

Evaluation of the community pharmacy element of an information prescriptions pilot

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Aim: The aim of this paper is to describe the experience of community pharmacists participating in a pilot of an information prescription service aimed at children and their parents, in the wider context of factors relevant to the adoption of new services in community pharmacies. **Background:** Information prescriptions (IP) are conceived to signpost patients to information and advice that will increase self-efficacy. The Department of Health for England has supported IP development with a national programme of pilots, only one of which incorporated distribution of IP through community pharmacies. The new contract for community pharmacy, implemented in 2005, formalized cognitive services, including information-giving about medicines and health, and positioned signposting as a core activity. There are, however, concerns about the impact of such services on the capacity of community pharmacy. **Methods:** Qualitative semi-structured telephone interviews were conducted with key informants: seven pharmacists in four IP pilot community pharmacies in England ('IP pharmacists'), and 22 other pharmacy and medicines information stakeholders. Two interviews were conducted with each IP pilot pharmacist (before and during the pilot), and one with all other stakeholders. **Findings:** IP pharmacists, and other stakeholders, identified a number of benefits for parents of children with long-term conditions in receiving IP, and hoped that most parents would welcome the service. Many anticipated operational challenges consistent with those of other new cognitive community pharmacy services, such as medicines use review. Pharmacists completing IP for parents found it satisfying and straightforward. Recruitment of parents to the pilot, however, fell below IP pharmacists' expectations. The lack of interest in the service from parents, who are assumed to be generally welcoming of information about their child's condition, was both surprising and disappointing to them. IP should be integrated into a wider, integrated medicines and information strategy.

Key words: information; innovation; long-term conditions; medicines; parents; pharmacy

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Introduction

The Department of Health for England (DH) introduced the concept of 'Information Prescrip-

tions' (IP) in 2004, stating that '...In essence an information prescription, given directly to patients by health professionals, would signpost people to sources of further information and support that are relevant to their condition and circumstances' (Department of Health, 2004: 17). By 2008, DH anticipated that patients with long-term conditions, and their carers, would routinely receive information about their condition and, where possible,

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about peer support networks (Department of Health, 2006: 114).

The 20 IP pilots across England employed a range of settings and delivery mechanisms in their operation (Office of Public Management, 2008): initiatives included IP about cancer being delivered by general practitioners (GPs) and district nurses, and IP for young people with mental health problems being delivered through a community-based programme. IPs have five main components:

- **Information content** – the identification of reliable and relevant sources of information
- **Directories** – repositories of information that link to individual IPs
- **Personalized process** – information is provided that is specific to the condition, place and point on the care pathway
- **Issuing or prescribing** – creating and offering an IP to a user or carer
- **Access** – IPs are made available to users through a range of accessible channels, such as face-to-face engagement, the Internet, email, telephone and outreach.

To have IPs available in community pharmacy, at the point where medicines are dispensed and where advice about wider health issues can be given, and where no appointment is necessary, might broaden access and opportunity for patients and carers.

The Government is committed to better information for patients, but other commentators have asserted that investment in information as a ‘therapy’ does not match funding for other therapeutic areas such as medicines and surgery (Childs, 2005). Although most commentators welcomed the concept of the IP, some expressed concern that the time needed to work through the patient’s requirements would put undue pressure on the general practice consultation (Anonymous, 2007). It is therefore important to use existing distribution resources effectively, and community pharmacy could offer a cost-effective channel for delivering this policy to the public.

The new community pharmacy contractual framework for England (CPCF), implemented in 2005, contains three tiers: essential, advanced and enhanced services. The contract includes an obligation to ‘support self care and provide signposting services to other sources of help...for people with long-term conditions’ under its essential services tier (Department of Health, 2005: 4). This frame-

work requires community pharmacists to provide information services that extend their engagement with patients with long-term conditions, and IP provision is consistent with this remit. Another service within the advanced services tier of the new contract is medicines use review (MUR). This is an opportunity for pharmacists to discuss their patients’ understanding of their medicines, and to identify unmet information needs. Community pharmacists are already collating local information about health and social care resources within their community that could enhance their ability to perform an IP navigator role (Pharmacy Practice Research Trust, 2007).

