Community Pharmacy Integration – an evaluation of community pharmacy using an integrated clinical electronic health records system (SystmOne)

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List of Abbreviations

BLMK	Bedfordshire, Luton and Milton Keynes
BP	Blood Pressure
C&P	Cambridgeshire and Peterborough
CPCS	Community Pharmacist Consultation Service
CSU	Commissioning Support Unit
CQRS	Calculating Quality Reporting Service
DMS	Discharge Medicines Service
DNA	Did Not Attend
DSA	Data Sharing Agreement
EHC	Emergency Hormonal Contraception
EMIS	Egton Medical Information Systems[1]
EPR	Electronic Patient Record
GP	General Practitioner
HSCN	Health and Social Care Network
IG	Information Governance
MSE	Mid and South Essex
NMS	New Medicine Services
ODS	Organisation Data Service
OOH	Out of Hours service
PCS	Pharmacy Contraceptive Service
PIA	Privacy Impact Assessment
PMR	Patient Medication Record[2]
PRSB	Professional Record Standards Body
QOF	Quality Outcomes Framework[3]
RA	Registered Authority[4]
SCR	Summary Care Record[5]
SLA	Service Level Agreement
SNOMED CT	Systemized Nomenclature of Medicine – Clinical Terms
SQUIRE	Standards for Quality Improvement Reporting Excellence
TPP	The Phoenix Partnership (provider of SystmOne)
UEC	Urgent & Emergency Care
USS	Urgent Supply Services

[1] EMIS Health formerly known as Egton Medical Information Systems supplies electronic patient record systems and software used in primary care, acute care and community pharmacy in the United Kingdom https://www.emishealth.com/about-us/our-story

[2] Patient Medication Record is the standard digital platform used within community pharmacies to record patient information, history of medicine supply and delivery of medication and/or clinical interactions/interventions.

[3] Quality Outcomes Framework is a framework of indicators agreed as part of the GP contract negotiations every year against which GP practices are assessed and awarded points.

[4] Registered Authority is the NHS function that verifies the identify of users of NHS healthcare and IT systems to provide appropriate access.

[5] The NHS summary care record (SCR) is an electronic summary of key clinical information about each patient registered with the NHS in England. https://www.england.nhs.uk/long-read/summary-care-records/

Executive Summary

Background

The integration of community pharmacy services into the broader healthcare ecosystem has been identified as a critical strategy for enhancing patient care and improving service efficiency. Community pharmacies in England typically operate using standalone digital platforms, which limits their ability to contribute to integrated care delivery. In response, NHS England's East of England Region initiated a pilot study to evaluate the impact and feasibility of community pharmacies using an integrated clinical electronic health records system (SystmOne). The pilot aimed to facilitate real-time read and write access to patients' primary care records, improve communication between healthcare providers, and enhance service delivery. This evaluation report summarises the key findings from the pilot, which was conducted from November 2022 to December 2023 across selected sites.

Methods of Evaluation

A mixed-methods evaluation approach was adopted, guided by a logic model that framed the pilot's objectives and expected outcomes. Data was collected through system usage metrics, pre- and post-implementation surveys, and interviews with community pharmacy and general practice staff. Quantitative data was analysed to measure system utilisation and activity indicators, while qualitative data was thematically coded to capture staff perceptions and experiences. A total of 35 community pharmacies and 31 general practices engaged in the pilot, with 13 pharmacies and 19 general practices actively using SystmOne throughout the study period.

Results

The pilot demonstrated the feasibility of integrating community pharmacies into a shared clinical records system. Key findings include:

System Utilisation: General practice booked over 19,000 patients into community pharmacy appointments directly through the system. Thirteen pharmacies actively used SystmOne to directly record over 16,000 patient consultations and clinical interactions, using templates and clinical coding aligned with general practice standards.

Impact on Care Delivery: Pharmacists and GPs perceived that access to shared patient records improved clinical decision-making, facilitated a more comprehensive understanding of patient history, and enhanced the safety and quality of care. The use of SystmOne reduced the need for redundant communication channels, such as NHS mail, thereby streamlining workflows.

Staff and Patient Experience: Both pharmacy and general practice staff reported improved communication and stronger interprofessional relationships. Patients benefited from increased access to timely consultations, leading to a more co-ordinated and seamless care experience.

Barriers to Implementation: Challenges included technical issues, staff capacity constraints, and the need for patient consent to access records. Additionally, duplication of data entry across different systems posed an administrative burden for some pharmacies.

Conclusions

The pilot demonstrated that it is feasible and acceptable to use a SystmOne clinical system in community pharmacy. The findings highlighted the potential benefits of integrating community pharmacies into a shared electronic health records system, aligning their digital infrastructure with that of general practices. Key outcomes included enhanced interprofessional communication, improved clinical decision-making, and better service coordination, all contributing to improved

patient care. However, scalability requires addressing technical barriers, streamlining data entry processes, and fostering greater engagement from both pharmacies and general practices.

Implications for Policy and Practice

Current moves to commission more advanced services from pharmacies and to move workload from general practice and urgent care services to community pharmacy highlight the potential to expand the clinical role of community pharmacists and the accessibility for patients. Integrated, real-time digital communication between care settings and healthcare professionals will be crucial to ensure community-based care is co-ordinated, safe and effective. The findings from this pilot provide a foundation for policy and practice discussions aimed at leveraging digital integration to enhance community-based healthcare delivery. Key considerations for future pilots or developments include:

1. Expanding the pilot to include other electronic health record systems to assess interoperability.

2. Implementing strategies to manage patient consent more efficiently.

3. Developing targeted training and support mechanisms to build staff capacity and confidence in using integrated systems.

4. Investigating the use of SystmOne or other existing clinical systems for NHS prescribing in community pharmacy given the progress of pharmacy independent prescribing.

5. Functions and functionality need to be considered carefully to prioritise how these meet user needs, and optimise engagement and potential efficiencies.

Introduction

Community pharmacy in England, makes up one of the four pillars of the primary care system in England, sitting alongside general practice, optical services, and dentistry (1). Community pharmacists are responsible and commissioned for dispensing prescriptions, selling over-the-counter medicines, providing advice, signposting, treatment of everyday health conditions, and providing specific clinical services, e.g., Pharmacy First, New Medicines Service (NMS) and Hypertension Case Finding Service (2). Patient Medication Records (PMR) are the standard digital platforms that are used within community pharmacies to record patient information, history of medicine supply and delivery of medication and/or clinical interactions/interventions. These records do not form part of a patient's primary care clinical record but are standalone (3). More recently pharmacies delivering specific clinical services have been required to purchase a further IT platform to both record and claim for services. These IT platforms are nationally approved and include Pharmacy Services (Cegedim), PharmOutcomes (EMIS Pinnacle), HxConsult (Positive Solutions) and Sonar (Sonar Health). These systems are standalone, but recent national developments have seen a link to general practice systems by GP Connect (otherwise termed 'middleware') however this currently relies on general practices agreeing to such connectivity.

Currently, community pharmacists do not have direct access to a patient's primary care clinical record. In 2016, community pharmacies were given access to patients' summary care record (SCR) alongside other professions across the health and care system. Around 96% of patients in England have a SCR, which provides key clinical information about a patient sourced from their general practice electronic patient record (EPR). A community pharmacist can use the information in the SCR (if a patient has consented) to check allergies to prevent prescribing errors, eligibility for services e.g., free flu jab, and current medications prescribed for emergency supply purposes (4). The use of SCR in community pharmacies has had clear benefits for patients and staff, it has led to fewer referrals to other NHS care settings, a reduced need for phone calls to general practices, fewer prescribing errors, reduced patient waiting times and improved service for patients (5).

Despite the positive impact of access to the SCR, the need for community pharmacists to have full read and write access to patients' healthcare records remains. In 2022, the Professional Record Standards Body (PRSB) published a report that stated due to the nature and complexity of pharmacists' involvement in patient care and treatment, full access is fundamental and will result in an improvement to patient safety and care (6). This report highlighted community pharmacists are often the first point of contact for patients when it comes to medicine-related enquiries and that they play a vital role in supporting patients with long-term conditions. Additionally, the PRSB hoped that this level of access would result in improved communications between pharmacy teams and other healthcare professionals, including general practice, as well as reducing the chances of errors being made and provide an audit trail (6).

Improved communication between general practice and community pharmacy is often cited as an enabler to improve community pharmacy integration into the wider healthcare system. The need for improved integration of records between different health care professionals has been highlighted as a critical step to reduce patients being asked duplicate questions and to providing more information to the pharmacist to facilitate decision making relating to offering a new service to a patient (7). Also, with the increasing use of point-of-care testing within community pharmacies, the risk of duplicated effort by community pharmacists and general practitioners (GPs), and consequently, an ability to relay test results to the patient's GP also becomes more important. Current methods of service referral and feedback rely on emails, phone calls and having to upload shared information. Avoidance of duplication has also been identified previously regarding medicine use reviews in the UK, with GPs stating that it was a reason for their reluctance to engage with pharmacy-provided services.

The pandemic has clearly demonstrated the importance of interoperable, connected digital systems across services (8). Getting access to reliable information was important for tracking supplies and deliveries related to the COVID-19 vaccination programme. The pandemic raised

awareness of IT functions for enhanced delivery of essential services (e.g., medication planning, prescribing and dispensing between pharmacies and general practices) and advanced services, including vaccinations.

The policy context underpinning community pharmacy, the potential for improved communication and the impact on safety has led the NHS England East of England Region to explore providing read and write access to the primary care clinical record held in general practice. This pilot study describes and evaluates community pharmacy using an integrated clinical electronic health records system (SystmOne) in selected sites across the East of England. Use of an integrated clinical system was intended to enable functionality currently unavailable to community pharmacies such as recording directly to the patient care record in real time (write access); read access to the primary care clinical record held in general practice, with patient consent; use of templates integrating decision support tools and information from the clinical record and an integrated appointment booking system.

This report describes the evaluation of a pilot that took place from November 2022 to December 2023, which provided selected community pharmacies with a TPP SystmOne Community Unit (SystmOne) giving them full read and write access to consenting patients' primary care records, across the East of England. The pilot was intended to improve communication and integrated working between community pharmacies and general practice. The evaluation was a collaboration between the evaluation team at Health Innovation East (JF, GC, ML); academic experts, Professor of Pharmacy at Newcastle University (HN) and Associate Professor at the University of East Anglia (MT); and the project team responsible for implementing the pilot (SL, JN).

Study Aim

This study aimed to test the feasibility and impact of community pharmacy utilising the same electronic health records system as general practice in the same way other health professionals do including community nursing teams and staff within Primary Care Networks (PCNs). Community pharmacies used their own TPP SystmOne community unit, through a pilot conducted across the NHS England East of England Region.

Objectives

1. To assess how and to what extent community pharmacies utilised the electronic clinical records system.
2. To explore the perceived impacts of this new way of working on: integration; patient access; efficiencies; quality and safety of patient care; staff capacity, confidence and decision-making.
3. To appraise the acceptability of this new way of working to community pharmacy and general practice.
4. To assess the feasibility of community pharmacy having the same electronic clinical records system as general practices to support delivery of services and integration.
5. To identify the issues, considerations and improvements for any similar pilots or future deployments of electronic health record systems in community pharmacy.

Methods

Study Context

The pilot took place from November 2022 to December 2023. Selected community pharmacies were issued with a TPP SystmOne Community Unit (SystmOne) giving them full read and write access to consenting patients' primary care records, across the East of England. The pilot was intended to improve communication and integrated working between community pharmacies and general practice. Participating pharmacies could use SystmOne to directly record onto a patients' record using templates and free text. General practices and community pharmacies were also able to send each other tasks and directly book appointments for patients in each other's settings through the appointment rota on SystmOne. The task functionality provided pharmacists with an alternative way to communicate with their relevant practices when there was a need to act or be alerted to possible issues of clinical importance for a patient.

Interested Primary Care Networks (PCNs) and individual general practices were invited to submit an expression of interest to the project team via the six regional Integrated Care Boards (ICBs). A total of 31 general practices (7 PCNs representing 20 general practices, and 11 individual general practices) who were using SystmOne were invited to participate in the pilot.

A target of 40 participating community pharmacies was agreed during project scoping. As part of the pharmacy selection process, the project team identified community pharmacies who dispensed high volumes of prescriptions issued by the 31 selected general practices. This resulted in a shortlist of 67 community pharmacies who were invited to register for the pilot. A total of 43 pharmacies submitted an expression of interest, of which 40 went on to sign the Service Level Agreement (SLA) (see Appendix one). On receipt of the SLA, individual SystmOne Units were purchased on behalf of the 40 pharmacies. Six pharmacies withdrew prior to unit mobilisation, due to technical reasons. Only three of these six units could be repurposed for other interested pharmacies, leaving 37 pharmacies moving into the mobilisation stage. A further two pharmacies withdrew, resulting in a total of 35 pharmacies included in the pilot.

Prior to accessing SystmOne, each pharmacy was required to meet Information Governance (IG) requirements including completing an individual Privacy Impact Assessment (PIA) and signing a Data Sharing Agreement (DSA). All pharmacy staff identified as needing SystmOne access were required to attend relevant training sessions and attain the correct level of Smartcard access from the Registered Authority (RA) teams in the responsible ICBs.

SystmOne units were configured locally by the Commissioning Support Unit (CSU) supporting the pilot. This involved loading bespoke consultation record templates onto each unit to support consistency in consultation recording and to aid data extraction. Templates provided drop down menus and incorporated relevant codes used in general practice record keeping (SNOMED CT (Systemized Nomenclature of Medicine – Clinical Terms) codes). The unit was also configured with easy links to relevant parts of the patient record and clinical support tools such as the Sepsis UK Screening and Action tool and the Smoker Life Expectancy tool.

