NHS
Health Education England

Integrating Community Pharmacy into Urgent and Emergency Care (UEC) Pathways

Report on community pharmacy UEC management across Kent, Surrey and Sussex

November 2017

medway school of pharmacy

*Each pharmacy in Kent, Surrey and Sussex is undertaking, on average, 13 urgent care consultations per week. Of these, 70% are managed by the pharmacy and at least half prevent referral to another NHS service. Scaled up across the region, this represents over 11,500 urgent care consultations **per week**, 8050 of which are managed independently by pharmacies, preventing approximately 5400 other NHS encounters.*

Executive summary of key findings

Background

Increasingly high demand for urgent care services (NHS 111, GP out of hours, and Accident and Emergency, A&E) is a national concern which is leading to pressures within secondary care and delayed treatment for patients. Streamlining of UEC services will help support people with urgent care needs to obtain appropriate and timely advice outside secondary care. Community pharmacy teams have been identified as an under-utilised, accessible resource, with a wealth of expertise to support demands for urgent care. The Health Education Kent Surrey and Sussex Emergency Care Board commissioned Medway School of Pharmacy (MSoP) to investigate community pharmacy involvement in UEC, to provide insight into what pharmacists are currently doing to support the UEC agenda and what future training requirements would facilitate the optimisation of urgent care management in this setting.

Evaluation Process

The evaluation was in 3 phases spanning a 20-month period from November 2015 to June 2017. Phase one was involved an exploration of community pharmacists' views and experiences of UEC services, together with an evaluation of the impact of a recently locally distributed CPPE training package on UEC. The second phase of work, which started in June 2016, was an analysis of the UEC practices of 17 pharmacies, documenting in detail all UEC requests received in the pharmacy over a 2-week period, the first time that such an investigation has been undertaken. The final phase, which began in October 2016, informed by the results of phase one, evaluated a novel respiratory resource pack designed to support pharmacists in delivering UEC services, and the re-issue of the CPPE UEC pack.

Findings on community pharmacy UEC management in Kent, Surrey and Sussex region

Most pharmacists in Kent Surrey and Sussex (KSS) estimate they manage up to five urgent care requests in an average four-hour work shift. Detailed analysis in phase 2 suggested 13 such consultations per week. However, qualitative elements of phase 3 suggested these numbers could be considerably higher as many urgent conditions may be dealt with by counter staff.

In the detailed analysis of the UEC requests received by 17 pharmacies across KSS in phase 2, 70% of consultations were dealt with by the pharmacist in-house. Of the 30% of consultations which resulted in referrals, just over 50% were to a GP practice. Only 7% of consultations were to A&E. 73% of all consultations were for the person who made the urgent care request.

Over half of all UEC requests were for symptom management, with skin problems the most common (38% of all symptoms presented). Other common symptoms related to eye problems, musculoskeletal issues, upper respiratory tract infections (URTIs) and wounds.

In 27% of all consultations the pharmacist provided advice alone to manage the UEC request and in 42% of all consultations the pharmacist provided advice (oral/written) together with a sale of an over-the-counter product.

Most pharmacists (71%) expressed willingness to provide an emergency supply of medicines if all legal requirements were met. Emergency supplies of regular prescription medicines were made in 17% of consultations in phase 2.

Pharmacists were asked to rate their perception of the urgency of patient requests. 47% of consultations managed in-house were given an urgency rating which by definition meant pharmacy management 'averted the need for other NHS services'. There was correlation between degree of urgency and likelihood of referral. Infection or suspected infection constituted 35% of the total number of referrals to other UEC providers.

A panel of health care professionals experienced in urgent care agreed with the pharmacists' rating of urgency in around two-thirds of consultations and also agreed that the management decisions in terms of referral/non-referral were appropriate in 90% of the consultations the panel assessed. The difference was explained, in part, by pharmacists perceiving requests for emergency supplies as more urgent, which may be associated with the presence of the patient in the pharmacy. The other discrepancy related to a small number of incidences of minor ailments in patients with long term conditions where the panel rated the request as more urgent. This may represent an area for more training for pharmacists in future.

Both phases 1 and 2 indicated that locum pharmacists are likely to refer more patients to other UEC services compared to the pharmacist who works regularly in that pharmacy. This was a statistically significant finding in phase 2 although there was no significant difference between locum and regular pharmacists in regard to urgency rating at the 'extremely/very urgent' level. The rate of referrals was not affected by the experience of the pharmacist. These findings suggest that locum pharmacists in particular need to be a target for training around UEC consultations.

Whilst there was no significant difference in the numbers of queries dealt with overall by multiples pharmacies (pharmacies with >20 branches nationally) and independents (<20), multiple pharmacies undertook many more consultations outside core hours compared to independents. Consultations by multiple pharmacies were more likely to be rated as 'extremely urgent' or 'very urgent' compared to independent pharmacies and perhaps, as a result, consultations to multiples were statistically more likely to result in a referral to A&E or NHS 111 than those presented to independents. Overall the number of consultations dealt with in-house without referral was not different between the two pharmacy types. These findings suggest that multiple pharmacies can play an important role in future UEC training and service delivery.

Nearly all patients surveyed as part of phase 2 (95%) expressed satisfaction with pharmacist management of urgent care queries. 72% of these patients stated they would have sought other NHS services if the pharmacist had not supplied the care and advice that they did.

IC24, an out of hours (OOH) service operating in East Kent, employs pharmacists to deal with urgent medicines related queries. Detailed records of medicine-related consultations dealt with by pharmacists working for the service over a 4-week period suggested their advice averted referral to other OOH services or IC24 doctors. The expert panel convened in this evaluation believed that two thirds of a sample of queries dealt with by IC24 could also have been managed by a community pharmacy/pharmacist.

Findings on training needs

Most pharmacists (85%) consider that they have the necessary skills and training to manage UEC requests by patients, including those for upper respiratory tract infections (URTIs). The clinical questions asked in Phase 3 of the evaluation, however indicated that some pharmacists still had training needs with respect to URTI management and the appropriate place of antibiotic therapy, despite being offered specific resources to support the provision of appropriate advice.

There was generally a low uptake of all three training resources covered by this evaluation, with, in most cases, less than half of all pharmacists surveyed remembering the mail out. The CPPE pack was

undertaken to some degree by 11% of evaluation participants the first time and 20% on second release. The MSoP URTI resource was read or skim read by 32% of participants. The impact of all the materials was modest. On second release, the CPPE pack had changed practice for 8% and the URTI resource had changed practice for 11% of recipients.

Most pharmacists who had read the materials thought that they were relevant; however, the barriers to uptake of the distance learning provided were: time constraints; availability of other learning resources; lack of access (material sent to the pharmacy rather than an individual).

Across phases 1 and 3, pharmacists expressed a wide range of views on preferred training materials but most highlighted distance or on-line learning as being most useful to busy practitioners, particularly for knowledge-based materials. However, face to face training was preferred by some for skills acquisition such as consultation management.

Suggestions to help improve training course uptake included repeat distribution of materials, use of more visually appealing material, inclusion of more materials to display in the pharmacy to patients and training around diagnostic skills.

In Phase 1, over 70% of pharmacists supported pharmacist accreditation for provision of an urgent care service that was recognised nationally so the service could be provided by the accredited pharmacist at any location (similar to the MUR service).

Conclusions/Recommendations

Community pharmacy/pharmacists are playing a significant role in Kent, Surrey and Sussex in terms of management of UEC requests. Based on this evaluation, a conservative estimate would be that each pharmacy in KSS is undertaking on average 13 urgent care consultations per week. Of these 70% are managed by the pharmacy and approximately half prevent referral to another NHS UEC service. If this is scaled up across KSS this represents over 11,500 urgent care consultations across the patch **per week**, 8050 of which are managed independently by the pharmacies and prevent approximately 5400 other NHS urgent care encounters.

Pharmacists working in out of hours providers also make a significant contribution to avoiding unnecessary onward referrals for urgent medicines related queries.

Whilst this work did not include an economic evaluation, it evidences that community pharmacists are helping to avert inappropriate visits to other NHS UEC services. They are also managing conditions appropriately and to the satisfaction of their patients often with just advice and/or sale of an over the counter product, avoiding prescribing costs for the NHS.

Further intervention should target the future workforce to ensure that new registrants are competent and confident to manage urgent presentations. In addition, further work is required to target the locum pharmacy workforce to improve access and uptake of training materials.

Future considerations for workforce development and associated training need to:

- Recognise that the pharmacy team is more than just the pharmacist/pharmacy manager and that locums and counter staff play an important role in UEC management. In particular, any training initiatives must target locums as they have been shown to be more likely to refer.
- Ascertain whether the management of such conditions requires ongoing professional development and if there is the need to have a system of assessment involved therein, particularly if there is a shift towards the provision of accredited services from the community pharmacy setting.
- Undertake a more detailed analysis of positive implications for workforce transformation should pharmacists be trained at scale, in particular cost saving and easing of pressure from other parts of the UEC system.

- Ensure that training is provided within a broader structure of multi-professional systemic integration to ensure alignment with the wider aims of the NHS and minimise the risk of silo working among and between professions.
- Have support of multiple pharmacy chains at a local level, recognising the important role these organisations play and also recognising the challenges for these national businesses in supporting bespoke local projects.
- Maximise the potential of the pharmacist to identify and manage infections; using innovative service models.
- Maximise the potential of the pharmacist to identify and manage skin conditions, recognising the opportunities to improve dermatology services in primary care.

The training itself needs to:

- Be produced in multiple formats e.g. distance learning, apps, hard copy pharmacy resources, on-line resources to appeal to learners with different needs in terms of access and background – this may also help engage locums.
- Be linked to the needs of the locality and be co-ordinated through appropriate local organisations, for example the Local Pharmaceutical Committee, to avoid duplication of effort and targeting of training; not every pharmacy/pharmacist needs to upskill in every area.
- Be chunked up into smaller ‘campaigns’ and supported by promotion to the public, stressing the high satisfaction that users of pharmacies have. Services such as emergency supply could in particular be highlighted to encourage further uptake.
- Be, in some cases, delivered to a small selection of pharmacists who upskill in a particular area, for example dermatology, management of acute infections. This level of specialism could be enhanced by independent prescribing.

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Working definitions

Urgent - Urgent in the context of this evaluation encompassed 'any medical or health-related condition which the individual believed they need to get help with that day'.

Urgent care - covers all 'services provided for people who require same day health or social care advice, care or treatment.'

Core hours – Monday to Friday until 6pm.

Emergency care - 'services provided in emergency departments (A&E), other hospital departments, 999 and ambulances which are set up to respond to serious or life threatening emergencies.'

Locum pharmacist – Pharmacist that works temporarily to cover duties of pharmacists employed full time (also known as regular pharmacists) when absent e.g. due to sickness or annual leave.

Multiple pharmacy – chain for pharmacies with more than 20 branches nationwide.

Non-core hours (NCH) – Monday to Friday after 6pm, Saturdays after 1pm and all day Sundays.

Regular pharmacist – the pharmacist who works regularly in a pharmacy – can be full or part-time.

Saturday mornings until 1pm – Pharmacies were not classified as core or non-core based on their Saturday morning hours. Pharmacies that opened on a Saturday morning only – with no other non-core hours were classified as core hours. In pharmacies which undertook other non-core hours which also undertook to deliver services on a Saturday morning were classified as non-core.

Acronyms and Abbreviations

CH Core hours

CPPE Centre for Pharmacy Postgraduate Education

NCH Non-core hours

PGDs Patient Group Directions

PSNC Pharmaceutical Services Negotiating Committee

KSS Kent, Surrey and Sussex

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Background

The increasingly high demand for urgent care services (NHS 111, GP out of hour's services, and Accident and Emergency services) is a national concern which is leading to pressures within secondary care and delayed treatment for patients. NHS England thus undertook a review of urgent and emergency care (UEC) services in 2013 and proposed significant changes to the current systems [1]. Their review concluded that the key elements for streamlining UEC services include support for people with urgent care needs to obtain appropriate and timely advice, and to obtain responsive UEC services outside secondary care. To this end, NHS England has been working with stakeholders to deliver this vision. This has included establishing UEC networks to ensure that all the different components of UEC systems are effective and run efficiently [1].

In the review, community pharmacies and pharmacists were identified as an under-utilised resource, with a wealth of expertise to support demands for urgent care, and it was clear that efforts were needed to tap into the pharmacy workforce for UEC service provision [1]. Community pharmacies provide a number of services including managing minor ailments, offering advice on medicines and prescription-related queries, and have basic facilities to provide some UEC services. Nonetheless, a recent survey of the general public in the East Sussex region showed that up to 23% of the general public were unaware of community pharmacy services or pharmacists' role in urgent care [2].

The Health Education England Kent Surrey and Sussex Emergency Care Board supported a bid to explore the potential of community pharmacy to relieve UEC pressures. This was part of an initiative to build a well-trained and equipped workforce to ensure that patients in need of urgent or emergency care are provided with optimal services [3]. As part of their skills development strategy, HEE KSS has commissioned a number of programmes to up-skill different health professionals and enhance preparedness/ability to meet urgent care needs in the local office area. In 2014, the project commenced and the HEE KSS Pharmacy team commissioned training for all pharmacists in KSS from the Centre for Pharmacy Postgraduate Education (CPPE), a national Department of Health funded organisation which supports and provides training for the pharmacy workforce. The CPPE training pack was mailed out to all pharmacists and pharmacy technicians in KSS in July 2015 and introduced the topic of the pharmacist/pharmacy's role in emergency care.

At the time of commissioning the CPPE training, there were already some projects, involving community pharmacists, which aimed to relieve pressure on UEC services in areas of KSS. The projects included: a minor ailments service which was on-going in two Clinical Commissioning Groups (CCG) in areas of West Kent/Medway [4]; a project in Guildford and Waverley CCG that looked at community pharmacist use of emergency supplies to avert visits to A&E [5] and the Brighton and Hove Extended Primary Integrated Care (EPIC) project that aimed to ease pressure on secondary care services by strengthening human resource in GP practices through involvement of community pharmacists to manage minor ailments [6].

HEE LaSE commissioned the Medway School of Pharmacy (MSoP) to investigate a number of aspects relating to community pharmacy involvement in UEC. The MSoP evaluation aimed to provide the HEE LaSE UEC steering group with insight into what pharmacists are currently doing to support the UEC agenda and what future training requirements would support the optimisation of urgent care management in this setting. The original intention was to compare the geographic areas where existing projects were running with other areas and this did influence the study design of the first phase, however shortly after phase one started, it became clear that these projects were not sufficiently advanced/established and in one case, training for pharmacists had not been initiated.

Phase one thus involved an exploration of community pharmacists' views and experiences of urgent care services, together with an evaluation of the impact of the 2015 CPPE training package. Following on from this first phase, the second phase of work was a detailed analysis of the UEC practices of a small sample of pharmacies, the first time that such an investigation has been undertaken.

The final phase in October 2016, which was informed by the results of phase one, evaluated a novel respiratory resource pack, to support pharmacists in delivering UEC services (See Figure 1). As the CPPE had mailed out a revised Urgent Care Training pack nationally in September 2016, this was also included in the evaluation exercise.

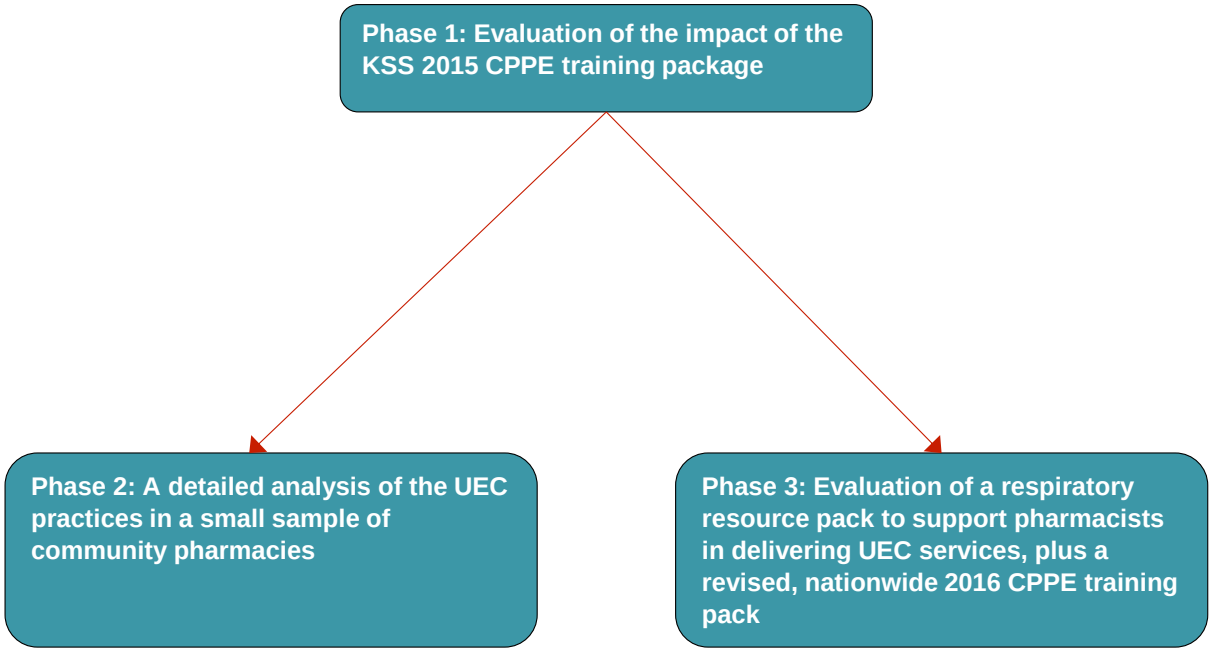

Figure 1 The three phases of UEC evaluation in community pharmacy

Approvals

Ethical approval was granted by the Medway School of Pharmacy Research Ethics Committee for all phases of the work. The study was conducted in accordance with the MRC Guidelines on Good Practice in Clinical Trials.

1. Phase one: An initial exploration of community pharmacists' views on their current urgent care provision and evaluation of a training pack on managing urgent care requests

1.1. Aim and objectives

Phase one of the evaluation aimed to understand the way community pharmacies currently respond to urgent care requests, to identify relevant training needs and to evaluate the CPPE urgent care training pack.

Specific objectives

To explore the views and experiences of a sample of pharmacists working core and non-core hours across community pharmacies in KSS in terms of:

- The provision of UEC services, including management options recommended by community pharmacists and the provision of emergency supplies of medicines.
- Pharmacists' referral practices to other urgent care services.
- Differences in terms of urgent care service delivery (proposed and actual) both in and out of core hours.
- Suitability and accessibility of training offered to community pharmacists and their teams when new initiatives are commissioned by local health economies.
- Possible barriers to future UEC service provision, together with the impact of such factors on service success.
- Uptake, accessibility, suitability, and usefulness of the KSS CPPE UEC training pack.

1.2. Methods

1.2.1. Sample recruitment

Recruitment to the first phase of work took place across KSS where pharmacists had recently received a training pack on urgent and emergency care from the CPPE.

Sample stratification and selection of pharmacies

Because of the desire to compare pharmacies/pharmacists from the 3 original pilot areas (Brighton, Guildford and Waverley and West Kent/Medway), 7 geographic areas were sampled:

1) West Kent/Medway.
2) Remainder of Kent minus West Kent/Medway.
3) Guildford and Waverley.
4) Remainder of Surrey minus Guildford and Waverley.
5) Brighton and Hove.
6) Remainder of East Sussex minus Brighton and Hove.
7) West Sussex.

In order to obtain a sample of 6-8 people in the focus group and 50 pharmacists for interview (25 core hours (CH): 25 Non-Core hours (NCH), it was decided to select 100 pharmacies across the region to take part. The number in each of the 7 areas was determined on a proportional basis on the whole

sample of 892 pharmacies in KSS. Within each sample there was further stratification to ensure the proportion of multiples (>20 pharmacies nationwide) to non-multiples (20 or less pharmacies) was taken into consideration. Excel spreadsheet filters were used to identify eligible pharmacies in each group (CH/NCH). Each eligible pharmacy was assigned a number and numbers were 'drawn out of the hat' to determine which were included (simple random sampling). Once a pharmacy was selected for the NCH group it was automatically excluded from the CH group, so one pharmacy would not appear in both groups.

Recruitment of pharmacists working core hours (9am-6pm Monday-Friday)

Pharmacies were sent an email by HEE LaSE and MSoP informing them of the project and asking for co-operation. It also invited interested participants to volunteer for a focus group on the topic to be held at MSoP. The information was sent to the name/email address registered with HEE LaSE as the contact for that pharmacy. The information sent included a project information sheet which was displayed in the pharmacy, so part-time and locum staff would see it. The pharmacies were then contacted during core working hours and the researcher would ask to speak to the responsible pharmacist. If necessary, a mutually convenient time for the interview to take place was negotiated. Consent was taken at the time of the interview. Once the target of 25 interviews was achieved, the researcher stopped the telephone interviews for this cohort.