Parents of young children are a major group of community pharmacy customers who seek advice and medicines for their family (Royal Pharmaceutical Society of Great Britain, 1996; Birchley and Conroy, 2001). As the most common intervention in health care is the supply of a medicine, most parents of a child with a long-term condition will visit a pharmacy. Thus, it may be possible for pharmacists to engage parents about information requirements and condition management on an ongoing basis.

Parents and carers need to be empowered to give medicines to their children in a safe and effective manner. Whilst it is recognized that written information is not the only means of possible communication, it is known to be one of the best forms of communication when time for dialogue is limited, and it can be referred to at a later time. There was potential for parents to increase their self-efficacy in administering medicines to their children. Ready access to information, both spoken and written, about medicines might increase their belief in their own agency to influence health outcomes for their child by more informed and effective administration (Bandura, 1997). Moreover, the NICE (National Institute for Health and Clinical Excellence) Clinical Guideline on medicines adherence (NICE, 2009) identified information that was tailored to meet the patient’s individual needs as a key factor in supporting patients and carers in joint decisions about adherence to any ongoing treatment.

Operation of the IP pilot in community pharmacy

Parents or carers attending participating community pharmacies to collect medicines in certain circumstances were asked if they wished to

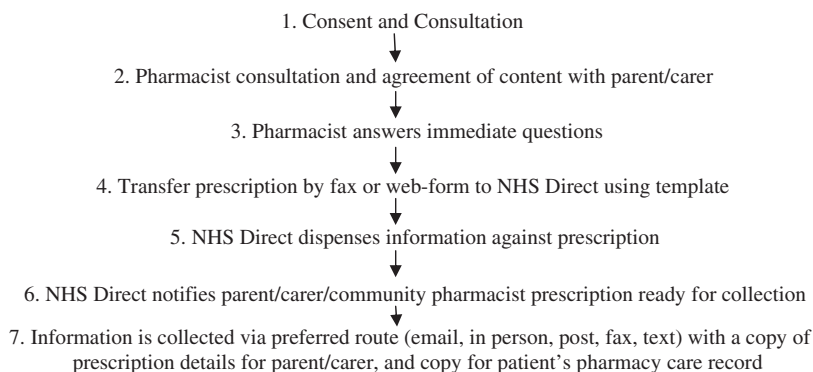


Figure 1 Process for issuing Information Prescriptions

participate in the project. The circumstances of interest were seven long-term conditions (epilepsy; other neurological disorders; renal transplant; cardiac problems; asthma; skin problems, including eczema) or the use of unlicensed/off-licence medicinal products. It was anticipated that the circumstances most seen in community pharmacy would be epilepsy, asthma, skin problems and off-licence/unlicensed medicine use. Diabetes was added after an initial pilot.

The community pharmacist obtained consent, conducted a consultation and agreed the IP content (Figure 1). The IP request could be faxed in hard copy/written form, or uploaded into a web-based form via a portal to the NHS Direct (NHSD) Online Enquiry Service from the pharmacy. The IP was 'filled' by NHSD using a validated system for providing specific medicines information. The filled IP could be collected by the parent/carer according to their chosen method (email, post, fax, or text message from NHSD, or collection from the pharmacy). The pharmacist would retain an ID code for the IP and would be able to access it if desired to see what was sent to the patient/parent using the web-portal.

It is recognized that the experience and opinions of the parents using the service is the ultimate arbiter of its success, or otherwise, but the experience and opinions of the providers also determine whether the service is sustainable. The aim of this paper is to describe the experience of community pharmacists participating in a pilot of an IP service aimed at children and their parents, in the wider context of factors relevant to the adoption of new services in community pharmacies.