Mobilisation of SystmOne across the pilot sites commenced in late November 2022 and was staggered to allow time for unit release by the supplier, local configuration and community pharmacy IG compliance. Community pharmacies were responsible for installing/downloading SystmOne on their own hardware, setting up their appointment rota and then utilising the system. The project team and CSU offered virtual support when requested. The pharmacies were directed to use their system in line with the SLA but had the scope to work with their associated practices to develop use.

Pharmacy prescribing was not within the pilot scope or an available function. All involved pharmacies were still required to meet the requirements of all national service specifications. The 12-month pilot data collection period was from 1st January 2023 to 31st December 2023.

Evaluation Methods

Collaboration between the evaluation team, academic advisors and the project team throughout the study helped to ensure data collection and analysis were relevant and robust. A logic model was developed in the design stage and used to guide the evaluation (see Appendix two). A sequential mixed-methods approach to the evaluation was adopted. Reporting of the study has followed the Revised Standards for Quality Improvement Reporting Excellence (SQUIRE 2.0) guidelines.

Data Collection

To address objective one and understand how and to what extent community pharmacies utilised the electronic health record system activity data was centrally extracted by the CSU and shared with the evaluation team for analysis. Surveys and one-to-one interviews with staff from community pharmacies and general practice settings were then conducted at two time points to explore feasibility, acceptability and staff perceptions of impacts and improvements to address objectives 2-5.

Evaluation of Activity Indicators

The community pharmacies were asked to record clinical patient interactions using the bespoke record templates on SystmOne. These templates were designed to aid the production of consistent consultation records, incorporate SNOMED CT codes, and provide the platform for activity report extraction across all the units. Prior to the commencement of the pilot, a list of key activity indicators was agreed by the project team. These indicators aligned with the aim of the pilot to capture usage of SystmOne for recording consultations and various associated tasks and activities and align with the outputs identified in the logic model (see Appendix two). The full list of activity indicators is provided in Appendix three, and a summary of what this captured is shown in Table 1.

This list was provided to the CSU to ensure that the system and templates would allow capture of this data and export into Microsoft Excel to generate a report that could be shared with the evaluation team. The final data set was exported into Microsoft Excel on 18 January 2024.

Table 1 Summary of data reported as key activity indicators

Activity Indicator Type	Description
Appointments Rota Utilisation	Number of community pharmacy appointment bookings made by general practices
Consultations & Clinical Information Recording	Recording of Essential Services, NHS Community Pharmacy Advanced Services, and information relating to the National Quality Outcomes Framework
Task Functions	Tasks referred and actioned between general practice and community pharmacy

Surveys

Three surveys were conducted at different time points during the pilot. All surveys were developed by the evaluation team and shared with the project team to ensure the questions aligned with the evaluation objectives. Separate surveys were developed with wording and questions adapted

to be relevant to the target populations i.e. community pharmacy staff and general practice staff. Individuals completing the surveys were asked to respond representing the views of their organisation (pharmacy or general practice) rather than their individual views.

There were two matching pre-post questions across the pharmacy questionnaires related to ease of picking up and managing referrals and confidence level in creating clinical patient records. There was one matching pre-post question across the general practice questionnaires relating to ease of making referrals. A summary of all questions is provided in Appendix four.

Surveys retained the identification of the organisations to enable us to identify people to invite for interview, and also to follow up with individual organisations to maximise survey response rates and to inform follow up questions in interviews to provide fuller context to support the analysis. For example, this was intended to enable comparison between baseline and follow-up and between associated pharmacies and general practices, where possible. They were therefore not de-identified, but GDPR requirements were followed throughout.

Baseline survey for pharmacies participating in the pilot and associated GP Practices

A baseline survey to understand the communications, interactions and relationship between community pharmacies and associated general practices was sent to all participating community pharmacies (N=35) and general practices (N=31) prior to the mobilisation of SystmOne. This included 23 questions about pre-pilot communication and integrated working between community pharmacy and general practices, and expectations for the pilot. The baseline survey was disseminated by the project team between November 2022 and January 2023 in line with the staggered mobilisation of the SystmOne units, responses were received between November 2022 and May 2023. Questions asked staff for their views on: current practice, such as time spent sending and receiving communications from associated general practices/community pharmacies pre-pilot; how referrals were made and received pre-pilot, and the ease of use of this process; the benefits and challenges of current practices pre-pilot; and their hopes, expectations, and concerns about the pilot.

Follow-up survey for staff engaged in the pilot

A follow-up survey was sent to a total of 15 pharmacies including those who utilised the unit and actively engaged in the pilot (n=13) and those who installed and tested the unit (n=2). This aimed to capture perceived impact and experience of the pilot. The follow-up survey was disseminated by the evaluation team at the end of November 2023 to lead contacts at the participating community pharmacies (n=15) and the associated general practices (n=19) that had been identified as having used their clinical records units from reviewing the activity reports extracted from the units. Survey responses were received between November 2023 and January 2024.

The follow-up survey aimed to gather general practice and community pharmacy staff views on the impact of the pilot on communication and relationships between general practice and community pharmacy; usability, engagement and impacts of sending and receiving referrals, the appointment rota and task function; and perceptions relating to staff satisfaction with training and insights on patient experience. The version of the follow-up survey for pharmacies contained 24 questions and the version for general practices 21 questions.

Survey to non-participating pharmacies

A separate follow-up survey was sent by the evaluation team to community pharmacies (n=20) that had registered to take part in the pilot but did not download the allocated SystmOne unit or use the unit once downloaded. The survey was sent to pharmacy leads on 15th November 2023, with the last response received in December 2023. The survey asked a single multiple-choice question with an optional comments field to identify the reason(s) for the community pharmacy not actively using SystmOne.

Interviews

Following the baseline and follow-up survey, interviews were conducted with community pharmacy and general practice staff to explore the findings from the surveys in more depth. Purposive sampling was used to identify community pharmacies based on their level of engagement with the pilot, with the associated general practices being selected accordingly. The rationale for this was to ensure representation from staff within high, medium and low community pharmacy engagement. General practice staff and community pharmacists within the selected sites were emailed by the project team to invite them to participate in an interview and were provided with full participant information and a link to a consent form, provided by the evaluation team, who conducted the interviews.

Initial interviews were conducted between July-September 2023. These aimed to understand factors influencing the early stages of the pilot. Follow-up interviews were conducted between January-February 2024, these were intended to explore in more detail how the pilot worked in practice, benefits and challenges, and suggestions for improvements that could help inform future scale up beyond the scope of the pilot. Semi-structured topic guides were developed for each round of interviews (see Appendix five).

All interviews were conducted on Microsoft Teams or on the phone and were recorded and transcribed for analysis. Microsoft Word documents of the transcripts were uploaded into Nvivo 14, a software for managing data for qualitative data analysis.

Data Analysis

Descriptive statistics have been used to analyse and report the agreed metrics relating to use of SystmOne and the quantitative data from the closed questions in the survey. Data from each survey and the KPI data were treated separately and analysed independently.

Qualitative data from both the interviews and open questions in the surveys were analysed using thematic coding (9), and are presented together in the results aligned to each objective. Initial codes were identified inductively through familiarisation with the data by GC and JF, and then shared and agreed through discussion with the wider evaluation team (MT, HN) and project team (SL, JN).

Results

The flow chart (Figure 1) provides an overview of the data collection and sample included in the results. The results are then presented below to address each of the evaluation objectives sequentially.

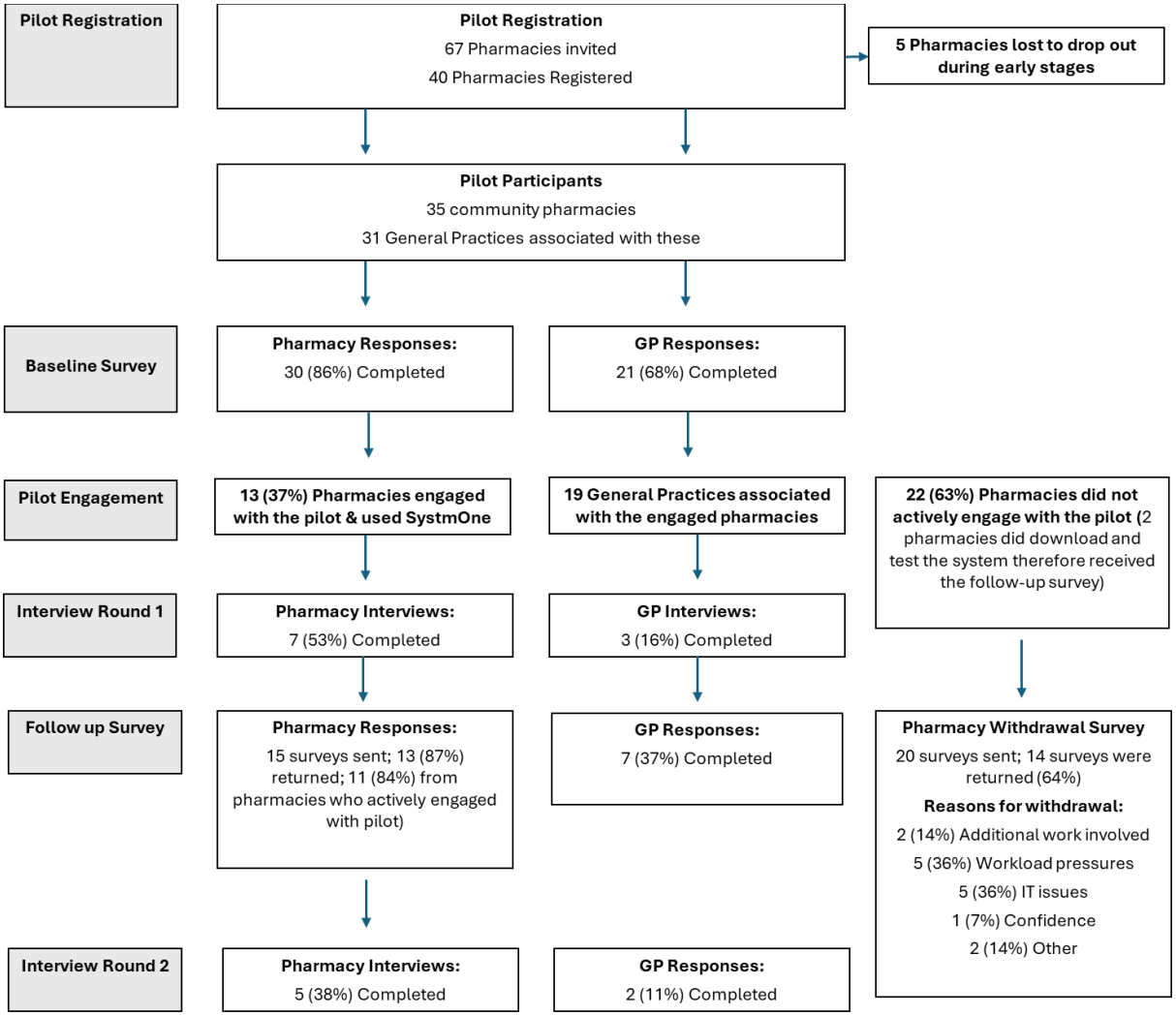

Figure 1 Overview of the data collection and sample included in the results

Objective 1: How and to what extent community pharmacies utilised the electronic clinical record system

1.1. Key activity indicator data

To address objective one, how and to what extent community pharmacies utilised the electronic record system we have presented the activity indicator data extracted from SystmOne at the end of the pilot. The data is grouped by use of the system, appointments booked by general practices, clinical consultations recorded on patient records and task functions used, in alignment with the measurable outputs identified in the logic model (Appendix 2).

1.1.1. Usage of the system

Of the thirty-five community pharmacies participating in the pilot, thirteen actively used SystmOne, defined as use throughout the 12-month data collection period which ran from January 2023 to December 2023. These were located across three of the Integrated Care Systems in the East of England. Ten of these pharmacies were linked to their local PCN (5 PCNs in total) and three pharmacies were associated with an individual general practice. In total, there were nineteen general practices actively participating in the pilot study.

Twenty-two community pharmacies did not actively use SystmOne, defined as those who registered but did not download the system (n=20) or downloaded and tested but did not use throughout the 12-month period (n=2). The twenty that did not download the system at all were sent a follow-up survey to ask their reasons for not engaging in the pilot. Fourteen of these responded. Figure 1 which provides the overview of engagement in the data collection, also includes a summary of the reasons given in the responses. The primary reasons were related to workload pressures and potential increases in work load that participation would involve, as well as IT issues.

1.1.2. Pharmacy appointments booked and reported

All thirteen pharmacies received direct appointment bookings from general practices using the SystmOne unit. The number of appointments booked at a pharmacy ranged from 8 - 14,646, with a total of 19,314 appointments made across all pharmacies. The mean number of appointments booked at a single pharmacy was 1,486 (SD=4,018). It should be noted that one pharmacy reported 14,646 appointments, however data revealed that one of the general practices associated with this pharmacy was using SystmOne to book a range of services not included in the pilot SLA such as vaccinations. Excluding this outlier in the data brought the overall mean down to 451 (SD=772) with the next highest number of bookings at one pharmacy being 2,267. Because the qualitative survey and interview data supports the accuracy of this data, it has been included the final analysis (Table 2). Of those booked appointments, the total number reported as Did Not Attend (DNA) was 1,968 (10%).

Table 2 Pharmacy appointments booked by general practices using SystmOne

	Pharmacies	Appointments booked		
	N (%)	N	Mean (SD)	Range
Community Pharmacy appointments directly booked by general practice	13 (100%)	19,314	1,486 (4,018)	8-14,646
Community Pharmacy appointments directly booked by general practice resulting in DNA	7 (54%)	1,968	281 (4,108)	2-1,736

1.1.3. Clinical consultations and information recorded by pharmacies

Table 3 shows clinical consultations and information recorded by pharmacies. Data in table 3 has been grouped into the following three categories: Essential Services, Advanced Services, and National Quality Outcomes Framework (QOF). Essential Services are defined as those which community pharmacies must all provide, under the community pharmacy regulations (10). Whereas Advanced Services are priced services that community pharmacies can choose to provide if they meet the requirements set out in the Secretary of State Directions. The capturing of certain information in relation to the National QOF formed part of the pilot, considering many pharmacies already gather this information during their interactions with patients. Pharmacies recording this

information in SystmOne was seen as an additional benefit and an example where pharmacies can further support general practice in meeting care quality standards.

