporting new ARRS colleagues. Prior to coming into GP practice, five had worked in hospital pharmacy, two in community pharmacy and three at commissioning level (ie, assessing needs, planning, prioritising, purchasing and monitoring health services rather than providing them⁴⁸). Further participant characteristics are in table 1.

Those who were employed and established as GP practice pharmacists pre-PCN are designated by an X before their identifier number in the results to differentiate them from the more recent ARRS PCN recruits, the key focus of this study.

Connecting pathway to practice

There was wide variation in levels of reported engagement with the PCPEP pathway and in how pharmacists thought

Table 1 Self-described participant characteristics

Pharmacists	ARRS	Already established in GP practices
Age range	25–52, mean 35.2	35–53, mean 41.8
Sex		
Female	7	8
Male	3	2
Ethnicity		
White British	8	7
British Pakistani	1	0
British Persian	1	0
British Indian	0	2
British Bangladeshi	0	1
ARRS, Additional Roles Reimbursement Scheme; GP, general practitioner.		

the training aligned with the contexts in which they were working. Ongoing COVID-19 pandemic induced limitations to patient contact in practice meant that there was limited opportunity for practising new skills with patients. PCPEP training, planned for in-person delivery, had to be redesigned for remote delivery and some interviewees and their colleagues were experiencing delays or were on waiting lists. Observed and reported course content continued to be focused on in-person practice rather than the current mode of telephone practice, much of which was conducted through cold calling and was perceived by most pharmacists as a potential barrier to person-centred practice development because it inhibited signalling and picking up on social cues.

All ARRS pharmacists had access to advice or clinical supervision from GPs, most of this in the form of GPs reacting to queries as they arose. Not all ARRS pharmacists, however, had access to senior pharmacist mentorship. Most were trying to minimise taking up the time of busy colleagues. Those working on the vaccine programme or medication-related administration were finding it difficult to complete other tasks. Some felt overburdened at times and others under-used. Early on, an experienced pharmacist coming from community pharmacy said she felt she was in education, rather than work and training, mode:

I don't feel like I've got a job particularly, it's just a bit learning this and learning that...I'm learning clinical stuff; I'm not learning any clinical skills...Because it's all remote...I think the clinical skills development has to be when you are actually going to use it...I could train now and not use it for 6 months and I would need training again...reflective essays and writing...about difference you've made to practice...that's laborious and you don't get a lot out of it.... (pharmacist identifier number 5)

Even the most highly motivated talked about the difficulty in being able to link and consolidate their learning during the pandemic, 'because there's so many events going on...sometimes I feel like I forget' (7).

Shifting the PCPEP online limited the opportunities for peer interaction. Those pharmacists who had attended one of the iterations of the pathway pre-pandemic said the residential study days provided them with a very useful and supportive peer network. This contrasted with groups formed online via social media, which were described as more instrumental than social; people only contacted each other when there was an issue. Online attendees reported frustrations with the amount of reading, navigating multiple websites and colleagues keeping silent and opting out of group activities in video workshops. Many thought that doing the pathway as originally designed would be less, 'laborious and lonely...I think everybody feels pretty much the same...that while it's worthwhile, it does feel like a chore' (5).

Lack of 'hands-on' preparation for a challenging and complex role

Pharmacists with longer experience in primary care said the best use of their primary care training pathway was to complement learning in practice and pharmacists had to be proactive to get the most out of it. In terms of preparation for patient-facing work, some interviewees in both ARRS and prior GPPTP cohorts compared their prior professional pharmacy training negatively to the much more 'hands-on' training of doctors, dentists and nurses:

I never saw a patient in my whole degree really and then you get taught, oh well you need to do these concepts...too much talk about concepts and not enough hands-on. (9)

...certainly when I was at university, we weren't taught...what's bread and butter for nurses and doctors...we haven't got quite the hands-on skills...I think people hoped that GPs would take you under their wing a bit and teach you as you went...like they would a registrar, or something. My experience has been, although they're very supportive and very nice, they don't want to do that bit...they almost expected you to drop in fully formed.... (X7)

There were examples of more senior pharmacists attempting to take those new to the role, 'under their wing'. One ARRS pharmacist, who quickly took on a senior role after working in a GP practice with a 'brilliant training culture', received training which mirrored that of a GP registrar:

I got really good input from the GPs in training... what pharmacists lack is that hands on face-to-face clinical skills...I think it takes a lot more input than some people think. (9)

Another pharmacist with longer experience in primary care said her own learning had been 'sink or swim' on the job and she saw her current supervisees struggling

with, 'the softer skills like how do you negotiate things with a GP, if you've got tension between staff?...if you've got a patient being really difficult and you then run late in clinic, how do you manage that?' (X5).

