





COMMUNITY PHARMACY SCOTLAND:

A MIXED METHODS NATIONAL EVALUATION OF THE EXPERIENCES OF SERVICE USERS OF THE MINOR AILMENT SERVICE

NOVEMBER 2018

Research Team

Jointly Held Post Dr Lee Boag

Robert Gordon University Prof Derek Stewart, Dr Katie MacLure, Dr Scott Cunningham

University of Strathclyde Dr Anne Boyter, Dr Gazala Akram

Community Pharmacy Scotland Prof Harry McQuillan

Funded by Community Pharmacy Scotland



Executive Summary

Background

The Minor Ailment Service (MAS) is a community pharmacy service which allows eligible people to gain improved access to care and to minimise health inequalities by providing free treatment for self-limiting conditions. Published literature on MAS in Scotland has largely focused on pharmacists' views and experiences. There is a paucity of research around the concept of value, as perceived and experienced by those eligible of the general public accessing the service.

Aim

The aim of this study was to explore value as perceived and experienced by those accessing MAS in Scotland.

Methods

A cross-sectional survey was conducted of those accessing MAS in June and July 2018, following a smaller-scale pilot study in April 2018. All community pharmacies in Scotland were invited to participate by distributing up to 10 study packs to consecutive individuals accessing MAS. The pack included an information sheet, pre-piloted questionnaire, and pre-paid return envelope. Questionnaire items included: experience of consultation (the Consultation and Relational Empathy, CARE Measure), reason for choosing MAS, overall satisfaction with the service, healthcare consultations potentially avoided, and overall experience and perceived value of the service. There was an optional one week follow-up questionnaire and a telephone interview to further explore experiences. Follow-up questionnaires confirmed any additional healthcare consultations related to their presented minor ailment and perceived effectiveness of treatment. Telephone interviews with purposively sampled service users explored, in more depth, the experiences across all presenting minor ailments. Ethical approval was granted by a university panel and NHS ethics panel South Central – Hampshire A Research Ethics Committee (18/SC/0229). NHS Research and Development approval was obtained from all geographical health boards across Scotland.

Results

One thousand one hundred and twenty-one questionnaires were returned with responses from all 14 geographical health boards in Scotland. Service users accessed MAS for their own health (n=647; 58.1%), for a child (n=420; 37.7%) and for another adult (n=47; 4.2%). Treatment was for 11 minor ailment indications: allergy (n=328; 29.3%), dermatological (n=183; 16.3%), gastrointestinal (n=123; 11.0%), infection (n=113; 10.1%), respiratory (n=90; 8.0%), musculoskeletal pain (n=82; 7.3%), teething (n=59; 5.3%), head lice (n=28; 2.5%), headache (n=26; 2.3%), blocked ears (n=19; 1.7%), and

undisclosed (n=70; 6.2%). Overall satisfaction of service users was rated highly (scoring 10 out of 10: n=960; 87.2%) remained consistently high across both presenting condition and Scottish Index for Multiple Deprivation (SIMD) based on home postcode. Most common reasons for selecting MAS were 'Convenient Location' (n=748; 66.7%), 'No Appointment Needed' (n=716; 64.4%), and 'Good Relationship with the Pharmacy Already' (n=700; 62.8%). Consultation experiences, reported using the CARE Measure, were uniformly rated as 'Excellent'. 'Strongly Agree' was most often selected for statements regarding competency/trust in the service with the exception of 'Disagree' with the statement 'Given the choice, I prefer to consult a GP than a pharmacist for minor ailments.'

Services that would otherwise have been accessed included: General Practice (n=655; 59%), NHS 24 (n=117; 10.6%), Accident & Emergency (A&E) (n=23; 2.1%), and purchased medication independently 56.7% (n=629). One week follow-up (n=327; 29.2%) reported that 6.4% (n=21) had subsequently consulted a GP, 0.3% (n=1) had used NHS 24, none had visited A&E, and 85.9% (n=281) reported using no other service. Almost all follow up respondents (n=324; 99.4%) would recommend the service to others with 85.6% (n = 279) reporting that the treatment had effectively managed their minor ailment. Service users also reported adequate privacy to discuss their minor ailment (n=962; 87.0%) and most agreed that pharmacist access to their patient medication files would enhance the care that they were able to provide (n=690; 62.2%).

Thematic analysis of interview transcripts (n=20) identified 5 themes relating to experiences of MAS: (i) Access for vulnerable groups, (ii) Not wanting to waste a GP appointment, (iii) Being unable to access a GP appointment, (iv) Positive relationships with pharmacy staff, and (v) Limited public awareness of the service.

Conclusion

This work demonstrates that MAS has high perceived value in terms of trust and service satisfaction and provides quantifiable data to demonstrate the reduction in accessing other higher cost healthcare services.

Contents

Excecutive Summary	
Contents	iii
Background & Scope of The Study	1
Aims & Objectives	2
Methods	3
Questionnaire Development	3
Data Collection & Generation	5
Governance	6
Results	7
Responses Across Health Boards	7
Service User Demographics & Eligibility	8
Utilisation of Service and Presenting Minor Ailment	9
Reasons For Seeking Treatment Through MAS	10
Alleviation of Other Services	11
Perceived Satisfaction Of Experience Using MAS	13
Perceptions of MAS consultation, Trust In The Service & Privacy	14
Follow Up Effectivness & Additional Servcie Use	16
Thematic Analysis of Service User Experiences	18
Discussion	21
Percieved Value & Effectiveness Of MAS	21
Quantification of Other Healthcare Service Visits Avoided	21
Demonstrated Value Of MAS	22
Study Strengths & Limitations	22
Conclusion & Recommendations	23
References	24
Appendices	26

Background & Scope of The Study

The Minor Ailment Service (MAS) in Scotland has provided NHS treatment in community pharmacy, for those eligible, for self-limiting conditions since it was established in 2006. MAS provides a source of professional advice which is readily available with no need for an appointment. This service contributes to the national enhancement of healthcare through improved access to services so helping to minimise health inequalities. In 2016/17 over 2 million products were provided by pharmacists through MAS with a reimbursement value of £4.9 million.¹ Minor ailments are reported to constitute around 13% and 5% of general practice and emergency department visits respectively, but cost two and four times more by comparison with treatment in a community pharmacy.²

Despite the increased access and convenience of community pharmacies, the general public has been reported to view pharmacists as 'drug specialists'³, overlooking the wider expertise they possess and the potential contribution to self-care they can provide. It is, therefore, important to not only understand the experiences of those who use the service, but also their expectations and existing perceptions and perceived value of community pharmacy's treatment of minor ailments.

