



Original Research

From community pharmacy to healthy living pharmacy: Positive early experiences from Portsmouth, England

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Abstract

Background: Research has shown the potential for community pharmacies to promote better health and prevent disease by providing individual services in a limited range of settings. In the UK, the healthy living pharmacy (HLP) framework has been developed to allow pharmacies to provide a portfolio of such services tailored to local need. This paper reports an evaluation of the uptake and success of HLP introduction in Portsmouth, the original pathfinder site for a national program.

Objectives: To assess the impact on service provision and staff engagement at an early stage in HLP program development.

Methods: Quantitative data, derived from pharmacy records, on service provision by HLPs ($n = 17$) and non-HLPs ($n = 19$) during April 2011–March 2012 was evaluated for trends and differences. Face-to-face interviews were conducted during November 2011 and February 2012, to gauge staff opinion on HLP development and sustainability, using interpretative phenomenological analysis.

Results: Significantly more clients per pharmacy were seen in HLPs than non-HLPs for the following services: targeted respiratory medicine use reviews (medians: 29 vs 11; $P = 0.0167$); smoking cessation at initiation (62 vs 18; $P < 0.001$) and at 4-week (26 vs 10; $P < 0.001$) and 12-week (5 vs 1; $P = 0.023$) follow-ups. Medians for alcohol awareness and weight management were appreciably higher in HLP pharmacies, but the differences did not reach statistical significance. Medians for clients seeking emergency hormonal contraception were comparable. Interviews with 38 staff from 32 pharmacies revealed a positive impact on service development in HLPs, largely engineered through revision of skill mix and additional training of non-pharmacist staff to become healthy living champions. Obstacles to HLP development were managing the increased workload, raising awareness of clients and other healthcare professionals of the services available, and receiving remuneration for service provision.

Conclusions: These data point to a largely successful introduction of the HLP program in Portsmouth and the potential for improving client health. Staff interviews suggest that adoption and sustainability of the scheme depend on achieving the right skill mix, including the introduction of healthy living champions, motivation of the entire staff team and the provision of adequate funding for services offered.

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Introduction

Over the past 12 years the UK Department of Health has published a series of policy documents setting out how health services should be designed around the patient, that seek to maximize the contribution of self-care.^{1–6} This shift in policy focus for health services as a whole has also been supplemented by specific White Paper policy documents identifying the contribution that pharmacists and in particular, community pharmacists, can make.^{7–9}

These papers make reference to a common theme of community pharmacists and their teams being under-utilized and the need to make better use of their skills to improve health outcomes. Recommendations have been made to increase pharmacy's contribution to promoting better health, prevention and early detection of disease, managing patients with long-term conditions and taking greater clinical responsibility for patients (e.g., prescribing). In the 2008 White Paper, 'Pharmacy In England-building on strengths, delivering the future', the concept of pharmacies being 'healthy living' centers was suggested as one means of delivering on these themes.⁹

In 2009, Portsmouth NHS Primary Care Trust (PCT) developed a model for Healthy Living Pharmacies (HLPs); the Department of Health (DH) commissioned Portsmouth PCT on behalf of NHS South Central Strategic Health Authority, now NHS Portsmouth, to develop a national HLP framework, informed by the Portsmouth model. The Portsmouth HLP framework was designed around a tiered commissioning framework delivering health and wellbeing services tailored to local requirements (Fig. 1). The framework built on the nationally commissioned, community pharmacy contract (stated as core services in Fig. 1) by providing three levels of increasing sophistication of service provision from Level 1 to 3, underpinned by a set of three 'enablers' to effect sustainable change within the community pharmacy team and service delivery. These were: first, workforce development with healthy living champions (HLCs—see below) on site; second, premises fit for purpose with a dedicated health promoting environment; and third, local stakeholder engagement, including local GP practices and members of the public.

An HLC was an individual who had undertaken additional training commissioned by the

PCT; they could be any one selected from the community pharmacy team except a pharmacist, who demonstrated an interest in this area and a commitment to the HLP concept. Their role was to act as a focal point for delivery of HLP services and enquiries from clients and to act as a role model for other staff.

A previously published review of the international literature from January 1990 to August 2011, conducted by the authors, identified a range of services, with quality supporting evidence, which might be included in an HLP portfolio.¹⁰ The services chosen for study were highlighted in this review.

The review identified a gap in knowledge on how medicines use reviews (MURs—a government funded review of a client's medicines, conducted by the pharmacist with a view to facilitating understanding and safe use of medicines¹¹) might be used to promote health, apart from the specific role in rationalizing medicines use; however reference was made to one study from the same geographical area, which showed clearly that community pharmacists had an important role to play in asthma management by the provision of targeted asthma MURs.¹² There is good evidence, available from one or more systematic reviews, that community pharmacy interventions in the form of counseling could improve patients' use of medicines and improve respiratory function^{13,14}; and that the quality of interventions was improved by pharmacist training.¹⁵ The review identified good evidence that community pharmacists could deliver effective smoking cessation campaigns.^{16,17} Good evidence was also available that community pharmacy emergency hormonal contraception (EHC) services provided timely access to therapy and were highly rated by recipients.¹⁸

Moderate evidence, available from one or more non-randomized intervention studies, suggests that targeted community pharmacy interventions encouraged weight loss,^{19,20} but it was felt that further research was required to define the pharmacist's role in reducing excessive alcohol consumption.^{21–23}

This paper reports on quantitative and qualitative outcomes from the implementation of the HLP initiative in Portsmouth in the financial year April 2011–March 2012, the first full financial year of pharmacies operating as HLPs. The