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Method

Evelina Children's Hospital in Guy's and St Thomas' NHS Foundation Trust and NHSD undertook a joint project to pilot the use of IPs with children and parents of children with a long-term condition (Tomlin, 2008; Wright, 2008). This pilot was part of a wider programme to pilot IPs in a range of settings and with a range of patient groups by the DH. The national IP pilot was subject to an evaluation of the entire IP initiative.

The work was classed as a service evaluation by the National Research Ethics Service, so ethical approval was not required. The work, however, met all the standards that would be required by the ethics process, including informed written consent and data protection.

Seven pharmacists were recruited from four community pharmacies participating in the pilot: three were branches of large regional or national multiples, and one was from a small independent chain of pharmacies (Table 1). Pharmacies were located across the northwest, west Midlands and southeast of England. Five pharmacists not participating in the pilot were also recruited for their views as potential participants: two were one-pharmacy independents and the other three were from larger multiples. Three strategic personnel from the IP pilot multiples took part, and one from a non-participating multiple. Other stakeholders were recruited to give a wider professional and commercial pharmacy view: five were from pharmacy organizations, and eight more represented other organizations that have an

Table 1 Profile of the participating pharmacies (IP = pilot)

Pharmacy code	Location/ownership	Description	Services in the Pharmacy
IPA	North West Small community Large Regional Multiple	GP practice next door. Post office, mini market, bookmaker nearby	Pharmacy asthma clinic MUR Immunization EHC Smoking cessation
IPB	West Midlands Supermarket Large National Multiple	Longer than average hours – open 8am–8pm. Medium intensity – not too busy. Lots of regular customers. Patients from about 40 GP practices – none close by	Methadone services EHC MUR Smoking cessation Repeat dispensing
IPC	Home Counties Large shopping centre Large National Multiple	High intensity pharmacy with high walk-in business from shopping centre. Shopping centre with local shops and national chain stores	MDS to 40 care homes Methadone services Smoking cessation Weight-loss clinic Cardiovascular health checks MUR Chlamydia screening & treatment
IPD	Greater London Suburban centre Small Local Independent Group	Suburban pharmacy near GP practice	MUR Blood glucose screening Smoking cessation service Cholesterol testing

GP = general practitioner; MUR = medicines use review; EHC = emergency hormonal contraception via patient group direction; MDS = monitored dosage systems.

interest in medicines and information, including primary care trusts.

Sampling was purposeful: the IP pharmacists had been engaged independently by the project team and the evaluation team had no input. The non-participating pharmacists were purposively chosen by the evaluation team from their existing pharmacist networks to represent diversity of pharmacy type (independent, multiple, urban, rural), that is, a wider population of pharmacies, and the stakeholder list was compiled jointly by the project and evaluation team to explore a range of operational and policy perspectives regarding pharmacy and medicines information across England. This wide engagement was considered important in order to gauge the opportunity and challenge for roll-out of IP services in community pharmacy.

All participants were contacted by email, fax or letter with a short message of invitation and an information sheet and consent form for return to the evaluation team, who then followed up by email or telephone to set the interview date and time.

A semi-structured telephone interview schedule was tailored to each group, with common core questions and others specifically geared to the group. The main questions are described in Box 1.

- Schedule A1 – Pre-pilot interview with seven pilot pharmacists (to establish their expectations from the IP pilot);
- Schedule A2 – In-pilot interview with five of the original seven pilot pharmacists (to explore their actual experience of the pilot);
- Schedule B – Interview with five non-pilot pharmacists;
- Schedule C – Interview with three pilot multiple personnel;
- Schedule DE – Interview with 1 non-pilot multiple stakeholder and 13 other stakeholders.

The telephone interviewer reaffirmed consent, and then worked through the appropriate interview schedule. A summary of the operation of the pilot was offered to those who needed information (based on Figure 1).