- As of 31st March 2017, 16.4% of the Scottish population were registered for MAS¹
- MAS items were prescribed with a value of £4.9 million

It has been recognised that minor ailment consultations present a major burden to the higher cost settings of general practice and emergency departments⁴ even though both those providing MAS via community pharmacies and those accessing the service as having positively regarded the service.^{5,6} The patient perception of MAS is restricted in the existing literature to staff and stakeholder understandings, however, public perceptions of community pharmacy practice³, and preferences for self-care and professional advice⁷ and the management of minor illnesses² have been reported as components of research projects concerned with pharmacy service evaluation

Despite the obvious influence that experiences and perceptions have on service use, adherence and satisfaction, no data exists to exemplify this on a national scale. Such data is required to ensure that the services of community pharmacies are properly utilised and pharmacy service models are implemented to meet the needs of service users accessing MAS.⁸ This project has the potential to demonstrate the national perception, value, and experiences of a service which has already been identified as crucial in the future provision of healthcare in regards to increased access to care and the minimisation of health inequalities.⁹



Aims & Objectives

The aim of this study was to explore value as perceived and experienced by those accessing MAS in Scotland.

The research objectives in relation to service users and MAS were to:

- i. determine their perceptions of the quality of the consultation and perceived effectiveness of the treatment and advice given
- ii. quantify the number of general practitioner or other healthcare professional visits potentially avoided
- iii. determine their perceptions of the value of the overall experience, including positive and negative aspects
- iv. explore in-depth their perceptions and experiences, with emphasis on value



Methods

Questionnaire Development

The questionnaire development was informed by previous service evaluation projects and from national public health reports ^{10,11} for the purpose of content validity. Questionnaire (Appendix One) items were designed to elicit (i) overall satisfaction, (ii) perceptions of perceived value of the service and (iii) experiences of the consultation (CARE Measure)¹². The CARE Measure is a validated tool which provides self-report measure of consultation and relational empathy experience, and has been used extensively within general practice. The CARE Measure questions relating to experience of consultation consist of ten descriptive statements relating to professional empathy in therapeutic relationships, to which service users could rate the perceived presence of these skills using a five-point Likert scale ranging from 'Poor' to 'Excellent'. The facets rated were: making you feel at ease, letting you tell your 'story', really listening, being interested in you as a whole person, fully understanding your concerns, showing care and compassion, being positive, explaining things clearly, helping you take control, and making a plan of action with you.

These three overarching aspects allowed a collective understanding of national experience and value of MAS while items regarding the actual process, i.e. type of ailment/condition, perceived privacy, and expectations, allowed for targeted and specific evaluation.

Items were also included to elicit the reasons for service users' choice for MAS, perceived trust and competency of the service, and also to find out if any other healthcare services would have otherwise been accessed. These data further demonstrated perceptions of the quality of service provided by community pharmacies by evidencing the contribution to alleviating the load on other services and providing accessible and professional front line advice or help for the treatment of minor ailments.

The follow up questionnaire (Appendix Two) allowed further determination of what other healthcare services had been avoided by ascertaining if any subsequent appointment was required to treat the initially presented condition. Service users were also asked whether they believed that their MAS treatment was effective, whether they would use MAS again, and whether they would recommend the service to others.



The questionnaires were piloted during April 2018 by five community pharmacies in the Glasgow and Stirling areas of Scotland. These were selected due to their varying deprivation scores (Scottish Index of Multiple Deprivation 2016) and locations: two were in an urban setting, two in a rural setting and one considered to be semi-rural due to accessibility and surrounding population. Each community pharmacy was sent twenty-five questionnaires to be distributed over a one week period to consecutive service users accessing MAS. Of these, fifty-two questionnaires were distributed, sixteen were returned completed, giving a response rate of 31%. The pilot study responses informed questionnaire refinement with minor changes in layout and a reduction in open-ended questions which were rarely completed and the inclusion of 'Good relationship with the pharmacy already' as a response to the question regarding the reasons for choosing to use MAS as it featured prominently as an additional 'other' response.

The responses from the pilot questionnaires provided positive indications regarding MAS user experiences and perceptions, provided a promising response rate, and provided the logistical framework for the main project.



Data Collection & Generation

All community pharmacies in Scotland, across all health boards, were invited to take part in the project. Several communications were sent from Community Pharmacy Scotland by means of email, social media updates and a blog on the website outlining the purpose and process of the study. Only two pharmacies of the 1,257 in Scotland declined to participate. Community pharmacies were sent study packs by post and primed to only distribute to people accessing MAS. Up to 10 individuals from each community pharmacy who received an item on MAS during June 2018 were offered a study pack by

their pharmacist, containing an information sheet (Appendix Three), pre-piloted questionnaire, and a pre-paid return envelope. Pharmacies who reported to Community Pharmacy Scotland that they had not received their study packs or had not yet begun distributing them (e.g. lead pharmacist had been on holiday) were given the opportunity to distribute until the second week of July to maximise response rate.



Figure 1: CPS social media communications encouraging responses for the study

The questionnaires provided a link to an online version of the questionnaire, in order to promote response rates by improving access, otherwise service users were asked to return their completed questionnaire by post as soon after their pharmacy visit as possible. The one week follow up was posted, or emailed, to reach the service users one week from their reported pharmacy visit. Upon completion and return of the follow-up questionnaire, service users could indicate their willingness to take part in a telephone interview. An interview information sheet (Appendix Four) and consent form were sent with pre-paid return envelopes and service users were contacted by telephone within time/ date periods that they had indicated they were available.

Semi-structured telephone interviews were conducted to the point of data saturation with 20 service users across the 10 defined minor ailment categories grouped from the responses, none of the service users in the undisclosed grouping (i.e. who had not disclosed the nature of their minor ailment) consented to interview. Purposive sampling was used to obtain a representative sample across the ten defined minor ailment categories: Allergy (n=4), Gastrointestinal (n=3), musculoskeletal pain (n=3), skin (n=2), respiratory (n=2), teething (n=2), infection (n=2), head lice (n=1), and blocked ears (n=1). Those interviewed (n=20) ranged in age from 17 to 82, were predominantly female (n=13) and had used the



service for themselves (n=15) rather than on behalf of a friend or family member. Interviews were digitally recorded and transcribed verbatim to enable thematic analysis.

Governance

Ethical approval was granted by the Robert Gordon University School of Pharmacy and Life Sciences Research Ethics Panel (Ref: S124), and NHS Health Research Authority South Central — Hampshire A Research Ethics Committee (18/SC/0229). Following NHS R&D approval, distribution of study packs was initiated after approval was received from the 14 geographical health boards within Scotland. The study has also been granted Caldicott Information Governance approval (243942) following completing the Medical Research Council Course: Research Data & Confidentiality (Date 17/4/18) to undertake recorded patient interviews.