Recruitment of pharmacists working NCH (after 6pm Monday to Friday, from 1pm Saturday and anytime Sunday)

Similar to methods used for recruiting core hour pharmacies, NCH pharmacists were sent an email by HEE LaSE informing them of this evaluation and inviting them to participate. The email included a project information sheet which was also displayed in the pharmacy. NCH pharmacies were contacted outside of core working hours and the researcher asked to speak to the responsible pharmacist at the time of the call. Again, mutually convenient times for the interviews were negotiated with the responsible pharmacist, and consent was taken at the time of the interview. Interviews with NCH pharmacists stopped after attaining the target sample size (25 interviews).

Note about Saturday morning (until 1pm) hours: Saturday mornings do not fall obviously into either core or non-core hours, hence pharmacies were not classified as core or non-core based on their Saturday morning hours. Pharmacies that opened on a Saturday morning only – with no other non-core hours were classified as core hours. Pharmacies which undertook other non-core hours and which also undertook to deliver services on a Saturday morning, were classified as non-core. Recruitment was attempted on Saturday mornings, however the pharmacy was included in whichever group it was originally selected into regardless of who was the responsible pharmacist on that day (locum or regular pharmacist).

1.2.2. Instrumentation

Focus group

The aim of the focus group was to inform the development of a telephone interview schedule by agreeing topics that needed to be covered during the main interview phase. A focus group guide was used based on previous interview schedules covering similar work which ensured the discussion would stay focused around the aim.

Structured interview schedule

The focus group content informed development of a single structured interview schedule. This questionnaire was intended to be delivered by members of the evaluation team via the telephone. To facilitate telephone delivery, the majority of questions were quantitative in nature, using Likert-type scales. Some questions, however, allowed short-answer free responses.

Once the first draft of the questionnaire was formulated, the focus group participants reviewed it visually. The questionnaire was piloted by phone with 5 pharmacist members of the MSoP team who are currently practising. As a result, three questions were re-phrased and the order of two questions reversed to ease understanding over the phone and assist with question flow.

The structured interview schedule broadly covered; demographic details (Pharmacist and pharmacy); extent of urgent care provision, including emergency supplies; training undertaken and training needs in relation to UEC; evaluation of the CPPE pack; attitudes towards further future service development/delivery.

1.2.3. Procedures

Focus Group

The focus group was held at the Medway School of Pharmacy, owing to insufficient resources to run multiple venue focus groups. The focus group comprised one person who volunteered as a result of the email (see above) and MSoP dispensary support pharmacists and postgraduate students with a background in pharmacy. The content of the focus group was audio recorded and brief notes taken by a member of the evaluation team. The recording and notes were used to assist the evaluation group formulate questions for piloting.

Structured telephone interviews

The member of the evaluation team carrying out the interviews rang the pharmacy during CH or NCH, depending on which group the pharmacy fell into. Additionally, some calls were made on Saturday mornings (see note in 1.2.1 above). Telephone interviews were conducted with the responsible pharmacist at the time of the call. The researcher offered to phone back or left a phone number to be called back if the pharmacist was busy or unable to take the call at that moment. However, questions if asked at a later time were related to the time and pharmacy at which the original call had taken place.

The researcher read out the questions to the participant over the phone, and obtained and documented responses by hand, in predesigned interview forms based on the structured questionnaire. All responses were recorded into the interview form at the time of the telephone interview then entered into an SPSS V24 database by the interviewer.

Distance from Urgent Care Services

Distances (in miles) between each pharmacy that took place in the interview and the nearest A&E, walk in centre, and GP practice were estimated by using the pharmacy's postcode, which was entered into NHS choices website to locate the nearest UEC provider/referral service.

1.3. Analyses

Qualitative analysis

Short-hand notes and comments written during the focus group discussion were reviewed. These qualitative responses were grouped according to specific issues generated (e.g. around training for urgent care provision, emergency supply, and delivery of new services). Free short-answer comments obtained during the telephone interviews were also reviewed in this way.

Quantitative data analysis of structured interviews

Quantitative responses to the structured telephone interviews were analysed in SPSS version 24. Descriptive statistics (frequencies and percentages) were reported for different variables, including frequency of urgent care requests and referral patterns. Contingency tables were used to compare categorical data. Chi-square tests and Fischer's exact tests were used to assess statistical differences in proportions in different categories, where sample size requirements were met. Spearman's correlations

were used to estimate the associations between two numerical/continuous variables. Associations between the pharmacy's proximity to other referral services (A&E, walk in centres, and GP practices) and pharmacists' likelihood of referring patients to these services were examined. In particular, correlations between distances to other UEC providers and the frequency of referrals to these services were estimated. Data were presented by using graphs and tables as appropriate.

1.4. Results

1.4.1. Background data

A total of 53 community pharmacists were interviewed in Phase 1 of the evaluation, exceeding the initial target of 50. This was because three pharmacists who agreed to ring back/be rung back did not do so/were no longer available at the re-arranged time and so were deemed to no longer wish to take part. However, they did subsequently get in contact and were accepted for interview.

Ultimately, 24 (45%) CH and 29 (55%) NCH completed an interview. The median duration of all interviews was 15 minutes (range 5-30 minutes).

Just over half (n=27, 51%) were regular full-time pharmacists at the current practice (12 CH, 15 NCH). Locum pharmacists comprised 41% of the sample, (n=22), and were evenly spread across both core (n=11) and NCH (n=11) samples. Four pharmacists were employed part-time on a regular basis (1 core, 3 NCH). Over two-thirds of respondents (n=37, 70%) normally undertook NCH in addition to CH (See Table 1).

Table 1 Characteristics of community pharmacists participating in phase one

Characteristic		CH n (%)	NCH n (%)	Total n (%)
Work experience	0-4 years	6 (25)	5 (17)	11 (21)
	5-9 years	6 (25)	3 (10)	9 (17)
	≥ 10 years	12 (50)	21 (72)	33 (62)
Working status	Regular full-time	12 (50)	15 (52)	27 (51))
	Regular part-time	1 (4)	3 (10)	4 (8)
	Locum	11 (46)	11 (38)	22 (41)
Working hours	CH only	9 (38)	2 (7)	11 (21)
	NCH only	0 (0)	5 (17)	5 (9)
	CH and NCH	15 (62)	22 (76)	37 (70)
Total		24	29	53

The median duration of practice since registration was 17 years (range <1 year to 47 years), and 62% (n=33) of pharmacists had been qualified for 10 years or over. Pharmacists' work experience (years of practice since qualification) was similar across all three counties. Compared to Kent and Surrey, Sussex had the most (75%, n=15) pharmacists with 10 or more years of work experience (see Table 2).

Table 2 Distribution of participants by area of work and duration of practice

	Duration of practice since registration		
Area	0-4 years n (%)	5-9 years n (%)	≥10 years n (%)
Kent (n=19)	3 (16)	5 (26)	11 (58)
Surrey (n=14)	4 (20)	3 (21)	7 (50)
Sussex (n=20)	4 (20)	1 (5)	15 (75)

As illustrated in Table 3, the sample comprised more locum pharmacists than part-time regular workers across all three counties. Regular full-time pharmacists were predominantly working in Kent (74%, n=14) compared to 35% (n=7) working full-time in Sussex.

Table 3 Comparison of pharmacists' work patterns by area of work

	Pharmacist work patterns		
Area (n)	Locum n (%)	Regular full-time n (%)	Regular part-time n (%)
Kent (19)	5 (26)	14 (74)	0 (0)
Surrey (14)	8 (57)	6 (43)	0 (0)
Sussex (20)	9 (45)	7 (35)	4 (20)

Approximately the same proportion of multiples (49%, n=26) and independent pharmacies (51%, n=27) were recruited to this phase of the project. Figure 2 shows that independent pharmacies were staffed by a higher percentage of pharmacists with 10 or more years of experience compared to multiple pharmacies (36%, n=19 vs 26%, n=14). Across the sample population, less experienced pharmacists (<5 years since registration) were mostly employed in multiple pharmacies.

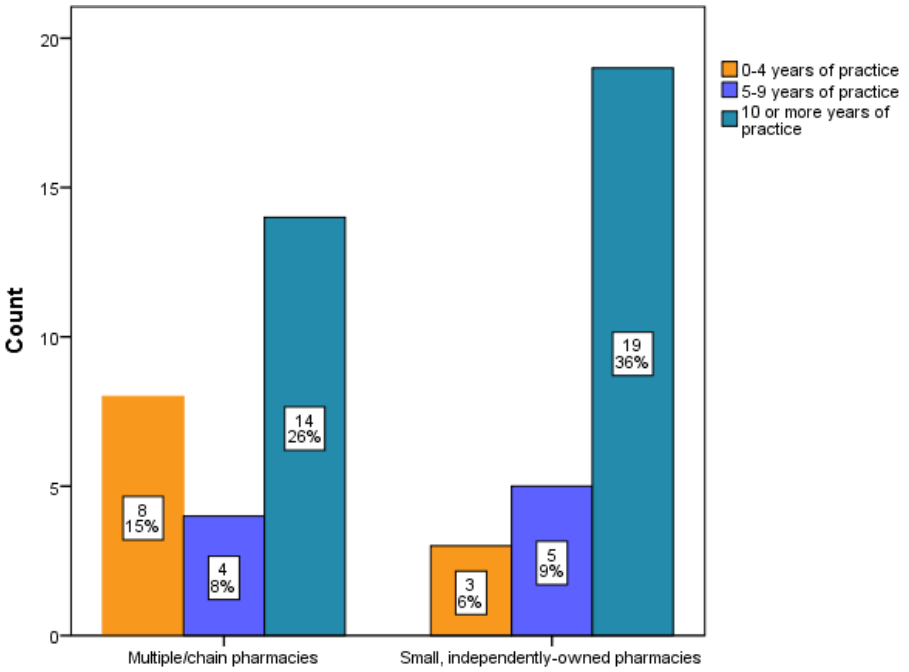

Figure 2 Comparison of pharmacists' work experience by the type of pharmacy

1.4.2. Frequency of patient consultations and patterns of pharmacy referrals to UEC services

Participant pharmacists were asked to estimate the frequency of patient consultations about urgent problems in a four-hour working period. Fifty pharmacists responded to this question and 86% (n=43) indicated five or fewer requests for advice were encountered in an average four-hour work shift (range, 0 to 15).

Pharmacists were asked to specify when most requests for urgent care were presented. Of the 45 participants who responded to this question, over half (58%, n=26) reported NCH (evenings and at weekends) as the time when most patients consulted about urgent problems. Only 13 % (n=6) of those who answered this question perceived urgent care requests to present most often during core hours. 19% (n=10) felt that requests for urgent care in pharmacies were the same during core and NCH service times, while three (7%) pharmacists were unsure about the times when most requests for urgent care presented.

When asked to estimate the number of patients they referred on to other UEC providers, nearly two-thirds (62%, n=31) stated they managed the urgent requests independently, reporting no referrals. A smaller percentage (14%, n=7) reported more than two referrals on a typical four-hour shift. Fifteen pharmacists estimated that a quarter (25%) of all urgent consultations were referred.

The volume of urgent care demands and the number of referrals were examined by the geographic area. 30% (n=6) of pharmacists contacted in Sussex reported more urgent requests (≥ 5 or more in a 4-hour shift) when compared to the other two counties (6% in Kent and 15% in Surrey). 88% (n=15) of pharmacists working in Kent reported no referrals in an average 4-hour work shift. 14-15% of pharmacists contacted in the Sussex and Surrey cohorts, respectively, reported they referred more than two patients to other services in a four-hour shift, compared with 6% (n=1) of Kent pharmacists (see Table 4).

Table 4 Estimated number of urgent requests and referrals in the three counties

Urgent care	Area		
	Kent (17) n (%)	Surrey (13) n (%)	Sussex (20) n (%)
Estimated number of urgent requests in a 4-hour shift			
0-1	9 (53)	7 (54)	10 (50)
2-4	7 (41)	4 (31)	4 (20)
5 or more	1 (6)	2 (15)	6 (30)
Estimated number of referrals in a 4-hour shift			
None	15 (88)	7 (54)	9 (62)
1 or 2	1 (6)	4 (31)	7 (24)
More than 2	1 (6)	2 (15)	4 (14)

A strong positive correlation (Spearman's rho, 0.79, $p<0.001$) was found between the frequency of patient consultations about urgent problems and the estimated number of referrals, suggesting that pharmacists were more likely to refer patients to other services if demands for urgent advice increased. A small negative correlation (Spearman's rho = -0.258, p= 0.071) was found between pharmacists' years of practice and the number of referrals in a typical 4-hour shift, suggesting that greater work experience was related to fewer referrals, although this association was only marginally significant. 68% (21/31) pharmacists with 10 or more years of experience said that they did not refer any patients during a typical shift compared to 40% (4/10) of pharmacists with under five years of experience.

Data were examined to establish cohorts of pharmacists likely to refer patients presenting with urgent problems. In particular, the estimated number of referrals was examined by the pharmacist's employment status. Just over half of the locum pharmacists contacted (55%, n=12) estimated that they would refer more than 50% of urgent care requests they encountered in the pharmacy compared with 33% (n=8) of regular (full-time and part-time) pharmacists interviewed (see Table 5). However, this was not statistically significant ($\chi^2 = 3.463$, Df=1, p=0.063)

Table 5 Estimated number of referrals by pharmacist's work pattern

Referral patterns	Pharmacist's work pattern		
	Regular full-time (24) n (%)	**Regular part-time (4)** n (%)	**Locum (22)** n (%)
Estimated number of referrals in a 4-hour shift			
None	15 (63)	2 (50)	14 (64)
1 or 2	6 (25)	2 (50)	4 (18)
More than 2	3 (12)	0 (0)	4 (18)
Estimated % of urgent requests referred on by pharmacists			
0-25%	9 (37)	3 (75)	3 (14)
26-50%	7 (29)	1 (25)	7 (32)
> 50%	8 (33)	0 (0)	12 (55)

20% (n=7) of pharmacists in total estimated they referred more than 2 patients in need of urgent care during an average 4-hour shift. Nearly two-thirds (63%, n= 7) of pharmacists working during core hours reported no referrals compared to 50% (n=2) of those working non-core hours (see Table 6).

Table 6 Estimated number of referrals by pharmacist's working hours

Estimated number of referrals in a 4-hour shift	Pharmacist working hours		
	CH only (11) n (%)	**NCH only (4)** n (%)	**All hours (35)** n (%)
less than 1	7 (63)	2 (50)	22 (63)
1 or 2	4 (37)	2 (50)	6 (17)
more than 2	0 (0)	0 (0)	7 (20)

1.4.3. Last Referral Destination

Pharmacists were interviewed about the last time they referred a patient with an urgent care problem to another service. Fifty responses were obtained for this question. Just over a third (36%, n=18) of those who responded had referred the patient to their GP. Walk in centres were the second most used referral service (26%, n=13), followed by NHS 111 (20%, n=10), and only six pharmacists (12%) had referred their last remembered patient to A&E services for their urgent care needs. Three pharmacists (6%) reported using multiple services for referral of urgent problems. As shown in Figure 3, GPs were the most often referred to service during CH, while NHS 111 was most frequently referred to during NCH.

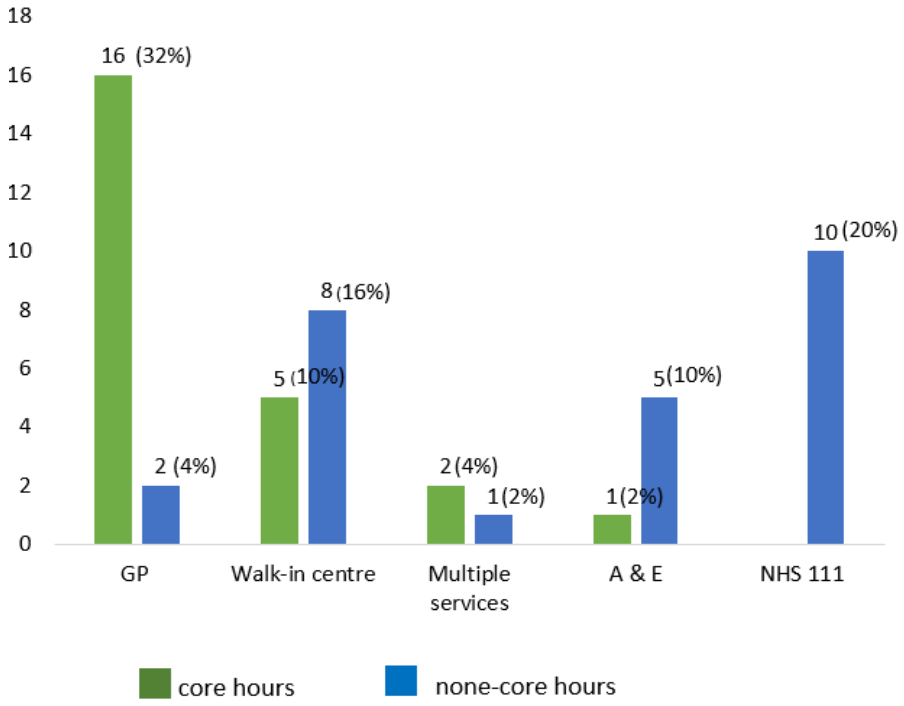

Figure 3 Services used by community pharmacists to refer their last remembered urgent care request during CH and NCH working shifts (numbers of pharmacists and percentages shown)

1.4.4. Proximity to other NHS services and patterns of referral

The median distances between contacted community pharmacies and other urgent care providers were estimated as: A&E services (3 miles, range = 0.4 to 17), walk-in centres (2.5 miles, range = 0 to 12), and GP practices (0.1 miles, range = 0 to 1.4). GP practices were the closest referral service. Patterns of pharmacy referrals were examined by proximity to the three urgent care providers (A&E, walk in centres and GP practice).

Pharmacists were asked to remember their last 4 hour shift in that pharmacy and estimate how many referrals they made and to state the destination for those referrals. The number of estimated referrals was compared to how far the pharmacy was from that referral destination. There were 18 remembered referrals made to GP practices where the pharmacy was located within 1 mile of the GP practice and 1 made to a GP practice where it was greater than a mile away.

There were an estimated 22 remembered referrals to walk-in-centres by pharmacies within a mile of that facility and 14 to walk-in-centres over a mile away.

There were no remembered referrals to A&E by pharmacies within a mile of A&E but 19 remembered referrals to A&E where the A&E was more than a mile away.

1.4.5. Common conditions referred to other UEC services by community pharmacists

Pharmacists were asked to describe the type of urgent conditions they had recently encountered in practice and referred on to other services. In particular, pharmacists were asked to name their ‘top three’ referred problems. There was considerable variability in the nature of urgent conditions managed and/or referred on. The findings suggested that the most frequently referred (n=35) urgent problems were those requiring a prescription (including repeat prescriptions requested for possible or actual running out of medicines). Other conditions commonly reported as urgent and referred on were: accidents (n=22), children’s problems (n=14), infections considered to require antibiotics (n=14), respiratory problems (n=

13), and problems relating to emergency supply of prescription medicines (n=12). Table 7 illustrates the 'top 3' conditions referred by pharmacists in the Phase 1 study.

1.4.6. Provision of emergency supplies of medicines

Pharmacists were interviewed about the emergency supply service, when a pharmacist can supply medicines in situations where it is not possible for a patient to obtain a prescription, provided that certain legal requirements are met. The pharmacist may supply medicines for a duration of up to 28 days, and this private service is paid for by the patient. The charge varies across pharmacies, and is dependent on the medicine and the pharmacy's policy. Recommendations from the Pharmaceutical Services Negotiating Committee (PSNC) are that the emergency supply service is available for at least five days every week, and if possible should be provided both during NCH and CH (assuming prescription supply is not available).

Table 7 'Top 3' conditions pharmacists refer to other urgent care service providers

Condition	Number of times stated
Problems requiring a prescription	35
Accidents including injuries, wounds, severe bleeding, serious burns, falls, cuts, bites/stings, fainting	22
Paediatric problems, including children with fever, rashes, coughs, headaches	14
Antibiotic-related, including infections considered to require an antibiotic	14
Respiratory problems, including persistent cough, colds/flu, infections, breathlessness, chest pain	13
Related to emergency supply of medicines, including controlled medicines	12
Medicines review by GPs or other HCPs (e.g. uncontrolled symptoms or side effects, target BP or INR below optimal value; non-adherence	10
Elderly with problems including, chronic pain, falls, breathing difficulties	9
Eye/ear problems	7
Anything perceived to be beyond pharmacist's competencies or resources (including lack of adequate information on medical history, symptoms demanding further investigation e.g. laboratory tests, X-rays)	7
Don't remember what condition	4
Urinary tract infections, including blood in urine	3
Gastro intestinal problems	3
Skin problems	2
Cardiovascular-related e.g. patient reporting heart pain	2
Pregnancy-related	1

49 pharmacists responded to the question about the emergency supply service. Over two-thirds of those who responded (71%, n=35) reported that they were 'likely' or 'very likely' to provide an emergency supply of medicines if all legal requirements were met. The likelihood of providing emergency supplies

was not significantly different between locum and regular pharmacists: 67% (14 of 21 locum pharmacists) and 75% (21 of 28 regular pharmacists) (p> 0.05). There were no statistically significant differences in the proportion of pharmacists likely to provide emergency supplies during CH (73%) and NCH (70%). As shown in Table 8, a relatively larger percentage (45% n=9) of pharmacists in Sussex were quite or very unlikely to provide an emergency supply of medicines, when compared to those working in areas of Kent (19%, n=3) and Surrey (15%, n=2), but these differences were not statistically significant (p= 0.105).

