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Original Research

Identifying the key determinants of a community pharmacy based bladder and bowel service

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ABSTRACT

Objectives: Community pharmacies and their personnel present an opportunity to implement new services for bladder and bowel continence care. Underpinned by the COM-B model of capability (C), opportunity (O), motivation (M), Behaviour (B)), this study explored the opinions of healthcare staff and users of community pharmacy services, to inform the development of a new pharmacy bladder and bowel service (PBBS).

Methods: A qualitative design was adopted by conducting in-depth semi-structured interviews with pharmacy staff, users of community pharmacy services, bladder and bowel service staff, and professionals involved with commissioning services. A thematic analysis was used, and resulting themes were mapped onto the components of the COM-B model.

Results: A total of 27 participants were interviewed that represented the four groups of participants. A pro-active, protocolised PBBS was envisaged, involving targeted advice and provision of self-help materials, medication support, and referral/follow-up assessment as appropriate. Training programs for pharmacy staff, adequate funding/remuneration and information technology, awareness campaigns, policy support and guidance were identified as key behavioural targets for the success of a potential PBBS. Workforce time and capacity, service user embarrassment and stigma were potential barriers.

Conclusions: The study identified a range of elements to be considered in the design and implementation of a successful PBBS. Informed by the evidence presented by this study, a multi-faceted approach to co-design the service will be required to ensure it is fit for purpose for all healthcare public and policy stakeholders.

1. Introduction

Globally, urinary incontinence, or the involuntary loss of urine, is known to affect millions of people, with a substantial economic burden to society.¹ A community representative sample in the United Kingdom (UK) found that one in four adults have had problems with urinary incontinence, and one in ten had experienced issues with faecal incontinence.² The actual prevalence is likely to be higher, particularly in women and older adults, but is difficult to determine due to poor disclosure and stigma.^{1,3} If incontinence is not managed or treated appropriately, it can lead to significant emotional, psychological, and physical impact on quality of life.⁴ People with incontinence can experience significant impact on their mental health including feelings of

embarrassment, anxiety and depression, leading to social isolation.⁵ Despite the existence of effective evidence-based treatment strategies, misconceptions persist, such as assuming that incontinence is an inevitable part of aging or childbirth. Only one in five women and one in 20 men who have urinary incontinence seek help, and this becomes even less likely in some cultures, or with people who do not speak English.⁶ Whilst absorbent products such as incontinence pads can help manage symptoms, addressing the underlying cause through preventative measures and education are key to allow more individuals to receive effective treatment.

There are approximately 11,500 community pharmacies in England.⁷ These healthcare settings are highly accessible, with 90 % of the population being within 20 min' walk, increasing to 99 % for those in

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highest deprivation areas.⁸ This role of pharmacies and pharmacy teams in addressing health inequalities by providing accessible health care to underserved populations has been highlighted.⁹ Their accessibility may make them particularly suited to reach those who might not seek help elsewhere, such as by going to see their general practitioner (GP).¹⁰ Pharmacies are staffed by trained professionals from whom the public can receive information on medications and health conditions. As part of their service they will provide general lifestyle advice and support for conditions such as incontinence, including often stocking a range of continence products.¹¹ However, it has been proposed that pharmacies could be an ideal setting for doing more to enable access to treatment for continence problems¹² and pro-actively identify people who are under-served.⁹ In England, along with the sale of over-the-counter medicines and products, community pharmacies are reimbursed for delivering services as part of their National Health Service contract. Other (advanced or enhanced) services are optional and may be commissioned on a national or local level.¹⁴ Indeed, the potential of community pharmacies to manage other common conditions such as sore throat and sinusitis has been recognised by the introduction of Pharmacy First in England, a service that includes a consultation that gives self-care, advice and medications as appropriate, the identification of any red-flags and sending of a notification to the patient's GP. This initiative is expected to reduce the requirement for a GP appointment and give people faster access to quality healthcare.¹⁵ A specialised pharmacy bladder and bowel service (PBBS) within community pharmacies, if commissioned and implemented by national organisations, could increase the capacity within healthcare systems to detect and manage incontinence, and make referrals to existing continence care pathways when required.^{11,12} This could alleviate pressure on general practices and bladder and bowel continence services.¹³

Healthcare interventions are more likely to be effective if they have a theoretical underpinning to their design.¹⁶ The COM-B behavioural model is widely used and theorises that there must be physical and psychological capability (C), social and physical opportunity (O), and sufficient motivation (M) (reflective or automatic) to optimise behaviour change.¹⁷ COM-B lies at the centre of the Behaviour Change Wheel, which is recommended to be used as a starting point to inform the theoretical basis of intervention development.¹⁷ The COM-B model has been used successfully to inform other community pharmacy-based services,^{18,19} however to the authors' knowledge this is the first application of this model to develop a community pharmacy-based continence service.