Acquiring clinically relevant skills

Becoming a prescriber and improving clinical knowledge were the key priorities for pharmacists new to a general practice primary care role and there was a perceived lack of 'clinical' focus to the training offered. Most pharmacists said they preferred the specific clinically focused elements of both the GPPTP and the PCPEP pathways that were delivered by a GP training company to other content which they described as more, 'wishy-washy' (3, 5), 'fluffy' (9) or 'box-ticky' (3, X7). Some said they struggled with the reflective style of learning on the pathways but appreciated the chance to have some thinking time outside of the usual routine.

Some interviewees in both cohorts said the clinical content of their pathway was 'too basic' for those with experience in general practice or a clinical diploma (eg, X4, X3, 8) and that some pharmacists now on the PCPEP were not gaining enough actual clinical experience. An ARRS interviewee coming from hospital pharmacy wanted more 'clinical information', categorising material on interaction with patients as 'non-clinical' and better learnt in practice:

I just...wanted...what you need to know for general practice, here's how you deal with...X disease, here's how you deal with this medicine...because I feel quite confident on how to interact with patients and all the non-clinical things...I learned more by just having practise of it rather than reading models. (8).

Most of the more recently qualified pharmacists had received some communication and consultation skills training at university level and had experienced objective structured clinical examinations. Some of these said this provided an essential foundation and considered learning about consultation models from PCPEP as more relevant for others, those who lacked confidence or did not have this in their university background.

An ARRS pharmacist with prior GP practice experience, now in a senior role which, during the time of the study, was focused more on supporting new pharmacists than directly delivering patient-facing practice, spoke about the limitations of 'counselling' training in pharmacy and why he had subsequently developed his own consultation skills by taking a level two counselling course, 'I actually think it's something everyone should do' (9):

...[W]hen...pharmacists get trained, they do a lot of counselling patients...which is just really telling the patient something. They don't do a lot of...consultation skills where...you...open up that idea of the patient has the choice, you need to give them the options and they can decide...that style of consultation is really important...because it becomes less of you're

telling them off...Pharmacy school is, right or wrong, this or that...it's almost like the guideline is the law... whereas the GPs don't have that view...I think it makes pharmacists feel uncomfortable, the lack of certainty...They want it to be, this is the answer, right or wrong...the other thing pharmacists don't get a lot of...is that sort of debrief style of reflection on their own work. (9).

He and a few others had sought out opportunities for peer review and shadowing in order to improve their own practice:

I don't know how many times I've done consultation skills and role-play and I still hate it. I think the biggest change for consultation skills is when you're at work. And I think even though I absolutely detest it, having my clinical supervisor sit with me when I do some phone calls, listening to the conversation and feedback is much more worthwhile. (5)

Pharmacists with prior community pharmacy experience but little opportunity to work with patients in their university courses felt they had developed their communication skills on the job, 'without...realising', but were aware that, '...all sorts of theory comes into it' (10):

...there are things which get covered now in the undergraduate course which probably weren't even thought of back 30 years ago and in particular things like communication skills, patient-centred consultations...any skills I have in that respect have been based on dealing with people, finding what works well, what doesn't work so well and building it up myself rather than ever being taught it...it is common sense, really. (10)

Many ARRS interviewees and some of those with longer experience in GP settings shared the idea that communication skills development was 'common sense', and some were ambivalent about the extent to which skills, often assumed to be inherent, or acquired on the job, could be taught on courses:

...consultation skills...either you have them inherently or you need to practise them, and I don't feel like they're something that responds particularly well to classroom teaching...you can't role play consultation skills... 'cause you'll always be aware that the other person isn't a patient...they're not going to lash out at you, they're not going to go off on one, they're not going to take things the wrong way. (3)

Consultation skills workshop observation

ARRS pharmacists at an observed PCPEP workshop on how to practically apply consultation skills (passing an online assessment was a pre-requisite of attendance), build confidence and put the patient at the centre of consultation, said they felt confident or fairly confident in their skills, though less so for working with older people,

children, people with dementia or people with learning disabilities. As anticipated by CPPE facilitators, in exercises aimed to show that, 'medicines are like catnip to pharmacists' and, '...the patient's agenda...should not be the last thing we think about', pharmacists focused in on medication.