All service users were given the opportunity to request further information regarding participation and to ask any questions prior to deciding whether to take part. Five service users enquired directly by telephone to the lead researcher regarding confidentiality and data handling and three service users made reference to this in their responses to the first questionnaire, e.g. 'I hope that what I have provided is being kept confidential' to which a written response clarifying anonymity was sent along with the follow-up questionnaire.

All service users who agreed to participate in a telephone interview were reminded that the calls would be recorded prior to the interview commencing. No telephone interview contact was made until a signed consent form was returned for this phase of the study.



Figure 2: CPS social media communications advertising the study



Results

Responses Across Health Boards

One thousand one hundred and twenty-one questionnaires were returned, with representation from all geographical health boards across Scotland. The responses from each health board remained proportionate to the number of community pharmacies within each area. The majority of service users provided their home post code (n=854; 76.2%), the use of which was to provide relative deprivation of service users rather than a reliance upon the post codes for the pharmacies accessed.

Table 1: Response rates across health boards and proportionate representation (n=1121)

Health Board	Responses	% of Overall Responses	% Pharmacies per health Board
NHS Greater Glasgow and Clyde	166	14.8	23.2
NHS Lothian	133	11.9	14.5
NHS Grampian	114	10.2	10.5
NHS Lanarkshire	107	9.5	11.5
NHS Borders	102	9.1	2.3
NHS Ayrshire and Arran	102	9.1	7.8
NHS Tayside	92	8.2	7.3
NHS Dumfries and Galloway	91	8.1	2.7
NHS Forth Valley	83	7.4	6.1
NHS Fife	71	6.3	6.8
NHS Highland	55	4.9	6.4
NHS Western Isles	3	0.3	0.2
NHS Shetland	2	0.1	0.3
NHS Orkney	1	0.1	0.4

Service User Demographics & Eligibility

Of the 1,121 responses, 861 (76.8%) were female and 251 (22.4%) were male (9 undisclosed; 0.8%), with a mean age of 50.9 (SD=18.67) years ranging between 16 and 96. Most prevalent employment statuses were: employed full-time (n=384; 34.6%), retired (n=349; 31.5%), Employed Part-time (n=171; 15.4%) and unemployed (n=131; 11.8%).

Table 2: Employment status of respondents (n=1121)

Employment status of respondents	n	%
Employed Full-time	384	34.3
Employed Part-time	171	15.3
Unemployed	131	11.7
Retired	349	31.1
Full-time Carer	32	2.9
Full-time Education	39	3.5
Part-time Education	2	0.2
Rather not Say	13	1.2

The most common eligibility criteria for accessing MAS were: aged 60 or over (n=412; 37.6%) and aged 16 or under (n=400; 36.5%).

Table 3: Eligibility criteria of respondents (n=1121)

Eligibility criteria for respondents	n	%
Under 16 years	400	35.7
Full Time Education and Under 19 years	38	3.4
Over 60 years	412	36.8
Pregnant	41	3.7
NHS Tax Credit	79	7.0
Receiving form of income support	89	7.9
Rather not Say	62	5.5

Utilisation Of Service & Presenting Minor Ailment

Of those who responded, the majority of service users had used MAS before (1002; 89.7%), with 103 new users (9.2%) and 12 unsure (1.1%) if they had previously accessed the service. Symptoms had lasted for between 0 days and 60 days with a mean of 4.6 (SD = 6.6) days. Of those who responded (n=1114) MAS was accessed for the service user themselves (647; 58.1%), for a child (420; 37.7%), and for another adult (47; 4.2%). Minor ailments reported were grouped in ten categories, and an additional category for those who did not wish to disclose their minor ailment.

Presenting Conditions

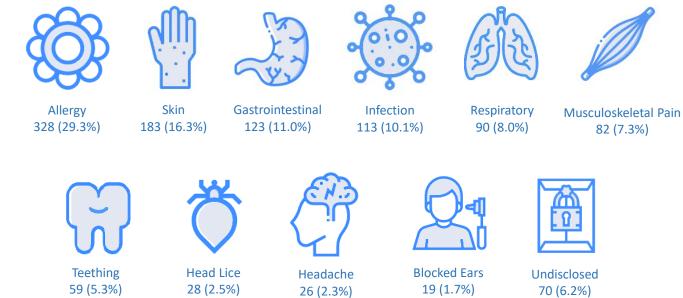


Figure 3: Composition of the eleven minor ailment groupings, including undisclosed

Table 4: Composition of the eleven minor ailment groupings, including undisclosed (n=1121)

Minor Ailment	n	%
Allergy	328	29.3
Skin	183	16.3
Gastrointestinal	123	11.0
Infection	113	10.1
Respiratory	90	8.0
Musculoskeletal Pain	82	7.3
Teething	59	5.3
Head Lice	28	2.5
Headache	26	2.3
Blocked Ears	19	1.7
Undisclosed	70	6.2



Reasons For Seeking Treatment Through MAS

Several reasons informed the choice of using MAS with 'Convenient Location' (n=748; 67.1%), 'No Appointment Needed' (n=716; 64.3%), and 'Good Relationship With The Pharmacy Already' (n=700; 62.8%) as the most commonly reported. Service users could indicate multiple responses that informed their service use decision.

"What were the reasons that made you decide to choose to visit your pharmacy rather than other healthcare providers?"



Convenient Location 748 (67.1%)



No Appointment Needed 716 (64.3%)



Good Relationship With the Pharmacy Already 700 (62.8%)



Not Serious Enough to See a GP 660 (59.2%)



Have Used MAS Before 620 (55.7%)



Didn't Have to Travel Far 468 (42.0%)



Seen/ Heard to use 'Pharmacy First' 357 (32.0%)



Open When Other Services Are Not 172 (15.4%)

Figure 4: Multiple choice responses for reasons for accessing MAS

Table 5: Multiple choice responses for reasons for accessing MAS

Reason for choosing MAS	n	%
Convenient Location	748	67.1
No Appointment Needed	716	64.3
Good Relationship With The Pharmacy	700	62.8
Ailment Not Serious Enough To See A GP	660	59.2
Have Used MAS Before	620	55.7
Didn't Have To Travel Far	468	42.0
Seen/ Heard To Use 'Pharmacy First'	357	32.0
Open When Other Services Are Not	172	15.4

Alleviation Of Other Services

Service users were asked if MAS had not been available, which other services they would have used instead. The two most frequent responses were 'GP Practice' (n=655; 59.0%) and 'Bought Medicines Independently' (n=629; 56.7%). Service users were given the option to select more than one option to fully explore both services and self-care options.