This study is part of the NIHR funded PRIME (Pharmacy Role in the Promotion of Continence) study that aims to develop a PBBS to support patients with urinary and/or faecal incontinence. A qualitative research design was chosen to elicit the views of different stakeholders and to identify the key determinants to a change in practice to enable pharmacists to do more for patients with incontinence, and to inform a PBBS that can be taken forward to produce a service specification using co-production methodology.

2. Methods

Semi-structured interviews were carried out to explore the perspectives of healthcare staff and users of community pharmacies in the United Kingdom. A purposive sampling strategy was used to recruit participants from four key groups.

1. Community pharmacist staff (P)
2. Healthcare staff working in existing bladder and bowel services (BBS)
3. Staff involved in commissioning and decision making for community services (C)
4. Members of the public who have bladder or bowel leakage, or their carers, using pharmacy services (SU)

Semi-structured interview guides (See online supplementary material) were developed and adapted for each stakeholder group, to investigate common components from different perspectives. These were informed by a systematic literature review,^{20,21} stakeholder meetings and previous engagement events. Each interview guide consisted of two parts. For each of the staff groups, the first part consisted of open-ended questions to inductively elicit views about their responsibilities, considerations and expectations regarding continence care. It included exploring their awareness of continence care guidelines, and their opinions on decision-making, resource provision and other factors which enable or restrict the ability to conduct continence care. For service users, the first part included the experience for individuals using pharmacies, the proposed PBBS, and how to ensure it would be fit for purpose. The second part of the topic guides for all stakeholders explored their views on the potential elements required for a successful PBBS, using the MoSCoW prioritization technique. This is a validated method to explore opinions on the relative importance of each requirement for the service (Must have, Should have, Could have, Would be good to have).²²

Staff participants were recruited through targeted emails, social media, and newsletters through specific staff networks including the Pharmaceutical Services Negotiating Committee (PSNC), Royal Pharmaceutical Society (RPS) and Society for Academic Primary Care (SAPC). Service users were invited using targeted emails, the Bladder and Bowel Confidence Health Integration Team,²³ and social media. Purposive sampling was used to ensure sufficient representation of individuals from each of the four stakeholder groups, and to encourage engagement with those commonly under-served in healthcare, and who may represent those most in need of the service.

The interviews were conducted online using video conferencing software (Microsoft Teams and Zoom), or by telephone, according to participant preference. Signed informed consent was obtained prior to participation through the provision of an online information sheet and completion of a consent form.

Interviews were transcribed verbatim using a professional transcription service and were checked for a high level of accuracy. Transcripts were then imported into the qualitative research software package NVivo v14 which assisted in the organisation and coding. A thematic analysis was conducted which involved carefully reading and re-reading of transcripts using a constant comparison approach.^{24,25} The concurrent data collection and analysis informed specific areas of focus for further investigation in subsequent interviews in an iterative manner. Themes were reviewed by AU and NC through regular discussion meetings to standardise the coding frame, and to triangulate viewpoints across participant groups. Discussion of interim analytic coding also helped foster reflexivity through the reflection on, and acknowledgment of any possible interviewer bias due to positive perceptions about the programme. Interviews continued until it was considered through discussion between NC and AU that no significant themes were arising from further interviews, and data saturation had been achieved in-line with the aims of the study.²⁶ All authors, including patient and public team members, were consulted on the themes and agreed on their relevance to the study aims. The final element to the analysis was the application of the COM-B model as a conceptual lens to classify the themes and sub-themes. Some of the themes could potentially be mapped onto multiple sub-components of the COM-B model, so final decisions on the mapping of the themes to the COM-B model were made following review by AB and subsequent discussion between AU and AB. This allowed the categorisation of the key determinants of a potential PBBS by the mechanisms of behaviour change, to inform proposed intervention components that are likely to be successful.

