Prometheus, Vol. 26, No. 2, June 2008

Beating the Bounds? The Introduction of Pharmacist Supplementary Prescribing in the UK National Health Service

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Abstract *Pharmacists in the UK were granted supplementary prescribing rights in 2003, subject to further training. Most of those now qualified are practising in general medical practices and hospitals. This qualitative study explores GP and pharmacist perceptions of the introduction of pharmacist supplementary prescribing, focusing on the consequences for professional boundaries, power relations and knowledge. GPs have delegated some routine work in specific chronic conditions, and a limited amount of decision making, to pharmacists, (albeit within tightly controlled boundaries). But diagnosis has remained firmly in the hands of GPs; work being delegated in areas where the pharmacist was minimally required to exercise diagnosis and clinical judgement. GPs have continued to exercise control over inter-professional boundaries.*

Keywords: early adopter; innovation; knowledge; power; prescribing; professional

Introduction

Until recently in the UK only doctors and dentists have held prescribing rights. A key policy in the British Government's ten year plan to 'modernise' the National Health Service (NHS) has, however, been the extension of prescribing rights, initially to nurses and subsequently to pharmacists (termed 'non-medical prescribing' by the NHS) in order to deliver improved patient access to medicines and make better use of pharmacists' skills. Non-medical prescribing is founded on the concepts of 'supplementary' and 'independent' prescribing, for both of which the pharmacist must undertake additional training. Supplementary prescribing is 'a voluntary prescribing partnership between an independent prescriber (a doctor) and a supplementary prescriber, to implement an agreed patient-specific clinical management plan with the patient's agreement'.[1] The existing professional hierarchy is maintained by this model, for the non-medical prescriber can only work within a clinical management plan agreed by the doctor. Supplementary prescribing

Prometheus ISSN 0810-9028 print/ISSN 1470-1030 online © 2008 Taylor & Francis
http://www.informaworld.com/journals
DOI: 10.1080/08109020802056524

usually takes place at a GP practice or in a hospital and focuses on specific diseases, eg hypertension. A Designated Medical Practitioner (DMP) is obligatory for each trainee prescriber, and this doctor may become, in effect, the pharmacist's sponsor within the GP practice or hospital, it being a requirement that a prescribing role be identified for the pharmacist prior to the commencement of training.

Supplementary prescribing for pharmacists was introduced in 2003 and the first pharmacist prescribers started work in 2004.[2] By autumn 2005 there were 450 qualified pharmacist supplementary prescribers and 5,700 nurse supplementary prescribers.[3] The extension of independent prescribing to include nurse and pharmacist prescribers was announced in 2005.[4] The first independent nurse prescribers were in place by mid-2006 and the first pharmacist independent prescriber qualified in early 2007.[5] Further training is required to become an independent prescriber and, while a community pharmacist could, in principle, practice as an independent prescriber within the pharmacy, prescribing from the full range of the British National Formulary (BNF) supplementary prescribing, being far more bounded by the requirements for close working with the medical practitioner, would be relatively impractical from the pharmacy.

Despite a prescribing role having to be identified in advance, not all the nurses and pharmacists who qualify as prescribers actually go on to practise. While, in a recent study, nearly 90% of the nurses qualified to prescribe were doing so,[6] slightly less than half of the pharmacists trained as supplementary prescribers were prescribing.[7]

The British Medical Association 'reacted with dismay' to the announcement of independent prescribing by pharmacists and nurses,[8] describing it as 'an irresponsible and dangerous move'.[9] There was some evidence that hospital doctors did 'not feel that pharmacists are the most appropriate healthcare professionals to prescribe',[10] and while there was some support for hospital pharmacist prescribing, it was clear that doctors wished to define and constrain the areas of prescribing in which pharmacists might practice.[11] Some doctors have misunderstood the roles of pharmacist and nurse prescribers, for example over two thirds of hospital doctors in one study were not aware of what supplementary prescribing meant in practice.[12]

Essentially the issue is how an NHS innovation being promoted by the Department of Health and supported by one or more professions allied to medicine (pharmacists and nurses) is viewed by another profession (medicine, and more specifically, GPs). There is an acknowledged (and professionally defended) hierarchy in primary care in which doctors are perceived to be at the top. It might be expected that GP attitudes and behaviours in response to role innovation for other professions would change over time; for example in a study published in 1992, a third of GP respondents in a large survey thought that pharmacists 'should stick to dispensing',[13] although around half the respondents were in favour of being permitted to cross into pharmacists' territory by being allowed to dispense. But the role of the pharmacist in primary care has extended considerably since 1992, for example in acting as prescribing advisers in GP practices, a role which might be thought to challenge GP autonomy, but which has become relatively embedded.