Table 3 Consultations and clinical information recorded by pharmacies using SystmOne

	Pharmacies	Consultations and clinical information recorded		
	N (%)	N	Mean (SD)	Range
Essential Services				
Clinically significant pharmacy consultations recorded*	13 (100%)	1,637	126 (281)	1-1,023
DMS consultations recorded	3 (23%)	6	2 (1)	1-3
Advanced Services				
GP CPCS consultations recorded	13 (100%)	8,568	659 (1,355)	1-4,524
CPCS Minor Illness consultations recorded (referral from NHS 111)	4 (31%)	5	1.3 (0.5)	1-2
CPCS Urgent Supply Services recorded (referral from NHS 111)	12 (92%)	3,346	279 (641)	3-2,250
Blood Pressure Service Check recorded**	10 (77%)	586	59 (98)	1-304
NMS recorded	2 (15%)	1,750	875 (1,184)	38-1,712
NMS Interventions recorded	3 (23%)	148	49 (54)	1-108
Pharmacy Contraception Service consultations recorded	7 (54%)	313	45 (101)	1-272
National Quality Outcome Framework (QOF)				
Number of patient BP measures recorded (outside BP check service) – DM019, BP002	11 (85%)	2409	219 (501)	1-1,642
Number of patient BMIs recorded - OB002	10 (77%)	346	35 (55)	1-177
Number of patient smoking status recorded – SMOK002/5	12 (92%)	219	18 (25)	1-84
Number of smoking cessation or brief intervention services recorded - SMOK004	12 (92%)	424	35 (87)	1-310

*Clinical interventions, self-care, sign posting, promoting healthy lifestyle

**Also known as Hypertension Case Finding

Pharmacies were asked to record directly on the patient's personal health record any consultation or information relating to the following Advanced Services: GP CPCS, CPCS, BP, NMS, and PCS. Pharmacies were also asked to record other services or information, relating to Essential Services that were deemed clinically significant. The clinical recording template pharmacies used during the pilot included specific tabs for nationally commissioned services (e.g. NMS and Hypertension Case Finding) and a general template for any other consultations such as walk-in consultations and other national advanced services (e.g. CPCS referrals from GP and NHS 111).

Thirteen pharmacies (100%) recorded GP referred CPCS Consultations, with a total of 8,568 consultations reported (range=1-4,524). The highest number of GP CPCS consultations recorded at one pharmacy (N=4,524) accounted for 52% of the total. This was the same pharmacy that reported a high number of appointments booked by general practice and was known to have a close relationship with its associated practice prior to the pilot commencing.

NHS 111 referred CPCS Urgent Supply Services (USS) were the second most frequently recorded consultations, followed by NMS checks. Twelve (92%) pharmacies recorded NHS 111 referred USS, with a total of 3,346 consultations recorded. Although NMS consultations totalled 1,750, these were only recorded by two (15%) pharmacies. The most widely recorded consultations following USS were the clinically significant pharmacy consultations (Essential Services), with 1,637 consultations recorded across all thirteen pharmacies (100%).

In respect of the National QOF, all thirteen pharmacies utilised SystmOne to record this data throughout the pilot. Information relating to smoking and smoking cessation was recorded by 12 (92%) of the participating pharmacies. BP measures (outside of the BP Check Service) were the most frequently recorded QOF measures, with 11 (85%) pharmacies recording a total of 2,409 BP measures.

1.1.4. Task functions used

The task function within SystmOne works in association with the individual patient record providing the opportunity to make task requests. Table 4 provides a summary of the number of pharmacies utilising task functions, and the number of tasks used to request actions by general practices. Nine (69%) of the thirteen pharmacies utilised the pharmacy to general practice tasks. A total of 90 consultation follow-ups were requested, of which 88 (97%) were reported as actioned. Three pharmacies sent tasks reported as 'other' to general practices, of which 14 (82%) were reported as actioned. Four (31%) of the general practices sent medication queries to pharmacies. One practice sent 20 'other' tasks to the pharmacy, 100% (n=20) of which were reported as actioned.

Table 4 Numbers of tasks functions reported

	Pharmacies	Task functions used		
	N (%)	N	Mean (SD)	Range
Pharmacy to general practice tasks				
Prescription Query	3 (23%)	4	1 (0.6)	1-2
Prescription Query actioned	3 (23%)	3	1 (0)	1-1
Consultation Follow-Up	9 (69%)	90	10 (10)	1-32
Consultation follow-Up actioned	8 (62%)	88	11 (11)	2-32
Other*	3 (23%)	17	6 (6)	1-13
Other* actioned	2 (15%)	14	7 (8)	1-13
Tasks relating to NMS recorded	1 (8%)	2	2 (0)	2-2
Tasks relating to NMS actioned	1 (8%)	2	2 (0)	2-2
General practice to Pharmacy tasks				
Prescribing/Medication Query	4 (31%)	32	8 (10)	1-22
Prescribing/Medication Query actioned	2 (15%)	9	5 (5)	1-8
Other*	1 (8%)	20	20 (0)	20-20
Other* actioned	1 (8%)	20	20 (0)	20-20

1.2 Survey responses relating to usage of SystmOne

Survey data provided further insights and context relating to how community pharmacies used SystmOne.

Table 5 summarises how pharmacies who completed both the baseline and follow-up survey (n=13) received GP CPCS referrals as reported in their responses. In the initial survey (baseline) nine (69%) pharmacy respondents indicated that their associated general practices used NHS Mail to send CPCS referrals, while six (46%) pharmacies were receiving referrals via middleware. In the follow-up survey, GP CPCS referrals via NHS mail reduced to three pharmacy respondents (23%), and one (8%) respondent for PharmOutcomes (or similar IT platform). Four (30%) pharmacy respondents reported GP CPCS referrals were received via SystmOne after the pilot implementation in the follow-up survey.

Table 5 Different routes pharmacies received GP CPCS pre-pilot and post pilot implementation

	Baseline survey N (%)	Follow-up survey
	N (%)	N (%)
NHS Mail N (%)	9 (69%)	3 (23%)
PharmOutcomes (or similar IT platform) N (%)	6 (46%)	1 (8%)
No referrals received N (%)	2 (13%)	4 (30%)
Other* N (%)	1 (8%)	1 (8%)
TPP SystmOne	N/A	4 (30%)

*Patients told to walk-in to pharmacy without a formal GP CPCS referral or advised to call in directly

At baseline, nine general practices (43% of general practice survey respondents) indicated that they did not routinely make referrals to the pharmacy for GP CPCS. When asked why referrals to GP CPCS were not being made, representatives from the practice stated not having the time or capacity, not being set up on the system or finding it easier for the patient to verbally liaise with pharmacy. Of the seven general practices who completed the follow-up survey, six (85%) responded that they did routinely make GP CPCS referrals to the pharmacy.

Table 6 shows the number of pharmacies and general practices who indicated they had used the appointment rota. Table 7 shows which services respondents to the follow up survey (pharmacy n=13, general practice n=7) indicated they had utilised the task functionality in SystmOne for.

Table 6 Number of pharmacies and general practices reporting use of the SystmOne appointment rota for referral to pharmacy services

	Blood Pressure Service Check	Contraceptive Services	NMS	Other
	N (%)	N (%)	N (%)	N (%)
Pharmacies receiving referrals from general practices	7 (54%)	8 (62%)	3 (23%)	2 (15%)*
Pharmacy in-house use	8 (62%)	7 (54%)	4 (31%)	1 (8%)**
General practices sending referrals to pharmacies	6 (86%)	5 (71%)	6 (86%)	4 (57%)***

**P04 - "Medicines advice inhaler technique", P24 - "check medications for patients with specific requirements e.g. lactose free"; **P04 - "private services such as travel health"; ***GP08 – "Minor Ailments such as infections requiring antibiotics", GP09 – "Minor conditions as agreed", GP25 – "Depression, NMS, ABPM", GP28 – "injections/vaccinations"*

Table 7 Survey responses from pharmacies and general practices showing the use of SystmOne to support the delivery of Essential and Advanced Services.

	Pharmacy	General practice
Hypertension case finding N (%)	9 (69%)	5 (71%)
Contraceptive Services N (%)	8 (62%)	3 (43%)
NMS N (%)	4 (31%)	4 (57%)
Discharge medicines (DMS) N (%)	4 (31%)	NA
CPCS N (%)	6 (46%)	5 (71%)
Prescription Queries N (%)	6 (46%)	5 (71%)
Other N (%)	0	1 (14.2%) *

** "Minor Ailments"*

Objective 2: To explore the perceived impacts of this new way of working on integration; patient access; efficiencies; quality and safety of patient care; staff capacity, confidence and decision-making.

2.1 *Impact on the quality and safety of patient care*

When asked if SystmOne had improved the delivery of patient services and care, nine (69%) community pharmacy respondents strongly agreed or agreed; two (15%) respondents disagreed; and another two (15%) neither agreed nor disagreed. Similarly, when asked if the clinical system had improved clinical decision making, seven (54%) respondents strongly agreed or agreed; with just one (8%) respondent disagreeing; and the remaining five (38%) neither agreeing nor disagreeing. These improvements were attributed to increased access to patient information, allowing pharmacies to have a more holistic view of the patient, resulting in safer practice.

Pharmacy respondents highlighted:

> *Clinical decision making is far better when we have all the available information (P29)*

> *Other advantages include being able to see previous consultation notes from other healthcare professionals which help guide our consultation e.g. when a person has been asked to perform sputum culture testing or stool sampling rather than blindly consulting with a patient. We are also able to get a holistic view of the patient e.g. details of recent hospital admissions and investigations etc...all these factors are the building blocks of a patient consultation. (PO8)*

> *….. access to information that normally would not be available has brought a new depth in Pharmacy clinical consultations. (P03)*

One general practice respondent commented on improved patient safety:

> *Ability to share information about medication errors, adverse drug reactions, and other safety concerns between practices and community pharmacies can help improve patient safety. This can lead to better monitoring of high-risk medications, improved communication between providers, and better management of patient medications. (GP19)*

2.2 Impact on efficiencies and staff capacity

When asked if having access to the appointment rota was beneficial to their general practice or pharmacy, five (71%) general practice respondents and five pharmacy respondents (38%) agreed or strongly agreed. While only three (23%) pharmacy respondents strongly disagreed, five (38%) indicated they neither agreed nor disagreed. Respondents who agreed or strongly agreed stated that the introduction of an appointment system had improved capacity for practices and helped pharmacies manage their workload.

For example, one general practice respondent commented:

> *Noting that as a practice we were overwhelmed (triage lists overflowing) last winter, if the pharmacies had not been able to provide this capacity it is not clear how we would have coped. This was only made possible by the SystmOne remote booking solution. (GP28)*

Another said*:*

> *TPP SystmOne allows minor ailments appointments to be booked directly into local pharmacist clinic which save so much time for the surgery and allows the surgery to focus on urgent and complex patients (GP02)*

Pharmacy comments touched on how the shared appointment rota allowed work to be better organised and managed:

> *The referral system is fantastic as we can manage our workflow better (P29)*

Others emphasised that SystmOne had led to increased efficiency, with one pharmacy stating:

> *This functionality proves beneficial during consultations, enabling the pharmacy to seamlessly utilise patient notes for a more integrated and efficient patient care experience. (P35)*

While a general practice commented:

> *Reduces time spent completing admin for our own staff. Clinicians can see the Pharmacy consultation immediately after it has taken place. Continuity all round. (GP11)*

Pharmacies also commented on the reduction in time spent on admin related tasks:

> *It significantly reduced our time contacting GPs. I'm not looking for email addresses, I'm not sending it to an old practice manager. I get it tasked to the right team and then it gets actioned. (P04)*

2.3 Impact on patients and patient access

Although feedback was not collected directly from patients, staff commented on the positive feedback they had received from patients. This focused on the improved access to care. Both general practice and pharmacy staff mentioned patients commenting on being able to get an appointment more quickly. With one practice commenting:

> *Patients have been delighted with the service offered by the Pharmacy and particularly like that we can book them an appointment directly. (GP11)*

While pharmacies reported:

> *And those patients were really grateful that they could just walk into the pharmacy and have this consultation, and they were booked in at a time and they were getting seen. (P35)*

> *Managing patient expectations by providing scheduled appointment times, enhancing the patient journey and experience…. Enhanced patient outcomes, and a smoother patient journey leading to increased patient satisfaction. (P04)*

A number of pharmacy and general practice respondents also stated that pharmacies having access to SystmOne had led to improvements in the service users' experience:

> *I think it's made the patient pathway a lot more seamless. So I think from initial contact with the GP surgery or with the clinician in the GP surgery, to then being referred on, as I said, that direct booking I think is a game changer. So actually not just saying, "Contact the pharmacy next door," because I think patients, our patients especially can feel that that's a bit of a fob off. (GP25)*

> *When I say to them, "I'm accessing your GPs record, is that okay?" That gives them so much confidence that I'm now working with their GP (P04)*

> *…patient have also had satisfaction that our treatment decisions have been documented in their GP notes, especially in instances where we have asked them to monitor symptoms*

and return if needed, they felt they would not need to start all over again with their consultations. (P08)

Clearly demonstrated significant improvements in patient access, ease of interface and fostering excellent working relationships, it should be extended to other pharmacies to level the playing field and bring those benefits to more practices, pharmacies and patients. (GP28)

However, some respondents shared reflections that described less positive patient experiences, these tended to relate to their overall experience and expectations of using the community pharmacy rather than specifically the patient experiences of this pilot. For example, one pharmacy commented on patients' expectations when being given an appointment, but needing to be referred back to the GP practice for further appointments or prescriptions:

I think the times when you could sense that the odd patient was slightly frustrated was when we would then have to refer them back into the surgery, even though that involves us picking up the phone and making that appointment for them, the patient did feel that this was then a wasted part of their journey. But I think most people are quite happy that we didn't leave them to go make that appointment, at least the pharmacy did that part for them. (P29)

The only downside is sometimes, especially elderly patients, do expect a prescription from you directly when you see them. (P28)

2.4 Impact on integration, relationships, and communication

Figure 2 demonstrates that eight (62%) community pharmacists and six (86%) general practices either agreed or strongly agreed that the introduction of SystmOne had improved relationships between their organisations. Only two (15%) pharmacy respondents and one (14%) general practice strongly disagreed or disagreed that relationships had been improved. Similarly, seven (54%) community pharmacies and six (86%) general practices either agreed or strongly agreed that the introduction of SystmOne had improved communications between their teams.