Box 1 Interview topic examples**(a) Pre-pilot IP pharmacist interview**

- Tell me a little about yourself and your pharmacy?*
- eg, *Pharmacy experience of pharmacist; Location/Type of pharmacy; Other services eg MUR*
- Tell me how you came to be involved in the IP Pilot?
- eg, *Who approached you? Why did you want to get involved?*
- What information did you get about the pilot?
- How do you believe it will work? What will happen?
- eg, *Can you estimate how many children might use the service?*
- What does your staff think about the pilot?
- What benefit (if any) do you think the IP service will have for patients and parents/you and your pharmacy?*
- What barriers (if any) can you see to implementing IP in your pharmacy?*

* Also used in non-IP pharmacist interview

(b) In-pilot IP pharmacist interview

- How have you found the first few weeks of the pilot?
- Do you think that the information/resources you had prepared you well enough for the pilot?
- Please tell me about the IP requests that you have had.
- eg, *How many have you had to date? How did you recruit the parents? Have you had any feedback from the parent? What was the impact of the process on the pharmacy?*
- How does/could the IP service fit with other elements of your daily practice?*
- eg, *Signposting, MUR*
- What benefit (if any) do you think the IP pilot has had for patients and parents?
- What impact do you think the IP service has had on you and your pharmacy? Were there any barriers that you had to overcome?
- What changes would you suggest to the process so that you could cope with large numbers of IP in your pharmacy?
- eg, *Skill mix, IT*
- Would you like to say anything else about IPs?

* Also used in non-IP pharmacist interview

(c) Other stakeholders (Strategic pharmacists in companies and professional organizations)

- Do you think that pharmacy is the right place to deliver IP?
- What benefit (if any) do you think this IP service will have for patients and parents?
- What benefit (if any) do you think the IP service would have for pharmacy?
- What effect do you think the IP service would have on community pharmacists, and pharmacy in general? Would there be any barriers to implementing IP?
- eg, *Skill mix, Workload, IT*

Each digital recording was assigned a project code linked to the consent form but the two were kept securely and separately. Each recording was transcribed verbatim. Each resulting transcript was edited so that any identifying locations or names were removed. Anonymized transcripts

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were then loaded into NVivo 7, a qualitative data analysis management software package. This facilitated data management and coding according to the main themes generated by the participants. The questions within the topic guide formed a natural framework for data analysis. One member of the team took the lead on coding and analysis (NG); another team member (GC) took a sample of the transcripts and independently coded them using the topic guide framework. These two team members had conducted all the interviews between them. Their subsequent discussion of their findings provided a consensus on the main themes to be reported.

Results and discussion

As the pre-pilot IP pharmacist interviews, non-IP pharmacist and stakeholder interviews shared much of the same topic guides, analysis of their combined responses will open this section. The insights and reflections of the in-pilot IP pharmacists on their developing experience will then be described. In the following quotes, where an interchange takes place, 'A' denotes the respondent and 'Q' denotes the interviewer.

Perceived benefits of IP to parents and patients

Respondents cited a number of reasons why the IP service might benefit parents and patients. The concept of IPs, whilst largely unknown to participants before the pilot and evaluation, was of interest to all. The majority considered the IP a natural extension of community pharmacy work in providing information about medicines. Respondents identified a range of potential benefits (and caveats) for parents/patients and pharmacists/companies if this service were to be made available (Table 2).

Many participants felt that parents and children would like to know more about their condition, hopefully producing a positive effect on their ability to manage the condition more effectively. This might include better adherence and control of symptoms, more power in the therapeutic relationship, and possibly reduced duration of medicine use:

...doing the MURs has really opened my eyes to how many people actually do not know what their medication is for...Some

people don't have a clue, they don't know, and I really think something like this [providing IPs] will, (a), give them a little bit more power in terms of making sure that they know what the medication is used [for] – therefore, hopefully, they're using it correctly, they may not need to be on so many, they may not need to use it for that long, get better benefits out of the medication or the effect on the condition.