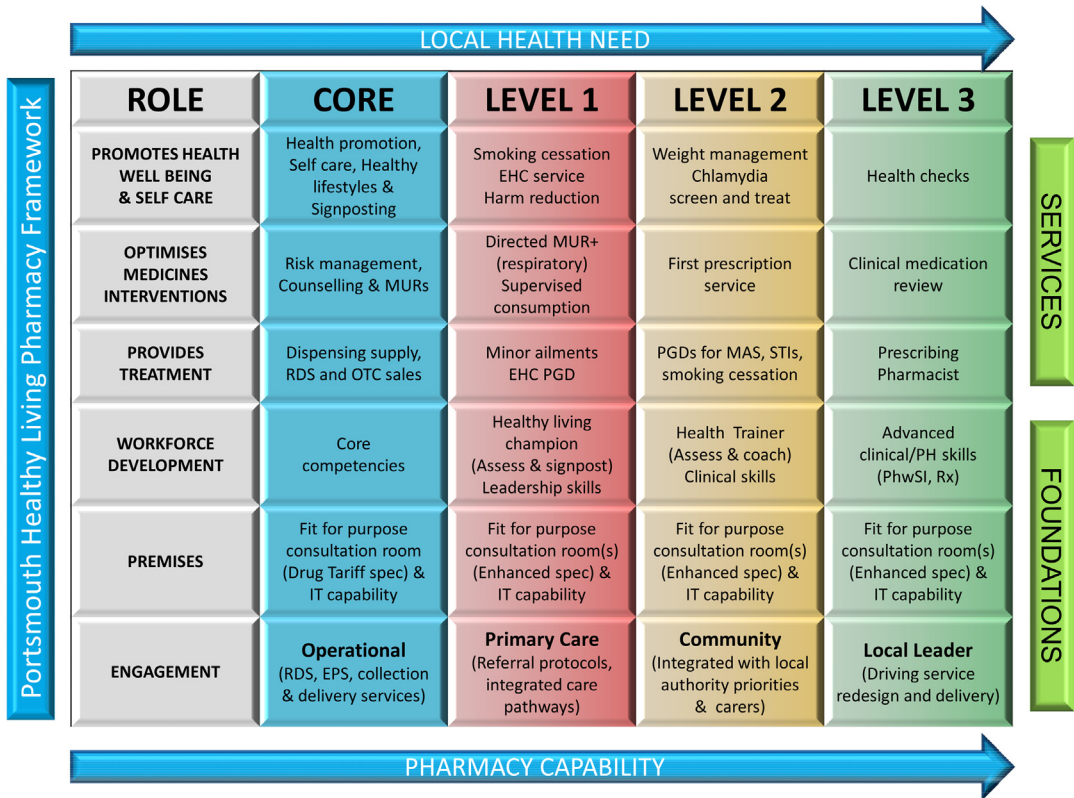


Fig. 1. The Portsmouth HLP framework EHC: emergency hormonal contraception; EPS: electronic prescribing system; MAS: minor ailments scheme; MURs: medicines use reviews; OTC: over the counter; PGD: patient group direction; PH: public health; PhRx: pharmacist prescriber; PhwSI: pharmacist with a special interest; RDS: repeat dispensing service; STI: sexually transmitted infection.

objectives were firstly to assess the extent of engagement with the HLP scheme in terms of the numbers of participating pharmacies and the services they offered compared with those pharmacies not signed up to the scheme; and secondly to interview staff at as many pharmacies within the sample as possible, to gain an understanding of the factors contributing to the success (or otherwise) of HLP pharmacies.

Methods

Services provided within the HLP framework

The services selected for study in the current research were prioritized for local introduction by the PCT from the published review.

The framework was launched in December 2009 through publication of a local HLP prospectus.²⁴ The PCT publicized the framework through a series of roadshows, targeting pharmacy managers,

owners and their staff. All community pharmacies in Portsmouth PCT were given the opportunity to become Level One HLPs.

To facilitate pharmacies achieving Level One HLP status, the PCT commissioned the necessary training to enable staff to meet the enabler requirements and attain Level One status. The training consisted of selected non-pharmacist staff undertaking the Royal Society of Public Health Level 2 Health Improvement Award²⁵ to become an HLC. In addition, pharmacist/senior team members attended PCT-run leadership training on workforce development and primary care engagement.

In addition to staff training requirements, for a pharmacy to attain Level One HLP status it had to:

- Deliver no less than 200 Medicine Use Reviews (MURs) annually, with at least 30 of these targeted toward patients with respiratory conditions (MURs are offered by most community

pharmacies, irrespective of HLP status under the national contract and are funded pro rata for up to 400 per annum).

- Demonstrate that not less than 12 clients had achieved a 4-week quit rate for smoking;
- Provide at least one other service listed by the PCT, other than smoking cessation;
- Be actively involved in local and national public health campaigns.

Six pharmacies achieved HLP Level One status in June 2010, followed by a further 11 pharmacies by the start of the financial year 2011–2012. These HLPs were the focus of the present research.

Details of the compulsory and optional services that HLPs could deliver are summarized below.

MURs targeting respiratory conditions

Pharmacists and their teams attended two training meetings. The first covered effective use of inhalers and a second detailed the specifications of the service, which included instruction on how to administer an asthma control test (ACT).²⁶ To check inhaler technique, the pharmacist used the “2tone” inhaler training device²⁷ along with the “In-check” device.²⁸ The ACT score was used to identify patients who had the potential to improve their symptoms and achieve better control of their disease. ACT scores could range from 5 to 25; anyone who scored less than 20 was considered “uncontrolled” and provided with advice and/or inhaler technique counseling. These patients were then invited to attend a follow-up MUR in approximately 6 months’ time to check ACT scores.