"Had MAS not been available, which other service(s) do you think you would have used?"

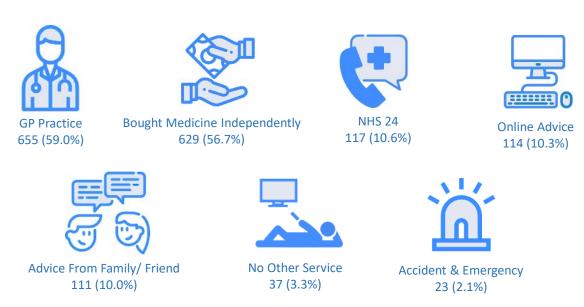


Figure 5: Multiple choice responses for other services that would have been used had MAS not been available

Table 6: Multiple choice responses for other services that would have been used had MAS not been available

Other Services That Would Have Been Used	n	%
GP Practice	655	59.0
Bought Medicine Independently	629	56.7
NHS 24	117	10.6
Online Advice	114	10.3
Advice From Family/ Friend	111	10.0
No Other Service	37	3.3
Accident & Emergency	23	2.1

Alternative to MAS



Figure 6: Number of responses indicating GP visit only as alternative to MAS

Of the 655 service users who reported that they would have visited their GP Practice, 337 (51.5%) of these would have used this as their one and only service choice, not considering the other services or self-care methods.

The remaining 318 responses consisted of GP Practice and one other choice (n=207; 31.6 %, as outlined in the figure below) and GP Practice with two to five of the other choices (n=111; 16.9%).

GP Practice and 1 other choice

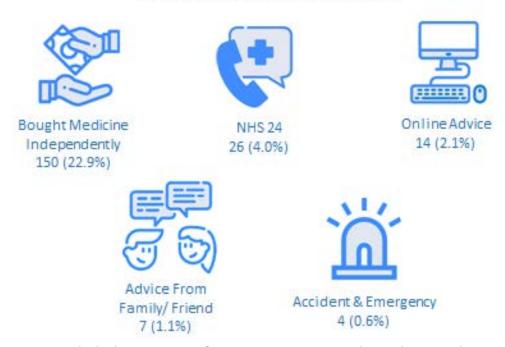


Figure 7: Multiple choice responses for accessing GP Practice and one other as an alternative to MAS

Table 7: Multiple choice responses for accessing GP Practice and one other as an alternative to MAS

Service Choice GP Practice and one Other Choice	n	%
GP Practice Only		51.5
Bought Medicine Independently	150	22.9
NHS 24	26	4.0
Online Advice	14	2.1
Advice from Family/ Friend	7	1.1
Accident & Emergency	4	0.6



Perceived Satisfaction Of Experience Using MAS

Overall satisfaction of the experience of using MAS was rated by service users from 1 to 10, with 1 representing 'Not at all satisfied' and 10 'Fully satisfied'. A score of 10 was reported most often (n=960; 87.2%), with the lowest scoring at 5 (n=4; 0.4%). Satisfaction responses were heavily skewed with both a median score and an interquartile range of 10.

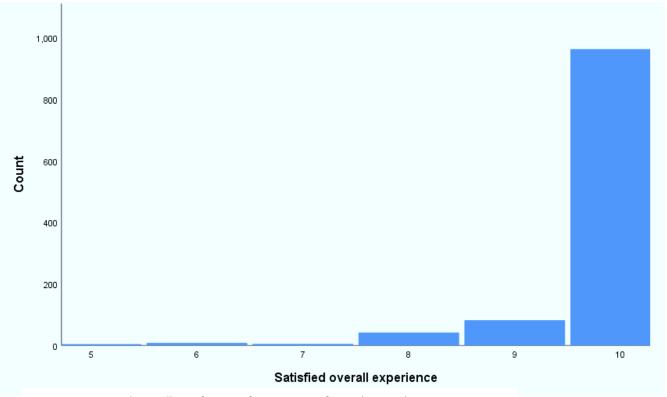


Figure 8: Reported overall satisfaction of experience of MAS (n=1121)

Table 8: Reported overall satisfaction of experience of MAS

Overall Satisfaction Rating (Out of 10)	n	%
10	960	87.2
9	82	7.3
8	42	3.8
7	5	0.4
6	8	0.7
5	4	0.4
1-4	0	0

Overall satisfaction was rated highly across all ten minor ailment groupings, and the undisclosed group. Scoring of satisfaction also remained consistently high across deprivation quartiles (SIMD 2016).

Perceptions Of MAS Consultation, Trust In The Service & Privacy

All ten CARE measure statements scored a median (mid-point) response of 'Excellent', demonstrating a very positive perception of the experience of consultation.

Table 9: Percentage of responses across each CARE Measure statement

CARE Measure Statement	% Poor	% Fair	% Good	% Very Good	% Excellent	% Does Not Apply
Making your feel at ease	0.4	1.4	5.9	20.4	69.8	2.0
Letting you tell your 'story'	0.3	0.7	5.0	22.7	70.1	1.3
Really listening	0.1	1.2	4.4	20.3	72.5	1.5
Being interested in you as a whole person	0.4	1.8	6.1	19.4	68.3	4.0
Fully understanding your concerns	0.2	1.0	5.8	18.6	71.6	2.9
Showing care and compassion	0.5	1.0	5.2	18.6	72.8	1.9
Being positive	0.2	0.9	4.3	21.3	70.8	2.5
Explaining things clearly	0.4	0.4	5.1	19.2	71.9	3.1
Helping you take control	0.7	1.0	4.6	20.1	59.7	13.8
Making a plan of action with you	0.6	1.4	4.9	17.2	58.7	17.2

Supplementary questions also asked service users to report their level of agreement with statements regarding perceived competency and trust of the service (Table 10). All statements scored a median response of 'Strongly Agree' with the exception of 'Given the choice, I prefer to consult a GP rather than a pharmacist for minor ailments' which scored a median response of 'Disagree', indicating preference for MAS for treatment of minor ailments.

Table 10: Percentage of responses across each statement related to perceived competency and trust of the service

Statement pertaining to perceived competency and trust	% Strongly Disagree	% Disagree	% Unsure	% Agree	% Strongly Agree
I am confident that a pharmacist will provide help with minor ailments as safely as a GP	0.5	0.6	3.0	30.5	65.4
I would recommend consulting a pharmacist for minor ailments to other people	0.3	0.4	1.2	28.3	69.9
Given the choice, I prefer to consult a GP rather than a pharmacist for minor ailments	15.6	50.0	16.4	11.1	6.7
I want my pharmacist and doctor/GP to work together to make sure I am receiving the best treatment	1.0	2.0	7.8	32.0	57.2
I want the wider healthcare team including doctors, nurses and pharmacists to work together in providing my care	0.9	2.8	10.2	31.1	55.0
I am more interested in the quality of care I receive than who delivers it	0.6	3.0	6.0	33.2	57.2

Service users were also asked to report their perceived level of privacy for discussing their minor ailments, whether or not they had used the consultation room, and their future willingness to use the consultation room to discuss minor ailments.