Table 8 Likelihood of pharmacists providing emergency supplies across KSS

Likelihood of emergency supply	**Area**		
	Kent (16) n (%)	Surrey (13) n (%)	Sussex (20) n (%)
Likely or very likely	13 (81)	11 (85)	11 (55)
Quite or very unlikely	3 (19)	2 (15)	9 (45)

Pharmacists were also asked how they would advise patients if they did not make an emergency supply of medicine. As shown in Figure 4, the most frequent advice was to ring NHS 111, followed by advising patients to visit their own GP. None of the pharmacists advised patients to use A&E services in scenarios where an emergency supply of medicines was not made, and only one pharmacist suggested the use of another pharmacy.

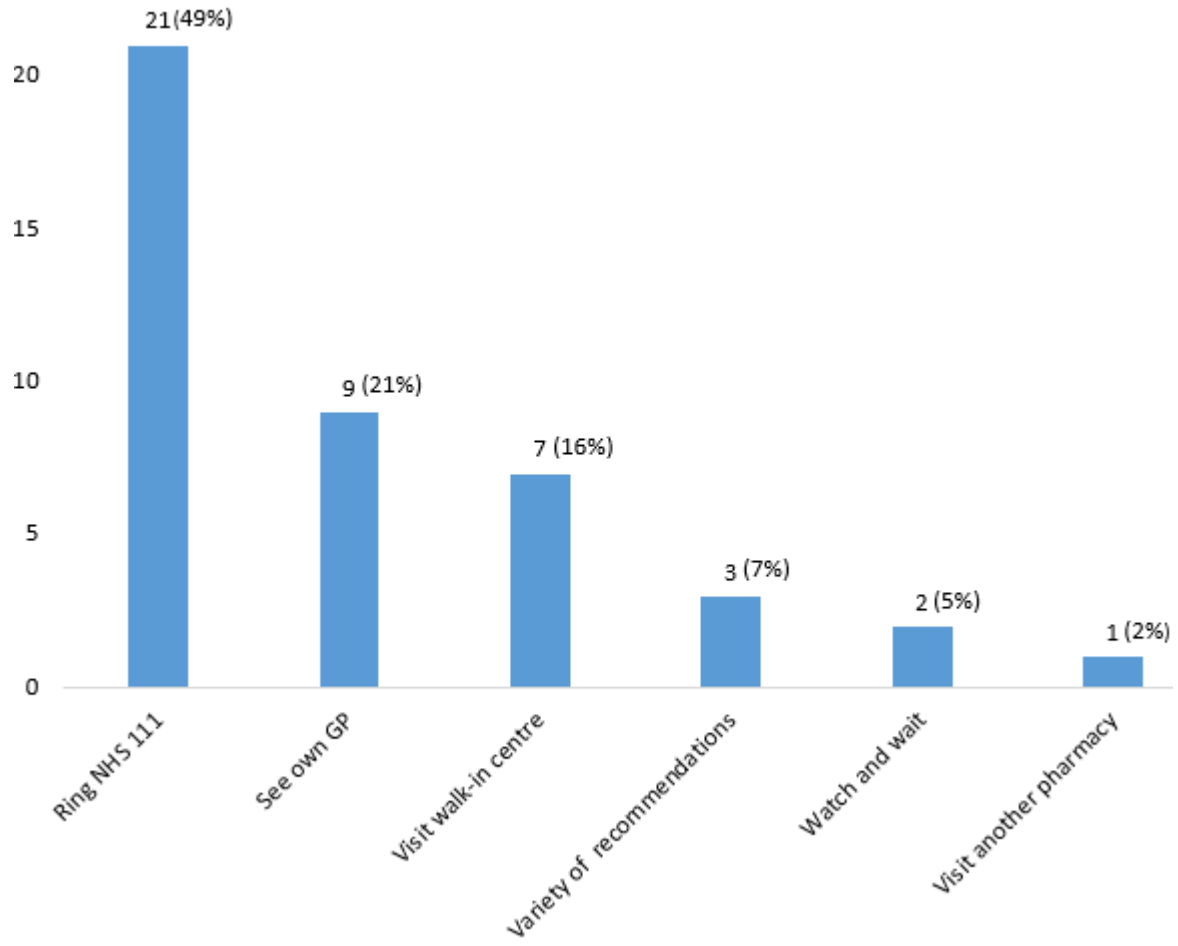

Figure 4 Advice offered to patients if an emergency supply of medicine was not made

Both locum (44%, n=8) and regular pharmacists (52%, n=13) were equally likely to recommend patients to call NHS 111 when an emergency supply was denied by the pharmacist. Pharmacists with 10 or more years of experience recommended NHS 111 services more often (70%, n=7), when compared to more junior pharmacists (0-4 years of practice) who were more likely to refer patients to see their own GP (57%, n=4).

Pharmacists were also interviewed about awareness of their companies' policies around the provision of emergency supplies of medicines. Just over half (55%, n=28) of pharmacists who responded were aware of their company's policy, while others were either unaware or unsure of the existence of such policies. Relatively more locum pharmacists (59%, 13 of 22) were unsure of different company policies around emergency supply of medicines, when compared to regular pharmacists (35%, 10 of 29). 88% (43 of 49) of pharmacists who responded to the question about company policies relevant to emergency supplies, advised patients about actions to take if they ever run out of their regular medicines. Pharmacists aware of their pharmacies' emergency supply policies were more likely to talk to patients about what to do if they ran out of their medicines (odds ratio =1.4, 95% CI, 1.1-1.8, p= 0.004), compared to those unaware of company policies. Most pharmacists (92%, n= 46) considered their counter staff to be knowledgeable about issues around emergency supply of medicines within their pharmacies, although three locums indicated that it varied between pharmacies.

1.4.7. Perceived skills and training for dealing with requests for urgent care

The majority of pharmacists (85%, n=45) indicated that they had the necessary skills and training to manage most urgent problems encountered. Three (6%) felt they did not have adequate skills to manage urgent problems or were unsure (8%, n=4). Relatively similar proportions of pharmacists working regular full-time (92%, n=24), regular part-time (75%, n=3), and locums (82%, n=18) reported adequate expertise to manage urgent health problems presenting in community pharmacies. In terms of work experience, there were no apparent differences in the proportion of pharmacists perceiving adequate skills/training by duration of practice: under five years of experience (80%, 8 of 10), 5-9 years of practice (89%, 8 of 9), and 10 or more years of practice (88%, 29 of 33). Qualitative comments revealed mostly positive perceptions about skills for urgent care provision among pharmacists contacted (See Figure 5).

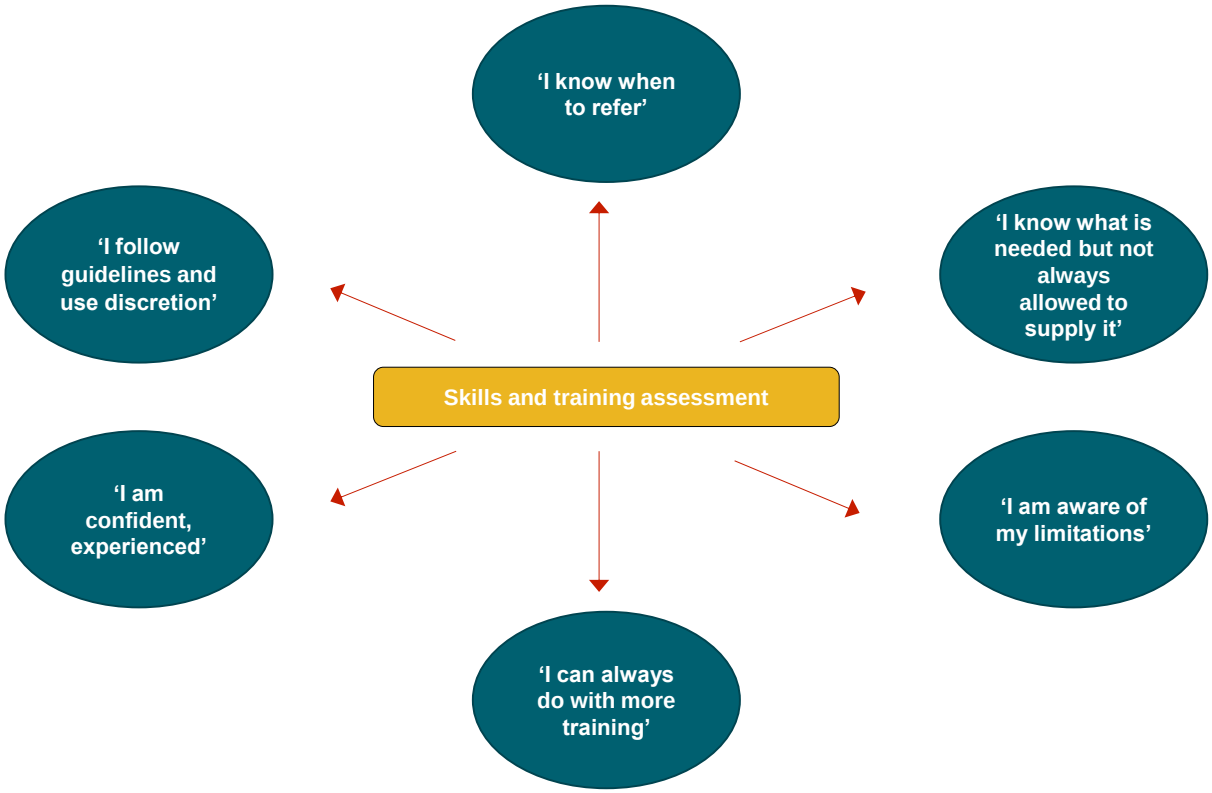

Figure 5 Pharmacists' perceptions of skills relevant to urgent care provision in community pharmacy

Health conditions and patient scenarios perceived to be beyond the pharmacist's expertise were commonly referred to other UEC services, as with clinical scenarios where pharmacists lacked adequate information or facilities. For instance, one pharmacist reported that 'I probably don't have enough equipment [to manage urgent care requests], e.g. to look into ear or mouth, or clinical examination skills' and another pharmacist echoed that 'things that we can treat as pharmacists are limited by what we can offer'. Another participant commented that often we 'know what is needed but [are] not always allowed to supply it.'

One pharmacist reported a referral relating to the use of multiple medicines (polypharmacy) and fear of adding new medicines to an already complex patient, and described a '…lady wanting liquid to help her sleep, [and yet] is on multiple meds already, I referred to GP'.

1.4.8. Access to and use of the CPPE training pack circulated in July 2015

Of the 50 pharmacists who responded to this question, nearly half (48%, n=24) remembered receiving the training pack and the rest were unsure whether or not they had received it. More pharmacists in the NCH sample (57%, n=16 of 28) acknowledged receipt of the CPPE training booklet, when compared to the CH sample (36%, n=8 of 22) although this difference was not statistically significant (p=0.166). There were no significant differences in the proportion of locum pharmacists (45%, 9 of 20) and regular pharmacists (50%, 15 of 30) in terms of recalling receipt of the training pack.

Of the 24 pharmacists who remembered receiving the pack, 6 (25%) reported they had read or worked through the training pack while the rest either did not read or skim read it. 5 (83%) of those who read or worked through the CPPE training pack were in the NCH sample. All 6 pharmacists that read the training pack had 10 or more years of work experience, two of whom were locum pharmacists. Five of those who read the training guide estimated up to four urgent care requests in an average four-hour shift, while pharmacists estimating more frequent (≥ 5) urgent care demands did not read the guide in any depth. Neither of the two pharmacists who estimated more frequent referrals of urgent care requests read the training booklet. Five of those who read or worked through the booklet felt they possessed necessary skills and prior training to manage most urgent problems encountered in community pharmacies. Of the six pharmacists who read/worked through the training material, four worked in Kent while the other two worked in the Sussex region. Pharmacists in the Surrey region were least likely to have seen the training pack; two remembered the CPPE pack but neither of them read it nor worked through it (See Figure 6).

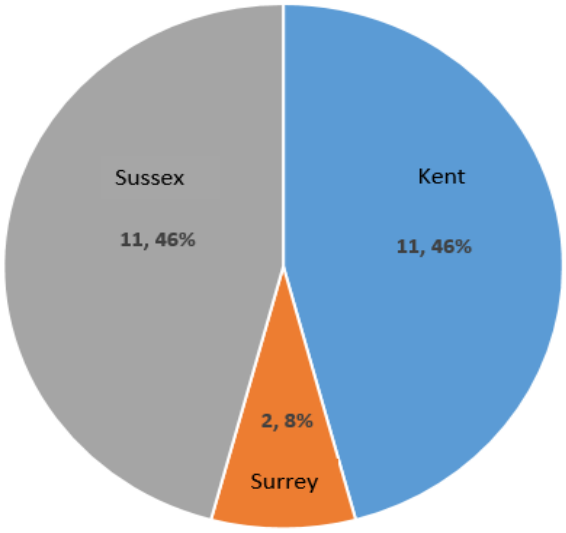

Figure 6 Proportion of pharmacists who remembered receiving the CPPE training pack by geographic region

1.4.9. Reasons for not reading the CPPE training pack on 'Urgent care in Pharmacy Practice'

Reasons for not reading the CPPE training pack were examined. Of those respondents who did not remember receiving the booklet, one commented that it was 'too much paperwork'. Of those pharmacists who received the booklet, lack of time and busy schedules were the most cited reasons for not reading or working through the material provided. Sample comments showed that respondents were 'too busy', 'still working on another training pack', 'recently done six CPD courses for flu', 'busy working on other things, will look at it more'. Procrastination was not uncommon as some pharmacists revealed putting the training pack away to read at a later convenient time, only to prioritise other tasks and so did not get an opportunity to read it. For instance, one pharmacist indicated that 'it's in the 'to do' pile of bedside reading'. Others reported the need for work-life balance, indicating that they '...don't want to spend free time after long tiring days or on day off'.

Comments specific to the training pack indicated that it 'looked too big, and not clear it would be of help'. Perceived relevance of this CPPE training material appeared to relate to its uptake and use; one pharmacist reported that he 'looked at the headline and decided it wouldn't have an impact' [on him]. Pharmacists' comments around the learning points from this training pack were mostly vague, and indicated that information presented was not new to them.

1.4.10. Perceived usefulness and relevance of the CPPE training pack

Pharmacists who read/worked through the pack were asked to rate usefulness of the pack; four of six evaluated that it was 'very or fairly useful' to them. When probed further asking 'what was the one most useful thing you learned from it?' most pharmacists were unclear with some indicating that they 'can't say'. A positive learning point from the pack was described by one pharmacist who 'made a list of products that they should keep to cover the ailments mentioned in the pack'. Three pharmacists rated the contents of the training pack as very or fairly relevant to their practice. Other perceived benefits of reviewing the training material related to confidence building, especially for new pharmacists. Nevertheless, the data revealed that junior pharmacists did not read or work through the training material provided. Two others cited that the pack served as a good reference or refresher, with one pharmacist reporting that it provided 'useful information to discriminate between muscle strains and sprains' and another mentioning that he 'will come back to it'.

1.4.11. Novelty of information contained in the CPPE training pack

Pharmacists who read/worked through the training material were also asked to assess if it contained new information; half of those who read it (3 out of 6) responded using a 'not really' answer option with some elaborating with that the pack 'didn't contain new information.' Comments were elicited around the proposed curriculum for urgent care provision, included on the back of the CPPE pack, and most pharmacists indicated that they didn't take notice of it; only two rated the curriculum as 'quite suitable' or 'useful'. Three pharmacists indicated that the contents were at an appropriate level.

1.4.12. Impact of the training material on behaviour and practice

Of those who read/worked though the material, three (50%) reported no immediate change to practice. However, the same proportion reported discussing the content or learning points with pharmacist colleagues or counter staff. In particular, one pharmacist mentioned that '…the pack prompted me to discuss giving emergency supplies with locums'. Three pharmacists reported that they felt 'a little more confident' to handle urgent queries after working through the training material, but none mentioned pain management as the clinical area of focus in the clinical pack.

1.4.13. Managing future training needs for community pharmacists

Pharmacists were asked whether they considered training would be needed if a new community pharmacy service around urgent care provision were to be introduced. Nearly half of all respondents to this question (46%, 23 of 50) thought training in 'clinical' topics would be needed (11 CH, 12 NCH). 52% (26 of 50) indicated that training in the 'practicalities' of providing such a service would be needed. 20% (10 of 50) considered that training would be necessary for counter staff.

Among the CH sample, significantly more pharmacists (68%, n=15) felt they would need training in 'practicalities' of the new service when compared to those in the NCH sample (39%, n=11) (p=0.042). As shown in Table 9, significantly more respondents (71%, n=20) in the NCH sample preferred distance learning to others forms of training if the urgent care service was to be commissioned in community pharmacies (p=0.03). An 'app' was seen to be useful for most of those interviewed, including those with 20 or more years of experience. In Sussex, 90% (18 of 20) of pharmacists thought an 'app' would be useful, compared to the overall figure of 76% (n=37).

Table 9 Training for urgent care service provision in community pharmacy

Training	CH n (%)	NCH n (%)	Overall n (%)
Training needs			
Training in clinical topics	11 (50)	12 (43)	23 (46)
Training in practicalities	15 (68)	11 (39)	26 (52)
Engaging counter staff	5 (23)	5 (18)	10 (20)
Preferred method of training delivery			
Face-to-face	13 (59)	12 (43)	25 (50)
Distance learning	9 (41)	20 (71)	29 (58)
On-line learning	15 (68)	15 (54)	30 (60)
An application for phone/tablet	18 (82)	19 (70)	37 (76)

Note: respondents could answer using more than one response option

There were no statistically significant differences between training needs and being in full or part-time employment versus locum work. Also, no statistically significant differences were observed between preferred methods of training delivery and pharmacists' employment status. Two-thirds (67%, 6 of 9) of more recently qualified pharmacists (0-4 years since registration) wanted further training around 'practicalities' of a new community pharmacy service on urgent care, and 33%, (3 of 9) wanted engagement of counter staff in the new service. In Sussex, seven pharmacists felt that it would be necessary to provide training for counter staff compared with two pharmacists in Surrey and one in Kent.

1.4.14. Qualitative comments on preferred methods of training

Participants' comments showed that preferences for different methods of training were influenced by a number of factors. For instance, pharmacists with little spare time or unusual working hours found it difficult to get to training sessions and felt that distance learning and on-line training were easier modes of delivery that could fit in their day-to-day lives. Examples of pharmacists' comments relating to the flexibility of distance and on-line learning were: '...can do distance learning at own time and pace"; "on-line is easiest and flexible"; "CPPE e-learning modules are best'.

On the other hand, a number of respondents indicated that meeting others at face-to-face sessions was beneficial to learning and implementing an urgent care service, and that these were better for role-playing, improving consultation skills and for learning complex subject matter. One participant indicated that he 'prefers face-to-face' sessions over on-line training, but another mentioned challenges of face-to-

face training: '…have attended a lot of workshops but don't fit working hours'; and that 'face to face training is time-consuming and costly'.

Practical challenges associated with using 'apps' on phones/tablets to deliver training for a new service were noted, including lack of internet access; one pharmacist indicated that '…there's no signal in the pharmacy'. Other pharmacists indicated restrictions around mobile phone use during working hours, with one pharmacist indicating that 'apps' maybe useful, but not allowed to have mobiles in the pharmacy'. Others perceived the use of 'apps' as more relevant to younger pharmacists.

Other issues were raised around suitable training methods for pharmacists to be used in commissioning an urgent care service in community pharmacies, and reducing referrals to other services. The increasing number of training sessions, and time limitations were noted. When asked how they would like urgent-care training to be delivered, one pharmacist responded that he was 'about to do a prescribing course'. Others argued that the method of training used 'depends on the nature of content and how complex it is', and that 'theoretical [issues] can be addressed on-line, and new skills [transferred] face to face'. Others implied that training should be relevant/applicable to practice and should offer new knowledge: 'needs to be concise, CPPE MUR modules can be too much and only able to remember and use 20%'; and '... am frustrated by training that tells me what I already know'.

The largest percentage (79%, n=38) of respondents indicated that training for a newly commissioned service should be accredited so that the pharmacists could deliver it in any location (as with the MUR service). Eight pharmacists were unsure about the need for accreditation and two felt that urgent care training should not be accredited. Locum and regular pharmacists responded similarly to this question.