When asked what the pharmacies and general practices had gained from pharmacies having direct access to the electronic clinical records system, responses often included reflections on better understanding, continuity of care, collaboration and improved communication and relationships across teams.

For example, several pharmacies reflected on improved collaboration:

Our relationships with our GP surgeries are stronger and we are working together better than ever before, we have formed new relationships with surgeries who previously were reluctant to engage as they felt using community pharmacy services increased their admin burden. (P08)

Improved collaboration with our GP practices, strengthening relationships and fostering better teamwork, leading to increased visibility and reassurance. (PO4)

The surgery and pharmacy have been working closely and this has improved relationships with the surgery admin staff as well as the Doctors. (P24)

The ability to integrate with clinicians at source via the system has proved to be invaluable and allow for better dialogue between pharmacy and GP surgery. (P03)

While general practice reported:

> *It's not just the IT platform, it's because there is an IT platform, it supports communication across organisations and it supports the development of that two-way communication between different organisations and building of trust, and I think that's the key benefit that we've seen. (GP25)*

> *A more accurate patient record. Better communication between practice, patient and pharmacist. (GP09)*

> *Strengthened cohesive working between the 2 practices and the pharmacy to provide better care (GP16)*

For those that didn't report improved communications or relationships, engagement was referenced as the reason with one pharmacy stating:

> *There has been no willingness on the part of the practice to engage with the pharmacy. (P28)*

With the associated practice reporting:

> *Unfortunately we rarely used it. (GP05)*

Another pharmacy commented:

> *There is massive potential for this if all parties are involved and engaged i.e. the pharmacy and the surgery. However, in our case we have not had any referrals or messages sent through the pilot SystmOne for about 4 months now. (P30)*

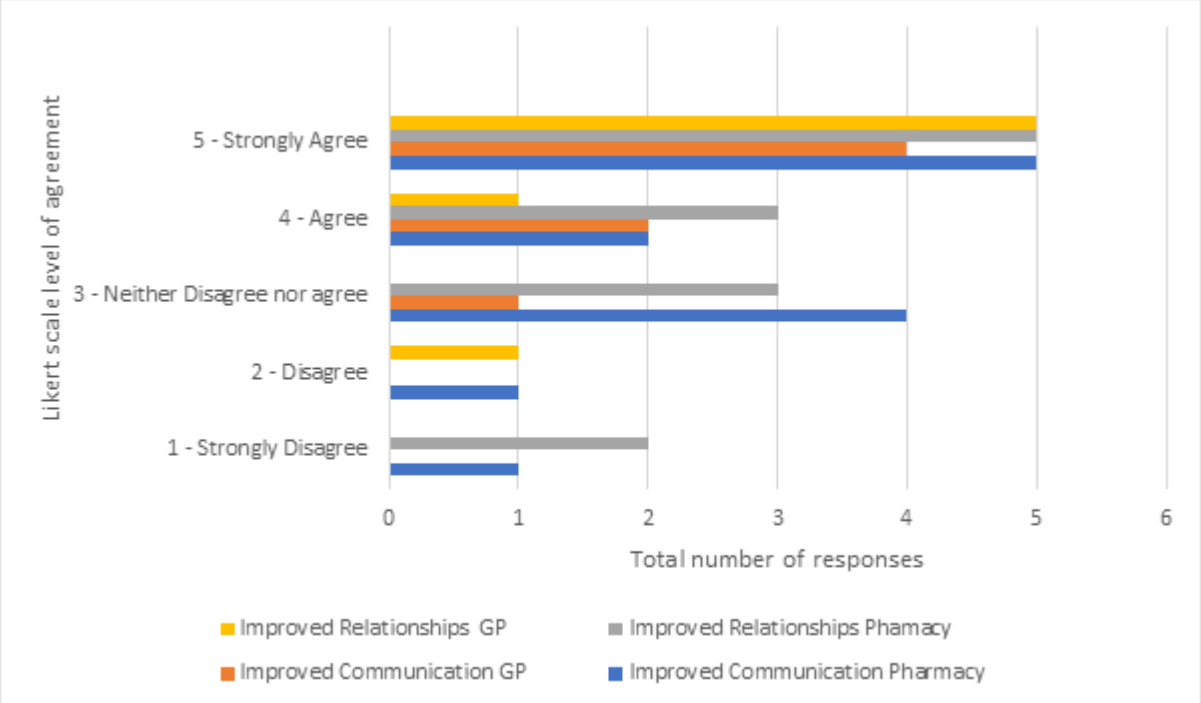

Figure 2 Survey responses from pharmacies and general practices demonstrating level of agreement with statements relating to improved relationships and communication

Objective 3: To appraise the acceptability of this new way of working to community pharmacy and general practice staff.

Figure 3 summarises responses from pharmacies in the follow up-survey. The data predominantly suggests that respondents were in agreement with statements indicating an overall acceptance of this new way of working between community pharmacy and general practice, and an agreement that it had provided benefits and improvements.

3.1 Confidence in pharmacies using the clinical system

Responses from the 13 pharmacies who completed both the pre- and post-pilot survey showed a shift from an average score of 3 (neither easy/confident nor easy/confident) to 4 (easy/confident) when asked about the ease of picking up and managing referrals to the pharmacy, as well as their confidence in creating clinical patient records (Table 8).

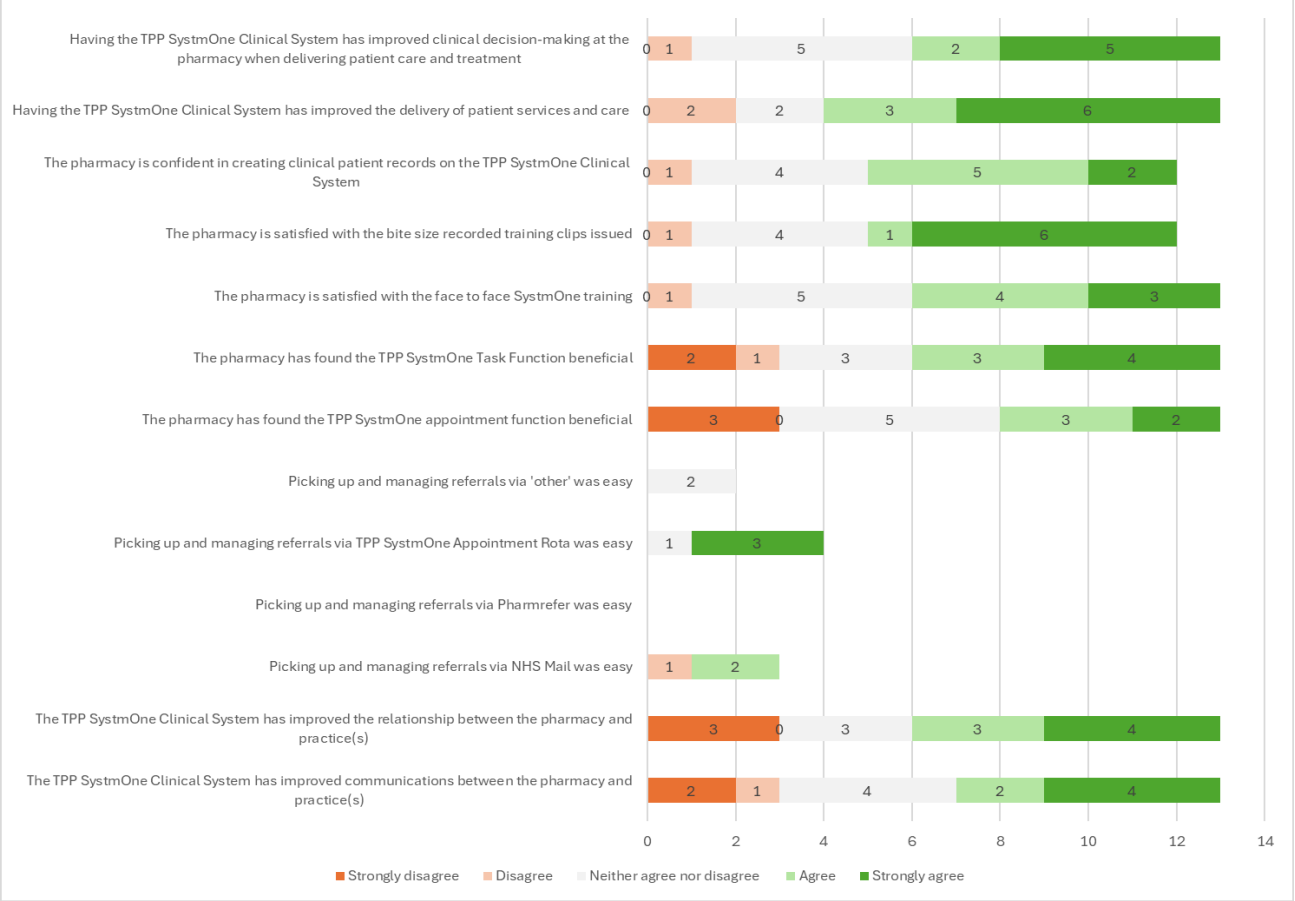

Figure 3 Retained pharmacies' (n=13) answers to post survey Likert-scale questions

Table 8 Average confidence score for completing tasks pre and post pilot as reported by pharmacies

	Pre-pilot	Post-pilot
Ease of picking up and managing CPCS referrals	3 (neither easy nor difficult)	4 (easy)
Confidence level in creating clinical patient records	3 (neither confident nor unconfident)	4 (confident)

During interviews and in survey responses, pharmacy respondents reflected on their confidence in using the new system. Although some participants felt confident using the system soon after its introduction; others suggested that they needed time to become confident, commenting that initially the system seemed complicated and different from what they were used to:

> *It's not difficult to learn. It may seem a bit complicated to start with […], I mean, I'm not a computer geek but I know how the computer software works so I didn't think I'd find it difficult to work so it is pretty straightforward after about four or five examples. (P28)*

> *It's been a trial to remember how all the things work on the platform as it is so different from our current pharmacy systems. (P14)*

3.2 Perceived benefits

Findings from the interviews also highlighted various themes relating to staff perceptions of the acceptability of this new way of working. These closely aligned with beneficial impacts previously described, for example improved communication, strengthening of relationships, collaborative working and improved patient care. The following two responses from a pharmacy and general practice respectively, describe the benefits of the system supporting collaboration, communication and access to clinical evidence:

> *Obviously it's the collaboration that I really, really think is really great about this pilot is that it will really kind of embody pharmacy within GP practices and working collaboratively with them. (P35)*

> *There's been a lot more communication with the community pharmacy because before I think we were thinking, well, what are the suitable cases that can go backwards and forwards? But I think having the evidence base of the clinical record, the governance being better, almost, the confidence that actually because it's not just the SystmOne part of it, we've also got clinical templates there. So actually when they're filling in consultations, they're able to document really well what they found, what they're worried about and things like that. So I think that in itself, one it's helpful for audit purposes and learning, but two, it's really helpful in terms of communication backwards and forwards. (GP25)*

The pilot itself was also described as an opportunity to showcase how the current ways of working and patient care could be improved. Some pharmacy and practices indicated their acceptance of this new way of working by referencing either continued use or the adoption by others in the future. One pharmacy stated:

> *Our pharmacy has used SystmOne to showcase what community pharmacy should look like. (P08)*

Another explained at interview:

> *So we have embedded SystmOne into our like daily practice. So now we pretty much can't live without it […]. So it has been a real game changer, changed our practice completely. We have expanded and excelled our clinical services because of this, it is just great. (P04)*

With one of the associated general practices stating:

> *This should be standard of care. Any alternative outcome is to knowingly deny patients the opportunity for the safest, most effective treatment available to them. Discontinuation of the service, or the refusal of a health system to adopt shared EPR access including community pharmacies, would be a disservice and a risk of harm to patients.* (GP28)

Another practice stated:

> *I think unreservedly, we wouldn't go back. We are very keen to keep SystmOne as the combined platform going forward, and we would really encourage community pharmacies to explore this because I think it enables the policy agenda of working together to support patients. And so we would highly recommend engagement with this. (GP25)*

Objective 4: To assess the feasibility of community pharmacy having the same electronic clinical record system as GP practices to support delivery of services and integration.

4.1 Feasibility of implementing and utilising

Interview data supported the findings from the survey and key activity indicator data, demonstrating that use had been made of the referral, booking and other task functions by both GP practices and pharmacies. However, some barriers were identified that relate to feasibility. This includes the barriers identified by the 14 community pharmacies who didn't implement or utilise SystmOne but responded to the follow up survey. Barriers and enablers identified are summarised below.