Smoking cessation

Portsmouth PCT adopted the national guidance for Stop Smoking services.²⁹ Those smokers wanting to stop met with a trained member of staff who helped ascertain their readiness to do so. If enrolled on the program, the most appropriate nicotine replacement therapy was issued and the smoker returned each week so that their success or otherwise could be assessed and further support provided. If the smoker achieved a 4-week quit status they were eligible for a further 8 weeks support.

Alcohol awareness campaign

Adult (aged 18 years and over) visitors to the pharmacy were invited to complete a scratch card exercise. The card asked three questions about

their drinking habits, based on published screening advice.³⁰ A score was assigned to each answer with the total score ranging from 0 to 9 or more. People who scored between 0 and 4 were deemed to be drinking safe limits of alcohol (as per UK government guidelines); they were given positive feedback about their drinking and a healthy drinking leaflet. Those who scored between 5 and 8 were offered advice and a leaflet on safe drinking; if they declined, an alcohol awareness guide was provided. Those people scoring 9 or above were assigned to an Alcohol Intervention Team.

Emergency hormonal contraception (EHC)

EHC could be supplied to any patient aged over the age of 13. For patients aged between 13 and 16 years of age, the supply was made under a ‘Patient Group Direction’ (a UK piece of legislation allowing the supply of medicines that would ordinarily be only available via a prescription). All pharmacists had to hold current accreditation approved by the PCT to provide the service. Supply of levonorgestrel was made in accordance with guidance issued by the Faculty of Sexual and Reproductive Healthcare.³¹

Weight management

Patients identified as having a Body Mass Index of 28 or more were eligible for the service. Identification of patients was either through the MUR service, NHS health checks (where clients present for an overall, government-funded health check-up³²) or healthcare professional referral. The service consisted of two tiers: Tier One included advice on healthy eating and physical activity; and Tier Two enrolled patients on a 26-week program involving at least 12, one-to-one counseling sessions with the goal of reducing patient weight by 5–10% of total body mass.

Study population

All 36 pharmacies in the PCT area were included in the study.

Quantitative data collection

The following services, identified from the literature review¹⁰ and prioritized for the HLP portfolio, were: the delivery of MURs targeting respiratory conditions, smoking cessation, alcohol awareness, EHC and weight management services. Data self-reported by each pharmacy included in the study were gathered by the PCT for

monitoring purposes. Data collection was either paper-based or derived from an online data capture system called ESMAQ (Enhanced Services Monitoring and Quality; Pinnacle Health Partnership LLP, UK). This generated real-time service reports, in terms of counts for clients seen for a particular service and where appropriate, interventions made, to the PCT allowing progress to be monitored at the individual pharmacy level. These data were shared with the research team for evaluation. Data for HLPs was separated to allow comparisons to be made between HLP provision of services vs non-HLP provision. Analysis of data was performed using Microsoft Excel and statistical tests conducted using Minitab (v15, Minitab Inc, 2006, USA).

The median levels of provision for the services mentioned above, in terms of client numbers were compared between HLP and non-HLP pharmacies. In the case of targeted MURs, the patterns of disease severity, as indicated by ACT scores were also assessed. For smoking cessation, the median numbers of ‘quits’ at 4 and 12 weeks were compared, in addition to the numbers of clients seen. For alcohol awareness, the differences in levels of unsafe drinking among clients were investigated. Provision of EHC was compared. Differences in the numbers of clients seeking weight management advice were compared, in addition to investigating how they had come to seek the advice in the first place.

Qualitative data collection

Between November 2011 and February 2012 all community pharmacies (whether HLP or not) were contacted by one of us (ZN) to conduct, face-to-face, semi-structured interviews to ascertain pharmacy staff perception of the HLP concept. Each pharmacy was provided with a brief written description of the research and after agreeing to take part, was visited by the researcher at a time when an interview could take place. All members of staff had the opportunity to take part in the interviews, and where possible, more than one staff member was interviewed, to facilitate triangulation. Prior to the interview, each participant provided informed consent to the research. The research team held a brainstorming meeting to determine the type of information needed. This was distilled into a series of key questions to be used by the researcher as the basis for interviews. This was refined at a second meeting, prior to piloting in a community pharmacy already engaged in the HLP project. The pilot

showed that the questions were clear, unambiguous and facilitated an interview of approximately 30 min’ duration.

The following questions were used as prompts during the semi-structured interviews:

- Can you tell me why you decided to engage/not to engage in HLPs?
- What qualities or attributes do you think are present in this pharmacy that have/have not enabled it to achieve HLP status?
- What challenges have you faced to get to where you are with HLPs?
- What barriers do you face to sustain Healthy Living activities or increase the range of services you offer here?
- What sort of benefits do you get from being an HLP?
- What are the top three things, which have contributed to the success of your HLP?
- What does it feel like to work here? How does this differ from before the pharmacy began to engage in the HLP initiatives?
- What skills do you feel you have developed/need to develop in order to be able to successfully deliver the HLP role?

The interviews were conducted in the pharmacy’s consultation room. Field notes were made and the interviews were digitally recorded. The interviews ranged in length from 20 to 35 min; they were transcribed verbatim by the researcher and checked by another member of the research team (DB). Interpretative phenomenological analysis³³—a technique where the researcher (ZN) constructed key themes and sub-themes, important to understanding and illuminating the data set, during the analytical process—was conducted, using NVivo9 software (QSR International Pty Ltd, UK); these too were validated for context and understanding by a second member of the research team (DB). Key comments were selected to illuminate the discussion.