1.4.15. Community pharmacists' willingness to engage with a new UEC service

Pharmacists were asked whether they would be willing to engage with a new service to help manage urgent care requests. Two-thirds of those who responded (65%, 31 of 48) were 'very likely' to engage with the new service (14 in CH sample, and 17 in the NCH sample). 33% (n=16) mentioned that they were 'likely' to engage with the service, and only one pharmacist said future engagement was 'quite unlikely'. Potential barriers for providing a new urgent care service in community pharmacies were examined. Lack of time was mentioned by 38% (n=19), followed by lack of staff (26%, n=13). Only two pharmacists (4%) revealed inadequate facilities (consultation room) as a threat to providing urgent care services. Two respondents felt that they were not qualified to offer such a service, and another two cited lack of resources such as internet.

1.4.16. Suggestions for minimising pharmacy referrals to other urgent care services

Pharmacists were asked to provide suggestions on how to reduce urgent referrals from community pharmacy to other NHS services, and they provided varying responses (see Table 10). Further training for diagnosis and independent prescribing were most frequently (n=10) suggested as a means of reducing referrals of urgent care requests to other NHS services. A common suggestion related to pharmacists' prescribing rights, with many indicating that they knew what the patient needed in urgent health situations but were restricted to what products or medicines they could offer. As one pharmacist noted that 'being able to prescribe would help, as too restrictive if I can only do what GP has prescribed.' Six pharmacists suggested access to patients' medical records as one way of encouraging them to independently manage urgent care requests, and prevent referrals to other urgent care services.

Providing further support and capacity for the minor ailments scheme, ideally as a nationally commissioned service, was also frequently mentioned. One participant in support of the scheme suggested that 'the minor ailments scheme could be upgraded a little to do examinations and prescribing.' Empowering pharmacists to screen and manage specific conditions, including those presenting in certain groups (e.g. elderly) was also suggested. Checking blood pressure and offering

basic health checks was also mentioned as a possible means of relieving long-term demands for urgent care within the NHS.

Public involvement and education about existing referral pathways for urgent care needs was suggested, and one pharmacist stating that there should be ‘more publicity for the public about when to go to the pharmacy’. Another participant indicated that a need to ‘educate the public about how the NHS works, and when they should go to different parts of NHS’.

It was noted that many urgent care referrals were related to repeat prescriptions and fear of running out or missed doses. Suggestions to minimise this included the use of a reminder service (e.g. reminding patients to order their medicines in time), better co-ordination of electronic prescribing, repeat prescribing and repeat dispensing, and better communication between prescribers and community pharmacists. Related to this was a suggestion that pharmacists should ‘have more contact with other out-of-hour services to get advice and discuss cases encountered, and 'be kept in the loop' for patients referred to other services. Suggestions for minimising referrals to other UEC services are summarised in Table 10.

Table 10 Suggestions of ways to minimise referrals by pharmacists to other urgent care services

Suggestion	n
Further training for diagnosis and/or independent prescribing	10
Encouraging management of specific conditions/problems	8
Further support for minor ailment scheme	7
Access to medical records	6
Extend pharmacists’ prescribing rights for agreed products or move more products to ‘pharmacy only’ status or extend patient group directions (PGDs)	6
Patient education on how best to use the NHS	6
Emergency-supply-service related e.g. Adopt an Emergency supply service similar to Scotland’s; widening what they can supply	6
More research and information resources for urgent care	1
More collaborative work-approach with OOH services.	1

Key findings from Phase one evaluation

Phase one explored the way community pharmacies currently respond to urgent care requests, and included an evaluation of the CPPE urgent care training pack and a preliminary assessment of pharmacists’ training needs. Various urgent care requests are managed independently within community pharmacies, and the majority (86%) of pharmacists manage up to 5 urgent care requests in an average four-hour work shift, while some pharmacists respond to 15 requests in the same time frame. However, some clinical problems are referred on to other UEC services, primarily GPs during core hours and NHS 111 during NCH. Proximity to other urgent care services (e.g. walk in centres) did not seem to affect pharmacists’ patterns of referrals. Requests for prescriptions, including antibiotics for upper respiratory tract infections (URTIs) are frequently referred. Most pharmacists (71%) are willing to provide an emergency supply of medicines if all legal requirements are met. The CPPE training pack posted to all registered pharmacists in July 2015, including those taking part in this evaluation, had minimal impact on their knowledge, skills, or provision of urgent care; only 6 (11% overall) had read it and only one pharmacist had worked through it as intended.

Most community pharmacists consider that they already have the skills and training to deal with the urgent problems that are presented to them.

Recommendations: Pharmacists indicated that future training should cover clinical topics, diagnostic skills, and lead to independent prescribing. Content should be relevant to community pharmacy practice and training should be delivered in a variety of ways (including face-to-face and distance learning sessions) to stimulate more community pharmacists to upskill themselves in areas of urgent care provision. Such training may help minimise referrals from community pharmacies, easing pressure on other urgent care services. Further work is needed to evaluate, in-depth, current practices of urgent care provision by community pharmacists. This is the subject of Phase 2.

2. Phase Two – An in-depth evaluation of current urgent care practices of community pharmacists in Kent, Surrey and Sussex

2.1. Background

A review of the literature carried out prior to the start of this evaluation showed that little work has been done looking at how community pharmacists manage urgent care consultations. The findings from the phase one evaluation indicated that more detailed information was needed about the current scope of urgent care activities by community pharmacists in order to identify training requirements to optimise practice. It was therefore considered necessary to examine in much greater detail the nature of urgent care consultations by community pharmacists in KSS and how these were managed. It was also necessary to incorporate additional perspectives to understand the appropriateness of urgent care provided in community pharmacies. In particular, the views and experiences of various stakeholders were sought, for example from patients, and from an expert panel of health professionals with experience in urgent care. Phase 2 also obtained the views of other pharmacists handling urgent medicine-related enquiries in an out-of-hours service and an assessment of whether these enquiries could be managed in community pharmacy was made in order to inform better use of both services. This second phase of work also identified additional areas where urgent care provision could be strengthened in community pharmacy, to potentially reduce pressures on other NHS UEC services.

2.2. Aim and Objectives

The aim of this second phase of the evaluation was to undertake a detailed analysis of the UEC practices of a small, representative sample of community pharmacies across KSS to specifically identify additional areas of care where community pharmacy could potentially avert visits to other NHS UEC services.

2.3. Objectives

1) To quantify accurately the type of requests that currently comprise UEC in the context of community pharmacy, comparing those presented during core hours with those in non-core hours.

2) To estimate the proportion and type of UEC requests presented to community pharmacists which are currently referred to other NHS services.

3) To survey patient satisfaction with current pharmacy provision of urgent care.

4) To compare pharmacists' assessment of what is an urgent request and the appropriateness of referrals made with that of an expert panel of health care professionals who currently provide NHS urgent care services.

5) To recruit pharmacists working for the out of hours urgent care service, IC24 to record details of calls referred to them needing medicine-related input and to assess whether a community pharmacist could have managed the problem.

2.4. General methods

Sample recruitment - pharmacies

The same recruitment procedures as those used in the Phase 1 evaluation were employed to identify a representative sample of pharmacies for phase 2. However, pharmacies selected in phase 1 were excluded. Again, simple random sampling was used to select pharmacies from the whole sample of 892 pharmacies in KSS, and stratification ensured the proportion of pharmacies included were representative in terms of the types of pharmacy (CH/NCH; multiples/independents). In order to obtain the target sample size of 20 pharmacies, a purposive sample of 100 pharmacies were invited to the study across the region.

Honoraria of £500 were offered to community pharmacies/pharmacists for participation.

Sample recruitment – IC24

All pharmacists (n=6) working at IC24 during the study period were included in the sample. The IC24 service was paid £1000 to participate.

Sample recruitment – Patients

All patients who had received advice from the pharmacist on an urgent care matter were invited by the pharmacist or pharmacy staff to complete a customer survey.

The expert panel

A panel was convened which consisted of a GP, nurse and pharmacist with experience of urgent care. These individuals were paid an honorarium for their input.

Instrumentation – Pharmacy Collection Logs

Pharmacy data collection logs were developed to record in brief all episodes of care. The log included a statement of consent and covered pharmacist details (gender, employment status, years qualified), details of the presentation (date, time, summary of issues), assessment of level of urgency (using a defined 5 point Likert scale – see below), action taken by pharmacist (including referral details if appropriate), time taken to resolve and outcome of episode of care. Each log entry covered a separate episode of urgent care and the pharmacists added details of new requests consecutively. If another pharmacist (working alongside the responsible pharmacist) was faced with a new patient request, they completed a new log sheet, and added their consent and details thus ensuring that each episode of care was attributed to a specific pharmacist.

The log sheets were piloted by 3 community pharmacists and following feedback the wording used to define the levels of urgency was amended and the logs were compiled into a booklet for ease of use. Examples of each level of urgency were also included.

Assessment of urgency of requests

A 5-point Likert-type scale was used to rate the urgency of requests, and scores ranged from ‘non urgent’ to ‘extremely urgent’.

‘Non urgent’ requests were considered as those for longstanding problems which did not necessarily need dealing with on the same day (1)

‘Fairly urgent’ requests were those for where a consultation with a pharmacist ‘probably’ averted the need for other NHS services, and could be appropriately managed in the pharmacy (2)

‘Urgent’ requests were for problems that needed resolving on the day and pharmacists’ advice ‘almost certainly’ averted a future GP visit or use of another NHS service (3)

‘Very urgent’ requests were for problems that needed advice on the same day and pharmacists’ advice ‘definitely’ averted the use of another NHS service (4)

'Extremely urgent' requests were for problems for which the patient should have sought other NHS services rather than a pharmacy (i.e. needed immediate referral to an emergency service) (5)

Instrumentation – IC24

IC24 log sheets were designed using feedback from the IC24 lead for the evaluation.

The log covered pharmacist details (gender, professional background, years qualified), details of the presentation (date, time, summary of issues), assessment of urgency (rated as non-urgent to extremely urgent using the 5-point Likert-type scale detailed above), action taken by caller prior to contact with IC24, action taken by IC24 pharmacists, time to resolve and resources required. Each log covered a separate episode of urgent care and the pharmacists added details of new requests consecutively. Each IC24 pharmacist had their own booklet.

Instrumentation – Customer survey

A customer survey was devised by the evaluation team and piloted with 3 non pharmacist staff members from MSoP. As a result of piloting, changes were made to question order. Following submission for ethical approval, an information leaflet was attached to the front of the survey. Customers were asked to indicate (using Likert-type scales) if the urgent care request was for themselves or for someone else, if they had previously used pharmacy services and if they had been referred on to seek pharmacy advice. Customers rated their perceived urgency of requests, and rated their overall satisfaction with how their request was managed. They also rated the clarity of advice given by pharmacists, indicated the likelihood of adhering to pharmacist advice and were asked about the need for further consultation. Other issues assessed were: the privacy of consultations, likelihood of using pharmacy services in the future, and the use of alternative UEC providers had the pharmacy not been used.

Instrumentation – Expert panel

A small data capture form was devised to enable the expert panel to decide on a level of urgency for the community pharmacy presentations and also whether they agreed with the outcome made by the pharmacist in terms of referral. A separate IC24 data capture form allowed assessment of whether the IC24 query could have been dealt with by a community pharmacist.

Procedures – Community pharmacies

Covering letters and consent forms were sent (by post and email) to pharmacies in the sample informing them of the evaluation, and asking for their co-operation. A pharmacy information sheet was also provided to each pharmacy contacted. Approximately one week after information was posted to all pharmacies, a member of the evaluation team telephoned the pharmacist manager asked for their interest and verbal permission to participate and if they agreed, arranged a mutually convenient visit to the pharmacy to obtain written consent on behalf of the pharmacy. At the visit, the member of the evaluation team went through the methodology of the study (logbook entries) and customer satisfaction survey with the pharmacist manager and the staff working at the pharmacy counter. This initial session sought confirmation that the pharmacist manager and staff trained at this time would be able to cascade this training to other staff including locum pharmacists not present for training.

Participating community pharmacies documented episodes of urgent care for 2 consecutive weeks in a convenient time period between June and August 2016. CH pharmacies only kept records during core hours. NCHs pharmacies only kept records during NCHs. Both kept records on a Saturday morning if the pharmacy was open then.

Procedures – IC24

The lead for IC24 was approached and agreed on behalf of the organisation that staff would participate. Pharmacists working for IC24 in KSS were identified by the lead pharmacist for the IC24 service and sent a covering letter by email, a participant information sheet, and a consent form. Written consent was obtained from each pharmacist who participated in the study. Training for IC24 staff on the use of the

logs was carried out by a member of the evaluation team. IC24 pharmacists recorded all medicine related calls referred to them for 4 consecutive weeks between June and August 2016. Pharmacists logged urgent medication related queries received during their working hours (Friday evenings, 4pm-10pm, and 8am-10pm during weekends.

Procedures - Customer Survey

Any patient who had consulted with a participating community pharmacist for advice on an urgent matter was invited to complete a customer survey. Pharmacists and counter staff were trained on how to recruit customers by a member of the evaluation team. Once completed, the anonymised survey was 'posted' into a sealed box in the pharmacy.

Procedures – Expert panel

The expert panel were given copies of a 20% sample (86) of log book entries from the community pharmacy entries. The sample was chosen by a member of administrative staff with no connection with the evaluation. The sample included entries from all pharmacies taking part, all pharmacists taking part (in a proportion to the number of individual entries made) and covered the full range of dates and times during the day when requests were recorded.

The expert panel reviewed the pharmacists' evaluation of the urgency of the urgent care requests they had documented. Using a sample of the logbooks completed by community pharmacists in which the urgency request recorded by the pharmacist had been omitted, the expert panel assessed the urgency of requests presented by patients using the same Likert scale the pharmacists had used (non-urgent to extremely urgent on a 5-point scale). The expert panel also evaluated the appropriateness of pharmacy referrals (as appropriate, somewhat appropriate, and not appropriate).

The expert panel were also given a 20% sample of the IC24 logs (n=50) again chosen by the administrative member of staff. The panel reviewed the episodes of care in full to determine if the presentation could have been dealt with by a community pharmacist.

2.5. Analyses

All data were analysed in SPSS version 24. Excel spreadsheets were used for preliminary handling of datasets. Logbook data were principally quantitative, but also included free-text short answer responses. All variables in logbook entries were analysed separately for community pharmacy data and IC24 data. The data were analysed to estimate frequency and type of requests in core versus NCH pharmacies. Referral patterns were examined for both community pharmacists and IC24 pharmacists, and the types of problems referred on to other NHS services and their frequency were documented. The outcomes of requests managed by the pharmacists, including emergency supply of medicines, were analysed. Appropriate statistical tests (e.g. chi-square test) were used to assess significant differences for some of the variables, similar to Phase 1 analyses. Pharmacists' assessments of the urgency of patient requests were tabulated and compared with those of the expert panel, and patients' own ratings.

2.6. Results for Phase 2: (a) Community pharmacy, including patients' responses

2.6.1. Characteristics of pharmacies/pharmacist consultations

17 pharmacies took part in the Phase 2 evaluation; 10 pharmacies collected data during core hours and 7 during NCH. Four were recruited from Kent, 6 from Surrey, and 7 from Sussex. 27 community pharmacists collected data on urgent care requests during the study period, of whom 7 were locum pharmacists (41%)

Overall, 432 consultations were recorded. Two-thirds (66%, n=285) of all consultations were conducted in core hour pharmacies and a third (34%, n=147) took place in NCH pharmacies. Most consultations

were recorded by female pharmacists (62%, n=268). Of those consultations in which pharmacists' employment status was documented, (n=376), 75% (n=281) were conducted by the regular pharmacist with 25% conducted by locums (n=95). 430 logs included data on work experience; nearly half (49%, n=211) of all consultations were conducted by pharmacists qualified for 10 years or more (See Figure 7). 201 consultations were carried out by multiple pharmacies (88 CH, 113 NCH), 231 by independent pharmacies (197 CH, 34 NCH), whilst the difference in the total number of consultations in multiples vs independents was not significant, there was a highly significant ($p<0.001$) difference in the consultations carried out in core hours and NCH.

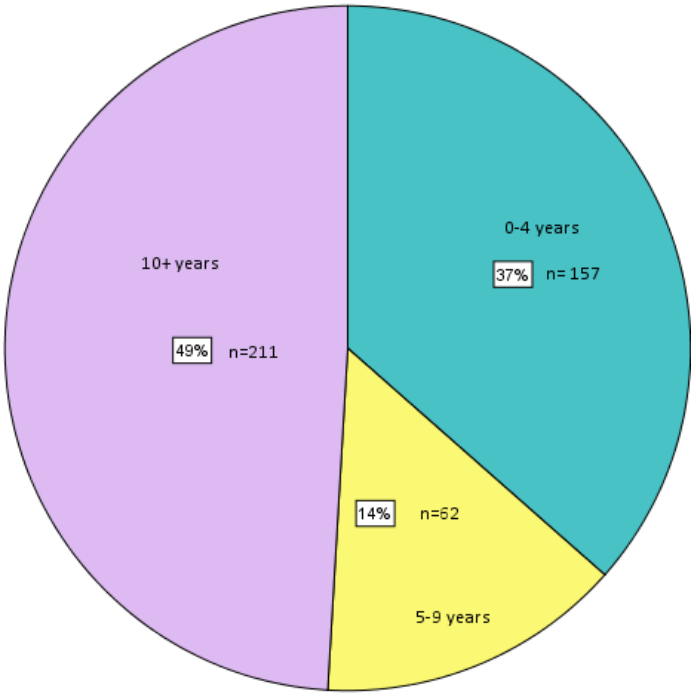

Figure 7 Proportion of pharmacy consultations by pharmacist's years of work experience (n=430)

The length of consultations was recorded in 414 log entries, and most consultations (48%, n=200) lasted approximately 5-10 minutes, while 32% (n=132) lasted 5 minutes or less. Longer consultations (11-20 minutes) were recorded in 63 (15%) consultations and the longest consultations went on for over 20 minutes (n=19, 16 NCH, and 3 CH). Most CH consultations/urgent requests were conducted between 10am and 11am. NCH pharmacies recorded the most frequent consultations between 7pm and 8pm (see Figure 8).

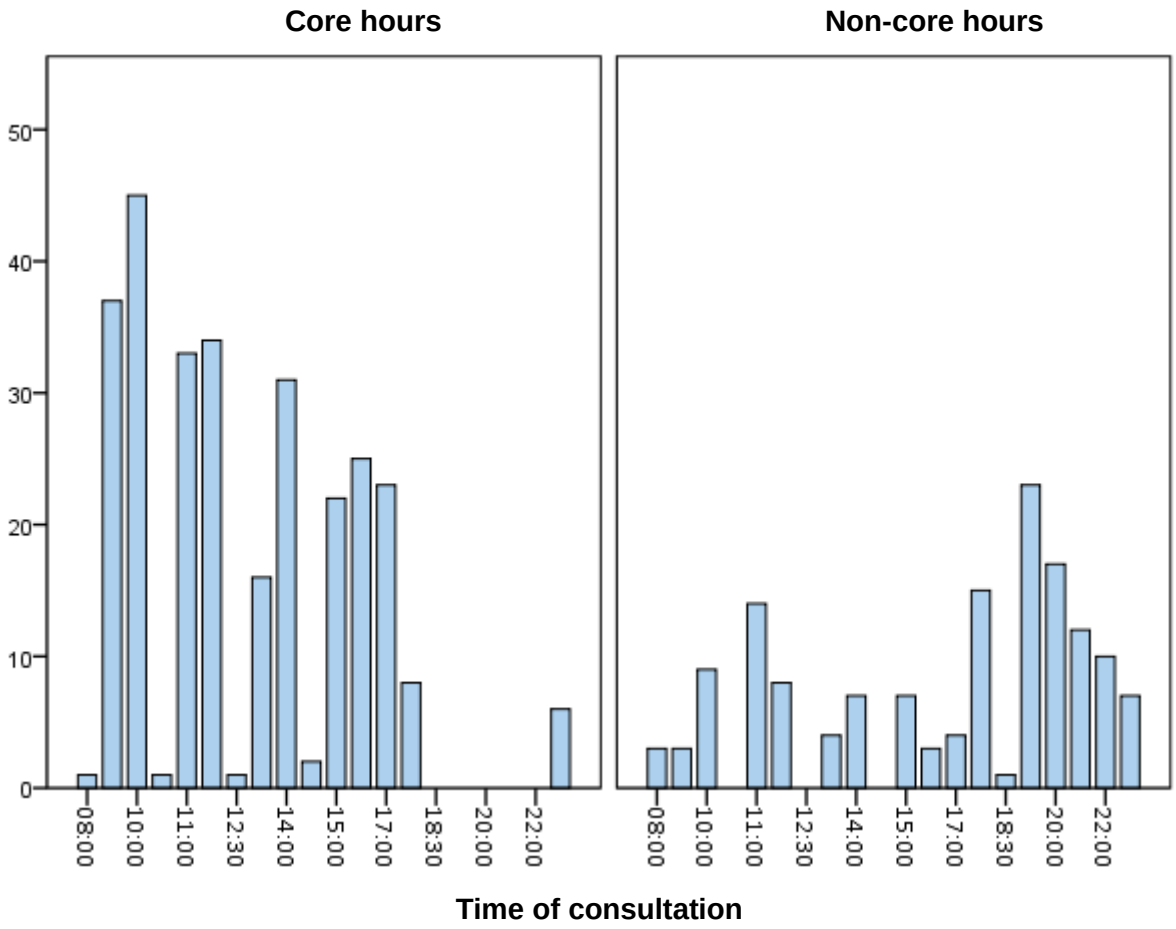

Figure 8 Timing of urgent care consultations in community pharmacies in KSS

2.6.2. Patient Characteristics

207 individuals completed the customer survey. 60% (n=124) were female. A third (31%, n=64) were aged 30-49, 18% (n=38) were 50-64 years, and 20% (n=41) were 65 years or over. The remainder were below 30 years of age. 61% (n=126) indicated the urgent care request was made for themselves, while 45 (22%) reported that the consultation was for someone else. Most respondents (75%, n=154) had previous experience of using a pharmacy service. 29 patients indicated that they were referred by their GP and 7 were asked to visit the pharmacy by NHS 111.