(ip5)

Other stakeholders perceived that this service was consistent with, and could facilitate, the 'expert patient' model, and that parents might experience fewer feelings of isolation as the IP might link them to support groups.

Some parents may not have previously recognized the pharmacy as an information source, or necessarily the benefit of open access without appointment that was not possible with many other professional-led channels:

Well I think it's a new channel of information for them so, you know, there could be all sorts of benefits come out of that and an improved relationship with us as pharmacists and the team in the store here, and maybe they would feel more confident in being able to ask for information or check information out, you know, again in the future.

(ip3)

Anticipated challenges of providing IP through pharmacies

Several participants warned, anticipating the challenges of providing IP, that IP uptake would depend on whether the parent was interested in the service or not:

I guess you get different types of parents, some ones are very concerned and...they're very interested in...the child's medication. They want to know as much information as possible and for those type of patients then it will be invaluable I would imagine, the more information they can get the better, they will be very interested. Whereas...some mothers might not be interested at all...So, I guess it depends on how interested the parents are in knowing about their children's disease and medication.

(ip2)

Table 2 Perceived potential benefits (and caveats) of the information prescription service for parents, patients, pharmacists and companies

Benefits for parents and patients	Benefits for pharmacists and companies
<p><i>Empowerment</i></p> <ul style="list-style-type: none"> • Better knowledge about condition • Better management of condition • Creating 'expert parent' • Fewer feelings of isolation <p><i>Access to information</i></p> <ul style="list-style-type: none"> • Better relationship with pharmacy team • Recognition of an accessible source of information – without appointment • Links to other relevant pharmacy services <p><i>Better information</i></p> <ul style="list-style-type: none"> • Credibility of the source – NHS Direct • Personalization of information • Enhancing other sources. eg, PIL • Written back-up to spoken consultation <p><i>Caveats</i></p> <ul style="list-style-type: none"> • Will parents actually want the information? • Couldn't they just find it themselves? • Could it have a negative effect? • Is it replacing face-to-face opportunities, or is it a good compromise? 	<p><i>Personal development</i></p> <ul style="list-style-type: none"> • Ability to help parents and patients • Better understanding of the patient/parent perspective • Better use of clinical skills • Opportunity to build relationships with children and young people <p><i>Respect from others</i></p> <ul style="list-style-type: none"> • From patients – appreciation of the caring role • From other professionals – reports from patients • Re-focusing on patient care and responsibility <p><i>Commercial advantage</i></p> <ul style="list-style-type: none"> • Generate loyalty and repeat business • Link to other pharmacy services • Added value in supply chain • Recognition of currently unrewarded service <p><i>Information support</i></p> <ul style="list-style-type: none"> • Reduction of information query workload • NHS Direct support for queries • Convenience and reliability <p><i>Caveats</i></p> <ul style="list-style-type: none"> • Pharmacists must recognize these benefits themselves for it to work • This service is potentially an extra burden on an already overstretched professional/system

Most of the challenges anticipated by pilot pharmacists and stakeholders in the successful operation of the system were consistent with those in other evaluations of innovation and service implementation in community pharmacy: system complexity; time/workload (including skill mix); pharmacy environment and service funding (Pharmacy Practice Research Trust, 2007). Other factors, perhaps more relevant to this particular service, included the nature of the information supplied and the IT capability of the pharmacies. An emerging feature of the growth of commissioned pharmacy services like MUR and smoking cessation has been the struggle of pharmacists to recruit patients (Pharmacy Practice Research Trust, 2007): it is a change from the traditional demand-led practice of dispensing prescriptions and selling medicines. Some respondents felt that

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funding was needed for promoting the service to patients. The challenges of recruiting patients to the IP service were a concern to pharmacists and stakeholders: the MUR experience was fresh in many minds.