4.2 Barriers to SystmOne implementation

Of the 22 pharmacies that didn't either download or utilise their allocated SystmOne unit, 14 responded by survey sharing the reasons for lack of engagement. As previously noted IT/Technical issues and staff capacity were highlighted. One of these pharmacies provided the following reason for not mobilising SystmOne:

> *Staff issues, as locums are just at the pharmacy for the day and will not use the system. Short staffed so the team just did not have time to assist. We cannot find a regular Pharmacist that will be able to provide the attention needed to benefit from the system. Also concerned at downloading external software to our computer. (P23)*

Another noted:

> *The system itself is something we are not used to. With out the option of repetitive practice it was difficult to get to grips with. Also when we did get it up and running the Surgery were unable to use it as they only had one member of staff able to configure the appointments their end. (P07)*

4.3 Barriers to SystmOne utilisation

Some pharmacy respondents could see the benefits of using SystmOne but had not been able to comprehensively engage for a number of reasons, including general practice engagement, capacity within the pharmacy, conflict with existing required community pharmacy IT systems and patient consent issues.

On practice engagement, pharmacies reported:

> *I attended a meeting with the GPs, with their monthly meeting explaining to them how this would benefit them in terms of their minor ailments that we can do the triaging system or just doing the minor consultation. But I don't think they booked more than 10 appointments since we started.(P28)*

> *Great system to have but would like to have seen better support to help drive the pilot in terms of getting GPs on board.(P35)*

In line with national requirements, the engaged pharmacies still had to use nationally authorised IT platforms to claim service payments which meant a duplication of recording on different platforms:

> *When we were doing the hypertension service […] we have to make four entries. So we have the entries on our PMR system, we had to make the same entry on SystmOne, then we have to make the same entry on PharmOutcomes. And then the same entry on MYS. So for one piece of work, we were having to do four different entries, which makes absolutely no sense. I think, I think that will be a big barrier going forward.(P29)*

The system is beneficial for highlighting potential issues that may arise during an appointment. However, this has significantly increased the workload as the pharmacist has to enter the information on both SystmOne and PharmOutcomes. (P24)

Records access and consent was also identified as a barrier by a few pharmacies:

Where the patient has consented, it is easier to check their history. However, many patients have chosen to opt out and as pharmacists, we cannot see their history. In almost all cases, patients are not aware as to why they had opted out.(P29)

… Then there is this one cohort of patients where we will go in, I can't really see much because it's all blocked. Then I have to task them to say can you open the record. And it only happens if the patient's been a walk-in patient. It doesn't 99% of time happen if they had been booked through the surgery. So yeah, it hasn't been. It's been a problem. (P04)

4.4 Enablers to SystmOne utilisation

Despite the potential barriers highlighted, key themes emerged from surveys and interviews relating to factors that enabled the utilisation of SystmOne in a community pharmacy setting, such as training and on-going support. Whilst some users found the system complex to learn, many felt supported throughout the learning process with just two (15%) pharmacies reporting that they were not satisfied with the training offered, seven (53%) respondents reporting that they were very satisfied or satisfied, and the remaining four (30%) providing a neutral response. One pharmacy respondent also emphasised the benefit of training offered outside of pharmacy opening hours:

Training was offered at a time outside working hours not to impact the daily running of the pharmacy. Trainer was very helpful in taking time to make sure I was fully comfortable with using SystmOne. (P24)

Others commented on the usefulness of bite-sized training videos that were issued following the initial training reporting that they were a useful resource to refer back to or use when setting up certain functions.

What did help was additional videos and the clips I got sent through later on. And so we had a reference sort of point. So if you got stuck anywhere, we could go back onto the videos and they're really self-explanatory and we didn't have a problem with that at all. (P30)

Aligned with the data presented under objectives one and two, that highlighted improved relationships and communication between pharmacies and general practice, participants described the trust established as a key enabler for implementation and ongoing utilisation, with one respondent sharing:

We are working together better than ever [...] As soon as I got SystmOne in [...] they just saw what we were capable of. That really built the trust between us [...] they started to expand on what they were sending patients over for. And I thought that was really nice. (P04)

Objective 5: To identify the issues, considerations and improvements for any similar pilots or future deployments of electronic health record systems in community pharmacy.

Interview participants provided insights into some of the challenges experienced throughout the pilot and areas for improvement and these are summarised below.

5.1 Training and support

Although training was identified as an enabler with pharmacies generally satisfied with both online and offline training videos, improvements in both the timing and delivery mode of training was highlighted.

> *Quite a hard system to navigate, felt with further training it was easy to use once you knew how but as there was a gap between training and initiation of pilot we did struggle.* (P35)

The delivery of training was also identified as an area that could have been improved with a number of pharmacies suggesting that face-to-face training would have been better:

> *The clips were informative, but would be better if we could have used the training straight away and not months later […] I still think that it's very different being shown something virtually, when it's a brand new system, and someone actually physically in the pharmacy spending half an hour, an hour with you. I think that's the key difference. (P29)*

> *Face-to-face training would have been better and we would have started using the system earlier.* (P27)

5.2 Systems interoperability and integration

Several pharmacy staff highlighted the challenges of needing to duplicate work due to requirements to make claims on the nationally approved and mandated IT platforms. The potential for better interoperability of systems was mentioned by several staff:

> *The only way this is realistically going to happen is if you're going to reach a situation where you're going to be able to integrate IT systems within GP surgeries and pharmacy systems. (P14)*

> *System integration is something that I think pharmacies have called out for a long time that all NHS systems should be integrated. Because, like I say, unfortunately, we are having to use so many different systems. (P29)*

5.3 Communications and expectations

General practice engagement was identified as an issue for some pharmacies. Others mentioned the need for clearer communication and agreements in how pharmacies and general practices should use the system. Where collaboration between some pharmacies and general practices was reported as improving through the pilot, others described this as a challenge. Some pharmacy respondents reflected on challenges with general practice commitment and not being aware of how they could engage with the pilot and making use of the functions.

> *The practice did not engage with the pharmacy after initial engagement and a failure to understand the process or try to engage with it […] When selecting a practice to work with there has to be a strong agreement to work together. Putting up wall does not allow for cross party working* (P28)

But I just feel like if the background was done in terms of supporting the GPs to really get onboard with this and actually working out a plan of how we were going to use it, it would've almost been more beneficial. (P35)

5.4 Improvements in functions, templates and options

Practice and pharmacy participants mentioned the potential value in increasing the available tasks and functions. Some suggested that even with the current number of options, a staged approach to implementation would be beneficial to allow pharmacists time to increase their familiarity and confidence in using the system. One practice also discussed the potential for enhanced population health management functions that would be possible if patients could be registered longer term with community pharmacies, in a similar way to patient records in GP practices.

So actually if you for example, use the pharmacy, you would be registered for a time period, but you wouldn't be registered forever. And so there are some limitations, whereas when you're with a GP surgery, you'd be my patient forever, so I could always contact you. And so that kind of…so we had to find a way to register a patient for a time period where we gave a clinical service. But what could be better in the future is that everyone that uses that pharmacy, if they could be just like everyone who uses my GP surgery, if they could be active people on the pharmacy SystmOne unit, that would allow a bit of population health management. (GP25)

I think it would be ideal to have most of these new tabs opening and coming up and closing, I think it would be easier for us to have all in one place, like PharmOutcomes […] everything is on one page. (P28)

5.5 Widen access and increase engagement with SystmOne and the pilot functions

Some pharmacies described challenges with practices being aware of how they could engage with the pilot and making use of the functions. One participant suggested if it were part of targets such as QOF, that may have led to increased engagement. Others commented on the funding model and how providing funding to pharmacies would enable more resource to support this way of working. Others also reflected on challenges related to variability in how different practices aligned to a single pharmacy engaged.

5.6 Exit plan from pilot

Several participants described their frustration over a lack of a clear exit plan for those pharmacies and GP practices that had engaged and invested time and resource in the pilot at the end of the twelve months:

Just that the exit plan is such a big disappointment. And I'm having to do a lot of work behind the scenes to find other ways to keep this going because we've built such a good thing with the PCN and it doesn't actually just need to stop with my organization […] I will help others get it if I can. (P04)

Project Team Reflections & Lessons Learnt

As this pilot was the first of type, there was a number of challenges in the set-up and mobilisation stage which are important to reflect on to both inform and support any future pilots of clinical records systems use in community pharmacy.

Technical Considerations

In community pharmacy there is a mix of owned and leased computer hardware and software and as a consequence a variation of technical infrastructure and digital governance. This was recognised during the pilot scoping and addressed in the inclusion criteria, however technical issues still impacted on the pilot. These included:

- The sign-up timeline for the pilot did not allow a long enough for pharmacies to explore and change corporate digital infrastructure and governance, this particularly impacted engagement of large multi-pharmacy organisations.
- Despite the inclusion criteria requiring a minimum IT specification, Health and Social Care Network (HSCN) connection and owner agreement to the download of SystmOne some pharmacies still experienced difficulties, including firewall issues with required digital ports not being open allowing download and some pharmacies only having a proxy HSCN connection. These issues were resolved but took time to identify, understand and fix.
- Some pharmacies needed additional devices and smartcard readers so the clinical system could be accessed in different settings within the pharmacy. The pilot budget did not allow for additional equipment.
- SystmOne units are usually set up using Organisation Data Service (ODS) codes. Initial unit testing identified that this set up was not fit for purpose so as a solution for the pilot the units were built on newly assigned workgroup codes. This technical configuration did not allow for prescribing, which was not in the scope of the pilot, but should be considered for any future pilots as independent prescribing for community pharmacy is a key future development, with all newly qualified pharmacists being independent prescribers from September 2026.

Training and Support

The initial pilot mobilisation timetable saw the 200 associated community pharmacy staff receiving their training either at the time or just before their SystmOne unit was scheduled to be deployed. Challenges of the unit set up just before the scheduled training meant that staff were trained without having access to a unit to test and consolidate their learning. For some pharmacies the gap between training and receiving the unit was 6 months. Bite-sized training videos were supplied, additional training sessions and set up support was offered once units were deployed but for some the delay impacted engagement and enthusiasm for the pilot. For some pharmacies despite training and technical support being given virtually (Teams and telephone) they were still unable to progress with set up and use. Any future pilots should ensure that training is provided once the pharmacy has access to a unit.

Information Governance

The pilot involved changes in how community pharmacies would access, process and own patient data. Therefore, a data sharing agreement had to be agreed and signed, and pharmacies were required to review how the pilot would impact on their information governance polices and statements. A Privacy Impact Assessment (PIA) template was offered to the pharmacies to support their review but several needed further support and guidance. Units were not deployed until pharmacies could demonstrate IG compliance so for some this caused further delays to mobilisation.

General Practice Involvement

The pilot tested the use of one of the nationally approved clinical records systems, with only TPP SystmOne showing interest in the pilot. Subsequently the pilot was limited to working with general practices only using SystmOne and their respective patient population. The pilot did not therefore allow for any interoperability testing which is a key factor moving forward due to community pharmacies in the main seeing patients registered at practices using different clinical systems. This also made the pilot more difficult for some of the pharmacies as they needed to identify the patient's practice, if the patient was not a referral, before considering using and recording on SystmOne.

PCN and general practice engagement in the pilot was through expressions of interest via ICBs rather than directly from the practice themselves. It became clear during the pilot that not all practices selected really understood the concept and objectives of the pilot and their role in it. Pharmacy engagement was formally agreed in a signed SLA (Appendix 1), they were also paid a small fee to recognise the additional work involved. The general practice requirements were only set out in the invite for expressions of interest documentation and then subsequently in emails and/or meetings. They were not agreed in any formal contract or memorandum of understanding, there was also no payment attached to general practice involvement.

Pilot Impact

The pilot was always set to be a time limited pilot of 12 months with a selected cohort of pharmacies with the potential option of the associated ICBs conducting further pilots on the back of the initial set up. The project team however underestimated the impact the pilot might have on the stakeholders involved with some pharmacies and practices completely changing ways of working making the withdrawal of their SystmOne unit difficult and seen as a backwards step.

The potential impact of pharmacies not involved in the pilot was also underestimated. A Local Pharmaceutical Committee (LPC) now known as Community Pharmacy Local raised concerns regarding pharmacies not involved in the pilot feeling that the pilot was giving the engaged pharmacies an unfair advantage and requested to be involved. Extending pharmacy involvement was not in the gift of the project team or factored into the pilot.

Summary of Key Findings

The focus of the pilot was to appraise the feasibility of the approach and the impact on integration between community pharmacies and GP practices. The pilot was novel in that community pharmacies had their own SystmOne Unit, making the pharmacies a data controller for their own data entries and removing the reliance on general practice to accept or enter information they deem relevant. Community pharmacy staff were able to write directly on the patient's clinical health record, use the task function and set up appointment rotas, while general practice had a new opportunity to remotely book patients directly into community pharmacy appointments.

The thirteen pharmacies that actively engaged in the pilot all used SystmOne to record consultations and test results, across a number of essential and advanced pharmacy services. The level of recording was varied but the pharmacies in the upper end of the range, for the 12-month pilot period, demonstrates the speed at which the clinical record system could be implemented and embedded into community pharmacy working practice.

The thirteen pharmacies also received appointment bookings from associated general practices, testing the remote booking functionality. A reduced use of NHS mail and middleware for practice referrals was reported, which supported the view that this was both an acceptable and feasible process. The more collaborative approach, of general practice booking their patients into

pharmacy appointments, was generally seen as beneficial, leading to improved efficiencies and capacity in general practice, and better workload management for the pharmacy. Pharmacies and general practice also reported that they had received positive feedback from patients.

There was a varied use in other functions, with the task function not being explored by all the active pharmacies and practices. Normal practice currently requires community pharmacy and general practice to communicate queries or requests via telephone or NHS mail. The task function, linked to the patient record, provides an alternative, more efficient and auditable method of addressing issues. As pharmacies were required to seek consent to access the patient record use of this function was limited. However, where it was used, general practice showed a high level of follow up response.

Survey responses evidenced a high level of acceptability and confidence in using the integrated system. The findings highlighted benefits and impacts of this new way of working which support integration, such as enhanced communication, collaboration, understanding and trust. Feedback from pharmacists and general practice staff was predominantly positive. The improved access to information, the ability to book appointments and make referrals, and better pharmacy and practice relationships were all highlighted as having positive impacts for staff and patients.