Most service users (n=962; 87.0%) reported that they had felt that they had adequate privacy to discuss their minor ailment. The consultation room was not used in the majority of cases (n=909; 81.9%). However, most service users (n=903; 82.5%) would consider using the consultation room in the future. Service users were also asked if they thought that access to their patient medication records would enhance the care the pharmacist was able to provide; almost two thirds (n=690; 62.2%) agreed that they felt this would be true.

Follow-Up Effectiveness & Additional Service Use

A one week follow-up questionnaire was sent to all those who opted in for this stage (n=514; 45.9%) with a return of 327 questionnaires (29.2%). Follow-up at one week from reported pharmacy visit, service users documented the use of any further access of healthcare services required to treat their minor ailment. The majority of the service users did not go on to use another service (n=281; 85.9%) and a small proportion went on to visit their GP (n=21; 6.4%).

"Have you gone on to use other service(s) for the minor ailment you first presented with?"



Figure 9: Multiple choice responses at follow up for any further services accessed

Table 13: Multiple choice responses at follow up for any further services accessed

Follow Up Use of Services	Count	%
No Other Service	281	85.9
GP Practice	21	6.4
Advice from Family/ Friend	10	3.1
Bought Medicine Independently	9	2.8
Online Advice	5	1.5
NHS 24	1	0.3
Accident & Emergency	0	0

The follow-up questionnaire also asked service users if they perceived the treatment on MAS to have treated the minor ailment they presented with, if they would use the service again and if they would recommend visiting a pharmacy for the treatment of minor ailments to other people.

The majority of service users (n=279; 85.6%) reported that their minor ailment had been effectively treated, that they would use MAS again (n=326; 99.7%) and would recommend others to visit the pharmacy for treatment of minor ailments (n=324; 99.4%).

Thematic Analysis of Service User Experiences

Interviews were conducted to the point of data saturation with five main themes emerging from the transcripts of the interview recordings. These themes were then read alongside the rich data set from the open response questions of the questionnaires; no additional themes emerged.

The five themes that emerged in regards to service users experiences of MAS were, as before: (i) Access for vulnerable groups, (ii) Not wanting to waste a GP appointment, (iii) Being unable to access a GP appointment, (iv) Positive relationships with pharmacy staff, and (v) Limited public awareness of the service.

Access for Vulnerable Groups

Those with, or caring for persons with, chronic conditions, neurodevelopmental disorders, and other limiting conditions recognised their community pharmacies as easier and more comfortable to access. The rationale for this focused on the short waiting times, the relative ease of visiting for a consultation, quieter environments, and a less stressful and familiar experience.

- Interview 03: "My son has learning difficulties so it's really a case of going where he feels comfortable. There's less queues and people than the GP and you can wait long enough for an appointment."
- Interview 09: "I have got five boys, two of which have autism. If they go to the GP it's my job to look after him but they get really stressed at the health centre or GP because they've got to sit and wait for so long."
- Questionnaire 252: "My pharmacy has been a god send to myself who suffers from diabetes and Addison's disease and both cause numerous trials and tribulations and you can feel really rubbish and ill. The pharmacist and staff are helpful, friendly and prescribe the best treatment, care and support better than a GP."
- Questionnaire 311: "As one gets older more minor problems occur. I am on a limited static income so the MAS service is a great help. I am grateful for it."

Not Wanting to Waste a GP Appointment

Service users evaluated the severity of their own minor ailments and recognised that they were better suited to visit a community pharmacy for treatment rather than taking up the GP's time and an appointment that could have been offered to someone with a higher level of need.

- Interview 08: "It's the things you don't want to bother the doctor with but they still get in the way of day to day life. It doesn't have to be something big to impact on your day."
- Interview 15: "I had a couple days where I had a cough that wouldn't go away and thought there was no point bothering the doctor with that."
- Questionnaire 289: "I have used this service many times over the years. I think a
 pharmacist's advice is so valuable can save a doctor's appointment for patients with more
 serious conditions. I would miss the service if it wasn't available."
- Questionnaire 574: "The minor ailments scheme has been great since having a baby I know that if I have any concerns, however trivial, that I will receive professional advice and that I'm not wasting a GP appointment for it."



Being Unable to Access a GP Appointment

It was observed by the MAS service users that the alternative choice of treatment at a GP surgery was harder to access. This was encapsulated by both the inability to be able to book an appointment and the expressed dissatisfaction with the waiting time.

- Interview 05: "It's very hard to get a GP appointment, you have to wait something like three weeks. If something went wrong, something minor ailments, then yes I'd go to the pharmacy as I'd be able to get instant service."
- Interview 07: "You don't have to wait for an appointment, you can go in and ask if you can see her [the pharmacist] whereas now if you ring the surgery they say 'There are no appointments, so ring back next week'."
- Questionnaire 275: "I have found the minor ailments is an excellent service for the convenience instead of having to wait 3 weeks for an appointment with a GP."
- Questionnaire 871: "I have always found minor ailments excellent, sometimes you cannot get a GP appointment. I came two weeks ago when I couldn't get a GP appointment."

Positive Relationship with the Pharmacy Staff

The existing dynamics and experiences of those who had used their community pharmacy before emerged as a common factor in the use and trust of MAS. Service users reported rapport and familiarity with staff and the perceived competence and knowledge of those providing MAS.

- Interview 11: "They're very, very, good in the chemist that I go to. They know you by name and my wife and myself and my daughter all use it so they know us well."
- Interview 20: "It's excellent. I've always been treated with a lot of respect when I go there. The staff are always very cheerful."
- Questionnaire 193: "The service I had was completely satisfied the pharmacists are so respectful and care about my child's condition. I'm really happy to have a pharmacy with wonderful staff to help me."
- Questionnaire 418: "It's a very friendly and effective service which I have used several times over the years for both my children. I have always found that the pharmacist and the assistants always take time to discuss the matter and are always available. I will continue to use this service."

Limited Public Awareness of the Service

Service users queried the extent to which MAS was advertised and referenced their experiences of others having a limited, if any, knowledge of the service. Many also admitted their own ignorance of aspects of the service such as what qualified and could be provided on MAS. Those who had not used the service before were also likely to report that they had not been aware of the service until this use, made aware of their eligibility by a member of staff.

