Medicine-related services in community pharmacy: public preferences for pharmacy attributes and promotional methods and comparison with pharmacists' perceptions

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Abstract

Background

Public awareness of pharmacy services designed to support use of medicines is low, yet little is known about how the public view promotion of these services or their preferences for the attributes of pharmacies from which they would like to receive them.

Objective

To compare the public's preferred attributes of pharmacies and methods for promoting medicine-related services with community pharmacists' perceptions of their customers' views.

Method

Parallel surveys of the general public, using a street survey, and community pharmacists, via a postal survey in South East England.

Results

Response rates were: public 47.2% (1000/2012) and pharmacists 40.8% (341/836) respectively. Pharmacists' perceptions of customer preferences for using the same pharmacy, independent ownership and personal knowledge of the pharmacist were higher than actual public preferences. More pharmacists also thought approachability and previous good service would be important than the public. The public's desires for long opening hours and for a pharmacy with a good relationship with their doctor's surgery was higher than pharmacists believed. The majority of the public prefer not to interrupt a pharmacist busy in the dispensary, which was not perceived by pharmacists as a factor. Pharmacists' perceptions aligned more with the preferences of regular medicines users and frequent pharmacy users.

Both groups viewed direct recommendation as the most effective approach for promoting pharmacy services, particularly by doctors and pharmacy staff. Pharmacists' expectations of the effectiveness of posters and mass media methods were much higher than those of the public.

Conclusions

Pharmacists and pharmacy owners must ensure good relationships with local medical practices to enable them to maximise opportunities for using the promotional methods judged most effective in encouraging use of medicine-related services. Staff must be approachable and enable access to pharmacists ensuring perceptions of pharmacist busyness are not a deterrent.

Introduction

Community pharmacists provide information and advice about medicines they dispense or sell to the public and increasingly provide additional cognitive services to support and improve medicines use, either funded by government or third party payers. Examples of these are the Home Medicine Review (HMR) service in Australia, Medication Therapy Management (MTM) services in the USA and the Medicines Use Review (MUR) and New Medicines Service (NMS) in England. While research has investigated the provision of these services from the perspectives of both pharmacists and users separately, relatively few studies have compared the views of pharmacists and potential service users.[1-3] Studies in the USA have explored the expectations of potential users of MTM services and researched the factors they view as important in selecting a pharmacy.[4,5] Consumers' and carers' views on preferences for new pharmacy services have also recently been explored in Australia.[6-8] However, no similar work exists in England, studies instead concentrating on determining the actual use of pharmacies with different attributes and the services they provide, rather than the reasons for use.[9-11]

What is known is that public awareness of medicine-related services is low, both in England[12,13] and elsewhere.[5,14,15] Most people prefer to seek advice about medicines from their family doctor, rather than a pharmacist.[11] In the UK, the Royal Pharmaceutical Society has highlighted the need for greater public awareness of pharmacy services designed to support medicines use.[16] Increasing awareness to improve public demand for services such as these may be required, but relatively little work has explored how this should be achieved.

Leaflets describing services are a common method advocated by professional organisations and national templates for such leaflets are available.[14,16] The leaflet describing the Australian HMR service was however viewed by researchers as not explaining adequately how problems

with medicines may occur and the role of the pharmacist in identifying and helping to resolve these.[14] Meanwhile a study investigating the language used in leaflets promoting the English MUR service found they portrayed the MUR as a "traditional pattern of patient-professional relationship with the pharmacist now in charge of educating the patient".[17] No work has explored whether leaflets are however the best method of promoting these services in England, although in the USA, a small study involving 163 people using eight pharmacies found preferences for promoting pharmacy services were: weekly grocery store ads (68.6%), in-store signs (51.0%) and flyers attached to prescription bags (36.0%).[18] Other US studies suggest that marketing approaches involving personal contact, such as relationship marketing, are most useful, because patients need to understand the service and experience it to derive benefit, hence appreciate the service's value.[19] This approach, as opposed to mass media campaigns, selects patients with similar needs and promotes new services to those perceiving benefit from existing services. However a study comparing methods of promoting these services found no differences between active (face-to-face offers and telephone calls) or passive approaches (letters and bag stuffers) in service uptake.[20]

The perceptions of English community pharmacists on public or consumer preferences for pharmacies and promotion of their services have also not been sought. Nor have any studies in England compared the views of pharmacists with those of the public whom they serve. This study therefore aimed to obtain the views of English community pharmacists on their perceptions regarding public preferences for pharmacy attributes and promotional methods, and the actual preferences of the public and to compare the views of both groups.