2.6.3. Nature of requests for urgent care in community pharmacies

As shown in Table 11, 57% (n=247) of urgent care requests were symptom-related (159 core, 88 NCH). Requests for prescription medicines were equally common during core hours (19%, n=53) and NCH (19%, n=28).

Table 11Type of urgent care requests in community pharmacies

Nature of consultation	**CH (282)** n (%)	**NCH (146)** n (%)	**Total (432)** n (%)
Presentation of symptoms	159 (56)	88 (60)	247 (57)
Request for prescription medicine(s)	53 (19)	28 (19)	81 (19)
Medicine-related enquiries	46 (16)	15 (10)	61 (14)
Emergency contraception	10 (4)	11 (8)	21 (5)
General health advice	9 (3)	2 (1)	11 (3)
Other	5 (2)	2 (1)	7 (2)

The symptoms presented were classified into categories shown in Table 12. Symptoms of skin problems were the most common (n=95, 60 CH and 35 NCH), followed by eye symptoms (n=29, 19 CH and 10 NCH). Other common symptoms were related to musculoskeletal (MSK) problems (n=20), upper respiratory tract infections, URTIs (n=19), and wounds (n=17).

Table 12Categories of urgent care symptoms presented in community pharmacies

Symptom category	**Number of symptom consultations in CH** (159)	**Numbers of symptom consultations NCH** (88)	**Total** (247) (n %)
Skin	60	35	95 (38)
Eye	19	10	29 (12)
Musculoskeletal	16	4	20 (8)
Upper respiratory tract infections	14	5	19 (8)
Wounds	13	4	17 (7)
Gastrointestinal	11	5	16 (6)
Allergy	7	6	13 (5)
Childhood infections	4	7	11 (4)
Pain	6	5	11 (4)
Urogenital	5	4	9 (4)
Ear	4	3	7 (3)

Pharmacists were asked to indicate how long patients had had the problem/symptoms for which they requested urgent care; 88 responses were obtained, and nearly two-thirds (65%, 57 of 88) of requests for consultation were for problems of three days or less duration. 13% (11 of 88) of requests were made within 4-7 days of the problem, while five patients made the urgent care request after one week. Fifteen consultations were made for long-term issues (9 for problems experienced between one month and three months, and 6 for one-year or more), although patients presented these as ‘urgent’ on the day.

2.6.4. Who requested a consultation?

73% (n=316) of all consultations were for the person who made the urgent care request, and 7% (n=28) were for another adult. Among consultations in which the patient's age was recorded or estimated (n=385), data showed that over half (57%, n=220) were for those aged 18 to 59, and a quarter (26%, n=101) were for older persons (age 60 and over), as shown in Figure 9.

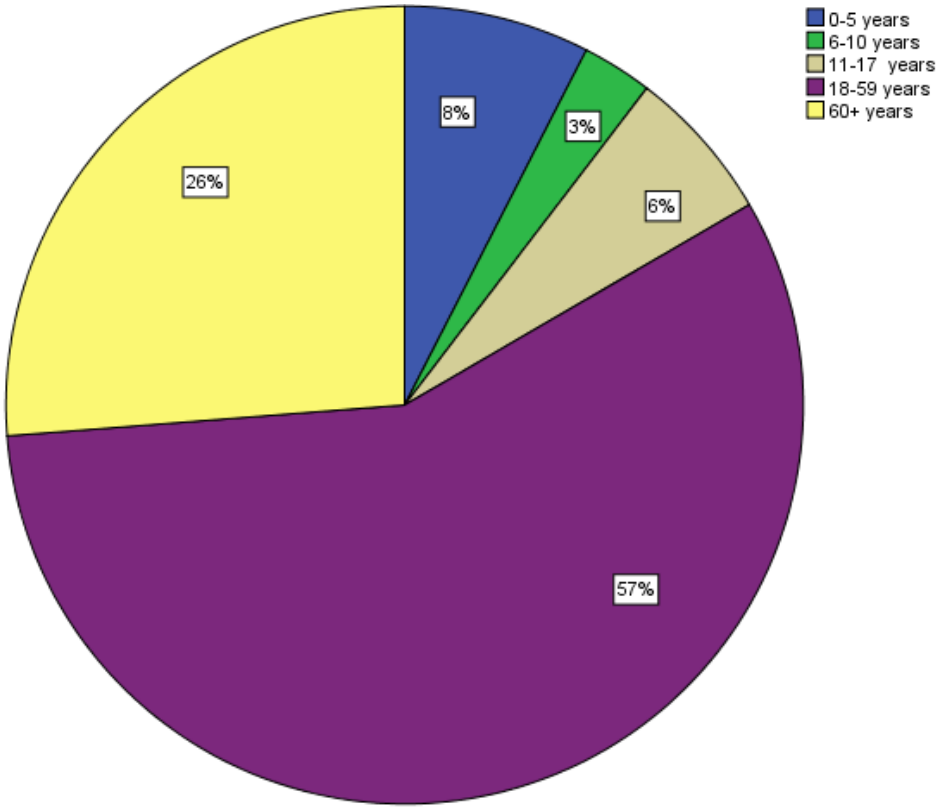

Figure 9 Age of patients requesting urgent care in community pharmacies

2.6.5. How did community pharmacists manage urgent care requests?

Community pharmacists were asked about the actions they took during consultations for urgent care.

Advice and/or supply of medicine

27% (n=116) of all consultations provided advice alone as the main way of managing urgent patient requests, 90 of which were conducted by full-time (regular) pharmacists, and 11 consultations by locum pharmacists. 42% (n=183) of all consultations were managed by providing advice (including written information in the form of booklets/leaflets) together with supply/sale of an over-the-counter (OTC) product or pharmacy-only medicine; 114 by full time pharmacists and 37 by locum pharmacists. In 16 consultations (4%), the pharmacist was unable to supply a pharmacy-only medicine or OTC product that could help with the urgent request due to the prohibitory cost.

Emergency supply

Emergency supplies of regular prescription medicines were eventually made in 17% (n=75) of all consultations (67 by regular pharmacists and 8 by locum pharmacists). 81 consultations were for people who had run out of their regular prescription medicines, 63 of which led to an emergency supply. Reasons for not providing an emergency supply included 11 cases of obtaining the medicine through other ways, 2 requests which involved a controlled drug, and 1 patient who refused to pay for the

emergency supply. There were an additional 10 emergency supplies given which were not documented as related to running out of medicines and 2 emergency supplies were made for which the reason was not stated. The breakdown of emergency supplies by geographic area and CH/NCH is shown in Table 13.

Table 13Emergency supply of medicines by geographic area

Area	Emergency supplies provided Core hours (47) n (%)	Emergency supplies provided NCH (28) n (%)	Total number of emergency supplies (75) n (%)
Kent	9 (19)	14 (50)	23 (31)
Surrey	10 (21)	9 (32)	19 (25)
East Sussex	19 (40)	4 (14)	23 (31)
West Sussex	9 (19)	1 (4)	10 (13)

Independent pharmacies carried out slightly more emergency supplies (40, 53%) than multiple pharmacies (35, 47%), although this figure was not significant.

Referrals

Pharmacists were asked to document urgent care requests that were referred to other NHS services. Consultation outcome was detailed in 392 of the 432 consultations. 70% (n=273/392) of urgent care requests were managed independently, and no referrals were made. 201 (47%) of these consultations managed in-house were given an urgency rating 2, 3 or 4 which included in the definition ‘averted the need for other NHS services’.

119 (30%) consultations resulted in referrals, 69 to GP practices, 22 to NHS 111 and 10 to walk in centres. For details of the GP referrals see table 14. Nine requests were referred to the Accident and Emergency service (a) unresolved skin infection already seen by GP; (b) URTIs and rash in an adult (c) 6 month old with gash on lip; (d) suspected stroke; (e) severe sunburn; (f) running out of medicine for a patient who was unable to pay for an emergency supply; (g) gastrointestinal pain and diarrhoea in an adult; (h) needing tetanus vaccine, i) request for antibiotics for ear infection. Overall, there were no significant differences (p=0.263) in the referrals services used by regular or locum pharmacists. Infection or suspected infection constituted 42 (35%) of the total number of referrals to all providers.

Table 14Detail of consultations referred to the GP Practice

Reason for referral to GP	Number of referrals n=69
Suspected infection	29
Medication query	13
Other	9
Pain	6
Skin	5
Ran out of meds	5
GI problem	2

Other services (n=9) used to refer urgent care requests presenting in community pharmacies were: family planning clinic, emergency dentist, district nurses and opticians. In 19 consultations, the pharmacist contacted/liaised with other NHS services on the patient's behalf (referral to that or another service may or may not have taken place at the same time). For referral details see table 15.

Multiple and independent pharmacies referred to GP practices similarly (29 and 33 referrals respectively) however, multiple pharmacies were statistically ($p<0.05$) more likely to refer to A&E (7 vs 2 referrals respectively) or NHS 111 (19: 3; $p<0.001$). The number of consultations managed in-house without referral was not statistically different between multiples and independents ($\chi 2 = 4.939$; df=2; $p=0.085$). Locum pharmacists were however statistically more likely to make a referral/not manage an urgent care enquiry in-house $\chi^2 = 16.710$; df=2; $p<0.001$.

Table 15 Consultation referrals including destination of referral in CH and NCH with assessment of urgency

Level of urgency (as before)	Not referred n=273		Referral to GP n=69		Referral to A+E n=9		Referral to 111 n=22		Referral to walk in centre n=10		Referral Other n=9		Total
	CH	NCH	CH	NCH	CH	NCH	CH	NCH	CH	NCH	CH	NCH	
1	14	9	3	3	0	0	0	0	0	0	0	0	29
2	48	30	23	7	0	0	0	1	2	0	4	3	118
3	56	21	12	3	0	0	1	6	3	1	1	0	104
4	34	12	1	2	3	1	0	1	0	0	0	0	54
5	1	18	4	6	3	2	0	12	2	1	0	0	30
Urgency not assessed	26	4	2	3	0	0	0	1	1	0	1	0	38

2.6.6. How 'urgent' are patients' requests for urgent care?

Patients' ratings of urgency

Patients' ratings of urgency were examined and 58% (n=121/207) perceived their requests as 'fairly urgent'. 19% considered their requests to be 'urgent' (19%, n=39) or 'very urgent' (19%, n=40).

Pharmacists' assessment of urgency

Pharmacists were asked to rate the urgency of patient consultation. 390 consultation logs included pharmacists' ratings of urgency of requests. 28% (n=108), 14% (n=56), 14% (n=53) of patient consultations were rated as 'urgent', 'very urgent' and 'extremely urgent' respectively (See Figure 10).

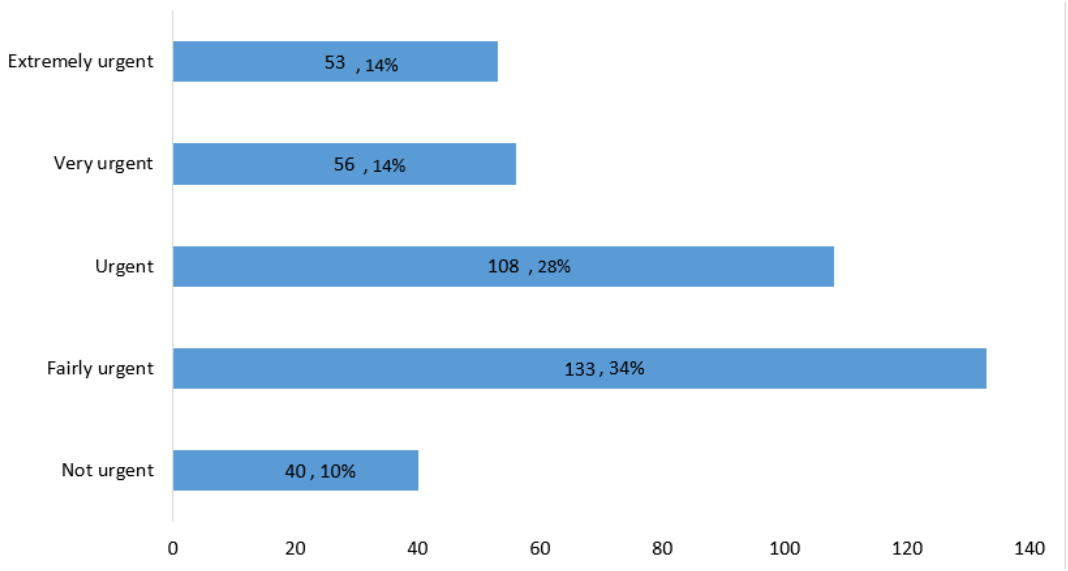

Figure 10 Pharmacists' assessment of urgency of requests

Urgency versus timing of requests

Pharmacists' ratings of the urgency were examined by the timing of patient requests. During core working hours most requests (24%, n=93) were rated as 'fairly urgent'. The proportion of 'fairly urgent' requests and 'extremely urgent' requests was the same during NCH working. Slightly more patients presenting during core hours (n=28) were rated as 'not urgent' when compared to those encountered in NCH consultations (See Figure 11).

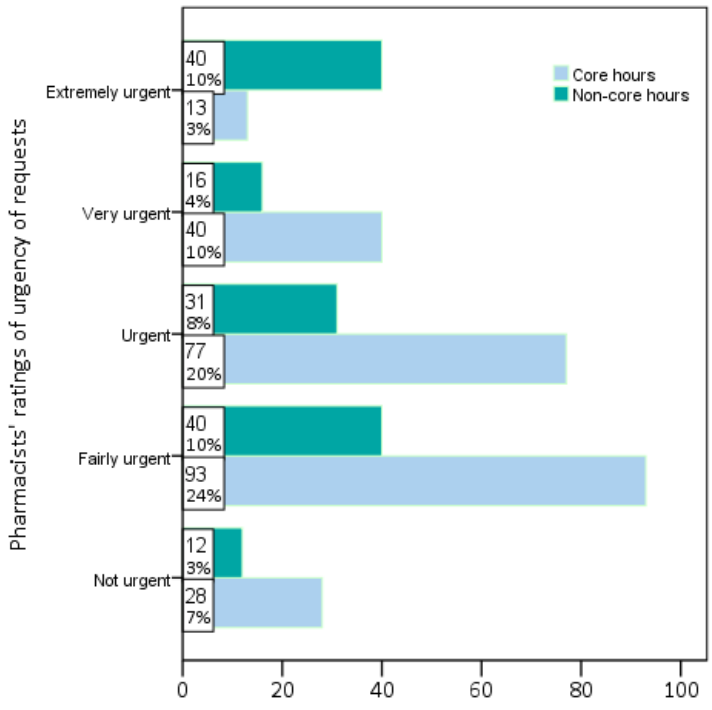

Figure 11 Pharmacists' assessment of urgency of patient requests in core hours and NCH

Urgency rating versus pharmacist's employment status

Pharmacists' assessments of the urgency of requests were considered in terms of their employment status and work experience. 61% (n=43) of requests handled by locum pharmacists were rated as 'urgent' compared with 28% (n=90) of those managed by regular pharmacists, and this difference was statistically significant (p<0.001). 29 requests were 'not urgent' based on assessments by regular pharmacists, compared to 11 requests considered 'not urgent' by locum pharmacists.

Urgency rating versus pharmacist's work experience

There were significant variations in pharmacists' ratings of urgency of requests in terms of their work experience. 25% (n=37) of requests handled by recently-qualified pharmacists (0-4 years of practice) were rated as 'extremely urgent' compared to 7% (n=13) of requests rated the same way by senior pharmacists with 10 or more years of experience (p<0.001).

Urgency rating of requests versus patient's age

Pharmacists' urgency ratings were examined by the patient's age. Across all age categories, most patient requests were rated as fairly urgent: 0-5 years (n=11); 6-10 years (n=7); 11-17 years (n=7); 18-59 (n= 64); and 60 years or older (n=31). 2 of 24 urgent care requests for children aged 0-5 years were rated as 'extremely urgent'. 10% (9 of 92) of requests for those aged ≥ 60 were rated as 'extremely urgent' (See Figure 12).

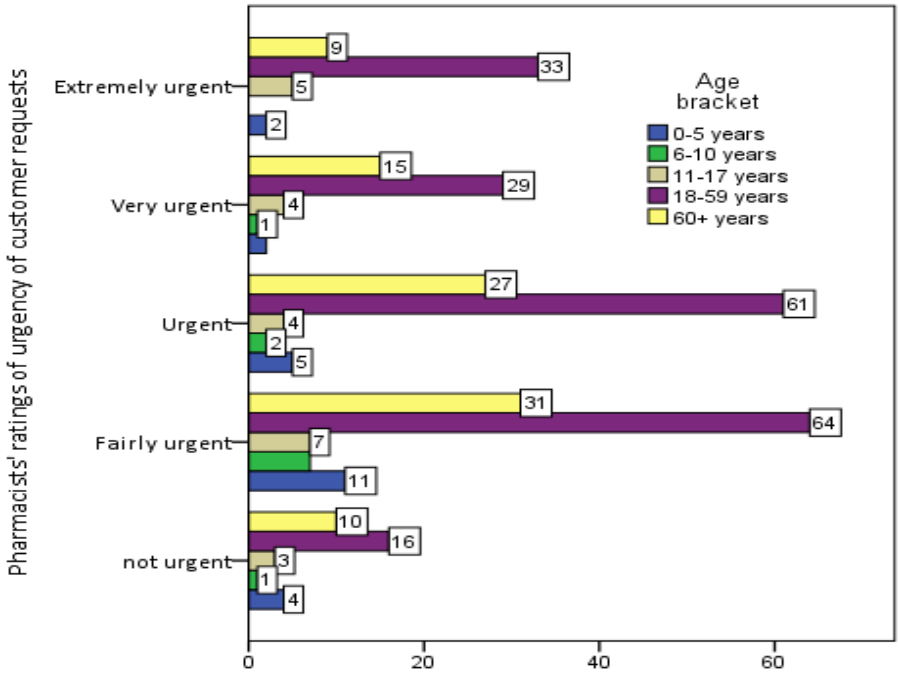

Figure 12 Pharmacists' ratings of urgency of requests by age of patients

Urgency by type of pharmacy

There was no difference in the numbers of consultations rated as 'not urgent' between multiple and independent pharmacies (21, 19) however there was a statistically greater number (p<0.001) of 'extremely urgent' rated consultations by multiple pharmacies compared to independent pharmacies (46, 7). Multiple pharmacies also saw statistically (p<0.001) more consultations rated as 'very urgent' (37, 19) compared to independents.

Expert panel assessments of urgency

A total of 81 (19% of total) logs of urgent care events were evaluated by the expert panel in which the pharmacist had rated the urgency (see Table 16). 11 patient requests in the sample were considered 'not urgent' by the pharmacists, 8 of which were also rated this way by the expert panel. There were 51 consultations in the sample deemed 'urgent' or 'fairly urgent' by the community pharmacists, 35 of which were rated the same by the expert panel. The most discrepancy came in those 19 consultations rated 'very urgent or 'extremely urgent' by the community pharmacists, where the expert panel rated only 1 in the same way. Of these 13 were for emergency supplies.

The expert panel rated 20 consultations in the sample as 'not urgent', 11 of which were rated the same by the community pharmacists. The expert panel rated 54 consultations in the sample as 'fairly urgent' or 'urgent' with the community pharmacists agreeing in 51 cases. Again, there was most discrepancy in the 'very urgent' 'extremely urgent' classification where the expert panel rated 7 consultations in this way with the pharmacists agreeing in only 1 case. 4 of these related to a request for symptom management in a patient with another long-term condition.