• Interview 10: "I was unaware of it and the fact that it was there and I got signed up, it was good. I think it was very good, maybe it was my fault for not knowing about it but maybe it could be better advertised."



- Interview 13: "Maybe it could be advertised more, maybe not just in the chemist but in the surgeries. There's adverts there for loads of other things but nothing telling you that you could use the minor ailments service."
- Questionnaire 171: "I was aware of the minor ailment service but wasn't sure if my child's ailment would qualify for the service. The pharmacist was very helpful at my pharmacy explaining the service."
- Questionnaire 511: "I wasn't aware that the Minor Ailment Service was available to over sixties, it was the worker at the pharmacy that told me this".

Discussion

In line with the stated objectives of the study, this report:

- i) demonstrates the quality of consultation and perceived effectiveness of treatment and value. Quality of consultation is demonstrated through the responses of the CARE Measure that show high ratings of all consultation aspect, trust in the service, and longitudinal evidence to demonstrate perceived effectiveness of treatment
- ii) quantifies the number of general practitioner and other healthcare professional visits potentially avoided by demonstrating service user choice at access and further determined through longitudinal follow-up of access to services
- iii) outlines the perceptions of the value of the experience through future use, recommendation of the service, perceived privacy and overall satisfaction
- iv) explores in-depth the perception and experiences with an emphasis on value through telephone interviews and analysis of qualitative data

Perceived value and effectiveness of MAS

This report provides a mixed methods, national evaluation of the experiences and perceptions of those using MAS. Overall satisfaction was reported very highly and remained consistently so across the minor ailment groupings. The reasons for selecting MAS for treatment demonstrated the numerous advantages of accessing, and receiving treatment from a community pharmacy.

Perceptions of consultation experience and trust in the service, as evidenced by the outcomes of the CARE Measure, were consistently high and exhibit the high regard of community pharmacy in relation to treatment of minor ailments.

Quantification Of Other Healthcare Service Visits Avoided

The quantification of other healthcare services that would have otherwise been used demonstrates the existing alleviation of comparatively high-cost health treatment services. This is further enforced with the low percentage of service users who required further access to care to treat their presented minor ailments. The majority of service users reported effective treatment through the access of MAS.



Demonstrated Value of MAS

Thematic analysis of service user experiences further demonstrated the value of MAS by recognising access of vulnerable groups, comparative access to community pharmacy rather than a GP, positive existing relationships with pharmacy staff, and a desire to see the MAS service further disseminated for others to be aware of and to access.

Overall, the captured perception and experiences of MAS display a highly regarded and trusted service that effectively treats minor ailments, alleviates pressure on other healthcare services, improves access to care, while minimising health inequalities.

Study Strengths & Limitations

The study provides data not previously documented for the national perception and value of those using MAS using a mixed methods approach with representation of all of the geographical health boards. This national data enriches the background knowledge and understanding of the experiences and perceptions of those using the service.

Limitations of the study should be recognised as there may have been biases in response due to the nature of social desirability or the rating of a service that provides free care at point of contact.

The percentage response rate of those distributed is unknown as this would require accurate recorded detail of which pharmacies received their packs and how many of these were distributed.

Only those receiving a treatment item on MAS during the study period were included and those who received advice only or other signposting were not reported.



Conclusion & recommendations

Those using MAS reported high levels of satisfaction, positive perceptions of consultations, and trust in the service. If MAS were unavailable, other high-cost healthcare alternatives would be used at a higher cost to the National Health Service and increased burden of these services and those who provide them.

The perceptions of service users include high levels of privacy and a belief that pharmacist access to their patient files would enhance the care that they are able to provide. It is also recognised by those accessing the service that MAS enhances access for vulnerable groups and alleviates the GP service while being under-recognised due to limited public awareness.

Overall satisfaction of experiencing treatment through MAS was rated highly across all minor ailment groupings and locations, evidencing the high standard of service provision whilst improving access to care and minimising health inequalities.

Further work should be done to explore and quantify the advice provided by community pharmacists as this phenomena surely contributes to the high number of responses reporting good relationships with pharmacy staff. Should this constitute the service provided, its understanding would not only demonstrate this relatively unrecognised aspect of the service but facilitate the future development and refinement of what community pharmacies are capable of.



References

- (1) Information Services Division. Prescribing & Medicines: Minor Ailment Service (MAS). 2017. Available at: https://www.isdscotland.org/Health-Topics/Prescribing-and-Medicines/Publications/2017-09-26/2017-09-26-Prescribing-MinorAilmentsService-Summary.pdf?98040407897. Accessed 12/02/2018.
- (2) Watson MC, Holland R, Ferguson J, Porteous T, Sach T, Cleland J, Bond C, Wright D. Community Pharmacy Management of Minor Illness (The MINA Study). London: Pharmacy Research UK, 2014.
- (3) Saramunee K, Krska J, Mackridge A, Richards J, Suttajit S, Phillips-Howard P.. How to enhance public health service utilization in community pharmacy? General public and health providers' perspectives. Research in Social and Administrative Policy 2014:10:272-284.
- (4) Fielding S, Porteous T, Ferguson J, Maskrey V, Blyth A, Paudyal V, Barton G, Holland R, Bond CM, Watson MC. Estimating the burden of minor ailment consultations in general practices and emergency departments through retrospective review of routine data in North East Scotland. Family Practice 2015:32(2):165-172.
- (5) Paudyal V, Hansford D, Cunningham S, Stewart, D. Cross-sectional survey of community pharmacists' views of the electronic Minor Ailment Service in Scotland. International Journal of Pharmacy Practice 2010:18:194-201.
- (6) Vohra S. A community pharmacy minor ailment scheme effective, rapid and convenient. The Pharmaceutical Journal 2006:276:754-756.
- (7) Porteous T, Ryan M, Bond CM, Hannaford P. Preferences for self-care or professional advice for minor illness: a discrete choice experiment. British Journal of General Practice 2007:57:911-917.
- (8) Paudyal V, Cunningham S, Gibson Smith K, MacLure K, Ryan C, Cordina M. Methodological considerations in clinical outcomes assessment of pharmacy-based minor ailments management: A systematic review. Available at: https://doi.org/10.1371/journal.pone.0205087. Accessed 07/10/2018.
- (9) Achieving excellence in pharmaceutical care: a strategy for Scotland. 2017. Available at: https://www.gov.scot/publications/achieving-excellence-pharmaceutical-care-strategy-scotland. Accessed 14/01/2018.
- (10) Scottish Health Council. Survey on social care support, pharmacy service and use of medications improving oral health. March 2017.
- (11) Scottish Health Council. Gathering patient views on community pharmacy services. September 2013.