Methods

Two surveys were conducted between September and December 2012, one involving the general public, the other community pharmacists. Approval was obtained from a University Research Ethics Committee (Medway School of Pharmacy Ref nos: 010912 and 020912).

Questionnaire development, piloting and distribution

Public questionnaire: A previously validated questionnaire used to obtain public views on pharmacy public health services[21] was adapted for this study using findings from a focus group involving members of the public, which sought views on medicine-related services (Supplementary material).[12] The questionnaire included a series of statements describing attributes of pharmacies, staff and practices, with which respondents were asked to indicate agreement (using the options agree, don't mind, disagree). A list of potential promotional methods for medicine-related cognitive services was provided, with which respondents were asked to indicate the likelihood of each encouraging them to access these services (using the options yes, maybe, no). Demographic data included: gender, age, ethnicity, educational level, and postcode for assessment of deprivation status. Open questions allowed respondents to indicate any additional preferences for pharmacy attributes and promotional methods.

Pharmacist questionnaire: This was designed to overlap with the public questionnaire, enabling comparisons to be made, covering pharmacists' opinions on peoples' preferences for the same attributes and their views on whether the same promotional methods would encourage uptake (Supplementary material). Demographic details gathered included: sex, years qualified, role in pharmacy, pharmacy type and location. Open questions were used to elicit additional views perceived public preferences for pharmacy attributes and effective promotional methods.

Piloting: This involved 25 members of the public and five pharmacists known to the research team. Both groups were asked to complete the respective questionnaires and provide

comments on its relevance, suitability for purpose and ease of use. This resulted in minor amendments to both questionnaires.

Distribution: The public survey was conducted using interviewer-assisted completion, face-to-face with members of the public, recruited at High Street locations in ten towns across the county of Kent, noting the number who declined. Interviews were carried out by ten students trained to ensure a consistent approach. Quota sampling was used, with a target of 100 respondents per town, to ensure that, as far as possible, respondents were representative of the county in terms of gender and age. Passers-by were approached by a researcher and invited to participate. Initial screening questions excluded people under 18 years of age and qualified or training health care professionals.

The pharmacist questionnaire was sent by post to all 836 community pharmacies in Kent, Surrey and Sussex, followed by a second mailing and telephone call to non-responders.

Data analysis

Data were analysed using SPSS v22. Use of regular medicines by the public was dichotomised into any or none, and frequency of pharmacy use was dichotomised into frequent (at least once per month) or infrequent (less than once a month/never) to facilitate analysis. Spearman's correlation was used to assess the relationship between regular medicines use and frequency of pharmacy use. Chi-square tests were used to assess differences in the proportions of the public and pharmacists agreeing to statements covering the same attributes and to evaluate the effect of both regular medicines and frequency of pharmacy use on public views. Missing data were excluded from analysis. Public preferences for promotional methods were dichotomised into Yes and No/Maybe, to facilitate binary logistic regression analysis, which included variables found to have an influence on preferences for promotional methods. Due to the large number of comparisons made, a p value of <0.001 was used to indicate

statistically significant differences between pharmacist and public responses. Free–text responses to open questions were categorised and quantified.

Results

Response rates and demographic details

Response rates were 47.2% for the public survey and 40.8% for the pharmacist survey. Demographic characteristics for both groups are shown in Table 1. The quota sampling ensured representativeness of public respondents in terms of age, gender and deprivation status and the pharmacist respondents were similar to national data in terms of pharmacy ownership, role and years qualified.[22]

Approximately half the public respondents (509; 50.9%) used a pharmacy at least once a month and 605 (60.5%) used regular prescription medicines. The number of medicines used was positively associated with higher frequency of pharmacy use (Spearman's r=0.352; p<0.001), however there were 85 people (8.5%) who indicated frequent use of a pharmacy but were not regular users of medicines. Conversely 180 (18.0%) regular medicines users used a pharmacy less than once every two months. There were 248 (24.9%) who claimed they had experienced a review of all their medicines in a private room (MUR) and 194 (19.4%) who recalled receiving advice about a new medicine in a private room (NMS). Of the pharmacists who completed questions relating to MUR and NMS provision, 95.0% (284/299) indicated they had provided at least one MUR and 82.2% (254/309) at least one NMS in the previous month.

Public preferences for attributes of pharmacies, staff and practices

Overall, the strongest preferences expressed were for pharmacies being located near to home (83.7%) or the doctor's surgery (79.9%); regarding staff characteristics, pharmacists appearing approachable (87.4%) and previously helpful staff (83.1%); and regarding practices, staff who

make it easy to speak to the pharmacist (81.6%) (Table 2). However a high proportion of the public also expressed a preference not to interrupt a pharmacist busy in the dispensary (84.0%).