There were no consultations that the pharmacists rated as 'non-urgent' that the expert panel rated as 'extremely' or 'very urgent' and vice versa. Likewise, there were no consultations rated 'extremely' urgent by the pharmacists that the panel deemed as 'not urgent', however there were 2 consultations rated as 'very' urgent by the pharmacists that the panel rated as not urgent. One of these related to back pain management and the other to a patient who had run out of sleeping tablets and was going on holiday.

There was thus overall agreement with the expert panel in 66% of cases (77% panel agreement with the pharmacists) and (54% pharmacist agreement with the panel).

Table 16 Comparison of urgency ratings by community pharmacists and the expert panel

Urgency of requests rated by community pharmacists	**Urgency of requests rated by the expert panel n=81**				
	Non-urgent (20)	**Fairly urgent** (40)	**Urgent** (14)	**Very urgent** (3)	**Extremely urgent** (4)
Not urgent (11)	8	3	0	0	0
Fairly urgent (22)	5	12	3	1	1
Urgent (29)	5	13	7	1	3
Very urgent (12)	2	8	2	0	0
Extremely urgent (7)	0	4	2	1	0

2.6.7. Did the urgency of requests affect the outcomes of pharmacy consultations?

Emergency supply

Of the 73 consultations where an emergency supply of medicines was made, 30% (n=22) were rated as 'urgent', 36% (n=26) were rated as 'very urgent' and 16% (n=12) were rated as 'extremely urgent'. This suggests that 82% (60) of all emergency supplies were appropriate based on the urgency of the request. An emergency supply was only made for 3 patient requests rated as 'not urgent'.

Referrals

See Table 14. 20% (n=13) of referrals to GPs were for what the pharmacist considered to be an 'extremely' or 'very urgent' problem, while 59% (n=13) of those referred to NHS 111 had 'extremely urgent' or 'very urgent' requests based on community pharmacists' assessments. All 9 patients referred to A&E had 'very urgent' or 'extremely urgent' requests. 89% (23 of 29) of all non-urgent requests were managed independently by the pharmacist, and 6 (21%) were referred on to GP services. Overall,

referral services used by pharmacists significantly varied with the urgency of patient (p<0.001). Community pharmacists independently managed 19 consultations they considered to be 'extremely urgent' and 46 'very urgent'. These included 30 supplies of medicine, 20 responses to symptoms including pain, flu like symptoms, GI problems and 9 supplies of EHC.

The expert panel assessed the appropriateness of the management of the pharmacists of a sample of 31 consultations in relation to referral to another service/not referring. 28 of 31 (90%) of the decisions (to refer/where to refer and non-referral) were rated as 'appropriate' or 'somewhat appropriate, and only 3 management decisions were deemed inappropriate (See Table 17). These related to referral to a GP for a patient with rough skin on their face, referral to A&E for someone with reflux symptoms and no referral of a patient who had suffered an insect bite who had some irritation in their throat.

Table 17 Appropriateness of community pharmacy management in relation to referral by the expert panel

	Expert panel ratings of appropriateness of pharmacy management relating to referral		
Referral service	**Appropriate (18)**	**Somewhat appropriate (10)**	**Not appropriate (3)**
GP (10)	8	1	1
NHS 111 (3)	2	1	0
A& E (1)	0	0	1
Other (1)	1	0	0
No referral (16)	7	8	1

2.6.8. Patient satisfaction with pharmacy consultation

Most patients (95%, n=194) were satisfied with how their request was managed by the pharmacist, and the same proportion felt that the pharmacist clearly advised them about their request. 96% (n=197) indicated that they would return to a pharmacy for health advice.

76% (n=154) of all respondents stated that they were 'very likely' to adhere to the pharmacist's advice, and 2 reported that they were not likely to adhere to advice given. The privacy of consultations was rated positively by 98% of patients, n=201. Patients were asked if they needed a further consultation about their problem following the visit to the pharmacy, and 70% (n=141) disagreed. 43 patients (21%) believed they needed a further consultation with another healthcare professional. The reasons for this were not explored. Over half of patients (57%, n=114) indicated that they would have visited their GP or contacted NHS 111(15%, n=31) had they not received help from their pharmacy (See Table 18) i.e. 72% of patients would have contacted another service had they not have been seen by the pharmacist.

Table 18 Patient satisfaction with pharmacy consultations about their urgent care needs

Customer satisfaction survey items	Response	n (%)
Previous use of a pharmacy for advice (n=206)	Yes	154 (75)
	No	39 (19)
	Unsure	13 (6)
Referred to pharmacy by another person/service (n=105)	By family/friend	67 (64)
	By GP	29 (28)
	By NHS 111	7 (7)
Satisfaction with management of problem(n=204)	Yes	194 (95)
	Unsure	6 (3)
	No	4 (2)
Satisfaction with communication or advice given (n=204)	Yes	194 (95)
	Unsure	6 (3)
	No	4 (2)
Likelihood of adhering to pharmacist's advice (n=204)	Very likely	154 (76)
	Likely	48 (23)
	Not likely	2 (1)
Need for further consultation (n=203)	No	141 (70)
	Yes	43 (21)
	Not sure	19 (9)
Privacy of consultation (n=206)	Yes	201 (98)
	No	2 (1)
	Not sure	3 (1)
Future use of pharmacy services (e.g. for advice) (n=206)	Yes	197 (96)
	Not sure	7 (3)
	No	2 (1)
Alternative services that patient would have used if not pharmacy (n=200)	GP service	114 (57)
	None	55 (28)
	NHS 111	31 (15)

Overall, comments about the pharmacists' role in the context of UEC provision were positive. Example comments from patient satisfaction data are included in Table 19.

Table 19 Qualitative feedback from customer satisfaction survey

Positive comments	Negative comments
'Advice appreciated and as referred to GP - knew I wouldn't be wasting the doctor's time'	'Not role of pharmacy to give healthcare advice just dispense drugs'
'Pharmacist is very helpful, would come back for more advice.'	'Spoilt by a rude woman behind the counter'
'Always helpful staff, friendly and give excellent advice. Brilliant service'	'Don't understand why I can't get vaccine and needles from Pharmacy'
'Always helpful, up to date and relevant information.'	
'Clear advice provided and understanding plus caring Pharmacist.'	
'Complete confidence in pharmacist's advice. Saved me several trips to the Doctors.'	
'Great service, seen in a private room straight away.'	
'I felt that the pharmacist had understood my problem'	
'Pharmacist calmed me down and dresses my wound which made me feel so much better.'	
'Pharmacist phoned GP. Great Customer service; 'professional, friendly staff'	
'Very useful advice. Wish GP had told me!'	

2.6.9. IC24 pharmacists' role in UEC

Background characteristics – IC24 pharmacists

Data were collected by six IC24 pharmacists (3 males, 3 females). 4 (of 6) pharmacists had ≥10 years of work experience since registration, and 1 pharmacist was a qualified independent prescriber.

Altogether, 196 telephone enquiries/consultations were recorded in the 4 week period of the evaluation. 90% (n=176) of queries were documented by more senior pharmacists (≥ 10 years of experience), 5 consultations were recorded by a pharmacist with 5-9 years of experience. 15 enquiries were handled by a recently qualified pharmacist (0-4 years of experience).

IC24 pharmacists were asked about their professional background. 25% (n=49) of all enquiries were managed by pharmacists from a community pharmacy background. 55% (n=107) of all queries were handled by pharmacists with the experience of working in NHS 111 centres, and 24 queries were recorded by a pharmacist with tele-health background. 49 consultations were recorded by the independent prescriber. 24 (12%) queries were recorded by pharmacists with both community and hospital backgrounds. Other enquiries were documented by a pharmacist who had the experience of working in a community trust (n=9) and CCG (n=7). 80% (n=156) of all IC24 consultations were recorded by pharmacists working part-time, and 20% (n=40) consultations were conducted by full-time pharmacists. All queries were handled between 7.55 and 22.29 hours.

Nature of queries handled by 1C24 pharmacists

The type of enquiries handled by IC24 are shown in Table 20. After queries for general medicine-related information (27%, n=52), the most common enquiry related to running out of regular prescription

medicines (24%, n=46). Other enquiries included general advice on symptoms, pain management, dental problems, and requests for emergency contraception.

Table 20 Type of queries handled by IC24 pharmacists (note some consultations involve more than one type of enquiry)

Type of enquiry	n
General medicine information	52
Running out of medicines	46
Other queries	41
Medicines information about dosing errors or missed doses	32
Medicines information about side effects or drug interactions	32
Medicines information on dosage and administration	30
Care home enquiry or carer calling about administration	26
Potential poisoning	16

Caller's actions prior to IC24 consultation- utilisation of other services

IC24 pharmacists were asked to record the caller's actions preceding the enquiry. Only 14 (7%) callers had already visited a community pharmacy about their problem, and 2 (1%) had been referred to IC24 by a community pharmacist. 22 callers had visited their GP before ringing IC24, and one was referred by their GP. Referrals from NHS 111 to IC24 were more common (68%, n=134). Two callers had contacted their dentist prior to ringing IC24. Other referrals to IC24 services were from ambulance staff, or the 999 emergency service. One caller had visited A&E, while another had recently been discharged from hospital prior to calling IC24 staff.

Outcomes of IC24 consultations

IC24 pharmacists were asked to document how they managed caller's enquiries. Advice/reassurance was offered in 79% (154) of all consultations. A prescription was issued in 20% (n=39) of all consultations. 6% (n=12) of all consultations were referred to community pharmacies. (See Table 21).

Table 21 Management of caller enquiries by IC24 pharmacists (In some cases a consultation resulted in more than one outcome being recorded)

Action	n (%)
Advice and/or reassurance	154 (79)
Prescription issued by IC24 pharmacist prescriber	39 (20)
Other action	39 (20)
Referral to out-of-hour doctor	31 (16)
Advice given to visit own GP	14 (7)
Referral to a community pharmacy	12 (6)
Referral to an IC24 clinician	5 (3)

IC24 pharmacists' assessments of urgency

IC24 pharmacists were asked to assess the urgency of requests from callers using the same 5-point Likert-type scale (not urgent to extremely urgent) as that used by community pharmacists and the expert panel. 40% (n=76) of all consultations were rated as 'urgent', 37% (n=73) were rated as 'fairly urgent', 11% (n=21) were considered 'very urgent' and 9 (5%) enquiries were considered 'extremely urgent'. 15

(7%) queries were for long-standing health problems that were considered to not need dealing with on the same day by the IC24 team.

Duration of enquiries handled by IC24 pharmacists

44% (n=86) of queries were managed in 11-20 minutes, and just over a third of callers (35%, n=68) received a response in 5-10 minutes. 16 consultations (8%) were very brief and lasted less than 5 minutes. 26 consultations (13%) took longer than 20 minutes, with the longest consultation taking 45 minutes. IC24 consultation times varied with the urgency of requests. A greater proportion of 'fairly urgent' queries and 'urgent' requests were managed between 5-10 minutes and 11-20 minutes respectively (See Figure 13).

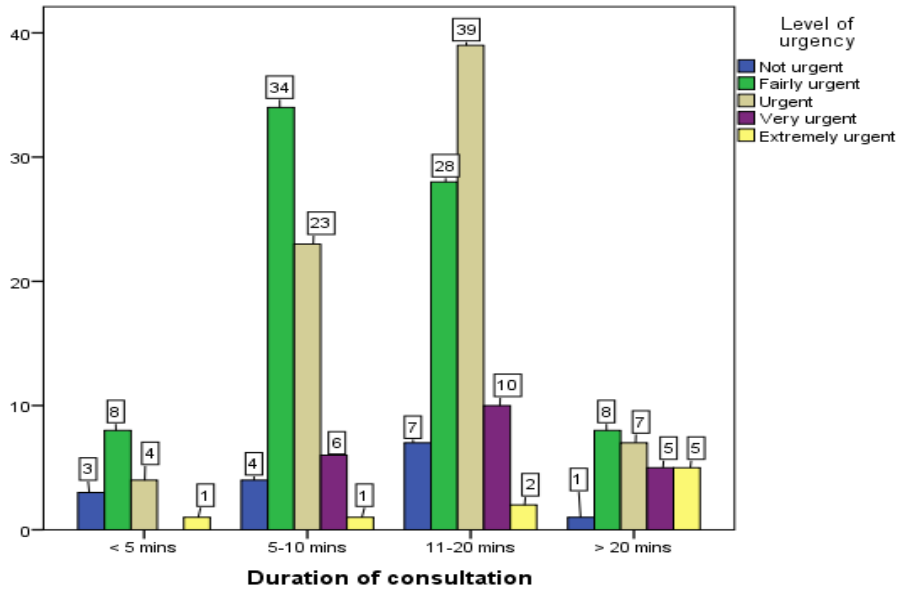

Figure 13 Duration of consultations by IC24 pharmacists by the urgency of callers' enquiries

Resources used by IC24 pharmacists

IC24 pharmacists were asked to record the information sources/resources used to manage callers' enquiries. 81% (n=158) of all consultations were guided by the pharmacists' own knowledge.

The British National Formulary (BNF) and/or the electronic Medicines Compendium (eMC) were used in 107 (55%) consultations, while 28 enquiries were managed by using Toxbase, which is a clinical database for the National Poisons Information Service (https://www.toxbase.org/).

Other resources used to manage urgent queries received by IC24 pharmacists were:

- the BUMPS (Best use of medicine in pregnancy, http://www.medicinesinpregnancy.org/) website; the Medicines for Children website (http://www.medicinesforchildren.org.uk/);
- Micromedex, a database with medicine information; Natural Medicines Comprehensive Database;
- NHS choices. One pharmacist used a pharmacy list to check the stock available during one of the consultations. Table 22 provides a breakdown of the information resources used by IC24 pharmacists and the actions taken to manage caller enquiries.

Table 22 Management of callers' enquiries by IC24 pharmacists and information sources used

Actions taken by IC24 pharmacists	Used own knowledge		Used BNF/eMC		Used Toxbase	
	Yes (158) n (%)	No (38) n (%)	Yes (107) n (%)	No (89) n (%)	Yes (28) n (%)	No (168) n (%)
Referral to a community pharmacy	10 (6)	2 (5)	2 (2)	10 (11)	0 (0)	12 (7)
Referral to out-of-hour doctor	28 (18)	3 (8)	18 (17)	13 (15)	4 (14)	27 (16)
Referral to an IC24 clinician	4 (3)	1 (3)	3 (3)	2 (2)	0 (0)	5 (3)
Advice given to visit own GP	13 (8)	1 (3)	12(11)	2 (2)	0 (0)	14 (8)
Prescription issued	16 (10)	16 (42)	18 (17)	14 (16)	1 (4)	31 (19)
Other action taken	31 (20)	8 (21)	8 (8)	31 (35)	11 (39)	28 (17)
No immediate action	56 (35)	7 (18)	46 (43)	17 (19)	12 (43)	51 (30)

Review of IC24 consultations by the expert panel

The expert panel were asked to decide if a sample of IC24 consultations could have been managed by a community pharmacist. A total of 50 consultations were reviewed, of which the expert panel believed that 32 (64%) could have been managed by a community pharmacist. A further 8 were assessed to be 'possibly' manageable by a community pharmacist (16%). 20% of the sample consultations (n=10) were considered not to be manageable. Those not manageable by the community pharmacist included 7 cases of actual or suspected poisoning, one dental issue and one where a patient had run out of a CD.

Key points from Phase 2 evaluation

Phase two was a detailed assessment of current UEC practices of 17 selected community pharmacies across KSS, establishing types of urgent care requests presented by patients, and how these are managed. The findings support preliminary work undertaken during Phase 1, which showed that different forms of urgent care requests are managed independently within community pharmacies. In the present evaluation, 57% of urgent care requests to pharmacists were for various symptoms/conditions, the most common being skin conditions, eye problems, and upper respiratory tract infections. The high number of requests for skin conditions may have been related to the timing of the evaluation which was in summer. Requests for prescription medicines were also common, and account for some referrals; however emergency supplies were made in 17% of the 19% requests to community pharmacists during Phase 2. Appropriate reasons for non-supply were made for the 2% where supplies were not made.

Although the percentage of locum pharmacists in this phase was identical to those in phase 1, only 25% of consultations were recorded by locum pharmacists. This may have related to the fact that the honorarium was made to the pharmacy/lead pharmacist and it was this person who received the training form the research team. Thus locum pharmacists may have been less incentivised to take part or may have not had training on entering data cascaded to them appropriately. Regardless, locum pharmacists were statistically less likely to manage a consultation in-house and thus more likely to refer urgent requests. This makes them a key target group for future training and development around UEC.

Pharmacists appear to be rating the urgency of consultations appropriately in at least two-thirds of cases when compared to assessment by an expert panel of health professionals with experience of urgent care. However, it has to be recognised that when presented with a patient/carer in person the pharmacists will be responding to all sorts of non-verbal and verbal cues and thus would be expected to

rate the urgency differently than individuals who are not patient facing and in the pharmacy environment at the time. In particular, the difference related to requests for emergency supplies where a patient who is anxious would potentially create an impression of greater urgency in person when compared to documented details reviewed cold.

The other discrepancy related to a number of incidences of minor ailments in patients with long terms conditions where the panel rated the request as more urgent. This may represent an area for more training for pharmacists in future.

Pharmacists manage UEC requests through various ways, but mostly provide advice/reassurance. Overall, 30% of all consultations resulted in referrals, mostly to GP practices, but the vast majority (90%) of pharmacist referrals were deemed 'appropriate' or 'somewhat appropriate' by the expert panel. Those that were inappropriate did not identify any particular learning needs. 95% customer satisfaction with UEC in community pharmacy was remarkable and 73% of customers would have sought other NHS services if the pharmacist had not supplied the care and advice that they did.

Recommendation: Although most pharmacist referrals of urgent care requests are appropriate and necessary, there is the potential that more could be managed in-house with additional training, facilities and resources in place. In particular, this is true of locum pharmacists who need to be targeted for future training and development. Multiple pharmacies chains need to be engaged in any local UEC services as they are managing the majority of non-core hour's requests.

In terms of future training in relation to clinical conditions, a particular focus could be the management of some infections. In this evaluation, over a third of referrals were made for actual/suspected infections. With more training in identification of certain infections the pharmacist could be part of the first line management and advise, treat or refer more appropriately. One such area may be that of minor skin infections. This evaluation shows that the pharmacist deals with many minor skin problems, certainly during the summer months, so probably has expertise in this area already. Patients clearly believe that consulting the pharmacist first about a skin condition is appropriate. GPs do not necessarily have particular expertise in dermatology so this would support local provision. If pharmacists also had access to certain anti-infective medication, for example under patient group direction or through independent prescribing, then they could supply medication, following assessment, in accordance with local guidelines as part of the antibiotic guardianship programme.

This focus on infection management could be used to strengthen UEC provision in primary care settings and minimise pressures on other NHS UEC services. At a national level this could be part of a 'minor ailments plus' style service or could even be underpinned by a change to legislation i.e. pharmacists are able to prescribe in a primary care setting from a limited formulary for minor illness and ailment, following additional training in a similar way to the community nurse prescribers.

3. Phase 3 Evaluation of respiratory resources to support urgent care requests

3.1. Background

The findings from the Phase one evaluation indicated that respiratory problems were among the top three conditions that were referred by community pharmacists to other UEC providers, particularly in the context of a request for antibiotics. In addition, Phase one included an evaluation of a generic resource on urgent care posted to all pharmacists in KSS by the CPPE, and the findings suggested minimal uptake and impact of this training mode on knowledge, skills or provision of urgent care. Phase two evaluation comprised an in-depth analysis of urgent care consultations carried out by community pharmacists, and showed that over half (57%) of all urgent care consultations were related to symptoms of health conditions, including those for upper respiratory tract infections (URTIs) and that many patients ask the pharmacist for advice to manage these or even request antibiotics. The second phase

subsequently highlighted the high number of consultations in the pharmacy for skin conditions and again drew attention to the number of presentations for actual or suspected infection, many of which the pharmacists has to refer on to other services. Phase 3 was started before the phase 2 analysis was complete, however the two different approaches evaluated to training pharmacists around infection management in URTI is useful as a study to inform possible further infection training more broadly.

In order to support pharmacists to manage patients who present with respiratory issues, the Phase 3 interventions were designed to assess the impact of a novel style of information resources on the management of URTIs. The materials were prepared by MSoP taking into account the feedback from Phase 1, the current emphasis worldwide on the need to stop inappropriate antibiotic use, and an NHS initiative to improve management of sepsis. Phase 3 also included an evaluation of a revised CPPE pack on urgent care which had been sent out nationally as a result of the work in KSS and therefore was delivered by post a second time to pharmacists in KSS.

Two methodologies were used in this phase. Method one involved telephone interviews with a random sample of pharmacists across the KSS area, and explored pharmacists' views of the resource materials provided and how these compared to other training in urgent care or respiratory disease. Method two involved pharmacists not involved in the interviews completing an online survey that also considered how useful the URTI resource was. Both methodologies also helped to identify pharmacists' training needs and opportunities in order to optimise respiratory care service provision in community pharmacies.