Improved quality and safety of patient care was also recognised. Pharmacies suggested this was attributable to better access to patient records and information. Writing directly onto the patient record meant that information pertaining to consultations, treatment or advice could be viewed in real time by the patient's GP without the delays inherent with sending consultation information via middleware or NHS mail which needs general practice review and acceptance.

Findings identified a level of clinical information generated in community pharmacy that is currently not routinely shared. Despite requirements for pharmacies to record certain patient interactions, usually recorded in the PMR or in paper records, there is no standardised method for recording or sharing essential services records. The use of the integrated clinical system in the pilot allowed all thirteen active pharmacies to add what they deemed clinically significant information to the patient record.

Similarly all except one of the pharmacies recorded QOF measures. These measures are routinely collected by many pharmacies in the course of their patient interactions but are not currently routinely shared. The pilot demonstrated that with the use of the SystmOne Unit this information could easily be added to the patient record, highlighting how community pharmacy could actively support meeting and improving care quality standards.

Whilst the pilot has provided evidence of overall benefits of community pharmacy having the same electronic clinical records system as GP practices to support delivery of services and integration, it is important to consider carefully the feasibility of this new way of working and how learning from the pilot can inform future use of the approach. Participants identified several enablers and barriers that had influenced adoption and engagement during the pilot, which are described below.

It cannot be overlooked that twenty-two of the initial cohort of pharmacies did not implement or use their SystmOne Unit, with those that provided feedback citing IT issues (not defined) and the challenge of workload pressures as factors for their lack of engagement. Others cited concerns over the additional workload associated with the requirement of double recording. The pilot design could not evade the national process for advanced service payments via the mandated pharmacy IT systems therefore recording duplication was unavoidable for any participating pharmacy, making the pilot more challenging and a barrier for some. Future consideration of clinical systems use in pharmacies could explore extraction and payment methods similar to those currently used nationally in general practice via the Calculating Quality Reporting Service (CQRS), removing the need to duplicate records. The need for patients to consent to sharing of their clinical records was also a key influence on the extent to which pharmacies could use SystmOne, and this was

dependent on patients being present at the pharmacy. Some pharmacies also mentioned limited engagement and referrals from general practice as influencing their own level of engagement and use of the system.

Training was an important aspect of the pilot and a key consideration of any future pilots or deployment of electronic health record systems. Staff shared mixed views; a key factor appeared to be timing of training, both in terms of how this fitted into workloads and the gap between receiving training and access to their SystmOne unit. Many also mentioned that it took time to become confident in using SystmOne, but that confidence grew as they familiarised themselves with its use. Training videos were also mentioned as a useful source of reference.

Some of the actively engaged pharmacies reported that a lack of understanding, engagement and referrals from general practice influenced their level of engagement and use of the system. Some indicated the need for greater clarity over how GPs and pharmacies should be using the system, and this is an important aspect for further consideration of how training could be enhanced.

In summary, the findings have demonstrated the feasibility of community pharmacy utilising the same electronic health records system as general practice. The insights gained have been applied to identify areas important to consider in similar pilots or future deployments of electronic health record systems in community pharmacy, and key implications for future policy and practice.

Implications for Policy and Practice

Community pharmacy has long been considered an underutilised resource with highly trained personnel who are not using their clinical skills to maximum advantage for patient. This is even more poignant as pharmacists are becoming independent prescribers and from 2026, all newly qualified pharmacists will be able to prescribe.

There is also an increasing move to commission more advanced services from pharmacies (11), primarily to move workload from general practice and urgent care services to community pharmacy and to shift public perception to considering their pharmacy as the first point of contact for minor conditions.

The Darzi review of the NHS In England(12) concurs with this strategy highlighting the further potential to expand the clinical role of community pharmacists and highlighting the accessibility for patients, particularly in areas of high deprivation.

The government has outlined their intention to provide more patient care in primary care and community settings as part of the plan to reform the NHS(13). Proposals also include further digital developments and a move to a "single patient record" across primary and secondary care.

Should future national data sharing agreements be extended to include implied consent for community pharmacy the use of the task function could be used and further tested for other things, including prescription queries.

Community pharmacy is already and will continue to be an essential partner in achieving these reforms. Yet to date community pharmacy has not been offered full access and autonomy to record directly in the patient's health care record in parity with other clinical colleagues. This should be addressed.

Integrated, real-time digital communication between care settings and healthcare professionals will be crucial to ensure community-based care is co-ordinated, safe and effective.

Introducing a new system requires a full understanding of how existing platforms, systems and ways of working will impact engagement and use. Functions and functionality need to be

considered carefully to prioritise how these meet user needs, and optimise engagement and potential efficiencies.

Strengths and Limitations of the Evaluation

The pilot provided data from multiple sources and perspectives allowing an in-depth evaluation of the feasibility, impacts and staff perceptions of community pharmacy using their own SystmOne unit. Collaboration between the evaluation team, academic advisors and the project team throughout the study helped to ensure data collection and analysis were relevant and robust.

Activity data was remotely extracted across all the units and as such the standardisation of the extraction was a strength of the study. However there were limitations in the data, for example some of the activity metrics were not reported on and survey responses for the categorical data relating to time spent on tasks was not robust enough to include in the analysis. Appendix three provides a list of all the agreed metrics, and shows those that were not fully reported and have therefore not been included in the analysis presented. Data extraction was only at one time point at the end of the pilot and this did not allow for formative feedback or reviewing trends in activity across the pilot period.

The sample size for the evaluation was limited by the numbers of community pharmacies and their associated general practices that actively engaged in the pilot. This was influenced by several factors detailed elsewhere in the report, including delays between training and receiving SystmOne units, and the lack of formalised agreements or funding for general practice involvement. Drop off in engagement between the pre-pilot survey and follow-up survey has meant data for the follow-up is limited to the small number of pharmacies that actively engaged (N=13), and this impacted the ability to undertake a more robust comparative analysis.

At the start of the pilot the national Advanced Services specification for the Pharmacy Blood Pressure Check Service allowed pharmacies to feedback results via email or similar method, thus allowing the pharmacies in the pilot only need to record the findings directly onto the patient record. As of the 1st September 2023 the requirement changed with pharmacies having to report via to one of the NHS assured pharmacist IT systems. This resulted in the need for engaged pharmacies to duplicate records for this service potentially impacting their SystmOne use.

Conclusion

This evaluation demonstrates that it is feasible and acceptable to use a SystmOne clinical system in community pharmacy. The system was uncomplicated to download and has the potential to be implemented far more rapidly than it would take to develop alternative IT solutions to achieve the same functionality offered by SystmOne.

In light of previous literature and evidence around the need for digital integration to support safe and effective patient care, it follows that to deliver safe and effective pharmacy clinical services a fully integrated clinical IT system is needed. This pilot has shown that the integration afforded by using the same clinical system in community pharmacy and general practice can facilitate and foster better communication, and collaboration resulting in better patient care.

Further work in this field should be carried out to trial the use of EMIS and Vision in community pharmacy and testing the systems on a larger scale, exploring in particular, the functional interoperability between general practices using one system and community pharmacies using another. The use of SystmOne or other existing clinical systems for NHS prescribing in community pharmacy should also be investigated given the progress of pharmacy independent prescribing.

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- Registration Authority staff;
- East of England Pharmacy Local Professional Network;
- Community Pharmacy BLMK & Northants, Community Pharmacy Cambridgeshire & Peterborough, Community Pharmacy Essex, Community Pharmacy Hertfordshire and Community Pharmacy Norfolk & Suffolk;
- The following ICBs, NHS Bedfordshire, Luton & Milton Keynes, NHS Cambridge & Peterborough, NHS Hertfordshire & West Essex, NHS Mid & South Essex and NHS Suffolk & North East Essex.

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Appendices

East of England Region

Community Pharmacy SystmOne Patient Record Access Pilot

Service Level Agreement

NHS England and NHS Improvement

1 Parties to the agreement

1.1 **This agreement is between**

NHS England and NHS Improvement (the Commissioner)

NHS England and NHS Improvement East of England
Victoria House
Capital Park
Fulbourn
Cambridge
CB21 5XB

and the Provider (the Pharmacy)

Ferry Pharmacy
167 Ferry Road
Hullbridge
Essex SS5 6JH
Contractor ODS code: FY681

1.2 For the provision of services to test the concept and feasibility of community pharmacy having full access to the patient electronic record when delivering services.

1.3 By signing this Service Level Agreement (SLA) you are agreeing that you fully comply with the Terms of Service as outlined in the NHS (Pharmaceutical and Local Pharmaceutical Services) Regulations 2013 and agree to comply with the terms and conditions as outlined in this SLA.

1.4 Failure to comply with the full terms of this SLA may result in a withdrawal from the pilot. Before any withdrawal, the Pharmacy and Commissioner will discuss the reason for the withdrawal to identify any possible resolution to enable the Pharmacy to remain engaged with the pilot.

2 Purpose and scope

2.1 The need for improved communication between general practice and community pharmacy is often cited as an enabler to improve community pharmacy integration. Even though pharmacies have access to the patient summary care record they do not have full access to a patient's clinical record and do not have the ability to directly add information to the record, about community pharmacy services or interventions. Clinical services in community pharmacy are rapidly developing but the current methods of service referral and feedback rely on emails and having to upload shared information. The current pathways are deemed both inefficient and difficult to audit further supporting the need for a shared record.

2.2 NHS England East of England Region (EOE) are conducting a pilot that will provide community pharmacy with full access to the patient record currently held by general practice so they can, with patient consent, access the full record and then write into the record by template, Snomed code or free text . The record access will also allow

task functionality between a practice and pharmacy and in agreement allow access to appointment booking.

2.3 40 community pharmacies, across the region, will be given access to an individual SystmOne TPP Community Unit (the Unit) and be asked to use it, under the terms of this SLA. The aim of the pilot is that all 40 pharmacies will, as a minimum, have access to the unit for a 12-month period.

2.4 An evaluation of the impact of the electronic record access and functionality will be undertaken with the support of an evaluation partner. The evaluation will encompass both quantitative and qualitative measures including the experience of both pharmacy and general practice staff.

2.5 It is hoped that this independently evaluated pilot will inform future community pharmacy strategies at national, regional and Integrated Care Board (ICB) level.

2.6 This service agreement details how the Pharmacy should aim to utilise the SystmOne TPP Community Unit during the pilot.

3 Timescale

3.1 This agreement covers both the period of preparation for the SystmOne TPP Community Unit being installed and then using the unit for an aimed 12-month period and will run from 1st May 2022 to 31st July 2023.

3.2 As this is a pilot there might be unforeseen issues or delays that occur either prior to or after implementation. Where there are any delays that impact on the Unit being live for a minimum period of 12-months the commissioner may look to extend the terms of this agreement with the Pharmacy.

4 Obligations

4.1 The Pharmacy shall utilise the SystmOne TPP Community Unit in accordance with the service level agreement and ensure that all pharmacists and pharmacy staff are aware of the agreement.

4.2 The Pharmacy will ensure that those staff that have been nominated to have access to the Unit have completed the required training and the relevant Smartcard access has been assigned and granted.

4.3 Pharmacy staff must only ever access the Unit using the individual Smartcard issued to them and must not access it using any other Smartcard.

4.4 The Pharmacy will participate fully in the pilot evaluation as requested and detailed in this agreement.

4.5 The Commissioner will monitor and assure the SystmOne TPP Community Unit is used in accordance with the specification and support pharmacies where they are having issues or challenges using the Unit.

5 Standards

5.1 The service will be provided in accordance with the standards detailed in this agreement.

6 Eligibility criteria

6.1 All pharmacies participating in this pilot need to satisfy the following criteria to be eligible to take part in this pilot.

a) Have been invited by NHS England and NHS Improvement East of England region to take part in this pilot service.

b) Be compliant with the Essential Services elements of the Community Pharmacy Contractual Framework (CPCF).

c) Be delivering a number of Advanced Services

d) Be in good standing with NHS England and NHS Improvement and have met all GPhC standards at their last inspection.

e) Can comply with all the elements described in the service specification.

f) Have IT equipment, either desktop or laptop or both, fitted with a smart card reader that meets the minimum specification as set out in Appendix B

7 Unit Installation & Training

7.1 Installation

7.1.1. Prior to the SystmOne TPP Community Unit being ordered the Pharmacy will confirm with the commissioner the names of all the staff who will access the Unit and those staff that will act as Unit Administrators. Unit Administrators will be responsible for the day to day housekeeping of the Unit. It is advised that more than one person should be named to cover working shifts and staff absences.

7.1.2. The Pharmacy shall ensure that all staff that will be using the SystmOne Unit has a valid Smartcard. All staff using the Unit will be nominated an appropriate level of access which will be reflected in the rights on their Smartcard.

7.1.3. Information relating to staff roles and Unit Administrators shall be submitted to the commissioner on the staff template form in Appendix A.

7.1.4. The Pharmacy must ensure that they have either a desktop, laptop or both types of IT hardware available, that meets the criteria set out in Appendix B throughout the term of the service. The hardware to be used needs to have an attached Smartcard reader as access to the Unit will be via Smartcard only.

7.1.5. The SystmOne Unit is in essence a software application that will be linked to the providers ODS code and configured for local use. Once the Unit is ready it will need to be installed by the provider in line with the guidance provided in Appendix C. Arden and GEM Commissioning Support Unit (Arden and Gem CSU) will be available to offer advice and support to providers during installation and then throughout the term of the pilot.

7.1.6. During the term of this agreement TPP SystmOne and Arden and GEM CSU will be responsible for supporting the provider with any technical and user issues relating to the SystmOne Unit. The Pharmacy will be able to access support via the Arden and Gem help desk by calling the number given below. Please ensure that you select Option 3 – Essex as it is the Essex Arden and Gem CSU team that are supporting the pilot.