This research received a favorable opinion from the Portsmouth NHS Local Research Ethics Committee (ref 10/H05012/6) 22/01/10.

Results

A summary of key findings is shown in [Table 1](#). Some pharmacies did not provide all the services studied because of their level of engagement with the HLP program. For analysis, the relevant denominator was reduced accordingly.

Table 1
Summary table for HLP services provided

Service	Service uptake by type of pharmacy		Service delivery by pharmacy type		Median unit (range) delivery by pharmacy type			P**
	HLP	Non-HLP	HLP	Non-HLP	Total	HLP	Non-HLP	
MURs	12/17 (70.6%)	13/19 (68.4%)	420 (72.5%)	159 (27.5%)	579	29 (7–78)	11 (1–50)	0.0167
Smoking cessation	17/17 (100%)	19/19 (100%)	1003 (70.9%)	412 (29.1%)	1415	62 (10–110)	18 (1–57)	<0.001
Smoking cessation 4-week quits	17/17 (100%)	19/19 (100%)	438/1003 (43.7%)	264/412 (64.1%)	702	26 (4–61)	10 (0–35)	<0.001
Smoking cessation 12-week quits	17/17 (100%)	19/19 (100%)	89/438 (20.3%)	40/264 (15.2%)	129	5 (0–13)	1 (0–10)	0.0232
Alcohol awareness	12/17 (70.6%)	8/19 (42.1%)	2612 (78.5%)	717 (21.5%)	3329	165 (23–543)	94.5 (7–175)	0.1325
EHC	17/17 (100%)	16/19 (84.2%)	2717 (66.7%)	1355 (33.3%)	4072	69 (19–110)	70 (15–308)	0.8997
Weight management								
Tier 1	12/17 (70.6%)	2/19 (10.5%)	538 (97.1%)	16 (2.9%)	554	33.5 (3–178)	8 (4–12)	0.2353
Tier 2	11/17 (64.7%)	2/19 (10.5%)	125 (94.7)	7 (5.3%)	132	6 (1–38)	3.5 (1–6)	0.4897

Statistical analyses: * Chi-squared test, ** Mann Whitney.

MURs targeted toward respiratory conditions

A significantly greater proportion of total MURs were completed by HLP pharmacies. The targeted respiratory MURs in HLPs also included a significantly greater proportion of current smokers (HLP clients: 100 of 420 representing 23.8% of the total; non-HLP clients: 25 of 159 representing 15.7% of the total); the difference was statistically significant (chi-squared test, $P = 0.035$). A significantly higher median number of clients received this service from HLP pharmacies.

The ACT scores are shown in Table 2. HLPs saw a significantly greater proportion of patients in every ACT score category. ACT scores of less than 20 were seen in 354 of 579 people (61.1%) who were therefore eligible for a follow-up MUR; 81 of these 354 (22.9%) took up this opportunity. Almost all follow-up appointments (78 of 81: 98.8%) were undertaken in HLPs. Thirty (38.5%) had improved their ACT score of which 17 (56.7%) had raised their score to over 20. Sixteen (20.5%) scores remained the same and 32 (41.0%) had decreased scores.

Smoking cessation

All 36 pharmacies in the PCT participated in this service, recruiting 1415 patients into the smoking cessation programme. The 17 HLPs recruited significantly more people than the 19 non-HLPs and the median was also significantly higher (see Table 1).

The monthly, four-week quit data showed some seasonal variation, with higher quit numbers in January and February than in other months, but the preponderance of HLP-facilitated 4-week quits persisted for each month over the study period (see Fig. 2).

At 4 weeks, the difference in medians for HLPs (26) and non-HLPs (10) was significant. This was also the case at 12 weeks (HLPs: 5; non-HLPs: 1).

Alcohol awareness

HLPs accounted for significantly more of the total number of consultations (see Table 1); although the difference in medians was not statistically significant. With reference to Table 3, there were no differences in the number of people accepting or rejecting pharmacy advice between the two types of pharmacy overall (133 of 1089 (12.2%) for HLPs, 35 of 290 (12.1%) for non-HLPs; chi-squared test: $P = 0.956$). This indicates that while HLPs were seeing more people who

Table 2
Asthma control test scores for patients undergoing a targeted MUR

Pharmacy type	ACT < 9 ^a	ACT 10–14 ^a	ACT 15–19 ^a	ACT ≥ 20 ^a	Totals
HLP (<i>n</i> = 12)	64	83	113	160	420
Non-HLP (<i>n</i> = 13)	16	27	51	65	179
Totals	80	110	164	225	579

^a Significant difference in proportions (chi-squared test, $P < 0.001$ for all comparisons).

wanted help, they were being no more effective in persuading individuals to take advice.

EHC

HLPs provided a significantly higher proportion of total consultations, however the difference between medians was not significant (see Table 1).

Table 4 shows the distribution of client-reported timings after intercourse at which visits to HLPs and non-HLPs took place. Given that EHC is most effective in the first 24 h, then both HLPs and non-HLPs supplied it within this time in 73.5 and 76.4% of clients respectively.

Weight management

In both Tier One and Tier Two of the weight management programme, HLPs were the predominant provider (see Table 1). However, there were no statistical differences in median numbers visiting HLP and non-HLP pharmacies for Tier 1 or Tier 2.

The motivations for seeking advice are shown in Table 5. For HLPs, almost half were self-referred while a further fifth sought advice after

a routine health check in the pharmacy. Very few visited the pharmacy as a result of GP referral.