<<Table 2>>

More regular medicines or frequent pharmacy users indicated preferences for using the same pharmacy, a pharmacy where pharmacists and staff know them, for privacy and for good working relationships with their doctor, compared to those not using regular medicines or pharmacies frequently (Table 3).

<<Table 3>>

Statistically significant differences in expressed preferences and perceived needs for different pharmacy attributes were also found in relation to age, work status and gender, but not for ethnicity, deprivation status or educational status. Respondents aged 65 or over were significantly more likely to prefer to use the same pharmacy than those aged 35-64 and 34 or younger (76.0%, 66.1%, 59.6% respectively), one where they recognise the pharmacist (72.8%, 56.5%, 53.2%) and the staff know them (58.1%, 40.5%, 47.5%). Preferences were reversed in relation to using pharmacy in a supermarket, with those aged 34 or younger having the highest preference compared to those aged 35-64 and 65 or over (28.9%, 19.0%, 13.4% respectively). Respondents aged below 65 were more likely to prefer a pharmacy near to where they work (69.9%, 62.2%, 29.8%) and one open in the evening (77.8%, 77.6%, 63.6%). Fewer respondents who were working full-time preferred to use the same pharmacy each time than those working part-time, retired or not working (57.6% versus 73.4%); those in work were more likely to prefer a pharmacy near to where they work (68.8% versus 40.5%) and one open in the evenings (78.75 versus 68.1%).

Proportionally more female than male respondents indicated a preference for a pharmacy where they recognise the pharmacist (65.3% versus 52.6%), for a pharmacist the same sex as them (28.4% versus 13.6%), not to speak when others can overhear (67.6% versus 47.9%), not to share their reasons for asking to speak to the pharmacist with staff (54.8% versus 41.4%), for staff to make it easy to speak to the pharmacist (86.9% versus 76.1%) and to have a conversation in a private room (48.2% versus 35.0%).

Differences between pharmacist perceptions and public views

The views of pharmacists differed significantly from views expressed by the public (Table 2), but were more in line with the preferences of regular medicines users and frequent pharmacy users. Pharmacists generally overestimated people's preferences for using the same pharmacy, independent ownership, personal knowledge of the pharmacist, approachability and previous good service. Conversely, public desire for long opening hours and for a pharmacy which had a good relationship with their doctor's surgery was higher than pharmacists believed and pharmacists did not anticipate that the public prefer not to interrupt a pharmacist busy in the dispensary.

Further reasons for choosing pharmacies

Fifty-six pharmacists (16.4%) made additional suggestions why people may choose a particular pharmacy ((Table 4). These covered efficiency and reliability of services (11), previous good experiences (10) and additional service provision (10), accessibility (5), cleanliness and staff smartness (4), good communication skills (3) and staff continuity (3). Comparatively few members of the public (63; 6.3%) gave additional reasons for choosing a pharmacy. The most commonly cited reasons covered parking and disabled access (12), location (10), efficiency (11) and the pharmacy environment (7).

Preferences for promotional methods for medicine-related services

Overall views of both the public and pharmacists on the promotional methods viewed as most effective in encouraging uptake of services are shown in Figure 1. Those judged most effective all involved direct recommendation, by general practitioners (GPs) or other health professionals, pharmacists and their staff or friends and family. However, with the exception of doctor recommendation, significantly more pharmacists than members of the public believed that all potential promotional methods may be effective in encouraging uptake of services. Among the public, factors with most influence on positive views towards promotional methods were: female gender, frequent pharmacy use and experience of one of the services (Table 5). Age and educational level influenced only preferences towards healthcare websites and e-mail. Personal e-mail was preferred by slightly more of non-white ethnicity. There were no differences in preferences among sub-groups for other forms of promotion: TV, radio, local newspaper or leaflets in public places. Binary logistic regression, including gender, age group, ethnicity, education, frequency of pharmacy use and experience of services found that gender, age group and frequency of pharmacy use were the key factors influencing promotional methods (Table 6).

Additional comments on promotional methods were added by 30 (3.0%) members of the public, of which only ten suggested alternative methods: social media (6), apps for smart phones (2), text messages (2). Two advocated GP recommendation, while one felt it was inappropriate (Table 4), others suggested pharmacists needed a pro-active approach. Fifty-three (13.6%) pharmacists commented on promotion including: involving other health professionals (11) or national representative bodies (2), relationships with GPs and their involvement in promotion (10) and difficulties in encouraging patients to take up services (6).