Some respondents felt that the parent was under just as much pressure of time as the pharmacist. This might be most acute when the child was first diagnosed, and/or when other children were waiting for them to return:

I think sometimes it's time constraints, people are in a rush, especially if you have a sick child...and so the parent might be coming and just wanting their prescription dispensed and they go because they have got to pick up their other kids from the school.

(ip7)

Some pilot pharmacists had already devised possible strategies for recruiting parents/patients to the pilot. One had specific parents in mind whom he knew quite well and who might be quite good to test the service upon:

A: I have got an idea of which ones to target, but its always a good idea to be able to experiment a bit and get a better idea of how you are going to talk, or what questions to raise or how you are going to bring things up to your patients. There is a few I have got in mind I'd like to start off with.

Q: So you are...piloting it yourself, on people that you know quite well and then you can refine it?

A: Yes.

(ip1)

Another had estimated, using the community pharmacist's electronic patient medication record, the number of patients whose parents might be recruited, and how his staff might flag possible participants on the patient medication record, prescription or dispensing bag:

... We always try and operate a scheme whereby the pharmacists hands out the prescription here so we would normally have an opportunity to discuss prescriptions face to face, so we'll just have a mechanism where we put a sticker or something on the prescription at the dispensing stage – that it's for one of the conditions – and then we'll try and have a word with the patient.

(ip3)

There was division, however, among other stakeholders about the best way to offer IP to parents. Some respondents felt that the best way to utilize the service was to promote it to patients/parents and doctors so that it was requested, not offered. Another stakeholder suggested that the direction for an IP could be added by a prescriber to an existing medicine prescription and would then be 'dispensed' in the pharmacy.

Reflections of pharmacists on the IP experience

Process and satisfaction

The IP pilot system was well received by the pilot community pharmacists, who felt that it was

easy to use. Those who had completed forms with parents confirmed that it was straightforward:

A: We just explained it to them[parents]...and helped them fill out the form and faxed it off.

Q: Yes, excellent, and how was the form?

A: It was good, yes.

Q: Easy enough to follow?

A: Yes.

(ip7)

All pharmacists who had completed an IP said that they felt some satisfaction from the process, and saw the IP initiative as positive for community pharmacy. For example, the IP service was a really useful way to supplement oral advice given with medicines:

It's a useful add-on, yes definitely, yes...a lot of our information is oral, and people can only remember three valid points, you know. Three points by the time you get home, so having something written down for them is very, very handy: something they can refer to again and again.

(ip7)

Disappointing demand

All the participating pharmacists were disappointed with the low numbers of completed IP. Most felt that they had been sufficiently prepared, and had received enough resources from the project team, to get started with IP. All participants felt that the process was straightforward and workable in the community pharmacy. Most pharmacists expressed disappointment that they had not reached the target of 10 completed IPs, and they provided reasons for this result:

I found the whole thing a bit disappointing and surprising because I thought, in principle, it was a brilliant idea and in terms operationally it was fine. I couldn't see how we could make it any slicker because I think the forms were good and all we had to do was fax things off. However, we just didn't get any kind of response from patients at all.

(ip3)

Indeed, one pharmacist felt that they had been too confident about reaching the target, and that this failure was a bad reflection on them:

I will tell you what happened as well is on the planning stage, I think we all thought it

would be quite straightforward to get ten...we should be able to get a lot more. And it's as if we have got egg on our face, really, because...yes, it has just proved to be a lot harder than what we anticipated.

(ip1)

Two main reasons were given for the disappointing uptake: lack of interest from parents, and operational issues in the pharmacy over the pilot period. The latter had been anticipated, and mirrors challenges seen with other cognitive pharmacy services, but there was genuine surprise about parent response:

We just didn't get any kind of response from patients at all...It's almost like the patients don't perceive a need for that information, and I don't know whether it was because of the type of prescriptions that we do in the (supermarket) pharmacy, whether it is that kind of customer that we have. We don't get that many children's prescriptions anyway...and when we do children's prescriptions they are not often for, you know, ongoing conditions: they tend to be just antibiotics or eye drops or something like that, you know, for short-term use. And when it is...a diabetic child or a child with asthma or something, the parents don't seem to perceive a need to have any more support or information than they are already getting from the GP or the asthma nurse.