The adoption of the innovation of non-medical prescribing raises a number of questions about what it means to be a knowledge professional where boundaries are changing,[14] besides implications for the management of expertise and associated issues of power and authority. It has been argued that institutional values for professionalism are highly developed in Britain and are embedded in national

systems of education and work organisation which leaves 'the specification of qualifications in the hands of specialist occupational associations',[15] for example the royal colleges and societies in health sciences. By contrast vocational training in other European countries has been influenced by the state rather than the professions.

At the heart of the concept of a profession is the notion of the exclusiveness of knowledge and expertise. Linked with this is task uncertainty and the exercising of 'professional judgement'. Tasks with a high degree of uncertainty and which cannot be 'standardised or rationalised' involve greater autonomy and discretion, professional bodies restricting entry by controlling the training required for qualification.[16] Professional expertise is, thus, contingent upon the concept of a discipline, 'the normative definition (of which) emphasises the existence of established rules', the descriptive definition being 'what is included under the banner of the discipline' namely embodied knowledge and skills.[17] Notions of task uncertainty and the accumulation of professional knowledge, which have been actively constructed over time, are now being challenged by UK Government policy.[18] Expertise is, however, not the sole preserve of a particular group, since it is produced, transmitted, bought and sold in many settings and at an increasingly faster rate. It is bound, therefore, to be transmitted across disciplinary and professional boundaries. Moreover, it commands a price in the marketplace.

Profession-specific knowledge and expertise serve to maintain boundaries between professions which may be problematic where innovation requires interprofessional working,[19] particularly where there is a perceived inequality between the respective professions. Different professionals within healthcare may construct and represent knowledge in different ways.[20] The definition of a field of work as lying within the province of one profession, rather than another is culturally, rather than scientifically determined.[21] This may serve to achieve greater complementarity or more competitiveness and/or resentment between the parties concerned.[22]

Professional associations are far from being homogeneous communities of individuals. Drazin sees professionals as 'role incumbents who serve as transfer agents to facilitate the movement of information between the profession and the employing organisation'.[23] They are, nevertheless, members of a community of practice[24] and this can contribute to rigidity. A positive relationship between professionalism and innovation is by no means assured since innovation involves changes in the social system, threats to power and status, and the redefinition of tasks and responsibilities.[25] And when responsibility for a task is transferred from one professional group to another, both groups change, as does (in time) their relative power.[26]

In health service provision policy, practice and technology innovations are likely to emanate from universities, pharmaceutical companies and Government. Professionals, thus, become adopters—either from choice or requirement (for example, as part of their NHS contracts). As Rogers has shown, individual potential adopters (when not required by policy to adopt) are inclined to adopt at different points in the adoption cycle, depending on their attitudes towards the innovation, the persuasiveness of the case for adoption, and the availability of role models and change agents.[27] Early adopters have been said to have a pro-innovation bias, a tolerance for risk and ambiguity and seek creative ways around problems.[28] The implication that patterns of adoption by individuals reflect fixed personality traits has, however, been criticised. 'People are not passive recipients of innovations' but seek, evaluate, and develop feelings about innovations; they modify them to fit

different contexts. This, it has been suggested, contrasts 'markedly' with the widely cited adopter categories, which 'fail to acknowledge the adopter as an actor who interacts purposefully and creatively with a complex innovation'.[29] There is, however, no implication in our use of the term early adopter that because an individual or organisation adopts one innovation early in the adoption cycle, they will necessarily adopt all relevant innovations at a similarly early stage, or any particular innovation in its entirety. Perceptive adopters are often selective, adopting specific elements of an innovation. An early adopter is context specific. It has been shown in community pharmacy, however, that early adopters, whose behaviours reflect tolerance of ambiguity and acceptance of higher levels of risk, provide role models for later adopters by demonstrating that adoption is achievable and contributes to practice enhancement.[30] Persuasion theory posits that, once an individual has been exposed to a new message, it is how he/she processes the information that determines whether persuasion will be enduring.[31] It is therefore not surprising that individuals resist making changes that they perceive to run counter to their own or, in the case of GPs, their partnership's perceived self-interest.[32]

This raises the question of the identity of the adopter. We are concerned with individuals (pharmacists and GPs), the organisations in which supplementary prescribing pharmacists work (GP practices) and the financial sponsors of much supplementary prescribing (PCTs), rather than the national organisation for health policy, the Department of Health. Within GP practices and PCTs it is possible, indeed likely, that there are some professionals who favour a particular innovation and some who oppose it.