Facilitators explained practice expectations had shifted from, 'a product centred to person-centred approach' and that this meant challenging the assumption, 'we know best', understanding patient illness beliefs, 'although these may not make sense to you' and recognising patients, 'are the experts in themselves'. Pharmacists were introduced to consultation models to provide a structure to put the patient at the centre. Small groups discussed how they would implement each stage of the Calgary Cambridge model. This model for structuring medical interviews was developed by Silverman and colleagues and is used widely in GP training.⁴⁹ During the debrief, facilitators gave examples for content and possible phrasing, stressing the importance of clinical empathy, non-verbal language and building rapport with appropriate body language and good eye contact. The Calgary Cambridge model was described as very structured but 'you learn to adapt it'.

Other consultation models and the 4Es model of coaching (Engage, Explore, Evaluate, End) were then briefly introduced as alternatives. The mnemonics TED (Tell, Explain, Describe) and ICE (Ideas, Concerns, Expectations) were recommended for eliciting patient concerns, with the option of adding Lifestyle factors and Feeling to the latter (L)ICE(F). The concept of 'the golden minute' was used to stress the importance of allowing time for a patient to speak uninterrupted. Small groups then suggested what they would do differently with five different groups—older people, people with dementia, children and young people, people with learning disabilities and people with physical disabilities. The debrief stressed consent issues and treating people as individuals.

The second section of this workshop gave each of the 32 attendees a chance to try out some of this in consultation scenarios with one of four actors. Pharmacists were encouraged by facilitators to, 'try something new'. Each consultation was observed by a peer who used a checklist to offer feedback; '...the learning here is in feedback from peers'. Actors also gave feedback. Pharmacists had 2 min for preparation, 5 min of role play and 8 min feedback. Feedback from both peers and actors featured lots of generic praise. Pharmacists were polite and interested but none of the actor patients was given a 'golden minute' by a pharmacist, very little time was spent building rapport and little attention was paid to establishing the patient's concerns.

Pharmacists again focused in on medications, asking lots of questions to identify opportunities to give information, with many offering to go through all the person's medicines with them. The form of questioning assumed patients would readily know and provide the medical

names of their drugs and doses. Feedback from some actors provided more specific constructive feedback:

...deal with the patient. When you get someone closed don't try and direct us to go through the medications, say what you see hear in front of you. 'You are sounding as if your mood is quite low.' Get the bull by the horns very sensitively. Don't be scared of the answers you might get. (Actor)

Discussions among the pharmacists showed that, despite the person-centred aims of the exercise, they were looking for the 'catch' and the correct answer, so approached the people in the scenarios as a medication problem or puzzle to be solved.

History-taking workshop

The second part of the workshop, on history-taking and record-keeping, took place the following week and featured content by a retired GP who described his first slide on the golden minute as the most important of the day. Throughout the workshop he stressed the importance of listening and trying to look beyond a presenting symptom to understand what is going on for people. He advised pharmacists to, 'listen to the answers and respond, don't default to the next question'. He said throwing lots of questions at people, 'clips their wings' and health professionals often interrupt. He described consultations as, 'a process, they flow' and cautioned against templates that, although helpful, can turn everything into a yes, no binary and might miss things coming from the patient. He said it had taken him 27 years so far to become confident with consultation skills; it was always frightening because of gaps in knowledge and because it was interaction with humans.

The workshop introduced mnemonics to help diagnose pain and red flag symptoms to look out for. Exercises included scenarios acted by a facilitator followed by a debrief. One featured an urgent call from a mother of a child with a rash. This had pharmacists asking lots of closed questions to see if it was meningitis. When asked what they would do differently after this workshop, answers included: 'try to be less robotic with questions; give patients the golden minute; be more open with questions; listen more; give preference to patient's story—let them talk to gain info'.

Takeaways from consultation skills training

Recall of the detail of their training pathways receded for all interviewees with time. Receiving feedback from patients and peers in practice and working with actors in the PCPEP training workshop, while limited, were identified by most ARRS interviewees as the most affecting part of their consultation skills training:

...we did a face-to-face session where we had actors and we had to do a consultation...and...be observed doing it. And then we got real time feedback from the actor themselves and said how we made them feel, and from other people who were looking on, and

that was one of the best days I've had through the entire CPPE [PCPEP]...Because it's really hard to know how you're making people feel. (4).