In HLPs, twenty of 125 subjects (16.0%) had completed the weight loss program described above and were seen at week 26 for weight measurement. Nineteen subjects had lost weight with 14 of these (70%) achieving a 5–10% loss in body weight. The average weight loss for all 19 individuals was 7.6%. No data were available for the 7 subjects seen in non-HLP pharmacies.

Interview findings

Staff from 32 of 36 pharmacies in the study area consented to be interviewed; those pharmacies, which declined had shown no engagement with the HLP project. (See Table 6).

In total, 38 interviews were conducted with pharmacy staff, as designated in Table 6. In some pharmacies, both the pharmacist and the HLC or healthcare assistant were interviewed. Two HLCs were employed by non-HLPs, which were in the process of trying to achieve HLP accreditation by demonstrating adequate service provision and staff training (this is defined as ‘aspiring to HLP status’ in the identifier to following quotations).

Analysis of staff interviews provided rich data which when subject to interpretive phenomenological analysis (IPA), provided the main, overarching themes (nodes) and subthemes (branches) shown in Table 7; both nodes (9) and branches (50) within nodes are presented in descending order of weight of comment, as revealed by NVivo analysis.

Factors contributing to HLP success

A majority of respondents stated that these attributes were key to enabling them to reach accreditation. The most frequently cited factor was having motivated staff and a well-led team; as illustrated by the following:

‘In the pharmacy we have a good team and very strong (pharmacist) management; the staff are

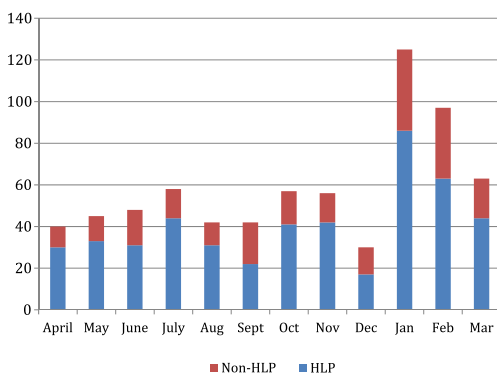


Fig. 2. Time series plot of monthly 4-week quits for HLPs and non-HLPs (study period April 2011–March 2012).

Table 3
Scratch card scores and relationship to advice accepted

Pharmacy type/scratch card score	0–4	5–8 Patient accepted advice	5–8 Patient declined advice	≥ 9 Patient accepted advice	≥ 9 Patient declined advice	Totals
HLP (<i>n</i> = 12)	1390	119	989	14	100	2612
Median values per HLP pharmacy (range)	69.5 (4–332)	6 (0–36)	56 (11–240)	0 (0–7)	1 (0–50)	165 (23–543)
Non-HLP (<i>n</i> = 8)	392	27	245	8	45	717
Median values per HLP pharmacy (range)	51.0 (3–120)	3 (0–7)	36 (1–98)	1 (0–4)	3 (1–22)	94.5 (7–175)
<i>P</i> value for difference in medians (Mann Whitney)	0.2318	0.2318	0.0698	0.3159	0.3545	0.1325
Totals	1782	146	1234	22	145	3329

dedicated and committed and from the word go, we decided that we wanted to get the (HLP) accreditation. It was something everybody got behind and worked hard to achieve.’ (From an HLP HLC).

HLP involvement appeared to alter the working dynamics within the pharmacy and introduced new roles for staff. For example, training an HLC from existing staff left opportunities for uptake of their previous duties by other staff members. As exemplified by the following:

“It did take more time away from our roles in the pharmacy which left us quite stretched; but it did mean that that everyone in the pharmacy was better trained to provide all the services.” (From an HLC in a pharmacy aspiring to become HLP accredited).

The key role of the pharmacist was also mentioned:

“Having a pharmacist who is interested and motivated and wants to get involved, makes all the difference. A motivated pharmacist will give staff the encouragement and freedom to do what they are trained to do.” (From an HLP pharmacist).

Having good rapport with the pharmacy’s clients was also viewed as important:

“It helps that all of our team members are good communicators and know how to talk to members of the public. With these front line services, you do need skilled professionals who are good communicator, to deliver them.” (From an HLP pharmacist).

Support from the PCT was also important:

“The training the PCT has put on has been excellent, we have really seen changes in the way staff work; they have come on leaps and bounds in being confident talking to customers about health related issues.” (From an HLP HLC); and:

“I think the training does need to continue; the PCT’s help has made HLP successful, so whenever anything new is launched, we need that to be backed up with the PCT’s help.” (From a pharmacist in a pharmacy aspiring to become HLP accredited).

Challenges faced

In spite of HLP success, respondents also identified key challenges they had overcome to achieve it. These included the additional pressure on staff time, motivating staff initially and

Table 4
Time after intercourse for those seeking EHC from HLP and non-HLP pharmacies

Pharmacy	<12 h	12–24	24–48	48–72	72+	Totals
Non-HLP <i>n</i> (%)	397 (28.4)	671 (48.0)	273 (19.5)	56 (4.0)	2 (0.14)	1399 (100)
HLP <i>n</i> (%)	505 (19.1)	1439 (54.4)	577 (21.8)	122 (4.6)	1 (0.04)	2644 (100)
Totals	902 (22.3)	2110 (52.2)	850 (21.0)	178 (4.4)	3 (0.07)	4043 ^a

^a This figure is lower than the total of 4072 visits, because some data were missing in this category.

promoting the services to clients. These concerns were illustrated by the following:

“Staffing issues have been the biggest barrier. We’ve had to send staff away for training days, which hasn’t always been easy to cope with, because we are a small team..... I feel that we do need more staff, especially if we are doing more services.” (From a pharmacist in a pharmacy aspiring to become HLP accredited).