Ethical approval for this study was granted by the Health Research Authority (REC reference 22/PR/1114). The study is reported in accordance with the standards for reporting qualitative research (SRQR) guidance.²⁷

3. Results

A total of 27 individuals were interviewed (Table 1) including eight pharmacists (P), eight bladder and bowel service staff (BBS), eight service users (SU), and three commissioning professionals (C). The interviews were held from September 2022 to February 2023 and lasted an average of 44 min (range 20–60 min). One-to-one interviews were conducted with 25 individuals, and one was conducted with two bladder and bowel service staff. All interviews were conducted by one researcher (AU).

Themes are presented according to the COM-B sub-components as follows: psychological capability (e.g. training), physical capability (e.g. provision of a pro-active, specialist service), physical opportunity (e.g. appropriate funding), social opportunity (e.g. trusted resource), reflective motivation (e.g. professional role alignment) and automatic motivation (e.g. service user agency and activation). Table 2 summarises the identified themes mapped onto the COM-B sub-components, with the associated PBBS interventions that are proposed. Fig. 1 is a visual display of the study themes (outer ring) as mapped onto the central COM-B components of the behaviour change wheel.

The quotes that are included from participant accounts in this paper are preceded by letter(s) and a number. The letter indicates the stakeholder group of participants, and the number represents the consecutive order in which they were interviewed.

Table 1
Participant demographic characteristics.

Participant characteristics	N
Gender (n=27)	
Male	6
Female	21
Age (n=27)	
30-39	3
40-49	8
50-59	12
60-69	2
70-79	2
Ethnicity (n=27)	
White	22
Asian or Asian British	3
Black or Black British	2
Type of Stakeholder	
Pharmacist (n=8)	
Owner	2
Superintendent	2
Employee	3
Practice manager	1
Years of practice as a pharmacist	
5 years or less	0
6–10 years	2
10–20 years	2
More than 20 years	4
Bladder and bowel service staff (n=8)	
Specialist continence nurse	5
Bladder charity director	1
Clinical operations lead	1
Advanced clinical practitioner (physiotherapy)	1
Service users (n=8)	
Service user	6
Service user and carer	2
Incontinence type	
Urgency and bowel	2
Bowel	3
Stress	2
Urgency	1
Commissioners (n=3)	
Integrated Care Board (ICB) programme manager	1
ICB Community Pharmacy Clinical Lead	1
Policy and Development Lead	1

Table 2

Summary of the identified themes mapped onto the COM-B domains with proposed PBBS intervention components.

COM-B framework	COM-B sub-component	Themes	Proposed PBBS intervention components
Capability	Psychological	Training (knowledge and skills)	Development/provision of training modules in continence management for pharmacy staff members Pharmacy staff interpersonal skills training Staff awareness of NICE guidance (training) Staff trained to provide more specialist guidance (e.g bladder training, pelvic floor muscle training)
	Physical	Provision of a pro-active specialist service	Staff who are trained to pro-actively initiate contact with patients and encourage engagement with the service (e.g. when buying incontinence products) Clinical history and verbal assessment of the most bothersome symptoms, followed by targeted advice, medication support, and referral/follow-up assessment as appropriate Ability to receive and make referrals to/from GPs, hospitals, continence services Use of validated electronic questionnaires for assessment Pharmacy-based hosting of specialist continence clinics with other health professionals (e.g. continence nurse)
Opportunity	Social	Trusted resource	Staff who are trained to be sensitive to possible embarrassment of people seeking help for incontinence problems Raising awareness of the PBBS to other NHS continence services (GPs, bladder and bowel services) A campaign to increase public awareness of a pharmacy-based bladder and bowel service
	Physical	Limited workforce capacity	Bookable telephone/video/in-person appointments
		Appropriate funding	Whole-team involvement in delivery of services Long-term funding for the sustainability of the pharmacy service Documentation to record the provision/treatment/referral offered for reimbursement purposes
		Environmental resources	NHS pad provider service in consultation with bladder and bowel service

(continued on next page)

Table 2 (continued)

COM-B framework	COM-B sub-component	Themes	Proposed PBBS intervention components
			Development/provision of self-care resources (poster, leaflets, apps) Access to private consultation room on premises
		Information technology infrastructure	Integrated electronic patient record systems with general medical practices Electronic pharmacy record for documentation of the patient consultation Links to other specialists (e.g. continence nurses, urologists or physiotherapists) Mapping of local continence services
Motivation	Reflective	Professional role alignment	Assessment of the patient's willingness and ability to engage with treatment Staff trained to provide more specialist guidance within their role (e.g. bladder training, pelvic floor muscle training)
	Automatic	Service user agency and activation	Patient consent for referral and sharing of electronic medical records

their capability to provide a specialist continence service, with the caveat that training would be necessary to increase their confidence and skills to deliver a PBBS: “We’re not the experts in incontinence care (P17)”. In addition to training, it was discussed that pharmacists would require greater knowledge and awareness of the sensitivities of interacting with patients with continence problems. A training package, most likely delivered online was the favoured medium, to allow the flexibility for pharmacy staff to learn within their busy schedule.