(ip3)

Most successful completion had happened when the parent was able to fill in the form with the pharmacist at the point of recruitment, in the pharmacy. Several pharmacists reported that if they had given the form to the parent to complete at home and return, none had returned. Commitment, however, to the principle of IP remained strong:

Q: Did you enjoy the idea of being in the pilot? You seem still quite enthusiastic about it. You said you wanted some more [IP].

A: Yes, because I think that's only how we're going to move forward, isn't it?...I mean, you have to try these new things otherwise how are you going to know whether they work? And, you know, it's more accessible for the patient...if they can come into the

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pharmacy...Because there might be questions that they want to ask which they...don't have the opportunity to ask their GP.

(ip6)

The experience of pharmacists participating in the community pharmacy IP pilot could be characterized as disappointing. The number of parents who responded to the invitation to have an IP was substantially below the pharmacists' expectations, and the nominal target for the pilot. The experience of the pharmacist, however, is helpful in highlighting potential solutions to the challenges that the pilot faced.

Parallels with delivering other cognitive services

When asked to explain the reasons for poor uptake of the service, pilot pharmacists cited lack of interest from target users, leading to recruitment difficulties, and competing demands on pharmacists' time.

Because we're quite a fast-paced dispensary I guess the problem comes when it gets busy and the form's been filled out, for us to free up some time and then go downstairs to get it faxed off.

(ip6)

Similar barriers have been identified in delivering other pharmacy services, such as MUR. There are, however, examples of pharmacists who have overcome these barriers for other services by creating a proposition for patients incorporating creative skill mix and effective communication (Pharmacy Practice Research Trust, 2007). The core IP service itself seems very easy to operate, with straightforward paperwork that was welcomed by the pharmacists, and so this is a good basis for future development.

Moving forward with IP

The experience of pilot pharmacists is similar to the experience of other pharmacists attempting to roll out other novel pharmacy initiatives where the responsibility for recruitment lies with the pharmacist and is not dependent on patient demand. The profession continues to grapple with the challenge to deliver pharmacist-led services in meaningful numbers. The challenge for pharmacists

and service commissioners is to provide a credible proposition to potential recipients of the service in order to overcome reluctance to participate. They may need to raise parents' expectations of the information that could be provided with medicines. Pharmacists felt that demand for the service could be created beyond the pharmacy by siting publicity for the service in other primary care settings, notably in GP practices. Other primary care professionals were cited as powerful referring sources. The wider hospital-based evaluation had included very positive feedback from parents, with one mother convinced that the additional asthma information had prevented a hospital admission and another appreciating the opportunity to consider the written information at a time and place to suit her (Tomlin *et al.*, unpublished data). Generally, there is more time for consultation whilst in hospital, but this feedback suggests that there is value in information provision.

The challenge for the wider IP initiative is to provide the patient with a meaningful context within which the offer of an IP is made. Offering a stand-alone IP may be poorly received by patients if they do not perceive an information need. Bandura reflects upon the influence of the interplay of societal subsystems, and the importance of context, on human functioning (Bandura, 2001). If parents are conditioned to see information provision about medicines as the province of the prescriber, be they in hospital or primary care, then they may not associate the community pharmacy environment with anything more than the dispensing of a prescription. Linking the IP process to 'critical events' in the patient's journey may be effective in changing this perception, for example:

- A new prescription
- A change in therapy
- A new diagnosis
- A medicines use review
- An adverse event

The summary report of the evaluation of the IP pilots across England concluded that IP systems needed to be part of a whole systems approach across the local health and social care system, with personalized IPs tailored to each patient's circumstances and needs (Office of Public Management, 2008: 45). Linking IPs to critical events is consistent with this approach.