3.2. Aims and objectives

- To explore the extent and nature of URTI focused urgent care requests in community pharmacies
- To evaluate pharmacists' views on the impact of a resource focused on URTIs
- To assess the skills of community pharmacists around the optimal management of URTIs

3.3. General methods

Development of the MSoP URTI resources

A number of resources were developed and supplied to all KSS pharmacies/pharmacists via the post as a single pack with an introductory letter. The pack was entitled 'Are you winter ready – a flu fighter?' The letter outlined that the resources were to support consultations and management of patients with symptoms of URTIs, and to explain why antibiotics are not always necessary. Instructions on how to use these resources and where to get more information were also detailed.

The resources included:

- Consultation sheets produced by Public Health England specifically for pharmacists.
- A fact sheet on coughs and information on where to get similar sheets for other common URTI conditions.
- Current national guidance for all primary care practitioners on use of antibiotics for URTIs.
- A sheet summarising when to suspect sepsis (a life threatening condition).

The material was reviewed and approved by the Clinical Lead and Programme Manager for Antimicrobial Resistance and Sepsis, Health Education England, to ensure it aligned with advice being shared with other HCPs on these topics.

3.3.1. Sample recruitment – Telephone interviews

The target sample size for telephone interviews was 10% of all pharmacies across the three counties in the region (minimum of 90). This was to include equal proportions of pharmacists working during core pharmacy hours and those working during NCHs, and multiples/independents. Excel spreadsheet filters

were used to identify eligible pharmacies in each group. Each eligible pharmacy was selected randomly from the pool of pharmacies, and once a pharmacy was selected for the NCH group it was automatically excluded from the CH group, so that one pharmacy would not appear in both groups. Efforts were made to ensure that the final sample of pharmacies matched the intended sampling frame (Table 23).

Table 23 Sampling frame for Phase 3 telephone interviews (M= multiple, I = independent pharmacy)

Area	Number of Pharmacies selected in CH sample (M:I)	Number of Pharmacies selected in NCH sample (M:I)	Number of Pharmacies in final CH sample (M:I)	Number of Pharmacies in final NCH (M:I)
Kent	18:18	18:18	9:9	9:9
Surrey	12:12	12:12	6:6	6:6
East Sussex	10:10	12:8	5:5	6:4
West Sussex	10:10	10:10	5:5	5:5
Total	50:50	52:48	25:25	26:24

3.3.2. Sample recruitment – online survey

The sample consisted of all the pharmacists working in a KSS pharmacy, excluding those who had already undertaken a telephone interview.

3.3.3. Instrumentation

The structured interview questionnaire for the telephone interview and the online questionnaire were developed at the same time and covered similar information, however the telephone interview gave opportunity for participants to expand on their answers in the form of free text.

Both questionnaires were divided into sections which covered the following areas:

- Background information relating to the pharmacist (years of qualification and practice, role in the pharmacy and working hours) and pharmacy (CH/NCH).
- General information relating to URTI consultations: type of URTIs presented, frequency of URTIs consultations, patient needs for URTI care, confidence to handle URTI queries, management options, referral of URTIs to other UEC services.
- Recollection and use of a resource on optimal management of URTIs which was circulated in October 2016 by the Medway School of Pharmacy Team.
- Recollection and use of a resource circulated by CPPE in September 2016.
- Views on the content and acceptability of both resources.
- Involvement of other staff within the pharmacy to support patients with URTIs.
- Assessment of response to URTI queries through 3 case scenarios (dry cough, colds in elderly, and child with ear ache).

The scenarios were developed in conjunction with the IC24 pharmacist who had contributed to phase 2. The most appropriate management of the scenarios could be found within the resources circulated by MSoP. For all three scenarios, participants were asked to follow these instructions: *'Please indicate which action(s) you would most likely follow. You can tick more than one statement. If you would have done something different to the actions listed, please briefly write what you would have done in the free*

text box. By safety netting, we mean advice like- 'if it worsens, or lasts for longer than… come back to see me or go see your GP'.

The questions were developed from the results of phases 1 and 2 of the project. The schedule and the questions for online use were piloted with a group of 3 community pharmacists. Changes were made, mainly to the wording of the case studies, which had originally been free text but were changed to allow a limited numbers of responses.

The online questionnaire was presented using the Qualtrics© online platform. Two of the three community pharmacists looked at the final questionnaire on the online platform to ensure it worked in that format.

3.3.4. Procedures – Telephone questionnaire

One week prior to the commencement of the telephone interviews (February 2017), all pharmacies in KSS were sent a joint email from HEE LaSE and MSoP informing of them of the project and asking for co-operation. This email included a project information sheet which pharmacists were asked to display in their pharmacy premises so that part-time and locum staff would see it and register their interest in the project. The information sheet included issues around consent and procedures for participation.

Pharmacies were phoned using the stratified sample list as in phase 1. The list was divided between the two researchers. Each researcher phoned pharmacies on their half of the list to ask for participation. Once all the pharmacies required to fulfil the required number in the sample had been recruited, for example the required number of non-core hour multiples in Kent, the researcher moved on to the next category in the sample.

The two researchers conducted the telephone interviews during core hours or NCHs depending on which group the pharmacy fell into. At the start of each telephone interview, the researcher asked to speak to the responsible pharmacist, invited them to take part in the evaluation after providing the project information. Verbal consent was confirmed at the start of all interviews. Interviews were conducted with pharmacists agreeing to take part after the initial telephone request, and mutually convenient times were negotiated for other interviews arranged outside the initial telephone encounter.

During the interviews, the researcher read the questions to the participant over the phone and responses were noted down at the time of the interview. All responses were relayed back to the participant to check accuracy and completeness. The majority of questions were quantitative in nature, using Likert-type scales, but some questions allowed free responses following prompting from the researcher.

Participants who took part in the telephone interviews were invited to enter into a prize draw for £50 worth of Amazon vouchers as an incentive for participation.

3.3.5. Procedures – Online survey

A link to the anonymous on-line survey was generated using Qualtrics©, a web-based platform, and distributed by email to all eligible pharmacists. Two reminder emails were sent to pharmacists at one and two weeks after the initial email, and a few days prior to closure of the survey.

General Pharmaceutical Council (GPhC) numbers were used to monitor survey responses to check that there was only one response per pharmacist, but the GPhC number was not used in the analysis. On-line survey participants were entered in a prize draw similar to that employed for the telephone interview incentive (worth £50 of Amazon vouchers).

3.3.6. Analyses

The structured questions used for the telephone interviews and on-line survey were principally quantitative, and data were entered into an SPSS database (10.2©IBM). Appropriate statistical tests were used to analyse results and examine any associations. The frequencies and percentages of variables were estimated, including:

- Uptake of training resources by mode of distribution (telephone interview versus on-line survey), county, type of pharmacy, background characteristics of pharmacy respondents
- Responses to the three case scenarios

Analysis of qualitative responses (free text) in both the telephone and online interviews was conducted using simple thematic analysis, with example quotes extracted to illustrate the issues raised in the Phase 3 evaluation, including barriers for uptake of the URTI resources.

3.4. Results for Phase 3 evaluation

3.4.1. Response rates

Overall, 143 pharmacists took part in in the evaluation. 100 pharmacists took part in the Phase 3 telephone interviews (50:50 for CH and NCH pharmacies, and 48:52 for independents and multiples respectively). 59 pharmacists started the on-line survey, and 33 (56%) completed it fully. Of those who did not fully complete the survey (n=26), 10 progressed over half way through the questionnaire recording 55%-97% progress and were also included in the analyses. 43 questionnaires were thus included in the analysis.

3.4.2. Background characteristics of pharmacists

See Table 24. Gender; Overall, 53% (n=76) of pharmacists in the Phase 3 evaluation were female (55 telephone interviewees, 21 on-line participants).

Employment role in the pharmacy: Locum pharmacists comprised 19% (27) of the entire sample, with 21 completing the telephone survey but only one completing the online survey.

Years of experience at the pharmacy from which pharmacists were contacted: Most pharmacists (41%, n=58) had worked at their present pharmacy for 1-5 years (43 telephone interviewees, 15 on-line participants), and 18% (n= 26) of the entire sample had over 10 years of experience at the pharmacy from which they were contacted (11 telephone interviewees, and 15 on-line participants.

Table 24 Characteristics of participants involved in the Phase 3 evaluation

Characteristic	Telephone interviews (100) n (%)	On-line survey (43) n (%)	Total (143) n (%)
Gender			
Female	55 (55)	21 (49)	76 (53)
Male	45 (45)	22 (51)	67 (47)
Employment role			
Regular pharmacist	74 (74)	40 (93)	114 (80)
Locum pharmacist	26 (26)	1 (2)	27 (19)
Other	0 (0)	2 (5)	2 (1)

Years of experience at current pharmacy			
< 1 year	32 (32)	6 (14)	38 (27)
1 to 5 years	43 (43)	15 (35)	58 (41)
6 to 10 years	14 (14)	7 (16)	21 (15)
Over 10 years	11 (11)	15 (35)	26 (18)

Duration of practice since registration. Across the entire sample, most pharmacists (n=37, 31 telephone interviewees, 6 on-line) had 5-10 years of work experience since qualification. 25 pharmacists indicated that they had been qualified for over 30 years (12 telephone interviews, 12 online). Fewer recently-qualified pharmacists (under one year of practice) completed the evaluation (8 telephone interviewees, 2 on-line participants).

3.4.3. URTI consultations in community pharmacies

Pharmacists were asked to reflect on their experience of patient consultations involving upper respiratory tract infections (URTI).

Nature of URTI requests. Pharmacists were asked what conditions patients asking about URTI asked about. A common URTI enquiry was for patients wanting advice about antibiotics, which was mentioned by 80 pharmacists. One pharmacist from the telephone survey added in his/her estimation '1 in 10 patients will ask if they need antibiotics or if they can buy antibiotics', suggesting that there is frequent demand for antibiotic prescriptions in community pharmacies. URTI symptoms commonly reported were coughs (mentioned by 55 pharmacists), colds (n=42), and pain (n=42) (See Table 25).

Frequency of requests: Pharmacists contacted by telephone estimated the frequency of URTI requests in an average shift ranged from 0 to 28, while the on-line cohort's estimates ranged from 1 to 20. Overall, 31% (44/143) estimated they handled 5 or more URTI requests in a typical work shift. (19 telephone interviewees, 25 on-line cohort) (See Table 26).

Table 25Type of URTI advice sought by patients in community pharmacy (pharmacists could mention as many type of query as they liked

Type of advice patients ask about in relation to URTI	**Number of pharmacists who mentioned they were asked for this type of advice**
Antibiotics	80
Relief of multiple symptoms	58
Managing coughs	55
Colds	42
Pain relief	42
Need for GP visit	42
Management of symptoms when on other regular medicines	42
Flu	39
Symptom duration	38
Ear infections	37
Need for NHS111 or A&E	23

Table 26Frequency of URTI queries in community pharmacy

Estimated number of URTI queries in an average work shift	**Telephone sample** (100) n (%)	**On-line sample** (43) n (%)	**Total** (143) n (%)
< 5	44 (44)	18 (42)	62 (43)
5-10	33 (33)	20 (47)	53 (37)
11 or more	23 (23)	5 (11)	28 (20)

In the telephone cohort, 5 pharmacists implied that the frequency of URTI requests was likely to be higher than that estimated, suggesting that support staff most likely responded to some of the URTI queries. Illustrative comments include: 'the healthcare staff deal with most of the queries so the pharmacist does not see many'; 'counter staff deal with more but refer about 4 a day on winter problems to me'; 'counter staff deal with most questions at least 10 an hour'; and 'mostly counter staff deal with winter type problems.'

Confidence dealing with URTI queries and referrals: Pharmacists were asked to rate their confidence level when dealing with requests for advice on URTI. The majority of pharmacists (88%) stated they felt 'confident' or 'very confident' in dealing with URTI enquiries. Only 1 pharmacist felt 'not confident' to deal with respiratory problems. When responding to the confidence question, one pharmacist interviewed indicated that 'I have well trained staff'', suggesting that they may enhance pharmacists' confidence levels and capacity to handle URTI queries.

In the telephone interview cohort, one pharmacist suggested that he 'rarely advised NHS 111 [and] mostly self-treatment' was advised, and another indicated that 'I try to steer them away from this [referring to other UEC providers]'. Another pharmacist noted that patients seemed 'aware that colds and flu don't need a doctor but [patients] want a magic cure to take away their symptoms or at least lessen them.' A few others felt that 'patients prefer to avoid asking GP if they can' for symptoms of an URTI, while another pharmacist said that 'most people know not to see GP if having colds/flu'.

Management of URTIs; Pharmacists who took part in the telephone interviews were asked to reflect about the last time they dealt with a patient asking for advice about an URTI and the outcomes of these consultations. 42% (n=42) of them recollected a patient presenting with cough. Respondents indicated that coughs were managed differently depending on the perceived seriousness of symptoms. Referral to GPs or other NHS services (111 or A&E) was mentioned for persistent forms of coughs where OTC cough remedies were not effective and/or when symptoms were worrying (e.g. coloured phlegm, shortness of breath).

3.4.4. Evaluation of resources to support URTI consultations

Are you winter ready – a flu fighter?

Recollection of resource; Overall, 63 (44%) pharmacists (36 telephone interviewees, 27 on-line participants) said that they had received the 'winter ready' resource pack.

Uptake and impact; 46 (73%) pharmacists, out of the 63 who remembered receiving the pack, had read all or some of the materials provided in the 'winter ready' pack (9 telephone interviewees, 37 on-line respondents). 37 pharmacists felt the materials were at an appropriate level for the topic covered. 34 (54%) pharmacists felt that the learning resources were relevant to practice, and 16 (25%) of pharmacists made changes to their practice as a result of the resource. 26 (41%) pharmacists shared information from the resource with pharmacist colleagues or counter staff. There was no pharmacist uptake of the respiratory course run by the Royal College of General Practitioners attributed to reading the 'winter ready' resource. Other forms of impact are illustrated in the Figure 14.

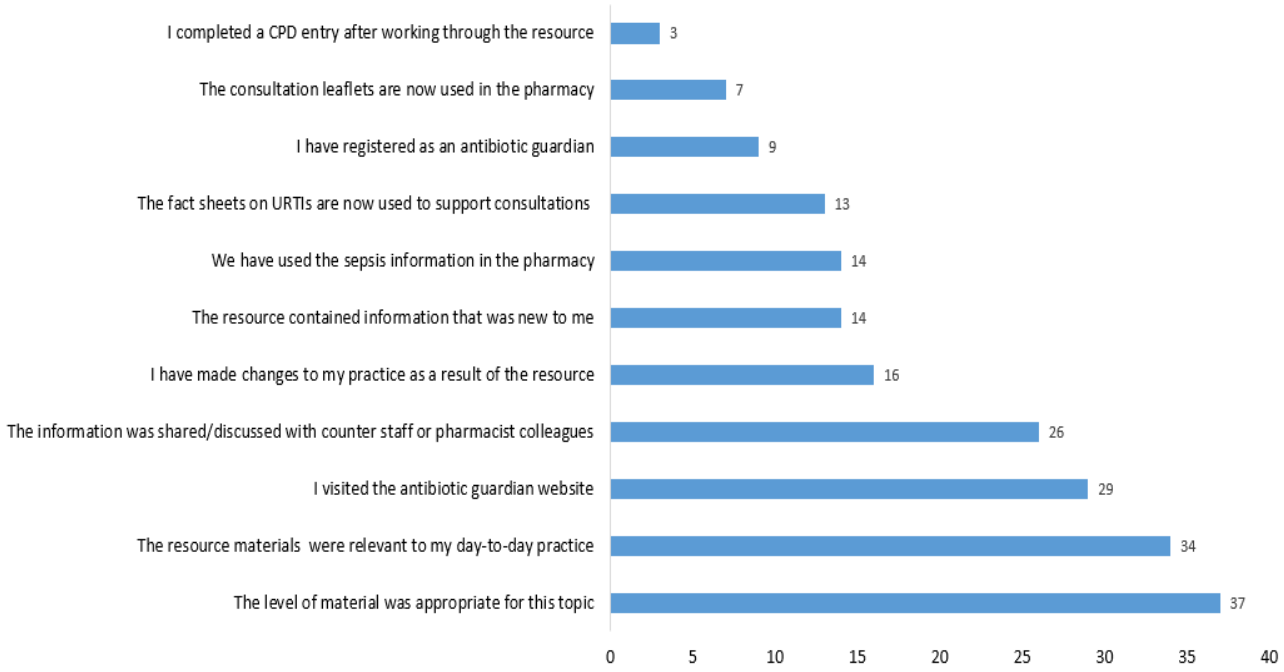

Figure 14 Uptake and impact of a resource on optimal management of URTIs -'Are you winter ready- a flu fighter?'

Qualitative comments about the 'winter ready' resource'; Pharmacists interviewed by telephone provided a range of qualitative comments about the resource. A number of general comments suggested that the materials were relevant and useful, while others reported an impact on services provided in community pharmacy and reduction in the number of referrals (See Table 27).

Table 27Comments on the 'Are you winter ready – a flu fighter' resource

General comments

- ' a good refresher'
- 'Good information'
- 'Helpful'
- 'This sort of information is always useful.'
- 'Material was useful''
- 'The factsheet was really useful to use in the pharmacy'
- 'Very useful to see leaflet on time course of symptoms'

Impact on practice

- Reduction of referrals
- 'Reduced number of referrals to GP'
- 'Instead of immediate referral, patients are advised to wait a while as [the URTI] can take a while to go.'
- Provision of services and information
- 'Offered the flu vaccine service to coincide with these materials'
- 'Displayed information on treating your infection.'
- 'took the information and put it on the pharmacy's Facebook page/TV and shared the information that way'

In addition, telephone interviews were analysed to examine possible barriers for uptake of the 'Winter ready' resource. A number of issues were identified, including perceived novelty and relevance of

information, time constraints, availability of other learning avenues, and recollection of information presented, and work role in the pharmacy (Table 28).

Evaluation of the CPPE urgent care workbook

In September 2016, a workbook on urgent care was posted to pharmacists in the KSS region by the CPPE. The CPPE workbook included a section on managing cough and earache. An evaluation of this resource learning resource was also conducted through telephone interviews with pharmacists and via completion of an on-line survey; the latter included a picture of the resource in the survey link to facilitate recall of the 'urgent care' resource.

Recollection of the resource; 76 pharmacists remembered receiving the CPPE workbook (50 telephone interviewees and 26 online respondents).

How many read the CPPE urgent care workbook; 29 (38%) pharmacists had read some or all of the material in the workbook.

Views on content; 13 (17%) pharmacists said that the CPPE workbook on urgent care contained new information, and 14 (18%) pharmacists felt this was at an appropriate level all of whom were on-line respondents.

Views on impact; 28 (37%) pharmacists found the resource useful generally. 21 (28%) pharmacists felt the material in the CPPE workbook was relevant to practice, and 12 (16%) mentioned that they had made changes to practice as a result of reading the urgent care workbook (See Figure 15).

Table 28 Barriers for uptake of the URTI resource (winter ready)

Barriers	
Perceived novelty and relevance of information	'Not new information for me' '..Info on sepsis not new but helpful' '…More for use by Healthcare counter assistants.' 'Girls in shop may have used them, I haven't as information not new to me.'
Time constraints	'…got busy with flu jabs etc. and never got round to looking at the material' 'Haven't had chance to look at it properly yet.' '..not much time to read - didn't really use the pack' 'Time to look through properly and implement' 'Pharmacy too busy' 'I am here on my own tomorrow (Sun) and will have to dispense, serve at the counter and answer all OTC questions' 'Time - lots of pressures to do things'
Availability of other learning avenues	"Been doing the [independent prescribing] IP course with Medway - not time to read anything" "We are Alphega members so get a lot of materials from them too" 'Have too many resources'
Recollection of information	'…can't really remember what was in it' 'But can't remember detail now.'
Work role in the pharmacy	'..I haven't been working here very long so may have gone to pharmacy manager.' 'I'm a locum so don't see things sent to the pharmacy' 'probably went to pharmacy manager and she took home to read'.