The exercise of power, in particular coercive and knowledge power, might be anticipated in most public sector organisations.[33] Coercive power, by which is meant the threat of negative consequences from a lack of compliance, can be evidenced in the requirements for targets to be met (and financial penalties for non-compliance); while knowledge power—the control of information—contributes to the embedding of professional boundaries.[34] Coercive power is usually the prerogative of those in senior positions, for example Government ministers, PCT chief executives or GP partners; whilst knowledge power may reside in the hands of younger persons who may exert it in a new treatment or form of service delivery, for example.

Research on changing professional boundaries within healthcare is a growing field. Recent studies of changing nurse roles in primary care,[35] skill mix issues in primary care, the effectiveness of inter-professional substitution,[36] the boundaries between primary care and social care,[37] and the implications of role changes for regulatory bodies[38] have made important contributions. Little is known, however, about GPs' perceptions of prescribing pharmacists, although perceived barriers between GPs and pharmacists have been identified in other contexts.[39] Pharmacists, as adopters of supplementary prescribing, in the first instance, albeit having secured the support of a general practitioner DMP, might be expected to create turbulence across the professional boundary with medicine. And, in particular, the first wave of supplementary prescribers, as early adopters, might be expected to have encountered particular problems.[40] In this paper we focus on members of the first wave of pharmacist supplementary prescribers, exploring GP and pharmacist perceptions of supplementary prescribing in two Primary Care Trusts, addressing, in particular, the approaches of these early adopters to the potentially disruptive innovation of pharmacist prescribing, professional identity (and self-interest) and the exercising of power relations.

Method

In this qualitative study the data were collected through interviews with pharmacist supplementary prescribers, (PSPs) and , uniprofessional focus group of PSPs and GPs. Ethical approval was applied for, and granted, by the NHS Local Research Ethics Committee.

The Sample

Two PCTs in the Midlands were identified as having relatively high numbers of PSPs from the first wave of training. Seven GP practices with a pharmacist prescriber, were asked to participate. Three practices agreed, together with eight PSPs.

The GP practices of Focus Groups (FG)1 and FG2 were located in the centres of two Midlands towns. Practice 1 had a high minority ethnic population and included some areas of social deprivation. Practice 2 was located in a somewhat run-down area of mixed socio-economic status, with some significant areas of social deprivation and a large minority ethnic population. The practice was seeking a new GP partner but was experiencing some difficulty in achieving this. Practice 3 was situated in a small semi-rural town located on the outskirts of a large Midlands conurbation, serving a mainly white middle class population. The variety of arrangements under which a pharmacist worked in each practice highlight the current state of fluidity with regard to terms of contract. Two pharmacist focus groups were held.

The seven interviewed pharmacists were practising in large or moderate-sized towns and in each case they had already worked in the GP practices prior to qualifying as supplementary prescribers. Apart from P5 who was a prescriber in a single-GP practice and P6 who was not prescribing, the pharmacists were attached to large GP practices with five or more partners.

Themes Explored

Topics discussed in the GP focus groups centred on experiences of working with a pharmacist supplementary prescriber, GP perceptions of and attitudes towards non-medical prescribing and patients' reactions to the new service. In the PSP focus groups, discussion largely concerned perceptions of GP acceptance of the prescribing pharmacist; role boundaries between the pharmacist, GPs and nurses; degrees of patient acceptance; training and learning on the job; and relations with non-prescribing pharmacists. Each focus group lasted for between sixty and ninety minutes.

The interviews with pharmacists addressed questions of motivation, perceptions of GP and Primary Care Trust (PCT) support for supplementary prescribing and intentions with regard to independent prescribing. The six prescribing pharmacists were each asked for three critical incidents. Five pharmacists provided three incidents and one provided two.