“Motivation is always difficult to create no matter what..... a change of skills from being retailers into offering services and healthcare advice. It’s always difficult to get people to change how they work and it seems we have more success with younger, more dynamic members of staff.” (From an HLP pharmacist).

“It does depend on the patients as well not just the ability of the staff to communicate properly. Sometimes patients are not willing to commit to anything new or change anything.” (From an HLP HLC).

Motives for HLP engagement

All pharmacist respondents whose pharmacies had become HLPs indicated that the opportunity to provide a wider range of health and well-being services that could benefit clients, was their main

motive for participating in HLP development. The most frequently expressed motive for HLP engagement was a sense of duty to the pharmacy profession and to clients, summed up by the following:

“I feel that people out there need to know how to take care of themselves.” (From an HLP pharmacist), and:

“We see the pharmacy as an ideal environment to help support patients with healthy living - the principles that HLP are built on really. What we are trying to achieve is..... to not just be there for help with people’s medicines but also to be able to give them advice and support on their general health.” (From an HLP pharmacist).

"I also feel that HLP helps patients to self-manage their health through empowering them with information and services that are easily accessible and free through the (HLP) project.” (From and HLP pharmacist).

Other motivators included professional interest:

“We are a relatively new pharmacy and when I set the pharmacy up, I had the ambition to keep it at the forefront of pharmacy, delivering services.” (From an HLP pharmacist); and a fear of losing out to competitors:

“After some time, we had seen the success of other pharmacies and realized that this is something we cannot afford not to be part of. We also felt that there was the risk of being frowned upon if we did not become accredited and that new services would then not be commissioned from us.” (From and HLP pharmacist).

Effects on staff attitudes

Staff participating in HLP cited a range of effects that engagement had had on them including a feeling of personal reward in being able to engage clients and affect their health

Table 5
Sources of clients presenting for Tier 1 consultations about weight reduction in HLPs and non-HLPs

Source	HLP	Non-HLP
Self-referred	241 (44.8%)	3 (18.8%)
Health check	111 (20.6%)	3 (18.8%)
Response to pharmacy promotion	90 (16.7%)	8 (50.0%)
Recommended by another service user	41 (7.6%)	1 (6.3%)
GP referred	7 (1.3%)	0 (0.0%)
Following MUR	3 (0.6%)	0 (0.0%)
None recorded	45 (8.4%)	1 (6.3%)
Totals	538 (100%)	16 (100%)

Table 6
Staff interviewed and type of pharmacy

Pharmacies	Totals	HLP	Non-HLP
Independents	11	7	4
Multiples	21	10	11
Total	32	17	15
Staff	HLP accredited pharmacy	Non-HLP accredited	Total
Pharmacist	14	11	25
HLC	9 ^a	2 ^b	11
Healthcare assistant	0	2	2
Totals	23	15	38

^a Consisting of three healthcare assistants and six qualified dispensers.

^b Consisting of one healthcare assistant and one qualified dispenser.

favorably, exemplified by the following HLC comments:

“I get great satisfaction helping others to quit smoking and lose weight, I share their success with them and that makes me enjoy my job more.” (From an HLP HLC); and:

“I found it exciting and it offered something different in my job rather than the run of the mill day to day dispensing. I was with the public more and it was something new, and I’ve always believed that this is the way pharmacy is moving.” (From an HLP HLC); this became a motivation to engage further:

“Believing in yourself, that you can make a difference, and you can help customers reach their goal; I think this is probably the most important motivating factor in wanting us to continue.” (From an HLP HLC).

HLC training helped to develop this approach. HLCs commented on feeling more confident and better equipped with the knowledge to approach clients and initiate conversations based on health related issues:

“I have now trained to become a HLC, and this has allowed me to get closer to customers and understand their issues and their behavior, and because I can do that, I can be more effective in influencing change.” (From an HLP HLC).

Increased motivation was not restricted to HLCs, exemplified by the following:

“Job satisfaction; I’m using more of my skills in a productive way to improve the health of my local community and that is really what I got into pharmacy for: to feel I am contributing and making a difference to people’s health.” (From an HLP pharmacist).

Effects on clients

Staff also observed the favorable effects that HLP had had on their clients:

“We do see a return of customers who use our services; we also gain new customers by word of mouth from people who have had positive experiences with our services.” (From an HLP HLC); and:

“The public see us providing a wide range of services that are easily accessible with no need for an appointment, so this is really good for our reputation and allows us to build stronger relationships with the local community,..... we have turned into a mini health clinic where customers can come for advice and support on a wide range of issues to do with their health.” (From an HLP pharmacist).

Effects on the pharmacy business

Unsurprisingly, interviewees commented on what HLP had meant for their businesses, exemplified by the following:

“We’ve implemented the new (HLP) services here and there is money in these services... even more, you get customers that know they can get those services here, so you get them to become regular; so that’s a way to gain customers and to earn money from the services.” (From an HLP pharmacist) and:

“Our numbers in quitters, weight management success and other services have increased which brings extra revenue into the business..... what we see is that customers refer friends and family members to our services when they have a good experience with us.” (From an HLP pharmacist).