Discussion

Main findings

The perceptions of community pharmacists in our survey about what attributes of pharmacies, staff and practices they believe are important to their customers differed considerably from the views expressed by the general public. There were also significant differences in the views of pharmacists and the public on how effective different promotional methods for medicine-related services may be. Pharmacists recognise that pharmacy location is important, but their perceptions of the need for evening and weekend opening hours fell below those of the public, which were high in all age groups. Convenience is clearly an important factor influencing those who prefer supermarkets, and pharmacies near to place of work, particularly among those of working age, which may have been underestimated by pharmacist respondents. Pharmacists appear to have overestimated public preferences for pharmacies where customers are known and have received previous good service, but their views on this were similar to those of frequent pharmacy users, suggesting that, once established, relationships are important. Both pharmacists and the public viewed being approachable as important, but the perception among the public that they prefer not to interrupt a pharmacist who is busy in the dispensary suggests that this aspect of approachability may need to be considered. The desire for privacy was estimated to be higher by pharmacists than expressed by the public, while a pharmacy which has a good relationship with GPs was higher among the public preferences. Trust in maintaining confidentiality was high, which was recognised by pharmacists.

Direct recommendation was seen as the most effective overall approach for promoting pharmacy services by both pharmacists and the public, but pharmacists had higher expectations of the effectiveness of other methods, in particular posters/leaflets, wherever located, and mass media advertising, than was expressed by the public. Previous experience of services and frequent pharmacy use both influenced views on promotional methods, hence the emphasis on direct recommendation is relevant. Not surprisingly, technological methods

such as health websites and email appealed more to younger people, those of higher educational level and those in work.

Strengths and limitations

This study is the first to compare the views of pharmacists and the public in England on what factors are important in choosing a particular pharmacy and on promoting pharmacy services relating to medicines. Findings from focus groups were used to generate items for the questionnaires, which, although containing primarily closed questions, did include open-ended questions seeking additional views. The two surveys were complementary and covered large geographical areas of England with some overlap; both achieved large sample sizes and reasonable (over 40%) response rates. The public survey achieved a representative mix of age, gender and deprivation of the Kent population and the findings on pharmacy use compare well to other large surveys.[9-11] It deliberately set out to include people who were not frequent pharmacy users or regular medicine users, although the majority were, which reflects national usage data.[9-11] Unlike many other studies it did not focus on users of pharmacies or of medicines-related services.[13, 18,19] The pharmacist responders were representative of the community pharmacies in terms of ownership and delivery of national commissioned medicines-related services.

The public survey used a face-to-face method, which could result in more positive responses, due to obsequiousness bias, which was compared to a self-completed pharmacist survey. However street surveys are a cost-effective method of obtaining public views[23] and can avoid misunderstanding of questions, while face-to-face methods involving pharmacists are less feasible due to time and budgetary constraints.

Implications for practice

Pharmacists in many countries who provide a range of services to support and improve medicines use, in addition to standard advice-giving, need to appreciate the desirability of different pharmacy attributes to potential users of these services. In Australia, consumers want pharmacies which provided patient-centred care, with convenience, prices and pharmacies which meet their expectations being additional factors.[6] Australian pharmacists recognised the consumers' desire for patient-centred care, accessibility and continuity of care, but did not realise their desire for information.[3] Our study suggests that English pharmacists' perceptions also do not fully align with those of potential service users. Pharmacists may not recognise that convenience, including opening times, is a priority for most people, perhaps more than pharmacy ownership, although previous work has shown that English consumers view pharmacy location as important.[11] Loyalty to one pharmacy is mostly important for regular medicines or pharmacy users, but does vary depending on patient characteristics, as has been shown in other studies.[24,25] Relationships, pharmacy atmosphere and quality of previous experiences are also obviously key factors influencing repeat patronage.[26] However, in our study, being known to the pharmacist and their staff and previous good service were judged as important by fewer public than pharmacist respondents.

Other key areas perceived as important by more members of the public than pharmacists were the pharmacy's relationship with doctors and actual accessibility of the pharmacist. For medicines-related services such as MUR or NMS, good relationships with GPs are essential, but our study indicates that these should also be harnessed to help promote these services. Relationships between pharmacists and GPs in England have been suggested to vary from isolation, through communication to full collaboration.[27] While proximity and location are obviously key factors influencing the opportunities for collaborative relationships, the need for mutual professional respect cannot be over-estimated. Without this, the possibility that GPs will promote pharmacy services, perceived by both groups as the most effective method,

appears remote. The Australian model of HMR, in contrast, requires referral from a GP, but has suffered from low uptake.[14] Busyness of pharmacists and pharmacies has been found as a potential barrier to uptake of services in previous studies.[28-30]