With the participants' consent the interviews and focus groups were audio taped. Detailed field notes were also taken. The transcripts were subjected to content analysis using the framework approach.[41] They were read by each of the authors, who independently identified themes and categories. Each transcript was then read and reread to locate data relating to the themes of professional boundaries, power, innovation and knowledge seeking both supporting and conflicting evidence.

Results

While the sample size is not sufficient to support generalisation of the findings, we believe that the results offer indications of key issues affecting a specific innovation in primary healthcare during a period of transition.

Approaches to the Innovation

The prescribing pharmacists in this study were amongst the first wave to be qualified as supplementary prescribers. Presenting some of the characteristics of early adopters identified in the literature, they were not deterred by infrastructure difficulties or GP negativity. 'I wanted to become one of the first to do it because I like to …be involved at the outset' (P2); 'I like to jump in there when theres anything new and exciting…no point in being in the second or third round' (P1). Pharmacists were aware of the responsibility of being an early adopter, and setting a precedent of good practice (F2P5). Intra-professional relations were occasionally strained when non-prescribing community pharmacists queried the presentation of a prescribing pharmacists prescriptions. Prescribing pharmacists believed it to be part of their role to build relationships with fellow professionals in community pharmacy (eg.P1). Motivators for prescribing pharmacists included the removal of professional isolation, the ability to influence patients' treatment (P7) and job satisfaction , one pharmacist taking a salary drop in order to become a prescriber (P3).

Supplementary prescribing was implemented through pharmacists taking the initiative in practices where they had already built a relationship with GP partners. For some it seemed a small step where 'in essence I was prescribing except the GP was signing the prescription' (F1P2) This pharmacist put a proposal to the practice 'outlining the potential benefits, because there still wasn't any evidence at the time' (FIP2); 'rather than it being pushed from PCT top down, its pharmacists pushing from bottom up' (FIP7). Most of the prescribing pharmacists worked part-time in one GP practice but P5 initially worked in three.

GP respondents did not perceive pharmacist supplementary prescribing to be an innovation which they actively sought but, rather, as one they (on the whole) accepted following a case made by the practice pharmacist: 'we've probably ended up doing this because we had a pharmacist in-house who…well, actively canvassed' (F1GP2). The conditions under which GPs were prepared to consider pharmacist supplementary prescribing were those under which any other core function of a medical practice might be delegated, namely a selection process which ensured that the person would be committed to the core values of the practice, besides being professionally competent (F2GP3). In the large GP practices there was no unanimous support for pharmacist prescribing, thus highlighting some of the potential difficulties of decision-making in large partnerships. P3 described how 'one of our team members was very negative and still is sometimes…doctors prescribe and nobody else does.' One pharmacist commented 'some GPs had their reservations…it was a bit of a threat to them' (FIP2), while P6 was sufficiently disillusioned by the perceived professional boundaries to be contemplating training to be a doctor. Four pharmacists reported very positive reactions in the GP practices in which they prescribed (FIPsI,2,3,7), P1 reporting 'this practice was brilliant at supporting me.' The importance of the pharmacist's skills being demonstrable in the practice was highlighted: 'The most important bit is clinical competence and just as doctors vary I'm sure pharmacists vary as well' (F2GP2).

While the GP practice makes the decision as to whether to have a pharmacist prescriber, PCTs are the gatekeepers to training. Pharmacists highlighted different levels of support. One PCT was 'always at the forefront…they tend to grasp things quickly …they don't seem to wait around to see what other people are doing' (P2). This contrasted with another PCT reported as 'useless…they weren't interested' (P1). One pharmacist, feared that 'the PCT is not going to allow me to do as much supplementary prescribing as I want to do and the only way around that is to circumvent the PCT' (P3). However the Director of Public Health was said to be 'a very good lateral thinker. I'm sure if there's a clever solution he will come up with it' (P3). If the PCT had no strategy for supplementary (or independent) prescribing and no funding stream for it then, despite having supported pharmacists' prescribing training, the only way forward appeared to be for pharmacists to identify opportunities in GP practices for themselves and to negotiate access and terms.

The level of patient acceptance of pharmacist supplementary prescribing was generally high: 'A lot of the patients actually think he's a doctor' (F2GP1). One GP reported one or two refusals (F2GP3); while one pharmacist reported 'Ive not had a single patient who's refused to see me' (P2) and a GP partner was told by a patient 'this guy's done wonders for me' (P2). Positive patient feedback may have been due, in part, to the longer consultation times offered by most prescribing pharmacists (FG2P4).