- **0300 123 1020 – Select Option 3 Essex**

7.1.7. Any issues relating to hardware and connectivity will remain the responsibility of the provider and or their hardware and internet suppliers.

7.2 Training

7.2.1. The provider shall ensure that all staff, who will be using the Unit, attend training. Training will be provided virtually by video links and live virtual sessions. Arden and Gem CSU will deliver the live sessions allowing for questions and queries to be raised. All staff using the Unit will need to attend the training sessions detailed below:

- ***Introduction to TPP SystmOne*** – 3 x short (circa 3 minute) You Tube videos introducing the system. These can be watched by staff individually or together prior to attending the live training.

- ***Using SystmOne in Community Pharmacy*** – A live virtual sessions with Arden and Gem CSU (see 7.2.3 for further details)

7.2.2. Those staff that are identified as Unit Administrators will also need to attend an additional training session to learn specifics about the role of an administrator. This training will follow the Pharmacy downloading their Unit and be conducted virtually by Arden and Gem CSU who will provide specific support on how to set up appointment rotas and run reports etc.

7.2.3. The provider will be given a schedule of training dates and times for the training sessions and will be responsible for booking their staff onto the sessions. Training sessions will be via a live webinar on MS Teams and will last about 1-1 ½ hours.

7.2.4. The provider will need to ensure that there is a suitable device that can be utilised for training in the pharmacy for the relevant training sessions. The device should allow for

full two-way communication, that is it should allow the participants to both see and hear the trainers and the trainers to both see and hear the participants.

7.2.5. Staff must attend the training sessions before their Smartcards can be given the relevant access to the SystmOne Unit. Arden and GEM CSU will ensure that recordings of the training sessions are made available, but these are for further reference only.

7.2.6. When new members of staff join the team and need to access the SystmOne Unit the provider will be responsible for contacting Arden and GEM CSU to arrange the relevant training and ensuring that they have a Smartcard with the necessary access.

8 Service Description

8.1 The pharmacy shall ensure that the SystmOne Unit is utilised as detailed in this section for setting up appointment rotas, accessing and recording clinically relevant data in patient records and tasking.

8.2 Appointment Scheduling

8.2.1. The Pharmacy are required to have appointment rotas set up on the Unit. These appointment schedules will be published to and accessed by the participating practices listed in 8.3.3. These practices will then be able to book a patient directly into an appointment with the Pharmacy when referring patients to the Community Pharmacist Consultation Service or any other agreed services.

8.2.2. The appointment rotas can also be used by the Pharmacy to book patients in for other Advanced Services, but they should always ensure that appointment slots are left available for practice referrals.

8.2.3. It is suggested that the Pharmacy make available a minimum of 4 appointments per day that can be accessed by the participating GP practices. It is at the discretion of the Pharmacy if they wish to offer more appointments. The appointments should be made available at various times during the day i.e. mid-morning, early afternoon, late afternoon therefore offering appointment access throughout the day.

8.2.4. Appointment rotas need to be set up at least 2 weeks in advance. If the Pharmacy wishes to set up appointment rotas further in advance it is at their discretion to do so. All scheduled rotas however should take into consideration the availability of the staff who will be delivering CPCS and any other advanced or pilot services where an appointment might be booked by the referring practice.

8.2.5. The Pharmacy should ensure that procedures are in place to make changes to appointment scheduling when there are unplanned staff absences or staff rota changes to ensure that appointments being offered can still be honoured.

8.2.6. Changes to the appointment rotas should be done as soon as possible and take into consideration any appointments already booked. In the event that an appointment needs to be cancelled this must be done as soon as possible with the community pharmacy having responsibility for contacting the patient. An alternative appointment should be offered to the patient.

8.2.7. Where an alternative appointment cannot be given the Pharmacy shall ensure that the cancellation is recorded in the patient record and the referring GP practice contacted and informed.

8.2.8. Appointment schedules need to be checked regularly throughout the day so booked appointments can be acknowledged, prepared for and the patient appropriately greeted.

8.2.9. Where a patient did not attend (DNA) an appointment this needs to be recorded appropriately in the patient record. The pharmacy then needs to follow any requirements set out in the relevant service guidelines for managing a DNA. For example, the CPCS service requires the community pharmacy to make one attempt to contact a patient who DNAs.

8.2.10. If following patient contact the patient fails to attend any subsequent appointment(s) this needs to be recorded as a DNA accordingly.

8.3 Accessing and Recording in Patient Records

8.3.1. Where a patient comes to the Pharmacy via an appointment booked by general practice directly into the Pharmacy appointment schedule, access to the patient record will be through the appointment screen. As the patient has agreed to the referral, no further consent is required.

8.3.2. Where a patient is not referred directly into the appointment schedule and is referred by another route or the patient is a “walk in” or has prescription issues, the patient record needs to be accessed through the registration pathway on the SystmOne Unit and patient consent gained.

8.3.3. The Pharmacy needs to check before accessing the Unit that the patient accessing services is registered at one of the following practices:

- Riverside Medical Centre ODS Code: F81061

8.3.4 Where the patient is not registered at one of the participating practices listed in 8.3.3 the Pharmacy cannot use the Unit. Services should continue to be delivered and recorded in the standard way as defined by any national requirements and existing pharmacy procedures.

8.3.5 Where a patient is registered with a listed practice the Pharmacy should confirm the patient's details and enter them onto the registration page of the Unit. The system will then automatically request that patient consent is gained and recorded accordingly.

8.3.6 Where a patient does not consent to sharing information with the general practitioner, the refusal of consent should be recorded accordingly on the Unit and then no further records made. Services should then be delivered and recorded in the standard way as defined by any national requirements and existing pharmacy procedure.

8.3.7 Where consent is gained the Pharmacy can proceed to the patient journal and the community pharmacy template on the Unit. Through the template the Pharmacy will be able to record any relevant patient and service.

8.3.8 The Pharmacy shall ensure that all staff accessing the SystmOne Unit do so in accordance with the training provided and use the relevant drop downs, pre-set text and tick boxes on the template, as relevant, to complete a record for the relevant encounter.

8.3.9 The general community pharmacy consultation template has been designed to record a number of different services and patient encounters so there is not a requirement to complete all the boxes on the template, only those applicable to the service being delivered should be completed.

8.3.10 More specific templates have been designed to record Hypertension Case Finding, New Medicines Service and the Infected Insect & Sting PGD Pilot.

8.3.11 The drop downs and pre-set text descriptions are linked to Snomed codes that support patient recording and care. <u>All record entries must be short and succinct.</u>

8.3.12 The Pharmacy are not required to record every interaction with patients under this pilot. They should however attempt to record the services listed below as standard, where the Pharmacy is offering the service, for patients registered with any of the participating practices:

- GP CPCS Consultations
- CPCS NHS 111 Consultations
- Clinically Significant Walk in Consultations
- Hypertension Case Finding
- New Medicines Service
- Infected Insect & Sting PGD Pilot if commissioned
- Oral Contraceptive Medicines Service (OCMS)Pilot*

**Pharmacies involved in this pilot will be invited to take part in the national OCMS Pilot*

8.3.13 The Pharmacy should also consider utilising the Unit for other services being delivered to patients of the participating practices. These include:

- Medication Interventions
- Emergency Supplies
- Emergency Hormonal Contraception
- Smoking Cessation – Local Service
- Smoking cessation – Hospital Initiated
- Chlamydia Screening

8.3.14 Once the patient is registered on the pharmacy SystmOne Unit they will remain as a registered patient either for a limited period or until the pharmacy closes the patient registration.

8.3.15 While the patient is registered on the Pharmacy Unit full access to the record will remain and any relevant follow up can be monitored.

8.3.16 Where the patient registration has been initiated via the practice booking an appointment the patient record will remain open for 7 days before automatically closing. This period should be sufficient to do any follow up that might be required.

8.3.17 Where the patient registration has been initiated by the pharmacy the registration will remain open indefinitely until the pharmacy closes it. If there is no follow up needed, following the record entry, the Pharmacy should close the registration after they have made their entry. If follow up is required, then the patient registration should remain open only until the Pharmacy is satisfied that all follow up is completed. For example, with a New Medicines Service the patient should remain registered until the final stage of the service has been completed.

8.3.18 Flow charts detailing how the SystmOne Unit should be used is detailed in Appendix D.

8.4 Task Function

8.4.1 The task function on the Unit provides another way for the Pharmacy to communicate with the relevant GP practice and should be utilised throughout the pilot where appropriate.

8.4.2 The task function should however only be used where there is a need for the GP practice to take action or need to be alerted to actual or possible issues of clinical importance.

8.4.3 Prior to the task function being utilised there is need for a local agreement with the GP Practices listed in 8.3.3 regarding where tasks, generated by the Pharmacy, should be sent. This is to ensure that tasks are routinely picked up by the practice and noted or

actioned accordingly. The Commissioner will facilitate these agreements and confirm in writing to the Pharmacy the local tasking arrangements.

8.4.4 Where a patient accesses a pharmacy service and consents to records access, the community pharmacy template will provide pre-scripted or free text task options directly linked to the patient record.

8.4.5 Where the patient has not directly accessed a pharmacy service and consented to records access, the Unit can still be used to task a participating GP practice but the patient name and DOB or NHS Number would need to be included in the task being sent. It is noted that a patient record should not be accessed, without consent, in order to send a task.

9 Indemnity

9.1 Pharmacy Contractors should ensure that this service, and all clinical professionals and other staff working within it are covered by appropriate indemnity.

9.2 Pharmacy Contractors must ensure they have adequate commercial insurance in place to cover all liabilities (e.g. public and employers).

10 Data and information management

10.1 All parties shall adhere to applicable data protection legislation including the General Data Protection Regulation 2018 and to the Freedom of Information Act 2000. The requirement for confidentiality will be balanced with the needs of the person accessing the service.

10.2 The Pharmacy should ensure that they have completed the latest Data Security & Protection Toolkit prior to sign up to this service.

10.3 The Pharmacy must maintain their registration with the Information Commissioners Office (ICO) and provide registration details if requested by the commissioner.

10.4 The Pharmacy will be required to complete sign off of a Data Protection Impact Assessment (DPIA) and a data sharing agreement which will cover the sharing of information between the Pharmacy and the relevant GP practices during the pilot.

10.5 The Caldicott Guardian, Senior Information Risk Officer (SIRO) or nominated Information Governance Lead of the Pharmacy will be required to sign the TPP Confirmation to turn on SystmOne Sharing Agreement in order to process the ordering of the Unit- Appendix A

11 Review and evaluation

11.1 As this is a pilot the Commissioner will be monitoring the use of the community pharmacy SystmOne Units throughout the pilot.

11.2 The pilot is being independently evaluated to identify the benefits of community pharmacy having full access to the patient record and the impact on patient care. The Pharmacy is therefore required to participate in the evaluation by taking part in a pre and post go live questionnaire/survey.

11.3 A number of (not all) community pharmacists will be invited to participate in a 45 – 60 min virtual/telephone interview. Those pharmacists that participate will be reimbursed for their time as outlined in section 12

12 Payments

12.1 Payments under this agreement are summarised in the table below:

Payments	
Pharmacy set up costs	One-off payment of **£500**
Participation in evaluation	One-off participation payment of **£75** per pharmacy premises when an associated pharmacist participates in a face to face (virtual) evaluation interview

12.2 All pharmacies involved in this pilot will be eligible to a one-off payment of £500 to recognise the preparation and staff training required prior to the Unit being set up.

12.3 A further £75 will be paid to those pharmacists who are both invited and take part in a more in-depth face to face (virtual) evaluation interview. These interviews will seek to explore further the experience of the pharmacy and the benefits and challenges of having full access to the patient record.

12.4 As payment for this pilot does not fall in line with payments listed in the Drug Tariff the Commissioner is unable to make direct payments for this pilot via the normal payment route via the BSA.

12.5 Payment will therefore be made by either of the payment routes detailed below.

12.5.1 The Pharmacy submits an invoice to the Commissioner for the payment to be made directly by the Commissioner. It is noted that an invoice template will be supplied to pharmacies choosing this option which will clearly identify all the information required to process the invoice.

12.5.2 Where the Pharmacy chooses to sign up to either the national Oral Contraception Medicines Service (OCMS) Pilot or the local Infected Insect & Sting PGD Pilot the Pharmacy if commissioned will be paid in the normal manner via the BSA.

13 Termination and notice period

13.1 As this is a pilot service being evaluated the Pharmacy will not be able to terminate this agreement. In the event that the Pharmacy is facing challenges using the SystmOne Community Unit for any period during the pilot these challenges should be discussed with the Commissioner. If a resolution cannot be found there will be an agreement to either reduce the use of the Unit or to completely stop use of the Unit for a mutually agreed period of time. The challenges and agreed actions will be noted and form part of the evaluation.

13.2 The Commissioner reserves the right to suspend or terminate this agreement forthwith if there are reasonable grounds for concern including, but not limited to, IG breaches, malpractice, negligence, or fraud on the part of the pharmacy.

14 Sign Up Process

14.1 To sign up to the pilot the Pharmacy needs to complete the two forms included in Appendix A, which are:

- Sign up and Staff Information Form
- TPP Confirmation to turn on SystmOne Sharing Agreement

14.2 If a Superintendent, Director or Owner of the Pharmacy is not the person completing the Sign up form they should be authorising the forms completion and submission.

14.3 The TPP Confirmation to turn on SystmOne Sharing Agreement should be completed and signed by a Caldicot Guardian if the Pharmacy has one, if not it needs to be signed by the nominated Information Governance Lead for the Pharmacy.

14.4 Once completed the forms need to be returned by email to england.pharmacyitpilot@nhs.net

Appendix A

Final Sign Up & Staff Info Form.docx

TPP Confirmation to turn on SystmOne Sharing Agreement

Confirmation to turn on SystmOne S

Appendix B

This is a standard TPP document that references practices, but the same minimum specification applies to this pilot and to the community pharmacies engaged.