Word-of-mouth is obviously a key promotional method highlighted by our study and advocated elsewhere,[18] which pharmacists and their staff need to use effectively themselves, particularly as it costs nothing and requires no permission from others or external co-operation with local service commissioners. Personal recommendations could for example be encouraged by the use of 'pass-it-on' cards, given to people who have received a service for distribution to others who have not. Our findings suggest that posters/leaflets and mass media methods are all potentially less effective, but other studies indicate these methods influence some people.[18,32,33] Mass media methods have been found in users of one US pharmacy to increase awareness but not use of services.[26] Whatever method is used, regular promotional messages are likely to be needed to increase uptake of these important services for medicines optimisation and learning from the potential consumers of these services is essential.[34]

Conclusion

Pharmacists and pharmacy owners should consider the factors seen as important by the public in selecting pharmacies when they require a medicine-related service, where possible ensuring good relationships with GPs, to enable them to maximise opportunities for using the promotional methods judged to be most effective in encouraging uptake of these services. Staff must be approachable and enable customers to speak to pharmacists, while ensuring perceptions of pharmacist busyness do not deter them from seeking to do so.

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Disclosure

The authors report no conflicts of interest in this work.

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Table 1 Demographic characteristics of public and pharmacist respondents

Public respondents		**Number (%)**
Gender (n=999)	Female	526 (52.7)
	Male	473 (47.3)
Age group (n=1000)	<34	280 (28.0)
	35-64	502 (50.2)
	65 and over	218 (21.8)
Ethnicity (n=985)	White	712 (72.3)
	Other ethnicities	273 (27.7)
Deprivation status (N=920)	1 (highest)	157 (17.1%)
	2	166 (18.0%)
	3	172 (18.7%)
	4	223 (24.2%)
	5 (lowest)	202 (22.0%)
Educational level (n=992)	None/primary/ secondary	314 (31.7)
	Further education	359 (36.2)
	Bachelor/higher degree	319 (32.2)
Use of prescribed medicines (n=1000)	None	395 (39.5)
	4 or fewer	376 (37.6)
	5 to 8	172(17.2)
	More than 8	57 (5.7)
Use of pharmacies (n=999)	More than once a month	136 (13.6)
	Once a month	373 (37.3)
	Once every two/three months	258 (25.8)
	Less than every three months	91 (9.1)
	Never use/don't know	141 (14.1)
Pharmacist respondents		**Number (%)**
Gender (n=338)	Female	179 (53.0)
	Male	159 (47.0)
Role in pharmacy (n=340)	Manager/sole pharmacist	269 (79.1)
	Second pharmacist	22 (6.5)
	Locum	36 (10.6)
	Superintendent	13 (3.8)
Type of pharmacy (n=340)	Large chain (≥31 pharmacies)	223 (65.6)
	Medium chain (11-30)	19 (5.6)
	Small chain (2-10)	33 (9.7)
	Single pharmacy	65 (19.1)

Table 2 Agreement with desirability of different attributes of pharmacies, staff and practices expressed by the public and community pharmacists