It is essential that the long-term benefit of this type of information provision be evaluated. A service such as this enables pharmacists to engage with the public about their medicines, and even if the uptake of additional information is modest, the prevention of any hospital admissions might still be considered worthwhile. If the decision to take the medicine has already been agreed when the patient/carer accepted the prescription from the prescriber, the pharmacist has a key role to encourage ongoing adherence to realize the full benefit. Having access to tailored, written information to support these issues could help to increase the self-efficacy of parents and carers.

Limitations of this evaluation

This evaluation explores the experience of community pharmacists in delivering cognitive services to patients beyond dispensing, offering useful insights into the aspirations and challenges of this group of primary care providers. There are limitations, however, to the generalizability of the results. The sample was small and purposive. The pharmacists had volunteered to pilot a new service, and thus represent 'early adopters' of innovation, but it was appropriate to begin exploration with the pharmacists and strategic stakeholders who will influence the spread of these new services. This work provides insights that would benefit from further exploration in a wider group of pharmacists if the IP service expands.

Conclusions

Community pharmacists and community pharmacy stakeholders were generally supportive of the concept of provision of IP from community pharmacies. Pharmacists felt the IP service piloted was easy to operate, with straightforward paperwork. Community pharmacists' experience, however, of providing IP was disappointing, largely due to the low number of parents who wanted to participate. This disappointment was probably heightened because of the pre-pilot conviction of participating pharmacists, and other stakeholders, that this service would be of great interest to parents. The other main challenges cited by pilot pharmacists were competing demands on their time. Pharmacists referred to IP as a useful 'add-on', and drew on their experience

of MUR to ground their new insights. Other primary care professionals were cited as powerful referring sources and advertising sites. There is continued enthusiasm and commitment from respondents to develop an integrated IP service for parents and children.

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References

- Anonymous.** 2007: More coordinated approach to health information provision needed. *Pharmaceutical Journal* 278, 272.
- Bandura, A.** 1997: *Self-efficacy: the exercise of control*. New York: Freeman.
- Bandura, A.** 2001: Social cognitive theory: an agentic perspective. *Annual Review of Psychology* 52, 1–26.
- Birchley, N.** and **Conroy, S.** 2001: Over the counter medicines in childhood: issues and concerns. A narrative view of the literature. *Paediatric and Perinatal Drug Therapy* 4, 161–67.
- Childs, S.** 2005: Information prescriptions (editorial). *He@lth Information on the Internet* 44, 1–2.
- Department of Health.** 2004: *Better information, better choices, better health: putting information at the centre of health*. London: HMSO.
- Department of Health.** 2005: *Implementing the new community pharmacy contractual framework: information for primary care trusts*. London: HMSO.
- Department of Health.** 2006: *Our health, our care, our say: A new direction for community services*. London: HMSO.
- National Institute for Health and Clinical Excellence.** 2009: *Medicines adherence: involving patients in decisions about prescribed medicines and supporting adherence* (clinical guideline 76). London: NICE. Available at <http://www.nice.org.uk/nicemedia/pdf/CG76NICEGuidelineWord.doc>
- Office of Public Management/University of York/GfK NOP.** 2008: *Evaluation of information prescriptions: final summary report*. London: OPM.
- Pharmacy Practice Research Trust.** 2007: *National evaluation of the new community pharmacy contract*. London: RPSGB. Available at <http://www.rpsgb.org.uk/pdfs/pharm-contracteval.pdf>
- Royal Pharmaceutical Society of Great Britain.** 1996: *Community pharmacy: the choice is yours*. London: RPSGB/BMRB.
- Tomlin, S.** 2008: Pharmacists should dispense information. *Pharmaceutical Journal* 280, 475.
- Wright, M.** 2008: Information prescriptions marking time. *Pharmaceutical Journal* 280, 561.