Large groups in training meant that most of the time in a PCPEP consultation workshop was spent observing others. Most interviewees remembered the point of the exercise was that they were missing important information and the concerns of the patient:

...they actually did put a bit of sort of real world into it...remembering not to just go into a consultation with what I want to talk about...let the patient have their time...Everyone likes to think they do shared decision making but...there's...a difference between telling someone that this is the guidance and this is what you should be doing ...I think for me the training's just, sort of, highlighted other ways of...approaching that conversation. (6)

A pharmacist who found roleplay very uncomfortable did not feel he had benefitted from the exercise because it was hard to 'play' himself (3). A pharmacist who had recently attended the workshop said she handled a call with a patient differently afterwards:

I think it's the listening thing. So although I feel like I listen and give them time, I was more aware of consciously doing that. (5).

There was widespread endorsement of the idea of listening, though acquisition of listening skills for person-centred practice was work in process.

Achieving person-centredness

Pharmacists on both pathways inevitably engaged with patient-centred discourse: '...it's always holistic and patient focused (5). Some currently on the PCPEP pathway felt they were actually changing their practice to embrace more listening, but it was easy to slip into old habits. Giving advice in a person-centred manner was recognised as challenging:

I think I'm getting there...even yesterday I was on the phone to a patient...and I was on the brink of saying to her, you know you really should be using inhalers and they'd be much better for you...you do think that you're one of these people who puts the patient first but then when you're actually in the situation you sort of think, actually, I'm not sure I am. I need to really think again about how I'm doing this. (10)

...it's more difficult to do...I'll tick the box and we'll move on...you see people [supervisees] doing reviews like that, because it's just much easier, you've got to make a real conscious decision to do the other thing really and it's difficult. (9)

...I know that I should be doing less [talking] now, I'll try...but...unfortunately, I completely struggle to put that into practice and to make that change. (6)

Most pharmacists across the sample said they were much less confident about handling complex cases or sensitive subjects like alcohol and opioid deprescribing, and those with longer experience in the GP practice setting were more aware of the complexity of SMR consultations.⁴¹ One ARRS pharmacist, employed early enough to have had some face-to-face contact with patients, was aware in retrospect that their earlier perceived confidence did not match their skill-level:

...I think with more knowledge, you...become consciously incompetent because you realise what you don't know...which I guess is better than being unconsciously incompetent. (4)

This pharmacist, who changed post three times during the study, was the only one to articulate a clear sense of practice development in terms of patient-facing practice while in an ARRS role.

Many pharmacists across both new ARRS and existing GP practice groups still articulated their medication review practice in terms of achieving 'compliance' and perceived giving a recommendation and asking if the patient was OK with that as fulfilling the shared decision-making brief:

I give them my recommendation...but at the end of the day, it's their own health and I let them decide what they want to do...it's better to be shared decision-making...because then you're going to get good compliance. (1).

I'm also addressing the patient's ideas, what their concerns are. Are they compliant? (X8)

Pharmacists with less experience in the GP primary care setting were waiting for a template to be developed for SMRs and were unsure how this would fit with the consultation models recommended in PCPEP training. An ARRS pharmacist who was very keen to adopt a person-centred approach was aware that she found it hard to have confidence in what she was doing without feedback, especially from patients:

I can't help people if I'm thinking they're a target. I need to think of them as a person...and I think it's really crucial that shared decision making is kind of like the pivotal backbone of a consultation because without that communication and decision making from the patient side...how do we know they're going to comply?...so I was talking to a patient. I thought I was doing a really good consultation...and doing shared decision-making. I put the phone down. One of the pharmacists she said, oh no, you sounded a bit harsh...I thought...I worded it really well...And only when that pharmacist said that did, I think, oh what if they're thinking that?...it's the patient that you need to engage with...and that can only be done by getting patient feedback. (7)

Some ARRS pharmacists thought shared decision-making was more relevant for medications like statins but not for others where there was 'no choice' about treatment recommendations (5), or more relevant for initial prescribing rather than reviewing medication (8). In contrast, an ARRS pharmacist more advanced in doing SMRs spoke about her experience of its importance for deprescribing:

I think approaching it in the right way is key to deprescribing...And people scoff at it...oh it's just woolly pharmacy practice stuff but actually, shared decision-making makes my life easier as a pharmacist, and it puts the patient in control as well. (4)