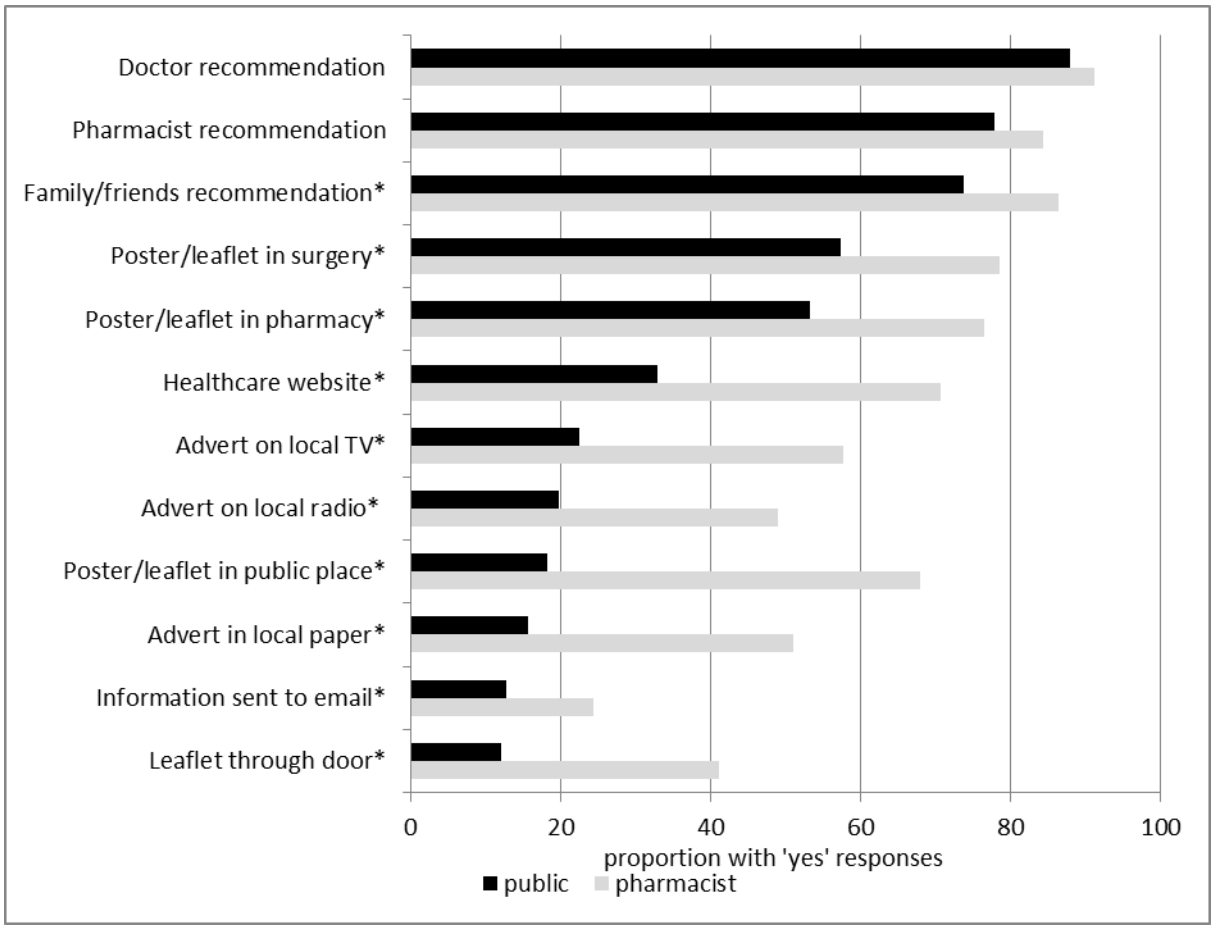
Pharmacy attribute	Proportion of respondents						P value (Chi-squared test)
	Public preferences (n=1000)			Pharmacist perceptions (n=341)			
	Agree	Don't mind	Disagree	Agree	Don't mind	Disagree	
Pharmacy characteristics							
Prefer to use same pharmacy every time	66.4	29.3	4.2	87.7	9.8	1.5	<0.001
Prefer a pharmacy owned by large company	33.2	45.3	21.4	9.5	53.1	37.4	<0.001
Prefer a pharmacy owned by pharmacist working there	26.6	56.5	16.8	22.6	50.9	26.2	0.002
Prefer a pharmacy in a supermarket	20.6	40.4	38.9	3.9	47.5	48.7	<0.001
Prefer a pharmacy near where I/they live	83.7	11.4	4.8	95.3	3.3	1.5	<0.001
Prefer a pharmacy near work	57.4	28.2	14.4	60.9	34.6	4.5	<0.001
Prefer a pharmacy near the GP surgery	79.9	15.4	4.7	72.8	20.4	6.9	0.023
Need a pharmacy open in the evening	74.6	21.4	4.0	42.4	45.7	11.9	<0.001
Need a pharmacy open on Saturdays	76.7	20.6	2.7	63.8	29.4	6.8	<0.001
Need a pharmacy open on Sundays	62.7	27.0	10.2	29.1	49.3	21.7	<0.001
Pharmacy staff							
I/patients recognise the pharmacist	59.1	34.6	6.4	91.8	7.0	1.2	<0.001
The pharmacist knows me/patients	55.6	36.3	8.1	85.5	12.7	1.8	<0.001
Pharmacy staff know me/patients	45.9	44.8	8.4	81.2	14.4	1.5	0.013
Pharmacist is same sex as me/patient	21.6	59.7	18.8	12.9	62.5	24.6	0.001
Pharmacist appears approachable	87.4	11.3	1.3	96.7	3.6	0.3	<0.001
Pharmacist has previously given me/patient time	76.5	21.0	2.5	93.3	5.8	0.9	<0.001
Staff have previously been able to meet my/patient's needs	83.1	14.8	2.0	97.3	2.4	0.3	<0.001
Pharmacy practices							
Prefer pharmacy staff make it easy to speak to the pharmacist	81.6	16.6	1.8	88.5	10.0	1.5	0.029
Prefer not to speak when others can overhear	59.1	35.1	5.8	71.2	23.0	5.8	<0.001
Prefer to talk to a pharmacist in a private room	42.0	47.9	10.1	61.0	33.5	5.5	<0.001
Prefer pharmacy with good working relationship with GP surgery	73.3	22.3	4.4	52.9	36.9	10.3	<0.001
Prefer not to share reasons for asking to speak to the pharmacist with pharmacy staff	48.5	39.0	12.5	43.3	46.1	10.6	0.075
Prefer not to interrupt a pharmacist busy in the dispensary	84.0	9.8	6.3	28.0	37.7	34.3	<0.001
Trust pharmacist to keep personal information confidential	94.8	4.5	0.5	90.9	7.6	1.5	0.039
Trust the pharmacy staff to keep personal information confidential	90.1	7.6	2.3	87.0	11.8	1.2	0.031