Barriers	
	Emphasising that resources are not just for pharmacy managers may help in future.
General reluctance or hesitation or procrastination	'Had the leaflets out but did not actively give them out' 'Left them in the consultation room' '..'..Binned the leaflets as less than 10% uptake'

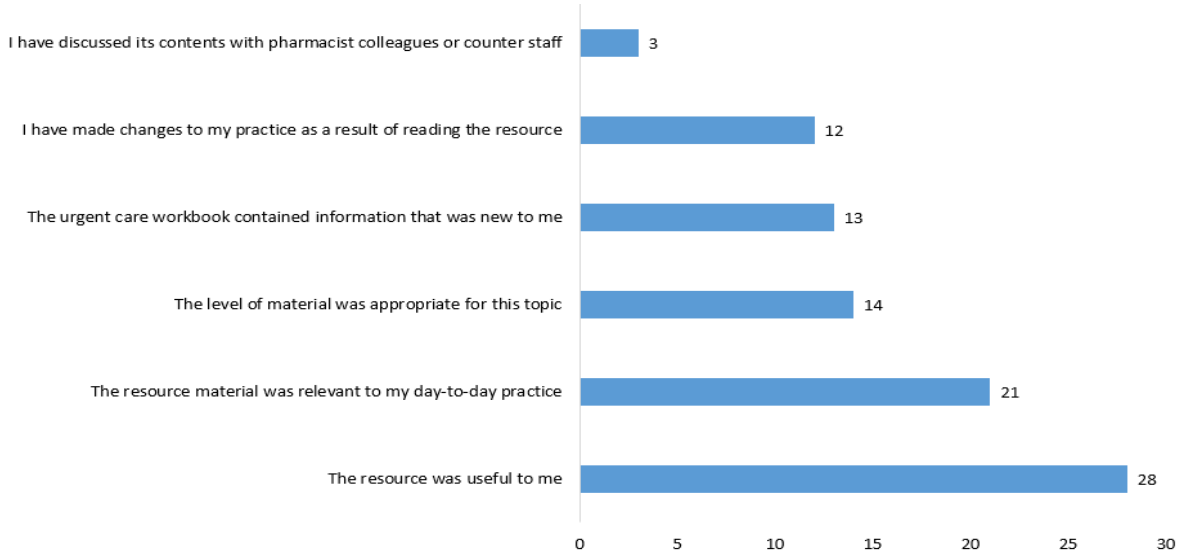

Figure 15 Uptake and impact of the CPPE resource on urgent care

Qualitative comments about the CPPE urgent care workbook; Pharmacists provided additional comments about the CPPE resource through the telephone interviews. Similar to the comments on the 'winter ready' resource, the CPPE resource was found relevant but also had similar challenges for its uptake (See Table 29).

Table 29 Uptake of the CPPE urgent care resource

General comments about relevance of the resource
'Aide memoir'
'Mainly a refresher'
'Find all CPPE courses useful'
'I have always welcomed the support received from CPPE throughout my 40 years of profession. CPPE training is thorough and is very relevant to my practice.'
Barriers for uptake of the CPPE urgent care resource
Perceived novelty of information 'Not new information to me'
Time constraints and availability of other learning avenues 'Just one training pack too many for me - I've just added it to the pile!' 'Been doing IP course with Medway. No time to do anything else.' 'Haven't worked through the pack - need time in day to read the pack properly' 'Have had no time to look at this resource yet 'Not even opened it. No time, safeguarding and methadone are top priority.'
Work role in the pharmacy 'As a locum it did not apply as it involved dealing with a pharmacy team'

General comments about relevance of the resource
Recollection of information 'Can't remember what was in it - don't remember receiving it but think I've seen on CPPE website'; 'skim read, can't really remember what was in it'

3.4.5. Future Training Resources

Telephone interviews were examined to explore pharmacists' views of future training materials and urgent care provision in community pharmacy. Suggestions covered a number of areas, including frequently providing the learning resources (and ensuring they are received), minimising text and clarifying the intended purpose of the resources provided. A few comments indicated desire for future accreditation of urgent care services (See Table 30).

Table 30 Suggestions for training improvement in UEC in community pharmacy

Future direction	
Availing learning materials	'No leaflets arrived. Would have liked them.'
	'.Try sending material out [again] in August.'
	'Useful to get information - perhaps send out again this year'
More visually-appealing materials	'Chart with how long for symptoms to resolve could be useful'
	'The factsheet was perhaps a little too wordy to pull out for every patient with a URTI'.
Further clarification about the intended purpose	'The leaflets were put out - more like a display'
	'We haven't used the pack in the pharmacy, they were put out for the customers'
	'Passed it on to the staff - good refresher for them'
Further training in clinical examination skills/diagnosis and reconsideration of antibiotic supply	'But we need better training to be able to diagnose e.g. ear scopes so can look in person's ear. People expect us to be able to do this and are being told to speak to us first not go to a doctor. But we are not staffed for this'
	'Proposal for doing diagnostic training for the pharmacy but the CCG is not equipped for this'
	'..despite worry about antibiotic guardianship would be useful if could do urine test and have PGD to supply antibiotic'
Accreditation of urgent care service provision	'Interested in registering to become an urgent care provider but cannot until NHS mail goes live. Awaiting confirmation'

3.4.6. How do pharmacists respond to symptoms of URTIs?

Pharmacists were asked to reflect about their approach to managing patient queries about URTIs by responding to three case scenarios. In all cases pharmacists were able to select one or more options.

Case scenario 1: *A 50-year old woman says she has had a dry cough for 3 weeks following a cold. She is a non-smoker, not on any regular medication, is not breathless or feverish and her sputum is clear but she is worried that she is still coughing, mostly at night which is affecting her sleep. She asks- do I need to go to the GP for an antibiotic?*

Across both telephone and on-line cohorts, 80% (n=115) of pharmacists would offer advice and sell an over-the-counter product. 3 (2%) pharmacists would suggest an antibiotic in this instance. 14 pharmacists would refer this patient to the GP (See Figure 16).

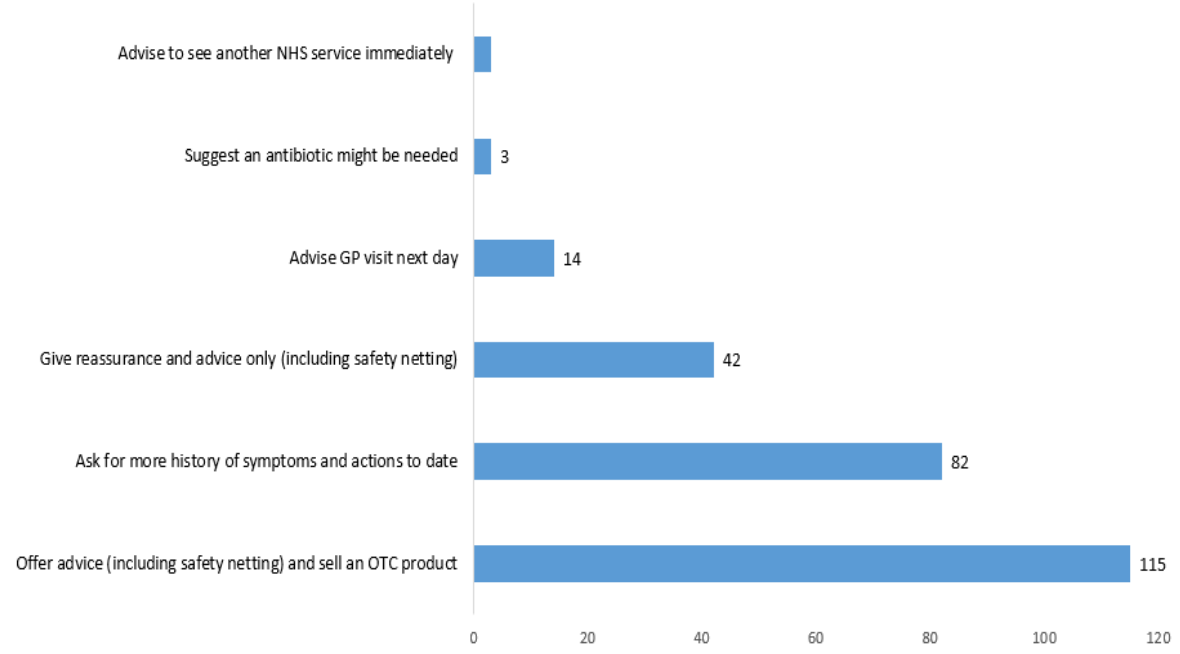

Figure 16 Responses to the first case scenario (need for antibiotic in uncomplicated but persistent dry cough)

Case scenario 2: *A 72-year old patient comes in and says his wife (also 72) has a cold and what do you recommend. He adds his wife is in bed today and feeling shivery, and that she is using her blue inhaler more than usual as she feels breathless. You know his wife is a smoker, a Type 2 diabetic and was recently prescribed Spiriva©.*

103 (72%) pharmacists would advise this patient to visit an emergency service (A&E, or NHS 111), and 59 (41%) would take a more detailed history of the symptoms and assess actions already taken by the patient. 18 (12%) would suggest an antibiotic for this particular patient (See Figure 17).

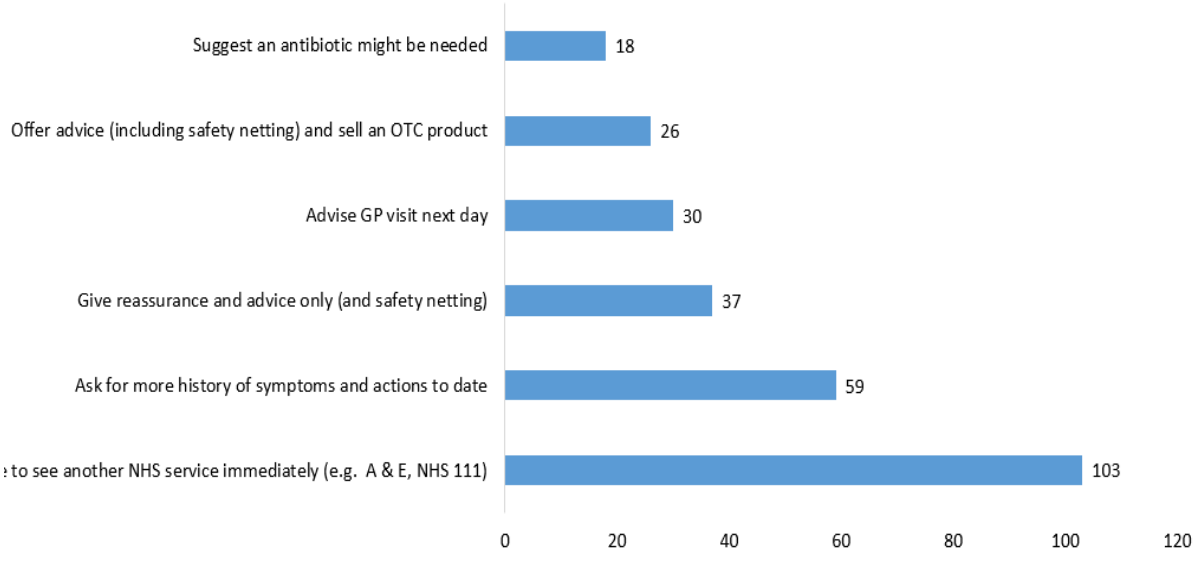

Figure 17 Responses to the second case scenario (elderly diabetic with complicated cold/breathlessness)

Case scenario 3: *A mum comes in with her 3 year old. She says that the child was clutching at her ear and crying last night. She took her temperature and it was 38° C. She gave her some Calpol™ and the child went back to sleep. This morning she was playing as usual with her sister. The child is sitting in the buggy quite happily. The mum asks, should I take her to the GP for some antibiotics?*

98 (70%) of pharmacists indicated that they would only give reassurance and advice in this scenario, and 5 suggested that an antibiotic might be needed. Similar to the previous two scenarios, further history taking about the nature of symptoms and actions already taken was the second most common way of approaching patients presenting with this URTI. 10% (n=14) and 11 % (n=15) would advise visits to the GP and emergency services (A&E, NHS11) respectively. (See Figure 18).

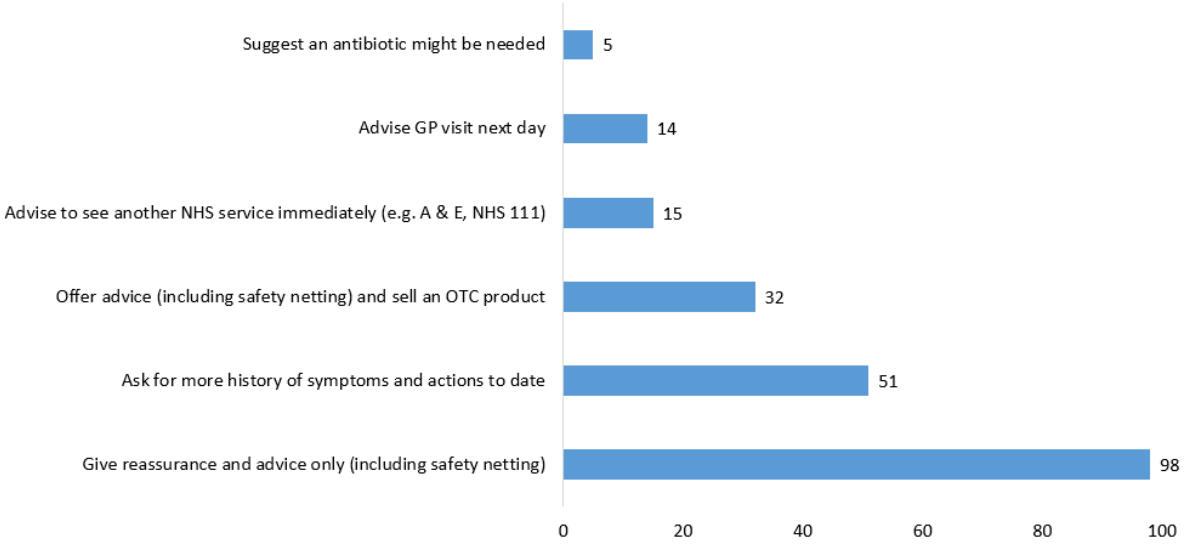

Figure 18 Responses to the third case scenario (child with earache)

Key points from Phase 3 evaluation

Phase 3 aimed to identify pharmacists' training needs and opportunities in order to optimise respiratory care service provision in community pharmacies. 143 pharmacists across the KSS area contributed to this evaluation and provided views of URTI resource materials provided. A skills assessment around the optimal management of URTIs by community pharmacists was also conducted. Compared to the CPPE resource evaluated in Phase 1, Phase 3 workbooks reached a larger sample of pharmacists. The MSoP resource pack was also seen and read by more pharmacists than the original CPPE pack. Overall, the resource materials were found relevant and were reported to be at an appropriate level. The materials provided were said to have an impact on UEC service provision, but a number of barriers were identified, particularly time constraints to allow full engagement with the training, perceived novelty of the materials, and use of alternative learning avenues. Regardless, some pharmacists emphasised that those designing UEC training resources should ensure they are fit for purpose, with explicit, visual materials preferably to lengthy text.

Whilst the majority of the responses to the clinical questions were appropriate, there was an indication of some training needs, particularly around the appropriate use of antibiotics and need for referral to other services. This may be a reflection of the low uptake of the resources, combined with the fact that most pharmacists interviewed in Phase 1 and Phase 3 considered that they had the skills and knowledge to deal with such queries.

Recommendation: To support future accreditation and optimisation of urgent care services, more targeted and novel training materials delivered via multiple modes, besides post, may support upskilling of pharmacists for UEC.

4. General discussion

This three phase evaluation aimed to investigate different aspects relating to community pharmacy involvement in UEC. It provides insight into what pharmacists are currently doing to support the UEC agenda and identifies possible areas for the extension of the pharmacists' role to take further pressure off of urgent care services such as walk-in-centres, NHS 111, GP practices and A+E.

Based on this evaluation, a conservative estimate would be that each pharmacy in Kent, Surrey and Sussex is undertaking on average 13 urgent care consultations per week. Of these 70% are managed wholly by the pharmacist and 47% prevent referral to another NHS UEC service, according to the pharmacists' definitions. Patients surveyed, however suggested that as many as 72% would have sought other NHS care if not seen by the pharmacist. If these figures are scaled up across KSS this represents over 11,500 urgent care consultations across the patch **per week**, 8050 of which are managed independently by the pharmacies and prevent as a conservative estimate, approximately 5400, other NHS urgent care encounters.

However, there is scope to extend this further and develop the pharmacist's role, in particular around the management of infections. Whilst the majority of pharmacists are confident in their ability to manage urgent care requests, there is a recognition that if they were to take on additional responsibilities then further training would be required. Not all pharmacists would be willing (or need) to undertake this additional training, but this evaluation suggests that sufficient numbers would. Local commissioners could look to provide sufficient cover across their locality to ensure consistent, high quality, community pharmacy delivered services. This evaluation suggests that demand is similar in and out of core hours so provision could be arranged to cover both. Better use of community pharmacists' skills will enable more targeted use of those pharmacists working in out of hours' services. Workforce transformation at regional level and support for training can ensure that appropriately trained pharmacists are being used most effectively, maximising the skills of the individuals but importantly exploiting the accessibility of community pharmacists.

Phase 2 in particular highlighted skin complaints as an area where pharmacists are already playing a key role. Other work in this area suggests pharmacists are willing to manage skin conditions in conjunction with their counter staff and that the general public sees this as appropriate [7-9]. Local services could be specific around skin complaints, or encompass management of infection in a wider service, for example minor ailment and illness. Workforce planning could support a range of models for service delivery e.g. use of PGDs, independent prescribing.

URTIs appear to be managed appropriately and professionally by the majority of pharmacists surveyed in phase 3 of this evaluation. Again, there is scope for some pharmacists to develop skills in this area further, for example through independent prescribing for respiratory conditions which could address management of acute exacerbations in patients with long term respiratory conditions.

This evaluation reinforces the fact that training needs be available in a variety of methods to appeal to the wide-ranging learning needs and circumstances of the pharmacy workforce. Accreditation of possible future UEC services was mentioned in all phases of the evaluation and whilst this was not investigated further in these evaluations, the implication is that formal accreditation can provide the motivation for pharmacists to upskill and can be formally recognised by service commissioners and employers alike, giving quality assurance.

The other aspect of urgent care highlighted by this evaluation is that of the role of the pharmacist in supplying medication in an emergency or to prevent further problems. There were still a considerable number of these requests being phoned through to IC24 at a time when pharmacies would still be open. The findings here suggest the pharmacists are dealing with many such requests each day. Other recent evaluations of pharmacists' role in urgent care in England suggest that the emergency supply service has a positive impact on optimal medicine use by ensuring a continuous supply and minimising burden on other urgent care services [10]. However, previous studies have shown differing public perceptions of the services provided by community pharmacies [11], and awareness and willingness to access the

emergency service in community pharmacy may have an impact on the current levels of service provision. Further promotion of the repeat dispensing service could also help to manage their medicine supplies better with support from their pharmacist.

Strengths and limitations

The findings are supported by the use of multiple methods. Telephone interviews enhanced the richness of data from pharmacists but the use of on-line surveys in phase 3 allowed those with limited time to participate in the evaluation at their own convenience. The views are representative of pharmacists working during CH and NCH across a mix of multiple and independent pharmacies across Kent, Surrey and Sussex. Nonetheless, a small sample of pharmacists in the KSS area may limit generalisability of the results, even though over 400 consultations were recorded to enable an in-depth understanding of current UEC practices. Also, the phase 2 data were collected during the summer, and it would be valuable to collect similar data over other seasons to capture the differences in consultation patterns and referrals.

Conclusions/Recommendations

Community pharmacy/pharmacists are playing a significant role in Kent, Surrey and Sussex in terms of management of UEC requests. This evaluation has revealed further potential, indicating that the investment and development of community pharmacy/pharmacists to support the national urgent care strategy can reduce the utilisation of other services.

Whilst this work did not include an economic evaluation, it evidences that community pharmacists are helping to avert inappropriate visits to other NHS UEC services. They are also managing conditions appropriately and to the satisfaction of their patients often with just advice and/or sale of an over the counter product, avoiding prescribing costs for the NHS.

Future considerations for workforce development and associated training need to:

- Recognise that the pharmacy team is more than just the pharmacy manager and that locums and counter staff play an important role in UEC management. In particular, any training initiatives must target locums as they have been shown to be more likely to refer.
- Ascertain whether the management of such conditions requires ongoing professional development and if there is the need to have a system of assessment involved therein.
- Undertake a more detailed analysis of positive implications for workforce transformation should pharmacists be trained at scale, in particular cost saving and easing of pressure from other parts of the UEC system.
- Ensure that training is provided within a broader structure of multi-professional systemic integration to ensure alignment with the wider aims of the NHS and minimise the risk of silo working among and between professions.
- Have support of multiple pharmacy chains at a local level, recognising the important role these organisations play and also recognising the challenges for these national businesses in supporting bespoke local projects.
- Maximise the potential of the pharmacist to identify and manage infections; using innovate service models.
- Maximise the potential of the pharmacist to identify and manage skin conditions, recognising the opportunities to improve dermatology services in primary care.

The training itself needs to:

- Be produced in multiple formats e.g. distance learning, apps, hard copy pharmacy resources, on-line resources to appeal to learners with different needs in terms of access and background – this may also help engage locums.

- Be linked to the needs of the locality and be co-ordinated through appropriate local organisations, for example the Local Pharmaceutical Committee, to avoid duplication of effort and to identify need. Not every pharmacy/pharmacist needs to upskill in every area.
- Be chunked up into smaller ‘campaigns’ and supported by promotion to the public, stressing the high satisfaction that users of pharmacies have. Services such as emergency supply could in particular be highlighted to encourage further uptake.
- Be, in some cases, delivered by a small selection of pharmacists who upskill in a particular area, for example dermatology, management of acute infections. This level of specialism could be enhanced by independent prescribing.

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