DISCUSSION

Expectations that all health professionals will engage empathetically with patients have proliferated in an era when systemic problems inhibit such practice.⁵⁰ ARRS pharmacists appointed during the pandemic were working in varied circumstances during a period of volatility in which they had few opportunities to practice their patient-facing skills or to receive the feedback required to improve their levels of proficiency. Thus, we found almost no change in terms of interviewee responses to person-centred practice to report over the time of this study beyond recognition that this was a requirement that they continued to try to fulfil. Those employed earlier in GP settings were more aware of the complexity of medication reviews in primary care and were more clinically confident. With notable exceptions, their reported pragmatic, 'common-sense' approach to time-constrained medication reviews was also limited in depth of person-centredness, though not to the same extent. Pharmacist-delivered medication reviews have to date involved little continuity of care and telephone-only contacts during the pandemic may have intensified pressures for short, transactional interactions. While speaking about their existing practice in person-centred terms and recognising that patients have preferences, pharmacists in the study mostly continued to describe a traditional paternalistic communication style with a passive patient, with the pharmacist controlling information flow and therefore decision-making.⁵¹

SMRs require a step change in communication skills from the medication reviews with which most new ARRS pharmacists were familiar. As well as knowledge of treatments for multiple conditions, this involves developing requisite skills to conceptualise the complexity of patients' clinical and social situations, discuss the balances between different potential harms and benefits and to know when and how to raise possibilities for deprescribing or changing prescriptions. Pharmacists coming into the GP practice setting brought limited consultation experience and many took the skills involved in talking to patients somewhat for granted. Limited opportunities to experiment and receive direct feedback on consultation

skills left it to ARRS pharmacists to link the rather abstract knowledge gained on the PCPEP pathway with their own tacit, experiential knowledge of medication reviews. GP clinical supervision was mostly reactive, and the availability of experienced senior pharmacist mentorship was patchy. This undermined opportunities for more proactive consultation skills development in and through clinical practice. Long established habits in pharmacy medication review practice, prompted by concerns for patient safety, combined with new local incentives and contextual cues, were producing quick-fix information-giving practices in SMRs with minimal deliberative decision-making, and some attempts to transcend these limitations.⁴¹

The PCPEP facilitated familiarity with person-centred ideas and a language for describing practice, the effects of which may be challenging to observe. ARRS pharmacist's confidence in their person-centred consultation skills did not translate readily into competence and was challenged when describing tackling subjects considered difficult or sensitive. This theory to practice translation challenge was also observed in the consultation workshop when actors playing patients did not conform easily to the usual question-and-answer format. Feedback given during the workshop was mostly from peers who were not proficient or expert themselves, and observation by peers with limited skills focusing on a list of requirements for assessment, may have inadvertently introduced a tick list that could draw focus away from the patient.⁵² The workshop learning was somewhat disconnected from experiences of practice and 'hard' clinical knowledge was prized by interviewees over 'soft' communication skills, despite the presentation of these by trainers as central to history-taking and diagnosis. Workshop facilitators encouraged pharmacists to adapt the Calgary Cambridge and other models to their own style. Without practice-based guidance, however, this carried the danger of inadvertently diluting important content.

Although medication reviews are complex interactions, these are often performed mechanically as mundane tasks by pharmacists, as well as GPs.¹⁶ The ARRS clinical pharmacist role and how it fits with others as part of a multidisciplinary team is still emerging. It relies on developing interpersonal and interprofessional relationships in the midst of a workforce crisis with pressured GPs in work settings unexpectedly altered as a result of the COVID-19 pandemic. Material derived from GP training on consultation skills and history-taking on the PCPEP paid little attention to the possible differences between current doctor-patient and pharmacist-patient roles. For example, patients were yet to have a clear sense of what their relationship might be with a clinical pharmacist and thus what to expect from the consultation. Patient clarity and trust in the GP role may help secure good communication, with implications for how clinical pharmacists introduce their own roles, and the SMR service, when providing information on how primary care services are organised. The particular challenges of providing a service that feels person-centred through remote