P17 “The whole pharmacy profession would need more training, for sure. An online module. Anyone could do it at any time”

P2 “I think this service will require regular training ... Not only the clinical aspects of it but to make sure that pharmacists and pharmacy teams have that, I guess, emotional intelligence to be able to engage with individuals.”

Pharmacist participants stated that they did not routinely use specific clinical guidelines for continence management. They were not aware of NICE guidelines²⁸ for continence management and were unable to comment on their suitability within current pharmacy practice.

P1 “Guidance is relevant to everybody’s practice, but there’s quite a lot of guidance out there, isn’t there? And there are only so many hours in a day”

3.2. Capability (physical)

A pro-active service was envisaged, that provides an initial assessment (including identifying any red-flags and administering validated questionnaires), targeted advice, medication support and referral/follow-up assessment when appropriate.

3.2.1. Provision of a pro-active, specialist service

The pharmacy setting was considered to provide an opportunity to pro-actively engage with individuals who are currently managing their symptoms with products or medication, and may be unaware of potential treatments.

SU25 “Pharmacists should be pro-active and pick up conversations.”

BBS4 “I think taking a more active interest and engaging and looking at how they can look to improve the situation ... rather than just letting people carry on purchasing their pads and using pads”

Pharmacists were confident to give generalised lifestyle advice (e.g. diet, fluid intake, exercise) but lacked confidence in providing specialist information on continence. Bladder and bowel service participants perceived a niche for community pharmacy services to provide general advice that could complement their own service.

BBS16 “I see a pharmacy service is sort of basic conservative advice, health promotion. So, what they can do to try and treat their symptoms, looking at their lifestyle, it might make a bit of a difference whilst they’re waiting to be seen.”

Participants proposed that a PBBS consultation could involve a pharmacist taking a clinical history and verbal assessment of the most bothersome symptoms, followed by targeted advice, assessment, medication support.

P21 “An assessment of the problem, to start off with. So, what symptoms have you got? When’s it happening? How long has it been going on for? All, kind of, the basics and medication”

BBS5 “if the pharmacy had some of the leaflets to give general advice ... Just general advice about eating, drinking and pelvic floor exercises”

Pharmacist and bladder and bowel service participants agreed a consultation should include identification of any red flags i.e. alarm symptoms, that would result in the recommendation for immediate referral to other services (e.g. blood in urine).

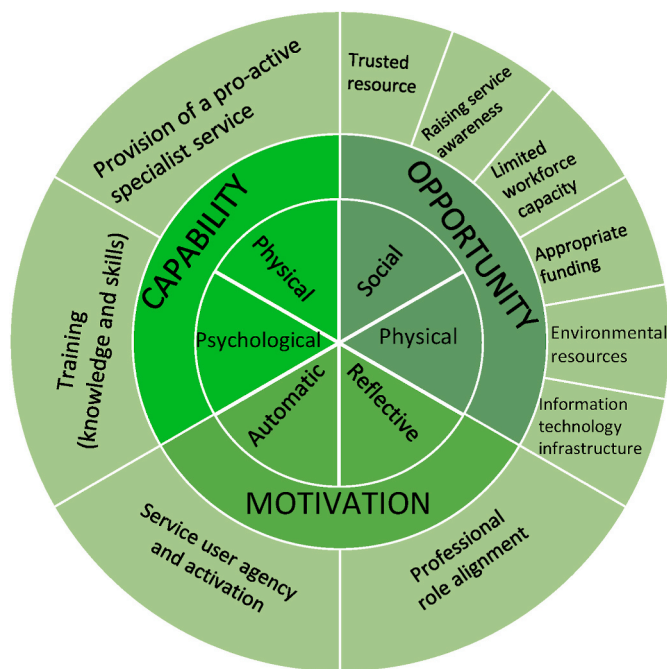


Fig. 1. The study themes (outer ring) as mapped onto the central COM-B components of the behaviour change wheel.¹⁷

3.1. Capability (psychological)

Training for pharmacy staff was required, to upskill their capability of providing a PBBS.