Supplementary and in time independent prescribing were perceived to have implications for the future conduct of general practice. One result noticed was that prescribing had become more consistent between GPs (F2GP2). The supplementary prescriber was perceived to be 'more systematic…he has a system and sticks to it (F2GP1). The possibility for the pharmacist to check for several disease states at a single clinic was identified as a potential efficiency (F2GP2). One pharmacist reported that he was 'getting a lot more referrals and…a lot more queries' (P2). But another GP did not view independent pharmacist prescribing in such a positive light 'I would say that given their training neither nurses nor pharmacists should be independent prescribers, I know its coming but I just don't think they've got the appropriate training' (F3GP1).

GPs in F2 appeared to be at ease with the pace of change, recognising that there would be no going back from supplementary (and independent) prescribing and that all boundaries were shifting such that GPs would replace the work transferred to others with more specialist work 'in ten years we won't be doing the job we're doing now' because in a few years time there will be more non-medical than medical prescribers (F2GP2). In view of their difficulty in recruiting another partner, the GPs in Practice 2 had come to recognise that a doctor could be recruited to do fewer sessions, the balance being made up by a combination of pharmacist and nurse-led clinics. Pharmacist respondents perceived independent prescribing to be the skill where 'the staff would notice a real difference' (P7), but new boundaries would need to be drawn between independent prescribers and GPs (P2).

The first wave of supplementary prescribers was beset by practical difficulties but, as early adopters, most pharmacists were sanguine. For example, once qualified, there was a delay of several months before each pharmacist received a prescription pad, without which they were unable to prescribe. Despite the fact that GPs wrote prescriptions on computer, pharmacists were not able to do so because the software at the time would only accept GP inputs. This was tedious and frustrating. GPs were reluctant to perceive value for money if they had to pay for a pharmacist's services

out of their budgets, 'so all of my effort as a practice pharmacist has had to go into saving money, rather than…clinical excellence' (FG1P1).

Professional Identity

Although there was some GP concern about supplementary prescribing it was not unanimous in any of the three medical practices. The pharmacy profession was perceived by one responding GP to be supporting role extension 'to make (the job) more interesting' (F3GP1). While some GPs' accounts directly referred to a sense of professional identity that appeared undiminished by working with a prescribing pharmacist 'I don't feel threatened by it at all '(F2GP3), others expressed anxiety that pharmacist prescribing might be a part of more fundamental changes that could ultimately threaten or undermine the doctor's future existence, 'Is this the start of doctor substitution … undermining the professional position of doctors?' (F1GP1) One respondent suggested that the Government's intention was 'undermining professionalism and technical knowledge' (F3GP1). Another respondent posited that prescribing was integral to the doctor's role: 'If you want to be a doctor, be a doctor' (F3GP2). Pharmacists, on the other hand, believed that they had complementary skills to offer GPs: 'I think supplementary prescribing is partly an educational tool to the GP practice because …we have, in general terms, more expertise with drugs than GPs do' (FGP5). In one practice it was the pharmacist who considered it unsafe to practice on account of a GP writing prescriptions by hand and not recording on the patient's notes what had been prescribed, with the result that the notes recorded a completely different drug from the one that the patient was actually taking 'so I told him and I don't think he was particularly bothered' (FG2P5). The existence of a professional hierarchy was inferred from patients' reported greater tolerance of doctors running behind schedule ' if he's (the pharmacist) running half an hour late they tend to leave the surgery, but if we're half an hour late they'll wait' (F2GP6).

Some GP respondents considered that the prescribing pharmacist had exerted little influence for change within the practice since the remit for chronic disease management was 'already done by our nursing team' (F3GP2). Others acknowledged that the prescribing pharmacist had increased doctors' knowledge 'he encourages us to be a bit more up to date in a way…I think they follow protocols and management pathways more strictly than I would have done a few years ago' (F2GP3) and "he has challenged me over, say, the logic of particular (medicines) and it's been very useful" (F3GP5). The pharmacist working with GPs in F1 was acknowledged to be 'very good' at finding information about particular medicines or even natural remedies (F1GP2). In another medical practice the GPs 'were all keen from the start to have me sitting in on their consultations…they wanted to hear what I thought of the way they'd handled things' (P7).