(12) Mercer SW, Maxwell M, Heaney, D, Watt GCM. The consultation and relational empathy (CARE) measure: development and preliminary validation and reliability of an empathy-based consultation process measure. Family Practice 2004:21(6):699-705.

Appendix One: Initial Questionnaire







Community Pharmacy Scotland: Investigating value as perceived and experienced by service users

Thank you for agreeing to participate in this study which is about your visit to a community pharmacy and use of the Minor Ailment Scheme.

We are hoping to provide national feedback on the service from the public based on your responses.

Please read the questions and mark your response in the boxes OR

> access the survey online https://www.surveymonkey.co.uk/r/CPSMAS

If you don't want to answer some questions, you can leave them blank and move on to the next one.

Your responses should relate to this pharmacy visit only. You will be asked some of these questions again in one week to see how effective you feel the service was in helping with your minor ailment.

Should any of the questions or your responses cause you any distress we advise that you contact your GP.



Section 1 - about your symptoms and choice of using the Minor Ailment Service

1. Ht	sve you previous	ly used the I	Minor Ailm	ent Servic	e?		
	Yes		No		D	on't Know	
2. How lor	ng have your sym	ptoms laste	d before de	eciding to	visit the ph	narmacy (în d	eys)?
3. Who an	e you using the N	linor Ailmei	nt Service f	or today?			
	Myself		A child			Another Adi	ult
4. Which r	minor ailment(s)	did you seel	k treatment	t for toda	r.		
5. Please s	specify the name	of the medi	icines (or it	ems) you	were provi	ded with:	
6. Was the	e medicine you w	ere given w	hat you ex	pected to	receive?		
	Yes	N	lo		Partly		Had no expectations
8. How sat	imately, how long tisfied are you ab cle on a scale from	out the exp	erience ove	erall?	_	d 10 being <i>f</i> L	illy satisfied
1	2 3	4	5 6	7	8	9 10)
9. What w other heal	ere the reasons the state of th				to visit you	r pharmacy :	on this occasion rather tha
	Convenient loc	stion		Didn't h travel fa			No appointment needed
	Open when oth services are not				lationship i		Have used MAS before
	Have seen/ hea the pharmacy fi (or before other	rst			ent wasn't enough to g	50	



	they can provid	le?	ent medicadon mes. C	o you crime t	nis iniormación w	Julu elinan
	Yes	No	Partly		Have no opinion	1
		ve a private consultation e consultation room use				
	Yes	No				
12. Wou	uld you consider	using the consultation ro	oom in future to discu	ss minor ailm	ents?	
	Yes	No				
13. Did	you feel that you	a had adequate privacy to	o speak about your mi	inor ailment?		
	Yes	No		Partly		
	the Minor Ailme ill that apply)?	ent Service not been avai	ilable, which other se	rvice(s) do yo	u think you would	have used
	GP Practice	Accident & Emergency	NAME OF TAXABLE PARTY.	24	Bought indepen	medicines dently
	Online advice	Asked for advice from family/ friends	m c	other vice		
15. Wou	uld you use the N	Ainor Ailment Service Ag	ain?			
	Yes	No	Maybe			
16. Whi	ch day of the we	eek was your appointmen	nt?		-	
17. Whe	st time of day we	as your appointment?				
	9am-12pm	12pm-3pm	3pm-6pm	6р	m-9pm	9pm+



Section 2 - about your experience of the Minor Ailment Service (MAS)

How would you rate your experience with the pharmacy:

Tick one box for each statement	Poor	Fair	Good	Very good	Excellent	Does not apply
Making you feel at ease (introducing him/herself, explaining his/her position, being friendly and warm towards you, treating you with respect; not cold or abrupt)						
Letting you tell your "story" (giving you time to fully describe your condition in your own words; not interrupting, rushing or diverting you)						
Really listening (paying close attention to what you were saying; not looking at the notes or computer as you were talking)						
Being interested in you as a whole person (asking/knowing relevant details about your life, your situation; not treating you as "just a number")						
Fully understanding your concerns (communicating that he/she had accurately understood your concerns and anxieties; not overlooking or dismissing anything)						
Showing care and compassion (seeming genuinely concerned, connecting with you on a human level; not being indifferent or "detached")						
Being positive (having a positive approach and a positive attitude; being honest but not negative about your problems)						
Explaining things clearly (fully answering your questions; explaining clearly, giving you adequate information; not being vague)						
Helping you to take control (exploring with you what you can do to improve your health yourself; encouraging rather than "lecturing" you)						
Making a plan of action with you (discussing the options, involving you in decisions as much as you want to be involved; not ignoring your views)						



Section 3 - about the role of those providing the Minor Ailment Service

Tick one box for each statement	Strongly agree	Agree	Unsure	Disagree	Strongly disagree
I am confident that a pharmacist will provide help with minor ailments as safely as a GP					
I would recommend consulting a pharmacist for minor ailments to other people					
Given the choice, I prefer to consult a GP rather than a pharmacist for minor ailments					
I want my pharmacist and doctor/GP to work together to make sure I am receiving the best treatment					
I want the wider healthcare team including doctors, nurses and pharmacists to work together in providing my care					
I am more interested in the quality of care I receive than who delivers it					
Do you have any additional comments about your ex	merience of	the Minor	ailment Serv	ice?	



Section 4 - some information about you - please remember all your responses will be anonymised.

How old are you?		What is yo	our home p	ostcode?
Are you?		Male		Prefer not to say
What is your employm	ent status?			
Employe		Employed part-time		Unemployed Retired
Full-time carer		Full-time education		Part-time education
For which reason(s) are	e you, or the persor	n you used the se	rvice for, e	ligible for the Minor Ailment Service?
Under 16		In full-time education and under 19		Over 60 Pregnant
NHS Tax Credit		Receive a form of Income Support		Rather not say

Please return your completed questionnaire using the prepaid envelope provided.

For us to send you the follow up questionnaire (in one week), please provide your postal address below.

Send the follow up survey to:	
House Number/Name:	
Street:	
City/Town:	
Postcode:	

Thank you for completing this survey which is much appreciated. Your responses will help us to understand the experiences of those using the Minor Ailment Service in Scotland.

Please return the completed survey in the prepaid envelope enclosed.



Appendix Two: Follow-Up Questionnaire







Community Pharmacy Scotland: Investigating value as perceived and experienced by service users

Thank you for continuing to take part in this study by filling out this questionnaire. Please fill the questionnaire out relating to your visit *last week* to the pharmacy where you used the Minor Ailment Service. We are hoping to provide national feedback on the service from the public and your responses will allow us to do this.