3.1.1. Training (knowledge and skills)

Pharmacist participants generally had a positive attitude towards

P26 *“If I’m going to do an incontinence service, I think I would like to rule out red flags”*

Ideally, direct or assisted referrals should be possible into the service (e.g. from GPs), or out of the service (e.g. to the continence service).

P26 *“The first port of call from the GP would be us. Then if we can’t manage them ... then we’d refer to the tertiary specialist centre.”*

The assessment of patients’ incontinence type and severity could be through provision of validated electronic questionnaires and bladder and/or bowel diaries. This would allow patient monitoring, contribute to outcome data collection and to facilitate assessment for appropriate referral.

P26 *“Outcome measurement can only come by either patients’ descriptions of their symptoms, or something like a symptom chart or some sort of score. So for a service to show it’s working”*

Pharmacies could also host a ‘one-stop clinic’, where appointments can be made to see a continence nurse for specialist advice.

BBS13 *“Put little leaflets up and little posters just to say, “We’ve got a continence adviser coming in on such and such a date,”*

3.3. Opportunity (social)

Although there is a social stigma to presentation with incontinence, that may present a barrier to service users, the opportunity to consult with pharmacists as a trusted resource was valued.

3.3.1. Trusted resource

Service users reported confidence in the capabilities of their local pharmacist. Service user participants talked about their experience of embarrassment or the ‘stigma’ of talking about incontinence problems in public. However, some had built a relationship with their local community pharmacist over many years and several described the importance of them as a ‘trusted resource’ for their health problems.

SU15 *“I remember going in and asking for advice on incontinence, particularly on my skin issues, because, again, it’s only probably because I know the pharmacist, and I trust her and I’m quite confident in talking to her”*

SU18 *“you don’t want to talk about something, whether you like it or not, there is such a stigma about it.”*

Service users valued the opportunity to have a walk-in discussion with pharmacists about health issues, and some perceived an advantage of anonymity by accessing advice from large chain pharmacies ‘where no-one knows you’ (SU15). Pharmacists perceived a strong demand from customers for continence products.

P32 *“I sell stuff, probably, every other day for it. It’s quite a common sale that we make”*

3.3.2. Raising service awareness

The importance of raising awareness of the PBBS through posters or other internal advertisement (e.g. on the pharmacy website) was highlighted by general practitioners (GPs) and other healthcare providers who may refer to, or receive patients from the PBBS. Participants expressed the potential value of national promotion initiatives, radio or television promotion, or through celebrity champions to raise the profile of incontinence and encourage engagement with the service.

SU18 *“It’s like having a really big campaign to make sure people are aware that they can actually go to the pharmacy and ask.”*

BBS16 *“I think if there could be some adverts, radio promotion. I mean if people don’t know about it, then it doesn’t get used, does it.”*

3.4. Opportunity (physical)

The capacity for the provision of additional services were a concern to participants. It was stressed that a PBBS would need to be appropriately funded and supported, with the required resources (environmental and information technology systems) and a clear service specification.

3.4.1. Limited workforce capacity

Pharmacists discussed the current lack of time and workforce capacity in the current community pharmacy environment, and the likelihood of these pressures increasing in future. These concerns were shared by service users and commissioners, who expressed that they did not wish to ‘overburden’ pharmacists. Bladder and bowel service staff also indicated their own limited capacity and expressed concern that any increase in referral to their service could be challenging to accommodate. For example, their own assessments could take up to an hour (either in person or over the telephone).

P20 *“I’ve got to give a lot more advice and help to patients. I have to do that, as well as dispense all of the prescriptions we get. So, it’s extremely difficult to run a pharmacy business at the minute.”*

SU24 *“You’ve just got to be aware that you don’t want to overburden them”*

BBS16 *“I mean, particularly in the community, or for probably a lot of continence services, there’s such a huge waiting list to be seen”*

3.4.2. Appropriate funding

There was agreement among all participants that the PBBS service must be funded appropriately to enable sustained implementation and delivery, and to ensure the service is commercially viable. Continence care in community pharmacies is currently unfunded, so any general advice was provided under their responsibility to promote public health. Given that a PBBS service could be time consuming and advice-based, an appointment-style booking system was suggested that would facilitate payment per appointment.

P2 *“instead of having payment by activity ... you say, “Okay, we’re going to pay you those 20 appointments for you but you need to do this training for us. At the end of the training, we’ll pay you for those 20 appointments”.*

Commissioner participants emphasised the influence of national policy initiatives to increase the likelihood of a service being funded in the long-term. For example, there would be an advantage to providing evidence for continence promotion in reducing health inequalities or being in-line with key health agendas.