Table 3 Differences in public preferences for aspects of pharmacy characteristics and practices dependent on use of medicines and pharmacies

Pharmacy characteristic/practice	Proportion (%) agreeing with preference			
	Regular medicines use		Pharmacy use	
	Yes (max n=601)	No (max n=395)	Frequent (max n=504)	Infrequent (max n=487)
Pharmacy characteristics				
Prefer to use same pharmacy every time	79.0	47.6*	79.8	52.8*
Prefer pharmacy owned by large company	36.1	28.9*	37.2	29.2
Prefer pharmacy owned by pharmacist working there	30.6	21.0*	32.8	20.7*
Do NOT prefer a pharmacy in a supermarket	47.9	25.6*	44.7	33.3*
Prefer a pharmacy near where I live	89.2	76.2*	89.5	78.3*
Prefer a pharmacy near the GP surgery	88.7	66.5*	88.3	71.1*
Prefer a pharmacy open in the evening	77.9	69.5*	77.9	71.1
Pharmacy staff				
Prefer a pharmacy where I recognise the pharmacist	73.0	38.0*	72.5	45.3*
Prefer a pharmacy where pharmacist knows me	68.6	35.9*	69.4	41.2*
Prefer a pharmacy where staff know me	53.0	36.1*	55.2	36.9*
Prefer a pharmacy where pharmacist appears approachable	92.0	80.6*	92.5	82.3*
Prefer a pharmacist who has previously given me time	84.3	64.5*	84.4	68.2*
Staff have previously been able to meet my needs	89.0	74.5*	89.3	76.9*
Pharmacy practices				
Prefer pharmacy staff make it easy to speak to the pharmacist	84.8	77.3	87.1	76.2*
Prefer not to speak when others can overhear	63.9	52.0*	65.0	53.2*
Prefer a pharmacy where I can talk in a private room	47.9	32.7*	51.3	32.0*
Prefer pharmacy with good working relationship with GP surgery	80.5	62.5*	84.0	62.3*
Prefer not to interrupt pharmacist busy in dispensary	87.6	78.3*	87.9	79.8*
Trust pharmacist to keep personal information confidential	97.5	91.1*	97.6	92.1*
Trust staff to keep personal information confidential	93.1	85.5*	92.7	87.4

* $p<0.001$ Chi-squared test

Figure 1 Proportions of public and pharmacist respondents indicating agreement that promotional methods are effective in encouraging service uptake



* p<0.001 Chi-squared test

Table 4 Views expressed by the public and pharmacists on attributes perceived as important in choosing a pharmacy and promotion of services

Views on attributes important for choosing a particular pharmacy		
Public views	*How good my relationship is with the pharmacist and if they're efficient having my medicines ready to collect on time.*	white female, aged 45-54, in full time work
	Its appearance, it needs to be neat and tidy, not too busy as well.	Asian female student, aged 24 or under
Pharmacist views	*Patients visit the pharmacist who has previously given 'good' advice even if they do not use the pharmacy regularly.*	female second pharmacist, independent pharmacy
	Communication skills of pharmacist. If patients can communicate fully with the pharmacist with no difficulty, and they feel listened to, they will prefer to return.	male second pharmacist, large multiple
Views on promotion of medicine-related services		
Public views	*GPs should promote what pharmacists can do*	black female, aged 65 or over
	If doctor says it, it becomes like a marketing deal-so they shouldn't get involved.	Asian female, aged 45-54
	Informing people when in pharmacy. People can't be bothered to read leaflets.	white male, aged 35-54
Pharmacist views	*Pharmacists try but struggle to promote these services. Patients view us as businesses and are suspicious, even if we tell them the NHS are behind it. MURs - If doctors and the NHS advertised and referred patients to tell them it was expected they should have this review, and that the GP wanted them to, then the reviews would be much more useful and less rushed.*	(female manager, large multiple)
	I believe services should be advertised in the pharmacy and it should be up to the patient to decide if he wants them, I don't like the hard sell that we have to approach patients to get them into the consultation room.	(female locum, small chain)