telephone consultations was not directly addressed in observed training.⁵³

While it might be true that, 'the single most powerful tool in medicine remains the conversation between patient and physician',⁵⁴ models of person-centred communication remain aspirational for pharmacists as well as doctors. This study echoes others pre-pandemic that find that in spite of its strong policy push, person-centred interventions such as shared decision-making have not been adopted widely into healthcare practice,²⁵ the importance of shared decision-making as a method of care is underestimated,⁵⁵ and acknowledgement of patient preferences continues to be positioned as at odds with, rather than integral to, evidence informed practice.⁵⁶⁻⁵⁷ Pharmacists in both ARRS and earlier cohorts still used the language of 'compliance' which is out of keeping with contemporary person-centred discourse. Ironically, the concept of 'concordance' originated with a review of medicine-taking by the Royal Pharmaceutical Society of Great Britain.⁵⁸ This interprets consent to treatment not as an end in itself but an ongoing process and recognises people as resistant to instruction where this seems contrary or irrelevant and where their own perspectives go unacknowledged.⁵⁹ However, a 'dominant compliance paradigm' in pharmacy practice persists.⁶⁰ The initial presumption is that patients lack information rather than, for example, have unmet needs or poorly coordinated care. Educational interventions to improve person-centred practice have focused on the self-reflection of the individual practitioner, although it is not clear how or if this works to disrupt the repetitive habits encouraged within organisational routines.⁶¹ Overestimation of treatment effects,⁶² incentives to prescribe⁶³⁻⁶⁴ and ever closer ties between pharmaceutical companies and organisations that regulate and sanction the use of their products,⁶⁵⁻⁶⁶ are all also implicated in the problematic polypharmacy for which the SMR is proposed as a remedy in primary care. This is thus a complex issue requiring systems of care and training to be organised such that SMRs can optimally contribute to reducing problematic polypharmacy and improving population health.

CONCLUSION

SMRs were introduced while ARRS pharmacists were new and in training, without time to secure solid foundations for practice in the primary care general practice setting. Remote practice during the COVID-19 pandemic had a major impact on training pathway provision, SMR implementation and conduct. PCPEP consultation training introduced participants to expectations and principles, but further practice development support, (and evaluation of this) is needed to develop grounded skills for person-centred medication reviews. Addressing problematic polypharmacy requires healthcare structural and organisational changes which include enhancing the communication skills of health professionals, and how such skills are actually used in practice.