C6 *“If some people aren’t getting the service that they need or, people with disabilities, it’s affecting them negatively That would, bump it up the priority list”*

Pharmacists emphasised the importance of having a clear service specification with a measurable or ‘provable’ outcome or figure for reimbursement accountability and service consistency. Outcome measurement was also deemed essential by commissioner participants to assess the economic implications of a PBBS.

P21 *“You’re going to have to show, ...show some figures to say, “Actually, yes, I’m doing this. Yes, we’re worthy of the payment for it and this is what we’ve got out of it, this is how many patients we’ve referred”*

C8 *“if there’s any cost savings, that’s always obviously another bonus, isn’t it? If we can show that it’s either been cost neutral or saved money.”*

3.4.3. Environmental resources

A private consultation room was considered an essential provision (must have) by all participants for the discussion of sensitive topics such

as continence. Although these were available in most pharmacist premises, there was some uncertainty from bladder and bowel service staff that these would be sufficient for the level of sensitivity required. Service users also identified a private consultation room as essential and usually available, but some also expressed concerns about the suitability of facilities in their local pharmacy.

BBS13 “It’s not soundproofed, so you can still hear a conversation. So if you come out, people are going to know what you’ve been talking about

SU3 “It’s probably better to be in the consultation room, because it’s quite a private thing. But even the consultation room isn’t automatically private, because it’s actually within the shop.”

Participants discussed the value and demand to provide a greater range of continence products. However the viable commercial model of providing this was questioned given the small revenue potential and shelf capacity constraints. Some reported that the price of the products were higher in pharmacies than in other retail premises.

P1 “We don’t hold loads and loads in stock. Because if you had a full range, you wouldn’t be able to put in some of the other lines where you might make some money.”

SU18 “if you buy stuff from pharmacies, it is so much more expensive than if you buy it from a supermarket.”

The provision of self-care information through leaflets was advocated, and signposting to online self-care information sources (e.g. the CONFidence mobile app²⁹). The consideration of gender-specific needs, levels of literacy and electronic capability were considered important in the distribution and development of these materials.

BBS19: “if they are tech-savvy, they could look at the CONFidence app”.

3.4.4. Information technology infrastructure

Pharmacist participants discussed the importance of straightforward electronic reporting systems for the efficient recording of patient consultation data. There was a lack of existing integrated IT systems with other services that could facilitate the effective communications between service providers. Ideally, integrated IT systems would allow access to patient records for the review of medical notes and facilitate referrals.

P23 “Everything needs to be quite straightforward, because often, we have to ask our support staff to do that side of things.”

SU11 “if they [pharmacists] had some links to continence services that would really help.”

3.5. Motivation (reflective)

The provision of a PBBS aligned with pharmacists’ underlying motivations to improve their practice and patient care, with the assurance that activities were within their professional remit.

3.5.1. Professional role alignment

Pharmacists primarily considered themselves to be ‘medicine experts’, with the core of their business being prescriptions. However, they expressed the potential of a PBBS for their personal professional development, and to make improvements to their practice to provide a patient-centred service.

P23 “if it means it comes with enhanced training and learning and development, then even better. It’s going to benefit practice.”

There was some uncertainty expressed about the type of advice that was considered within the remit of pharmacists to deliver practically and safely. Some BBS participants expressed concern over untrained pharmacists giving specialist advice such as bladder training, or pelvic

floor muscle training. Other interventions were considered to be more suitable for the established continence services, such as physical examinations and urine testing for the detection of urinary tract infections.

BBS5: “I would want it to be a trained pharmacist, not somebody who just works in the shop. There’s so much if you don’t know you could miss”

BBS7 “I would be wary of teaching someone bladder training, unless you know that they are emptying their bladder”

3.6. Motivation (automatic)

Service users motivations were to receive advice for their symptoms, whilst still having agency over the level of engagement with any service offered.

3.6.1. Service user agency and activation

Service users were motivated by the accessibility and potential to seek help in pharmacies to receive advice to manage their incontinence symptoms.

SU22 “For me to be able to go to a pharmacist and have a conversation I think would be really useful.”

SU11 “I can walk into the pharmacy any time of day. I haven’t seen a GP for four years but the pharmacist I have seen.

Some staff participants acknowledged that the level of engagement with any treatment and advice could be dependent on the individual, and emphasised the importance of the patient having the agency over whether or not to refer, and to give consent.