There was much discussion in each GP focus group on the distinctions between pharmacist and nurse prescribers. GPs seem to have accepted the extension of nurse roles, although there was some ambivalence about prescribing. Since nurse-led clinics were condition-specific (eg asthma) GPs were prepared to acknowledge that 'nurses do it reasonably well' (F1GP3) a colleague adding 'That's because they do it routinely though' (F1GP1). Moreover a perception that nurses 'seem to find it very difficult to take that next step' (F1GP2) may have contributed to GPs feeling reassured that nurses were likely to continue to defer to doctors when undertaking independent prescribing. There was also an indication that the tasks now undertaken by

nurses as part of chronic disease management were considered by GPs to be technical, routine and tedious and they were happy to delegate. But GPs emphasised areas where only they had the requisite knowledge and skills such as diagnosis and interpretation. Nurse reactions to pharmacist prescribing ranged 'from outright hostile' to dependency (P3). Some pharmacists were clear that health professionals' contributions in a GP practice were complementary: 'we're offering something quite different from what the doctor does, or what the nurse is able to do' (F2P5), a view endorsed by P4. Pharmacists were perceived by some GPs to be capable of taking a 'certain level of responsibility…I think a pharmacist is more used to the idea of being… independent, so they're more likely to…take decisions without having to check it out' (F2GP1,2). It was noted that 'the pharmacist without the lifestyle, people-centred approach, would be as bad as a nurse (prescriber) without the high-tech pharmacology' (F1GP2).

Despite optimism about inter-professional relations on the part of most pharmacists in the sample, one commented 'I think it's a very deep, deep mistrust…It goes back to the barber surgeons versus the apothecaries. I think it's as primal as that.' (F1-P1).

Power Relations between GPs and Pharmacist Prescribers

Doctors exercised power in defining the areas where non-medical prescribers might operate; for example, conditions that were measurable and 'treated to targets' such as blood pressure or cholesterol (F1GP1). There was, however, disagreement about which conditions met this criterion (F1GP3). Pharmacists, too, acknowledged their power base with patients who seemed quickly to forget the boundaries within which the PSP worked, noting 'we need to make it quite clear that we are not doctors' (P5).

Professional boundaries were central to the debate about which work should be carried out by doctors and which by professions allied to medicine, and it was here that diagnosis emerged as the central and non-negotiable element: 'there's got to be a core function for each profession, below which you'll become unsafe and that core function really has got, first of all, to revolve around diagnosis before you get to treatment' (F3GP5). Some GPs believed that pharmacists already undertook diagnosis, both over-the-counter and in a medical practice (F3GP2) and P2 had patients referred to him by GPs in the practice 'so Id say "Yes, I can help with the diagnosis" and I don't think the doctors see it as an issue'.

Power relations between GPs and non-medical prescribers were highlighted in descriptions of critical incidents. While some pharmacist respondents felt safe discussing incidents (eg P3) the perception of others was that 'doctors seem to be dealt with more kindly, nurses get the book absolutely chucked at them if they make a mistake' (P5) and some pharmacists were concerned that if they reported a critical incident 'the inspector's going to be knocking at their door' (P5) and this would act as a deterrent to reporting. In several incidents (P1,P2,P6) a GP had failed to record all the medication a patient was taking and it was only through careful questioning by the pharmacist that a potentially serious situation was averted. P2, having been asked to prescribe medication for one disorder, discovered that the patient was already taking medication for another which could have caused a serious adverse reaction. P3 was getting a list ready of patients to see on a particular day and discovered that one of the regular attenders to the clinic had died. Seeking to reassure himself that the patient's medication had not been a

contributory factor the pharmacist looked at the patient's notes and discovered that the cause of death had not been recorded and the GP, when asked 'couldn't remember'. A critical incident involving a patient with coronary heart disease led to the pharmacist (P6) telling a single-handed GP that, as patients' computer records were not being kept up to date, he considered it too risky to continue to work in the practice. In each of these cases knowledge power was exerted up the professional hierarchy from pharmacist to GP.

Coercive power was endorsed to a greater or lesser degree by GPs in all three focus groups, particularly through the General Medical Services (GMS)[42] contract which had been introduced in 2004 and was used as an argument against employing prescribing pharmacists, 'there's no doubt that people are competent and there's no doubt you could envisage a world where it (might) work. The trouble is that's not the world we're working in now' (F3GP1).