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REFERENCES

- Atkin K, Madden M, Morris S, *et al*. Community pharmacy and public health: preserving professionalism by extending the pharmacy gaze? *Social Health Illn* 2021;43:336–52.
- Silcock J, Raynor DKT, Petty D. The organisation and development of primary care pharmacy in the United Kingdom. *Health Policy* 2004;67:207–14.
- Anderson C, Zhan K, Boyd M, *et al*. The role of pharmacists in general practice: a realist review. *Res Social Adm Pharm* 2019;15:S1551-7411(18)30135-9:338–45..
- Mann C, Anderson C, Avery AJ, *et al*. Clinical pharmacists in general practice: pilot scheme. Independent Evaluation Report: Full Report. University of Nottingham; 2018.
- Bradley F, Seston E, Mannall C, *et al*. Evolution of the general practice pharmacist's role in England: a longitudinal study. *Br J Gen Pract* 2018;68:e727–34.
- Stewart D, Madden M, Davies P, *et al*. Structured medication reviews: origins, implementation, evidence, and prospects. *Br J Gen Pract* 2021;71:340–1.
- NHS England and Improvement. Network contract directed enhanced service contract specification 2020/21 - PCN requirements and entitlements. 2020.
- Mills T, Madden M, Stewart D, *et al*. Integration of a clinical pharmacist workforce into newly forming primary care networks: a qualitatively driven, complex systems analysis. *BMJ Open* 2022;12:e066025.
- NHS England. *Network contract directed enhanced service: additional roles reimbursement scheme guidance*. BMA NHS, 2019.
- Pettigrew LM, Kumpunen S, Mays N. Primary care networks: the impact of covid-19 and the challenges ahead. *BMJ* 2020;370:m3353.
- Baird B, Lamming L, Bhatt R, *et al*. Integrating additional roles into primary care networks. London: The Kings Fund; 2022. Available: <https://www.kingsfund.org.uk/publications/integrating-additional-roles-into-primary-care-networks>
- NHS England. Primary care networks: A briefing for pharmacy teams. 2019. Available: <https://www.england.nhs.uk/wp-content/uploads/2019/06/pcn-briefing-for-pharmacy-teams.pdf>
- DHSC Medicines. Good for you, good for us, good for everybody: A plan to reduce overprescribing to make patient care better and safer, support the NHS, and reduce carbon emissions london. 2021. Available: <https://www.gov.uk/government/publications/national-overprescribing-review-report>
- Swinglehurst D, Fudge N. The polypharmacy challenge: time for a new script? *Br J Gen Pract* 2017;67:388–9.
- May C, Montori VM, Mair FS. We need minimally disruptive medicine. *BMJ* 2009;339:bmj.b2803.
- Swinglehurst D, Hogger L, Fudge N. Negotiating the polypharmacy paradox: a video-reflexive ethnography study of polypharmacy and its practices in primary care. *BMJ Qual Saf* 2023;32:150–9.
- England NHS. Network contract directed enhanced service. structured medication reviews and medicines optimisation: guidance. 2021. Available: <https://www.england.nhs.uk/wp-content/uploads/2021/03/B0431-network-contract-des-smr-and-mo-guidance-21-22.pdf>
- Mitchell P, Cribb A, Entwistle V. Vagueness and variety in person-centred care [version 1; peer review: 2 approved]. *Wellcome Open Res* 2022;7:170.
- Barnett N. Person-centred over patient-centred care: not just semantics. *Pharm J* 2018.
- Liu C, Wang D, Liu C, *et al*. What is the meaning of health literacy? A systematic review and qualitative synthesis. *Fam Med Community Health* 2020;8:e000351.
- NHS England. About shared decision making. 2022. Available: <https://www.england.nhs.uk/shared-decision-making/about/>
- NICE. Shared decision making: NICE guideline [NG197] london. 2020. Available: <https://www.nice.org.uk/guidance/ng197>
- Mehta R, Lehman R. A solution for guideline overkill-more guidelines or shared understanding? *JAMA Intern Med* 2020;180:1508–9.
- Entwistle VA, Cribb A, Watt IS, *et al*. "The more you know, the more you realise it is really challenging to do": tensions and uncertainties in person-centred support for people with long-term conditions. *Patient Educ Couns* 2018;101:1460–7.
- Légaré F, Adekpedjou R, Stacey D, *et al*. Interventions for increasing the use of shared decision making by healthcare professionals. *Cochrane Database Syst Rev* 2018;7:CD006732.
- Timmermans S, Yang A, Gardner M, *et al*. Does patient-centered care change genital surgery decisions? the strategic use of clinical uncertainty in disorders of sex development clinics. *J Health Soc Behav* 2018;59:520–35.
- Zeuner R, Frosch DL, Kuzemchak MD, *et al*. Physicians' perceptions of shared decision-making behaviours: a qualitative study demonstrating the continued chasm between aspirations and clinical practice. *Health Expect* 2015;18:2465–76.
- Stacey D, Légaré F, Lewis K, *et al*. Decision AIDS for people facing health treatment or screening decisions. *Cochrane Database Syst Rev* 2017;4:CD001431.
- Da Costa DL, Corlett SA, Dodds LJ. A narrative review on the consultation tools available for pharmacists in the United Kingdom: do they facilitate person-centred care? *Int J Pharm Pract* 2020;28:301–11.
- Madden M, Morris S, Stewart D, *et al*. Using qualitative process evaluation in the development of a complex intervention to advance person-centred practice by pharmacists: the medicines and alcohol consultation (MAC). *SSM Qual Res Health* 2021;1.
- Latif A, Pollock K, Boardman HF. The contribution of the medicines use review (Mur) consultation to counseling practice in community pharmacies. *Patient Educ Couns* 2011;83:336–44.
- Latif A, Waring J, Watmough D, *et al*. Examination of england's new medicine service (nms) of complex health care interventions in community pharmacy. *Res Social Adm Pharm* 2016;12:966–89.
- Greenhill N, Anderson C, Avery A, *et al*. Analysis of pharmacist-patient communication using the calgary-cambridge guide. *Patient Educ Couns* 2011;83:423–31.