P20 “if the patient is motivated, they will make their own referral in”

BBS4 “if all they went in for was to pick up some pads and, all of a sudden, the pharmacist is saying, “I’m going to refer you for a full bladder and bowel consultation.” They might want some time to think about that so they might want to take away the information and choose to do something about it later or not.”

4. Discussion

This study applied a systematic process to the data analysis with the aim of informing the development of an intervention to increase continence promotion and care within community pharmacies in the United Kingdom. The mapping of the findings into the COM-B model has provided a theoretical basis to underpinning the identified facilitators and barriers to practice change. This resulted in a number of behavioural targets for stakeholders such as skills and knowledge, opportunities for resource provision, and social motivational factors which suggested the types of interventional components that could be effective.

The pharmacist participants had a generally positive attitude to their capability of providing a PBBS, if given essential continence specific training. This psychological aspect of the behavioural model can be targeted at the individual level, through clinical training to increase pharmacist confidence and knowledge in their provision of continence-specific assessment and advice. Effective training would enable the identification of patients that can be managed with appropriate advice and follow-up, or require referral to specialist services. Confident, well-trained pharmacists may be able to offer services more pro-actively, and likely result in higher service user confidence and health outcomes.³⁰ The Centre for Pharmacy Postgraduate Education in England (CPPE) provides e-learning modules for pharmacists to support new NHS services and for continued professional development (CPD).³¹ This is a platform that could provide specific continence training, alongside other specialist education modules.

Although physical examination and urine testing are recommended by the National Institute of Clinical Excellence (NICE),²⁸ some

participants did not consider these services to be appropriate for the community pharmacy setting. NICE guidelines are designed for specialist services, and the safety of continence-related interventions in the pharmacy context has yet to be evaluated.²¹ The scope of the PBBS will need to be agreed by stakeholders to be safe, appropriate and acceptable to the role of a pharmacist, and align with the services that other existing health services provide.

The investigation of ‘opportunity’ highlighted both barriers and facilitators to implementing a PBBS. The lack of time and workforce capacity has been identified previously as a barrier to the implementation of community pharmacy interventions.³² Recommendations for national innovations are that whole-team involvement and responsibility to deliver services may help to overcome these time constraints.³² Although pressures on pharmacy services have recently increased with the implementation of the Pharmacy First service, centralised systems and potential automation of dispensing services may increase future capacity.³³

The need for appropriate funding and reimbursement was considered an essential resource to provide the opportunity for a sustainable PBBS. Existing community pharmacy services may provide a model for reimbursement for the PBBS that incentivises uptake and ensure its commercial viability. For example, the New Medicines Service (NMS) is reimbursed according to standard reporting requirements where data is submitted on the number of completed NMS provisions per month.³⁴ Similarly, given that a PBBS service could be based on a specified consultation of activities, an appointment-style booking system that allows payment per appointment could facilitate the reporting requirements for reimbursement purposes.

In terms of environmental requirements, it was clear that access to a private room in the pharmacy was considered essential for sensitive discussions. In this regard, a PBBS could have similarities to other pharmacy services that have sensitive requirements, such as for emergency hormonal contraception, erectile dysfunction, sexually transmitted disease diagnosis and treatment.¹⁴ There was a demand for the stocking of a range of continence products for patients, however, the limited revenue potential of dedicating significant shelf capacity to this was apparent. It was suggested that the provision of NHS funded pads and/or affordable brands could provide the opportunity to patients both to receive appropriate advice, along with appropriate products. The challenge of finding the balance between the sometimes competing demands of professional obligations, and business viability has been found elsewhere in pharmacy practice.^{21,32}

The adequacy of information technology systems was discussed as a facilitator to a number of operations within the pharmacy. The effective two-way communication between pharmacies and other services such as general practice may play an important role for joined-up care and referrals. Whilst secure digital record sharing is increasingly used in UK pharmacies, achieving full ‘read and write’ clinical access to patient health records has been strongly advocated.³⁵ The implementation of these systems and the mapping of local services for referral purposes may be facilitated by strategic healthcare organisations (such as the Integrated Care Boards in England).³⁶ The support of Local Pharmacy Committees (LPCs) and national bodies (e.g. NHS England) may also be key to increase the priority of the national continence health agenda. Indeed, Public Health England set out in 2017 the strategic importance of pharmacists in the prevention of long-term conditions that has paved the way for the introduction of new interventions going forward.³⁷ This also aligns with the long-term ‘NHS five year forward view’ to enable people to become better at managing their own health.³⁸ The potential for pharmacy to go further to address health inequalities has also been highlighted, by the provision of a more pro-active service to seek out those commonly under-served in healthcare, to ensure all may benefit from accessible pharmaceutical care.⁹