Greater footfall was mentioned on several occasions:

Table 7
Node and branch summary of staff interviews subject to IPA

Nodes (Number of coding references)	Branches
Factors contributing to HLP success (347)	Motivated staff Good client rapport PCT support and training Effective teamwork Strong leadership Familiarity with initiatives Quality of service provision Early project involvement
Challenges faced (229)	Pressure on staff time Staff motivation Client interest & recruitment Public awareness Acquiring the necessary skills Clarifying client recruitment criteria Perceived lack of incentives Lack of training opportunities Lack of a stable team Competition from other healthcare providers Poor IT support
Motives for HLP engagement (214)	Sense of duty to profession and to the public Personal interest Fear of getting left behind Financial reward Management directive
Effects on staff attitudes (134)	Personally rewarding Increased opportunity to engage clients and improve their health Increased motivation at work Increased knowledge and skills Increased confidence Impact on own healthy behavior
Effects on clients (129)	Increased range and quality of services leading to greater client access and potential improvement in client outcomes Increased engagement with local community More effective signposting Client referrals following the positive experience of others
Effects on the pharmacy business (92)	Increased reimbursement for services Increased publicity and reputation for the pharmacy Greater client footfall Increased customer loyalty
Effects on staff skills (67)	Enhanced communication skills and confidence with clients Improved team dynamics Perceived client respect for the new role(s) Increased networking with other healthcare professionals and pharmacies
Interaction with other healthcare professionals (67)	Increased collaboration through signposting and referral Increased recognition of pharmacy services Increased accessibility due to participation in more services Networking with other pharmacy teams
Non-engagement (17)	Increased workload Unsuitable pharmacy environment Resistance to change Unfamiliarity with HLP

“We have got many more customers. For example the smokers; one successful smoker will let their friend know, so they’ll come and join as well. We’ve

got some slimming customers also where the mother will join and then send her daughter as well, so it is spreading.” (From an HLP pharmacist); and:

“We do see a return of customers who use our services; we also gain new customers by word of mouth from people who have had positive experiences with our services.” (From an HLP HLC).

Effects on staff skills

Staff working in HLP pharmacies also highlighted the attainment of new skills. One HLP pharmacist remarked about his staff that:

“They are able to communicate a lot more confidently and of course, advising patients on all sorts of problems like alcohol, stop smoking, losing weight healthily - all these things; they just gained more confidence.” (From an HLP pharmacist).

One HLC observed:

“The staff are better trained to offer healthcare advice to our customers and are also more confident to talk to customers about their health issues.” (From an HLC in a pharmacy aspiring to become HLP accredited).

Interaction with other healthcare professionals

Although some individuals identified working effectively with GPs to be a potential barrier to HLP development, others described how their work with other healthcare professionals had expanded as a result of HLP development:

“We have worked really closely with our local (GP) surgeries to keep them updated about what HLP is all about.....I feel we now work much closer together. We signpost customers more than before to locally available health services, and we also receive patients from the GP for the services we offer.” (From an HLP HLC).

“The local surgeries are aware of HLP and what it means; they have been signposting smoking patients and weight management patients to us, which has helped to boost our services and also made us make stronger relationships with the doctors and the receptionists.” (From an HLP HLC).

A “*pharmacy community*” had been created within Portsmouth, whereby the relationships between the pharmacies had grown through staff interacting at joint training sessions and keeping in contact with each other outside working hours in communicating ideas to develop HLPs further:

“I feel that being involved in HLP has brought everyone together in the pharmacy community, both the independents and the chains; we all want

to work to achieve the same goal.” (From an HLP HLC).

Non-engagement

There were few negative comments from HLP engagers, although one theme common to engagers and non-engagers alike was the reservation that the increased workload brought by HLP needed careful management and adequate remuneration from the PCT for services provided; as exemplified by:

“It’s all new to them (pharmacy staff) which they have coped with fine so far; but I’m a little bit worried that if more is rolled out, whether they will be able to cope (in addition to) the dispensing and serving the customers. I think we would have to recruit more staff if more is asked of us.” (From pharmacist in a pharmacy aspiring to become HLP accredited).

Discussion

The HLP framework was designed to allow individual pharmacies to provide services corresponding to local need. A previously published review of the world literature from January 1990 to August 2011 identified a range of services, with quality supporting evidence, which might be included in an HLP portfolio.¹⁰ The services selected for study in the current research were prioritized for local introduction by the PCT from this review and the findings generally demonstrate their effectiveness.

The evaluation of the Portsmouth HLP initiative demonstrated that with especially trained staff on their teams, HLPs conducted more targeted MURs for respiratory conditions, undertook nearly all of the follow-up MURs, with more than a third of these patients experiencing improvements in their asthma symptoms. Although not covered in the present study, evidence suggests that further improvements might be possible with greater collaboration between the pharmacy and other carers such as the patient’s GP and asthma nurses¹²; or discussion of current respiratory function test results, in addition to inhaler technique, in the pharmacy.¹³

The literature shows that pharmacists can deliver effective structured smoking cessation programs^{16,17}; and this was reflected in the results of the present study.

HLPs recruited a significantly higher number of clients into their smoking cessation programs

and significantly higher numbers of patients achieved both four and 12-week 'quits' with the help of HLPs compared with non-HLPs.