Discussion

The pharmacist prescribers who participated in this study had previously established relationships of trust with GPs through their existing work within the practices in which they later prescribed. Extension of their role to include supplementary prescribing was thus negotiated from the position of an 'insider' within the practice and achieved incrementally. None of the practices had taken a strategic decision to appoint a supplementary prescriber through normal recruitment and selection processes. In the GP practice which was more open to pharmacist supplementary prescribing it is possible that this was related to the difficulties the partners were experiencing in recruiting another partner and the (enforced) necessity of considering alternative ways of working.

The way in which non-medical prescribing was introduced into primary care has not maximised the chances of GP acceptance. Government-driven, the policy and its implementation had the active support of the Royal Pharmaceutical Society of Great Britain (RPSGB) and Royal College of Nursing. As already noted, the British Medical Association was hardly a champion for supplementary prescribing and the Royal College of General Practitioners, although more publicly supportive, could not be said to have been enthusiastic. Moreover supplementary prescribing was introduced at a time when many changes were being introduced into primary care. Some of the GPs in our study perceived a hidden Government agenda to de-stabilise the medical profession's power base and, to the extent that GP practices could decline to have a supplementary prescriber within the practice, they could easily impede the NHS agenda. None of the GP focus group participants identified a need for enhanced access to prescribed medicines, one of the government's key arguments for introducing non-medical prescribing.

Supplementary prescribing is tightly framed, geared to the management of chronic conditions and based on a clinical plan that has to be agreed by the original medical prescriber who has the power to enable or prevent the transfer of prescribing. The GP's perception of benefit from adopting the innovation thus becomes the fulcrum of the decision. The future diffusion of pharmacist prescribing in primary care is likely to remain in general practice for the foreseeable future.

An important source of coercive power for GPs was their monopoly of access to patients' computerised medical records, located in general practices and currently generally inaccessible to anyone outside it.[43] The budget for NHS prescribing is held by practices and it is the GPs who decide who can allocate this resource

through prescribing. GPs define the boundaries to clinical activities in their practices, specifying in which clinical areas a prescribing pharmacist (or nurse) may prescribe. The accidental withholding of patient information when GPs omitted, in some cases, to keep patient records up to date, was a potentially dangerous although unintended, use of power. Pharmacists, thus, had no power over the key elements of information and finance relating to prescribing. But, on the other hand, they exercised knowledge power and were acknowledged to do so by GPs who appreciated their greater knowledge of medicines, besides the situations in which pharmacists identified potentially dangerous critical incidents.

GPs displayed ambivalence towards changing role boundaries. While some GPs accepted prescribing pharmacists, acknowledging that they could learn from them and recognising that the nature of general practice would change as GPs take on more specialised roles, others appeared to feel threatened. The status of the GP, earned by a long period of training and validated by the royal colleges was being eroded. Greater task uncertainty, associated with the exercising of professional judgement, was perceived to lie at the heart of the discipline of the medical practitioner. Contested terrain this may now be and doctors, too, are expanding their horizons. Professionalism and innovation may not necessarily be in step; as Sibbald *et al.* demonstrate, when responsibility for a task is transferred from one professional group to another, both groups change, as does the relative power of each group.[44]

The medical practitioners and pharmacists were adopters, rather than initiators of this professional practice innovation, as is the case with most NHS innovations. But, as Rogers has observed, individuals choose to adopt (unless required to do so) at different stages in the innovation cycle, depending upon their construct of the relative advantages of the innovation, their propensity to take risks or require certainty, their desire to be venturesome or to follow others, their optimism or scepticism, their ability to engage with others or to be relative isolates.[45] For some pharmacists it was important to be innovators or early adopters, to be amongst the first wave of adopters. They were able to handle uncertainty and lack of support; they were initiators. But even in this small sample some were more venturesome than others. There was some evidence of GP innovator/early adopter behaviours, for example the GP who welcomed supplementary prescribing, and the prospect of independent prescribing. Other GPs presented behaviours typical of later adopters in relation to non-medical prescribing. Contrasting behaviours towards supplementary prescribing pharmacists within a single GP practice could be accommodated since it was up to individual GPs to decide whether to refer patients to a pharmacist prescriber.