The emotional stigma and embarrassment of presenting with incontinence for patients could present a barrier to the social opportunity of a PBBS. However, service users were positive about the accessibility

of a PBBS, and the demand for continence products and care was reported to be high. Interpersonal training for pharmacists to increase emotional intelligence of the impact of incontinence on peoples’ lives could facilitate engagement with the service. The social opportunity for a PBBS could also be enhanced by an awareness campaign to promote pharmacies as a resource for continence care.³²

The motivational attitudes of pharmacists towards professional development, was in alignment with other findings elsewhere. If the intervention is considered to benefit patient care or improved professional capability, individual motivation should not be considered a major barrier to the uptake of extended pharmacy practice roles.³⁹ Although service users were motivated by their desire to seek help and advice for their symptoms, the level of individual motivation for treatment was discussed as being a factor that could affect engagement with the service. The verbal assessment of patient activation, or ‘the knowledge, skills and confidence a person has in managing their own health care’ may help to assess the appropriate level of services to be offered to an individual.⁴⁰

4.1. Limitations and strengths

As is the nature of qualitative findings, the sample was limited to the views of this group of participants and reflective of the United Kingdom. Some of the findings and interventional targets are therefore specific to the pharmacy practice within the NHS context. The included sample did not include the direct views of other pharmacy staff (e.g. pharmacy technicians or medicine counter assistants). As discussed earlier, these staff help support the delivery of pharmacy services and can be trained and enabled to help relieve workforce time constraints. As recruitment materials were sent out on social media and by newsletters, it was not possible to determine the numbers that saw these materials, and provide any assessment of the representativeness of the sample. Nevertheless, many of the themes identified were consistent with results from others reported from international interventional studies, particularly in relation to workforce time constraints, stakeholder attitudes to the proposed intervention, training and remuneration requirements.³² Inevitably the research sample was self-selected, as interested and motivated individuals would be potentially more likely to agree to be interviewed, meaning there is a possible positive bias to some of the views represented. However a strength of the study was that it explored the views of different groups of key stakeholders, allowing the data triangulation of results.⁴¹ We consider that this sampling and analytic strategy is likely to have elicited the real issues for innovation and implementation of the PBBS, to ensure it fits with existing services and systems. Pharmacists have an interest in advancing the pharmacy profession and patient care, but readily highlighted the barriers to an increase in service provision in agreement with other stakeholder groups. Although the commissioner sample was smaller ($n = 3$), these individuals were representative of the English Integrated Care Boards so had a broad experience of how services are implemented, with no conflict of interest in the implementation of a PBBS. The bladder and bowel service representatives had a strong motivation to ensure that the pharmacy-based services were safe, and complementary to their own.

The COM-B model provided the theoretical framework that structured the analysis and identified behavioural targets to address the identified barriers and facilitators to the proposed intervention. An understanding of the theoretical basis of an intervention is recommended by the Medical Research Council guidelines for the development of complex interventions, and will also be important to informing how the intervention may be evaluated.¹⁶ Future evaluations should also include the assessment of quantification of the costs (direct and indirect) of the proposed service.

5. Conclusion

The study identified a range of elements to be considered in the

design and implementation of a successful PBBS. Informed by the evidence presented by this study, a multi-faceted approach to co-design the service will be required to ensure it is fit for purpose for all healthcare, public and policy stakeholders.

CRedit authorship contribution statement

Alan Uren: Writing – original draft, Methodology, Formal analysis. **Margaret Watson:** Writing – review & editing, Supervision, Methodology, Funding acquisition, Conceptualization. **Shoba Dawson:** Writing – review & editing, Funding acquisition. **Ade Williams:** Writing – review & editing, Funding acquisition, Conceptualization. **Hugh McLeod:** Writing – review & editing, Funding acquisition. **David Chandler:** Writing – review & editing, Funding acquisition. **Alice Berry:** Writing – review & editing, Methodology. **Nikki Cotterill:** Writing – review & editing, Supervision, Methodology, Funding acquisition, Conceptualization.

Declaration of competing interest

All authors report no conflict of interest.

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Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.sapharm.2024.07.003>.

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