Over two thirds (70.5%) of HLPs participated in the alcohol awareness campaign, compared with less than half of non-HLPs (42.1%). However, the campaign was equally effective with respect to advice uptake, in both groups of pharmacies. There is limited evidence that pharmacists might assume a higher profile role in detecting alcohol abuse in clients²¹; however, the present study suggests that clients were resistant to accepting pharmacy intervention with just a 12% uptake. There may therefore be a need for further staff training in how to approach clients as highlighted elsewhere.^{22,23}

The lack of statistical distinction between HLP and non-HLP pharmacies in the level of EHC provision possibly reflects the general emphasis that the PCT placed on the provision of EHC from any type of pharmacy, in response to a national initiative to introduce this as service, deliverable under the NHS Community Pharmacy Contractual Framework from 2006 onwards.³⁴

Previous work has shown that community pharmacy EHC services are well received by the women who use them.¹⁸ In the present study, HLPs supplied a significantly higher proportion of EHC, but the characteristics of those seeking EHC were the same as those visiting non-HLPs. Both types of pharmacy supplied EHC in a timely manner in over two thirds of clients. It is clear that if the PCT wishes to expand the service, then consideration should be given to greater publicity about the importance of early consultation and extending HLPs to areas where a significant number of consultations are taking place in non-HLP environments.

Limited evidence suggests that pharmacy interventions can encourage weight loss, although most of this is in patients who also had diabetes where there would have been additional motivation.^{19,20} Apart from a small but significant difference in age, the characteristics of clients seeking weight management advice from HLPs and non-HLPs were similar; however this service was provided much more frequently from HLPs.

Evidence from the HLP Tier Two service showed that weight reduction was seen in almost all patients who attended follow-up. Whilst this result is encouraging it has to be tempered by the very high loss to follow-up (84%). The results do demonstrate that in some patients at least, the 26-week program involving repeated and regular,

one-to-one counseling sessions with HLP pharmacy staff can have a positive effect.

With respect to the general level of service provision, it is known that during the period of analysis, several non-HLPs were working toward acquiring HLP status by increasing their health promotion activities and training staff; they were not standing still. The fact that the HLP group out-performed non-HLPs in almost every aspect of provision even though the latter would have contained pharmacies aspiring to become HLPs, confirms the impact of a fully functioning HLP and provides an impression of potential for further impact as more HLPs are accredited.

It should be noted that four, non-HLP pharmacies declined to be interviewed for our study. This might have provided greater insight into the perceived barriers to HLP accreditation and enlightened further approaches to recruit them. However, interviews with pharmacists and other staff working within accredited HLPs and to a lesser extent, those aspiring to become accredited, demonstrated that participation generally had a positive impact on the pharmacy team. There was a sense of enthusiasm and belonging for those who were working in HLPs and that the over-riding motivator for adopting HLP was professional rather than financial. Staff appeared ready to embrace the opportunity to become more patient- rather than medicine-focused. The introduction of new staff roles with subsequent changes to the skill mix of the team, as well as training and/or accreditation for new responsibilities, all contributed to the success of the HLP. It appeared that existing rapport and good relationships with regular clients made HLPs easier to explain to clients and so to develop. Managing staff resources appeared to be a challenge; accommodating staff absence for training increased the workload of remaining colleagues with some anxiety that there was no scope for further activities due to other demands within the pharmacy. Although raising client awareness was perceived by some interviewees as a barrier to effective service delivery, once established, HLP staff detected a noticeable strengthening of relationships with clients with subsequent service uptake. A perceived challenge was linking HLP and GP healthy living support services; this concern was evidenced by the very small number of clients referred to HLPs for weight management. Bradley et al³⁵ studied the introduction of new pharmacy services, including MURs, in the

UK and observed that there were obstacles to integration with other healthcare providers; due, for example to the contrasting cultures of community pharmacies and GP practice-based services. They concluded that greater awareness of pharmacy-based services among other providers was key to effective integration. In the present study, the role of the PCT was considered to be important in HLP support, in terms of staff education and training, publicity and remuneration; in addition successful HLPs had been proactive in collaboration with their local GPs.

Several studies^{35–37} have observed that motivated individuals were pivotal in the adoption and delivery of innovative services within community pharmacy and that in the case of MURs³⁵ there was a difference in participation in this service between multiple (generally high) and independent pharmacies (generally low). The present study showed that in the case of HLPs, the pharmacist's enthusiasm was key to HLP success and that there were no real differences between different types of pharmacy.

Participants reported increased job satisfaction as a result of working more closely with clients, having a more united team in the pharmacy and acquiring enhanced skills in healthy living support.

The present study was limited to comparison of contributions to healthy living in terms of client and staff engagement within HLPs and non-HLPs. As with many community pharmacy interventions, impact on clinical outcomes is difficult to quantify and we were able to do this in only a limited sense. The results do however suggest that the HLP program has the potential to make a telling contribution to health through sustained service provision.

It is not possible to quantify how many clients may have been eligible for any of the services studied, because in the UK, the client is free to visit any community pharmacy; it is therefore not possible to provide a denominator. While it is an aspiration that clients will visit the same pharmacy for all their pharmaceutical needs and thus allow staff to provide a continuity of care, there is no obligation for them to do so; some may visit more than one pharmacy depending on convenience and opportunity. This study provides very limited evidence, apart from anecdote from HLP staff that referrals from other healthcare professions is currently taking place, underscoring the need for greater publicity of HLP services, particularly among GPs.

Conclusion

The HLP is a commissioning framework that is intended to create a common vision with common goals and it is a brand that pharmacy teams and their clients should recognize.

The HLP project appears to have made a positive impact on community pharmacy services in Portsmouth. It has produced a strong community of participating pharmacies and clients are beginning to benefit from the services provided.

Further research is needed to determine the impact of HLP roll-out from the Portsmouth area, the long term impact of HLPs and factors influencing the sustainability of healthy living support in Portsmouth, with a special focus on the further development of HLCs who contributed so much to the interviews and apparent HLP success in this research.

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