Please read the questions and mark your response in the boxes.

If you don't want to answer some questions, you can leave them blank and move on to the next one.

Your responses should relate to your pharmacy visit you described in the first questionnaire only.

Should any of the questions or your responses cause any distress we advise that you contact your GP.



Did you use the full course of medicine you were provided? If no, why? _____ Yes No Would you use the minor ailment service again? Yes No Maybe Why? Would you recommend visiting the pharmacy for minor ailments to people you know (e.g. friends or family)? Yes No Maybe Did the medicine effectively treat the ailment you first presented with? Yes No Partly Unsure Have you gone on to use other service(s) for the minor ailment you first presented with? (please mark any that apply) Purchased Accident & NHS 24 medications Emergency Practice independently Asked for advice from Online No other advice family/ friend service Other Please specify _____

Follow Up: How are you now? - please remember all your responses will be anonymised.



Do you have any additional comments about your experience of the Minor Ailment Service?
Would you be willing to take part in a follow up telephone interview? The interview will further explore your experiences and will last no longer than 20 minutes.
Yes No
If 'No' – Thank you for your participation in the study regarding your first visit and follow up. Should you have any questions, please get in touch with Dr Lee Boag, 01224 263 101, I.boag@rgu.ac.uk.
If 'Yes' – Thank you for your participation so far and please provide us with the best telephone number to contact you on and note any specific days and times that are best for you.
Name:
Telephone Number:
The best times to be contacted:
Postal Address/ E-mail Address (So we can send you a consent form to take part):
Please note that if lots of people want to take part, not everyone will be contacted. Please do not stay in for the call as you may not be contacted.
Thank you for completing this survey.

Please return the completed survey in the prepaid envelope to the address below FREEPOST AB313, ATTN: Dr Lee Boag, School of Pharmacy and Life Sciences, Robert Gordon University, N539 SIWB, Garthdee, Aberdeen, AB10 7GJ

Your responses will help us to understand the experiences of those using the Minor Ailment Service in Scotland.



Appendix Three: Information Sheet for questionnaire participation







Community Pharmacy Scotland: Investigating value as perceived and experienced by service users

Research Team - jointly held post Dr Lee Boag Robert Gordon University Prof Derek Stewart, Dr Scott Cunningham, Dr Katie MacLure University of Strathclyde Dr Anne Boyter, Dr Gazala Akram

You are invited to take part in a research study which seeks to understand the experiences of those who use the Minor Ailment Service (MAS). Please read the following information carefully. Take your time to decide whether or not you wish to take part and please feel free to ask if there is anything that is unclear or if you would like more information.

What is the purpose of the study? To understand the experiences of people who have received a medicine through the Minor Ailment Service (MAS).

Why have I been chosen? We are inviting those who have used MAS in any part of Scotland to take part.

Do I have to take part? No. Participation in this study is voluntary; it will not affect your care or the service you, or any dependants, receive from this pharmacy.

What will happen if I take part? You are asked to complete and return a questionnaire (in pre-paid envelope) or follow a link to complete it online. To understand your views on how well the medicine has worked for you, we ask you complete a follow up questionnaire one week later which will be sent to you by post or e-mail.

What are the possible benefits of taking part? There is no direct benefit to you from participating in this study. However, the findings will be used to review the Minor Ailment Service.

Will my contribution to this study be kept confidential? All information provided by you will be kept completely confidential. You will not be named in any reports or publications that result from this study.

Who has reviewed the study? The research has been reviewed and approved by the ethics panels of both schools of pharmacy and NHS ethics panel [name to be added] and management approval from each NHS board in Scotland.

What next? If you decide you would like to participate, please complete and return the questionnaire. Or if you prefer to respond online, the link can be found on the front page of the questionnaire.

What if something goes wrong? You should ask to speak to the researchers who will do their best to answer your questions. Please contact Dr Lee Boag by phone 01224 263101 or email l.boag@rgu.ac.uk. If you remain unhappy and wish to complain formally, you can do this by contacting Professor Susan Duthie, Associate head of School, by telephone (01224 262815) or via email (s.j.duthie@rgu.ac.uk).

Thank you for your time and consideration in reading this information sheet.

Hamell Owlar.

Kind regards,

Professor Harry McQuillan



Appendix Four: Information Sheet for telephone participation







Community Pharmacy Scotland: Investigating value as perceived and experienced by service users

Research Team - jointly held post Dr Lee Boag Robert Gordon University Prof Derek Stewart, Dr Scott Cunningham, Dr Katie MacLure University of Strathclyde Dr Anne Boyter, Dr Gazala Akram

You are invited to take part in a further aspect of this research study which seeks to understand the experiences of those who use the Minor Ailment Service (MAS). Please read the following information carefully. Take your time to decide whether or not you wish to take part and please feel free to ask if there is anything that is unclear or if you would like more information.

What is the purpose of the study? To understand the experiences of people who have received a medicine through the Minor Ailment Service (MAS).

Why have I been chosen? We are inviting those who replied regarding their experiences of their initial pharmacy visit and follow up regarding effectiveness of treatment.

Do I have to take part? No. Participation in this part of study is also voluntary; it will not affect your care or the service you, or any dependants, receive from this pharmacy.

What will happen if I take part? You will be contacted by telephone at a time you specify as convenient to further discuss your experiences of using MAS. If you give permission, the conversation will be recorded so we can type it up accurately..

What are the possible benefits of taking part? There is no direct benefit to you from participating in this study. However, the findings will be used to review the Minor Ailment Service.

Will my contribution to this study be kept confidential? All information provided by you will be anonymised. Your consent form will be securely stored away from any data and recordings. You will not be named in any reports or publications that result from this study. However, we may report anonymised quotes.. The recording will be deleted upon transcription.

Who has reviewed the study? The research has been reviewed and approved by the ethics panels of both schools of pharmacy and NHS ethics panel South Central - Hampshire A Research Ethics Committee and management approval from each NHS Board in Scotland.

What next? If you decide you would like to participate, please complete and return the consent form. A member of the research team will contact you by telephone at the time you specify.

What if something goes wrong? You should ask to speak to the researchers who will do their best to answer your questions. Please contact Dr Lee Boag by phone 01224 263101 or email l.boag@rgu.ac.uk. If you remain unhappy and wish to complain formally, you can do this by contacting Professor Susan Duthie, Associate head of School, by telephone (01224 262815) or via email (s.j.duthie@rgu.ac.uk).

Thank you for your time and consideration in reading this information sheet.

Samel awlar.

Kind regards.

Professor Harry McQuillan