- 34 Pilnick A. "patient counseling" by pharmacists: advice, information, or instruction? *The Sociological Quarterly* 1999;40:613–22.
- 35 McCambridge J, Atkin K, Dhital R, *et al.* Addressing complex pharmacy consultations: methods used to develop a person-centred intervention to highlight alcohol within pharmacist reviews of medications. *Addict Sci Clin Pract* 2021;16:63.
- 36 Dhital R, Norman I, Whittlesea C, *et al.* The effectiveness of brief alcohol interventions delivered by community pharmacists: randomized controlled trial. *Addiction* 2015;110:1586–94.
- 37 Stewart D, van Dongen A, Watson M, *et al.* A pilot cluster randomised trial of the medicines and alcohol consultation (MAC): an intervention to discuss alcohol use in community pharmacy medicine review services. *BMC Health Serv Res* 2020;20:943.
- 38 McCambridge J, Stewart D. Managing alcohol use in primary care. *BMJ* 2020;371:m4129.
- 39 McCambridge J, Saitz R. Rethinking brief interventions for alcohol in general practice. *BMJ* 2017;356:j116.
- 40 McCambridge J, Rollnick S. Should brief interventions in primary care address alcohol problems more strongly? *Addiction* 2014;109:1054–8.
- 41 Madden M, Mills T, Atkin K, *et al.* Early implementation of the structured medication review in England: a qualitative study. *Br J Gen Pract* 2022;72:e641–8.
- 42 Madden M, Mills T, Stewart D, *et al.* Alcohol the overlooked drug: clinical pharmacist perspectives on addressing alcohol in primary care. *Addiction Science & Clinical Practice* 2023;18.
- 43 Gale NK, Heath G, Cameron E, *et al.* Using the framework method for the analysis of qualitative data in multi-disciplinary health research. *BMC Med Res Methodol* 2013;13:117.
- 44 Braun V, Clarke V. Using thematic analysis in psychology. *Qualitative Research in Psychology* 2006;3:77–101.
- 45 O'Brien BC, Harris IB, Beckman TJ, *et al.* Standards for reporting qualitative research: a synthesis of recommendations. *Acad Med* 2014;89:1245–51.
- 46 Madden M, Morris S, Ogden M, *et al.* Producing co-production: reflections on the development of a complex intervention. *Health Expect* 2020;23:659–69.
- 47 NHS England. What are integrated care systems? 2022. Available: <https://www.england.nhs.uk/integratedcare/what-is-integrated-care/>
- 48 National Health Service England. What is commissioning. 2022. Available: <https://www.england.nhs.uk/commissioning/what-is-commissioning/>
- 49 Silverman J, Kurtz S, Draper J. Skills for communicating with patients 3rd ed. Florida: CRC Press; 2013. 10.1201/9781910227268
- 50 Waring JJ. Doctors' thinking about "the system" as a threat to patient safety. *Health (London)* 2007;11:29–46.
- 51 Parsons J. *The social system*. Glencoe, IL: The Free Press, 1951.
- 52 Abdel-Tawab R, James DH, Fichtinger A, *et al.* Development and validation of the medication-related consultation framework (MRCF). *Patient Educ Couns* 2011;83:451–7.
- 53 Neighbour R. Creating "digital warmth" in remote consultations: BMJ learning. 2021. Available: <https://www.youtube.com/watch?v=VAQE9RTgLGc>
- 54 Timmermans S. The engaged patient: the relevance of patient-physician communication for twenty-first-century health. *J Health Soc Behav* 2020;61:259–73.
- 55 Montori VM, Ruisen MM, Hargraves IG, *et al.* Shared decision-making as a method of care. *BMJ Evid Based Med* 2022;bmjebm-2022-112068.
- 56 Dreischulte T, van den Bemt B, Steurbaut S, *et al.* European Society of clinical pharmacy definition of the term clinical pharmacy and its relationship to pharmaceutical care: a position paper. *Int J Clin Pharm* 2022;44:837–42.
- 57 Sackett DL, Rosenberg WM, Gray JA, *et al.* Evidence based medicine: what it is and what it isn't. *BMJ* 1996;312:71–2.
- 58 Royal Pharmaceutical Society. *From compliance to concordance: achieving shared goals in medicine taking*. London: Royal Pharmaceutical Society/Merck Sharp & Dohme, 1997.
- 59 McKinnon J. The case for concordance: value and application in nursing practice. *Br J Nurs* 2013;22:766–71.
- 60 Salter C. Compliance and concordance during domiciliary medication review involving pharmacists and older people. *Social Health Illn* 2010;32:21–36.
- 61 Potthoff S, Kwasnicka D, Avery L, *et al.* Changing healthcare professionals' non-reflective processes to improve the quality of care. *Social Science & Medicine* 2022;298:114840.
- 62 Treadwell JS, Wong G, Milburn-Curtis C, *et al.* GPs' understanding of the benefits and harms of treatments for long-term conditions: an online survey. *BJGP Open* 2020;4:bjgpopen20X101016.
- 63 BMJ. Too much medicine. 2018. Available: <https://www.bmj.com/too-much-medicine>
- 64 Abraham J. Pharmaceuticalization of society in context: theoretical, empirical and health dimensions. *Sociology* 2010;44:603–22.
- 65 HM Government UK. Life sciences vision: department for business. *Energy & Industrial Strategy and Office for Life Sciences* 2021. Available: <https://www.gov.uk/government/publications/life-sciences-vision>
- 66 Davis C, Abraham J. *Unhealthy pharmaceutical regulation: innovation, politics and promissory science*. London: Palgrave Macmillan, 2013.