There is evidence that GPs in all three participating practices were selectively adopting aspects of pharmacist supplementary prescribing, by 'unbundling' elements of the total package.[46] Routine activities of prescribing in specific condition-based clinics were delegated by GPs, but not the tasks which might involve pharmacists or nurses in exercising 'clinical judgement', including making a diagnosis. Diagnostic work was kept within the doctors' territory, the data demonstrating that GPs saw it as central to their professional identity. However, as the critical incidents show, pharmacists covertly undertook clinical investigation with patients which amounted, on occasion, to diagnosis—to the patients' benefit.

It is clear that any pharmacist who wished to join a primary care team in general practice—either full or part-time—needed to be highly motivated, particularly in the context of the GMS contract and practice-based commissioning which do not appear to offer obvious openings for pharmacists. Without an assertive pharmacist

petitioning for the opportunity to provide in-practice services, even the most supportive GPs were unlikely to have identified supplementary or independent prescribing as a priority. A sense of trust expressed by some GPs in each practice, endorsed acceptance of change through the pharmacist's role extension, paralleling the earlier extension of the practice nurse's role.[47] (It is only in recent years that GPs have adopted the extension of practice nurse roles into chronic disease management to any great extent; in 2002, for example, 'significant concerns' about the nurse's extended role were being voiced by GPs.[48]) These changes are occurring at a time when GPs' own professional boundaries are being extended as GPs with Special Interests encroach on the domains of hospital doctors.

There was recognition that the pharmacists and GPs had different approaches to medical care. Pharmacists were described by GPs as being systematic; working well with detail and routine; being computer literate. Their roles were perceived as being less concerned with task uncertainty and the exercising of professional judgement. GP respondents' emphasis on these latter aspects might reflect the view that the pharmacist was unable to practise the 'art of medicine'. Whilst supplementary prescribers prescribed, doctors diagnosed and prescribed. GPs considered themselves to be more holistic in their approach, with diagnosis at the core of their work. They saw themselves as working flexibly and, on occasion, rather more chaotically.

GPs were clearly aware that Pandora's box had been opened and that medical practices would not be the same once supplementary and independent prescribing had become more widely adopted. GP views were polarised. For some medical practitioners supplementary prescribing presented an opportunity to specialise, or to focus on more complex cases, thereby redefining their boundaries, while for others it was perceived as a threat.

Our purposive GP sample comprised partners in practices with a pharmacist supplementary prescriber who had already established a relationship with the practice as practice pharmacist. The early adopter pharmacists in the sample were likely to have underplayed the difficulties which might have presented seemingly insurmountable obstacles to later adopters. A limitation of this approach is that it may underestimate the concerns and views of GPs who are less supportive of non-medical prescribing. While the sample for this study does not permit any assertion to be made concerning how widespread the issues explored are, the results provide pointers to issues which may be encountered and thereby contribute to literature on the roll-out of innovations in healthcare, as well as to those concerned with practical implementation.

Conclusions

There was, without doubt, some GP opposition to supplementary prescribing. This was prompted, in part, by wider concerns about the erosion of professional identity. Individual GP and practice early adopters, on the other hand, recognised opportunities to develop other services, or to take on more of the 'complex' cases. As boundaries between primary and secondary care shift, GPs, too, have opportunities to undertake tasks which were previously the domain of medical specialists in secondary care. They are being encouraged to register as GPs with Special Interests to undertake, for example, routine dermatological treatment, some psychiatric work and minor surgery.

The terms upon which this supplementary prescribing innovation have been rolled-out in the NHS have not facilitated uptake by GPs. No evidence was

found to support one of the Government's justifications for supplementary prescribing, namely improved access to medicines, in that difficulty of access was not perceived to be a problem. PCTs do not appear to have identified supplementary prescribing as a priority and funding is, therefore, a difficulty. The terms of the GMS contract do not enable GPs to see how the innovation can pay. Until the means can be found by which an innovation in the Government's and pharmacists' interests can be shown to be also in the perceived interests of GPs, voluntary adoption may be slow. In the absence of coercion professionals are more likely to accept innovations in which there is a confluence of self-interest with what is deemed desirable by Government. While pharmacist supplementary prescribing and, in time, independent prescribing, are here to stay, it is likely that only those GPs who both see and welcome opportunities for their own role extension will promote the adoption of this innovation in the future.

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