Table 5 Public preferences for promotional methods for pharmacy medicines-related services related to respondent characteristics

Promotional methods	Proportion (% of total) indicating method would encourage them to use services													
	Gender		Age group			Ethnicity		Education			Pharmacy use		Used service	
	Female (520)	Male (469)	<35 (278)	35-64 (415)	65 or over (217)	White (707)	Non-white (271)	School Educated (312)	Further Education (357)	University (318)	Frequent (504)	Infrequent (484)	Yes (310)	No (680)
Doctor or other health professional recommendation	92*	84	87	89	92	92	85	90	88	87	92	84*	93*	86
Pharmacist or staff recommendation	83*	72	81	76	85	85	80	78	80	76	85	71*	87*	74
Family/friends recommendation	79*	70	83	73	78	78	76	72	74	76	78	70	80	71
Poster/leaflet in surgery	63*	52	63	57	65	65	57	55	57	59	65	50*	67*	53
Poster/leaflet in pharmacy	59*	47	60	53	61	61	54	55	53	53	61	45*	63*	49
Healthcare website	36	30	46	33	17*	35	35	22*	34	40	35	31	34	33
Leaflet through door	16*	8	10	13	16	16	15	15	11	11	16	9	15	11
Information sent to personal email	13	13	15	13	8*	13	17*	11	11	17*	13	13	14	12

* difference between sub-groups p<0.001

Table 6 Odds ratio (95% CI) of public views towards promotional methods for medicines-related services

Demographic characteristic	Odds ratio (95% CI) of preferences for promotional methods for services							
	Doctor/ health professional recommend	Pharmacist or staff recommend	Family or friends recommend	Poster or leaflet in a pharmacy	Poster or leaflet in a doctor surgery	Leaflet through my door	Email	Healthcare website
Gender: Female (ref = 1.00)								
Male	0.50* (0.34-0.76)	0.53* (0.39-0.73)	0.59* (0.44-0.79)	0.64* (0.49-0.83)	0.62* (0.47-0.81)	0.53 (0.35-0.80)	0.93 (0.63-1.34)	0.70 (0.53-0.93)
Age group: Older(>65) (ref = 1.00)								
Middle (35 – 64)	1.42 (0.88-2.27)	1.53 (1.04-2.46)	1.74 (1.20-2.53)	1.68 (1.23-2.31)	1.47 (1.07-2.03)	0.89 (0.54-1.46)	1.15 (0.74-1.77)	1.74* (1.26-2.40)
Young (<34)	1.33 (0.71-2.48)	1.59 (0.97-2.58)	2.56* (1.63-4.03)	2.86* (1.91-4.30)	2.47* (1.65-3.71)	0.95 (0.52-1.73)	1.94 (1.04-3.60)	4.85* (3.03-7.77)
Ethnicity: White (ref = 1.00)								
Non-white	0.66 (0.43-1.01)	1.21 (0.84-1.74)	1.07 (0.76-1.49)	1.02 (0.76-1.38)	0.89 (0.66-1.21)	1.52 (0.99-2.32)	1.49 (0.99-2.23)	0.91 (0.66-1.24)
Education: School (ref = 1.00)								
College/Further	0.96 (0.57-1.61)	1.00 (0.67-1.49)	1.37 (0.94-2.00)	0.95 (0.68-1.33)	1.24 (0.88-1.75)	0.79 (0.48- 1.30)	1.56 (0.96-2.53)	2.20* (1.52-3.20)
University	1.07 (0.67-1.71)	0.80 (0.55-1.17)	1.24 (0.86-1.78)	1.05 (0.76-1.45)	1.25 (0.90-1.72)	1.07 (0.65-1.77)	1.64 (1.05-2.58)	1.23 (0.89-1.71)
Pharmacy use: Frequent (ref=1.00)								
Infrequent	0.54 (0.35-0.83)	0.48* (0.34-0.67)	0.64 (0.47-0.88)	0.54* (0.41-0.72)	0.53* (0.40-0.69)	0.58 (0.38-0.89)	0.98 (0.65-1.46)	0.71 (0.53-0.96)
Service use: Yes (ref = 1.00)								
No	0.57 (0.34-0.96)	0.51* (0.35-0.76)	0.64 (0.42-0.85)	0.54* (0.40-0.73)	0.59* (0.43-0.80)	0.86 (0.56-1.32)	0.77 (0.50-1.46)	0.70 (0.51-0.97)

* difference from reference p<0.001