TPP Minimum System Specification

Appendix C

Installing SystmOne (006).pdf

Appendix D

Patient Self Referral Pathway V4.docx

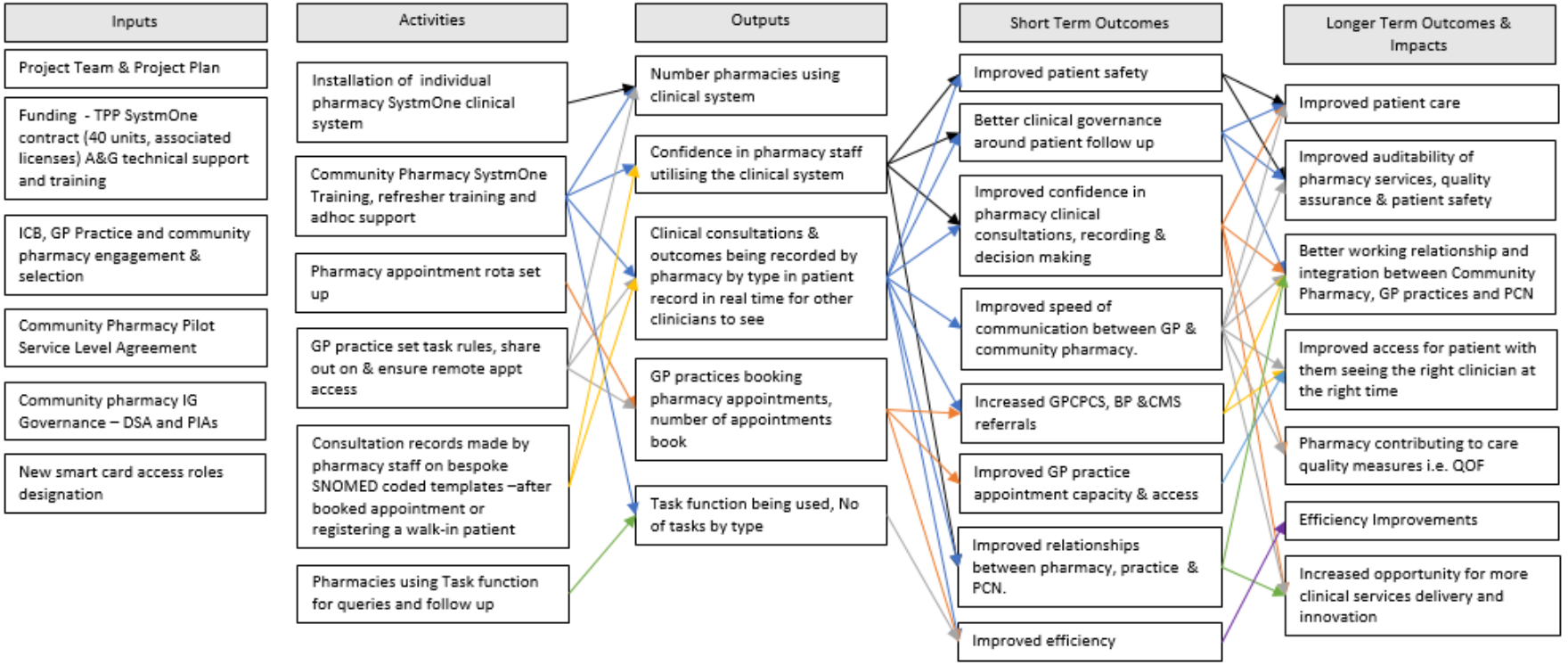
GP Referral Pathway Final.docx

Appendix 2. Logic Model

Background & Rationale: NHS E East of England are piloting a scheme across the region to provide community pharmacies read and write access to consenting patients' primary care records. Community pharmacies and GP practices will also be able to send each other tasks via the system, and where permission is given, book appointments for patients in each other's settings.

Aim & Objectives: The pilot aims to improve integrated working between GP practice teams and community pharmacies by providing an audit trail of activity where patients have been referred from one setting to another or self-referred into a pharmacy service.

The evaluation aims to test: Feasibility measured by levels of pharmacy & patient uptake, No. of tasks referred & completed, No. of appts, changes made to records via templates; How acceptable this way of working is to community pharmacists, community pharmacy technicians, practice pharmacists, GPs, primary care nurses and practice receptionists; and proof of concept.



Assumptions:

- The new system will be more efficient than the previous system where follow up information and/or referrals are sent via phone, e-mail or by asking patients to make appointments directly – with no way of primary care professionals following up on activity post-referral.
- Pharmacies who stated they are willing to participate are happy to complete double recording.
- GP Practices will engage with the project.
- Staff & Patients will be willing and consent to allow uptake.
- Pharmacies have access to an HSCN network or use SystmOne Internet. SystmOne Internet implemented during the pandemic, assumed this will continue to be available to pharmacies without HSCN

Contextual Influences:

- PSNC issued advice to pharmacies to not take on any extra work without compensation (may have stopped pharmacies from agreeing to partake). Government has now put additional funding into community pharmacy and general practice to improve access.

Appendix 3. Data relating to activities undertaken by pharmacies and general practices as part of the pilot

KPI	Comments
Task Function	
Number of Pharmacy to GP Tasks - Prescription Query	Pharmacies only have access to patient records with patient consent, therefore limiting the use of the task function for prescription queries.
Number of Pharmacy to GP Tasks - Prescription Query Actioned	Pharmacies only have access to patient records with patient consent, therefore limiting the use of the task function for prescription queries.
Number of Pharmacy to GP Tasks - Consultation Follow Up	
Number of Pharmacy to GP Tasks - Consultation Follow Up Actioned	
Number of Pharmacy to GP Tasks - Other	
Number of Pharmacy to GP Tasks - Other Actioned	
Number of GP to Pharmacy Task - Prescribing/Medication Query	Pharmacies only have access to patient records with patient consent, therefore limiting the use of the task function for prescription queries.
Number of GP to Pharmacy Task - Prescribing/Medication Query Actioned	Instances where pharmacies had actioned tasks but failed to mark as complete was found upon review, potentially impacting reporting of this metric.
Number of GP to Pharmacy Task - Other	
Number of GP to Pharmacy Task - Other Actioned	
Number of Pharmacy to GP tasks relating to NMS recorded	Only reported by one pharmacy.
Number of Pharmacy to GP tasks relating to NMS - Actioned	Only reported by one pharmacy.
Commissioned Core Services	
Self Care/Sign Posting/Promoting Health Lifestyle	
Number of clinically significant pharmacist Consultations Recorded (non CPCS) -Self Care Advice/ Sign Posting/Promoting Health Lifestyle	Recorded information from consultations deemed clinically significant but unlikely to make into the clinical patient record under normal circumstances due to no current mechanism or requirement to share this information
DMS	

Number of DMS consultations recorded on patient records	There was no specific DMS template developed as part of the pilot.
Commissioned Advanced Services	
Booked Appointments at GP Practice (Remote Booking)	Appointments were note coded by type, therefore these cannot be broken down by service.
Number of GP Booked Appointments that ended in a DNA	Appointments were not coded by type, therefore DNAs could not be distinguished.
GP CPCS	
Number of GP CPCS Consultations Recorded	We will look at pre pilot rates and provide these also alongside national activity. Without the system these consultation notes would have been sent by email and it would be dependent on the GP practice to put into the patient record.
Number of referrals to GP following GP CPCS consultation	High level of referral back to GP from Masters this has not been explored as practice could have been sending wrong patient type.
CPCS (referrals from NHS 111)	
Number of CPCS referrals recorded	
Number of CPCS Minor Illness Consultations Recorded	
Number of CPCS Urgent Supply Services Recorded	Good volumes of this service with the record going directly into the patient records rather than relying on NHS mail.
Hypertension Case Finding	
Number of BP referrals from GP *(this would not necessarily by a booked appointment as different local referral routes)*	Measured by referral source report which relies on the pharmacy to tick referral or self-referral.
Number of BP services that were self-referral or pharmacy identified	Measured by referral source report which relies on the pharmacy to tick referral or self-referral.
Hypertension cases either GP referred or self-referred where a BP reading was recorded (does not include those BPs taken outside the BP Check Advanced Service)	
NMS	
Number of NMS referred by GP	
Number of the NMS checks recorded on patient records	

Number of NMS with intervention recorded	Under current processes, this data is shared via email only which is then uploaded manually by the GP practice.
Contraceptive Medicines Service	
Number of Oral Contraceptive Repeat Consultations	
QOF Measures	
Number of patient BP measures recorded (outside BP check service) - DM019 BP002	These BPs will have been taken within consultations outside of the BP/Hypertension Service.
Number of patient BMIs recorded - OB002	
Number of patient smoking status recorded - SMOK002/5	
Number of smoking cessation or brief intervention services recorded - SMOK004	
NOT REPORTED	
KPI	**Comments**
Number of patient dissent to record access	This data was not extractable
Reason for refusal recorded at the time of refusal	This data was not extractable
Number of Pharmacy to GP tasks relating to GP CPCS recorded	A task category called GP CPCS was created but not used by pharmacists, and is reported within the total number of pharmacy to GP tasks and not reported separately.
Number of Pharmacy to GP Tasks relating to GP CPCS - Actioned	A task category called GP CPCS was created but not used by pharmacists, and is reported within the total number of pharmacy to GP tasks and not reported separately.
Number of Pharmacy to GP tasks relating to CPCS recorded	Any CPCS (NHS111) will be included in consultation tasks.
Number of Pharmacy to GP Tasks relating to CPCS - Actioned	Any CPCS (NHS111) will be included in consultation tasks.
Number of BP referrals directly book via remote booking	Appointments available to GP Practices were note coded by type
Number of NMS directly book via remote booking	Appointments available to GP Practices were note coded by type
Number of CMS directly book via remote booking	Appointments available to GP Practices were note coded by type
Number of the long term CMS services (Advanced and Tier 2 pilot) recorded on patient records	Not applicable. This service was a national pilot during the term of the IT pilot, therefore is not yet an established service.

Number of referrals to GP following CMS consultation	Not applicable
Number of Emergency Hormonal Contraception (EHC) recorded	Not applicable
Hypertension Case Finding - Number of urgent referrals (24 hour) to GP or other service (UEC or OOHs) recorded	
Hypertension Case Finding - Number of non-urgent referrals (3 weeks) to GP recorded	

Appendix 4. Survey questions

Table 1. Pharmacy pre survey

Q1	Role
Q2	Pharmacy Name
Q3	On an average day how many times, in total, does the pharmacy contact the practices listed in the accompanying email (only those involved in the pilot) regarding patient services, care, treatment and prescription queries? Please consider all types of contact. [Phone], [Email], [Shared electronic platform], [Other], [Please state other mode(s) of contact:]
Q8	How much time does the pharmacy currently spend, in total, contacting or sending information to the listed practices in the following ways per day?(Please note time options go up to 121+ minutes, if not visible on your screen please ensure you scroll across, using the bar beneath "other", if required)
Q9	On an average day how many times is the pharmacy contacted by the listed practices, regarding patient services, care, treatment and prescription queries? Please consider all types of contact:
Q10-14	How much time, in total, does the pharmacy spend dealing with incoming communications from the listed practices on average per day? (Please note time options go up to 121+ minutes, if not visible on your screen please ensure you scroll across, using the bar beneath ""other"", if required) [Phone], [Email], [Shared electronic platform], [Other], [Please state other mode(s) of contact:]
Q15	How does the pharmacy currently receive General Practice Community Pharmacy Consultation Service referrals? Please tick all relevant options.
Q16-17	How easy does the pharmacy currently find picking up and managing referrals to the Community Pharmacist Consultation Service from the listed practices?1: Not at all easy 2: Not easy 3: Neither easy nor difficult 4: Easy 5: Very Easy [Level of agreement:] [Please explain the reason(s) for your answer:]
Q18-22	On an average day how many times do you use the resources listed below to inform your clinical decision making when delivery patient services, care and treatment? [Summary Care Record], [Clinical Knowledge Summaries], [NICE Guidance], [Other (Please provide details below)], [Please provide details of other resources here:]
Q23	Does the pharmacy currently use a formal appointment booking schedule/system for patients to support the delivery of advanced services such as GP CPCS, NMS and Hypertension Case Finding?
Q24	What are the positives to the current two-way communications between the pharmacy and listed practices, please detail below:
Q25	What are the negatives of the current two-way communications between the pharmacy and listed practices? Please detail below:
Q26	Prior to signing up to this pilot what was the confidence level of the pharmacy in creating clinical patient records?1: Not at all confident 2: Not confident 3: Neither confident nor unconfident 4: Confident 5: Very confident
Q27	What do you as a pharmacy want to gain from this pilot?
Q28	What concerns, if any, does the pharmacy have about this pilot?

Table 2. Pharmacy post survey

Q1	Role
Q2	Pharmacy Name
Q3	On an average day how many times in total does the pharmacy contact the practices listed in the accompanying email (only those involved in the pilot) regarding patient services, care, treatment and prescription queries? Please consider all types of contact.
Q4-9	How much time per day does the pharmacy currently spend contacting or sending information to the listed practices in the following ways? [Phone], [Direct NHS Email], [IT platform such as PharmOutcomes, Sonar], [TPP SystmOne Clinical System], [Other], [Other] Please state other mode(s) of contact:
Q10	On an average day how many times is the pharmacy contacted by the listed practices, regarding patient services, care, treatment and prescription queries?Please consider all types of contact:
Q11-17	How much time per day does the pharmacy spend dealing with incoming communications from the listed practices on average? Please do not include actual consultation time in your calculation. [Phone], [Email], [IT platform such as PharmOutcomes], [TPP SystmOne Clinical System – Appointment Management], [TPP SystmOne Clinical System –Tasks], [Other], [Other] Please state other mode(s) of contact:
Q18-22	How much time does the pharmacy spend on an average day writing advanced services clinical notes and /or service outcome reports for General Practice. Please include only the time spent on the administration of this. Please do not include consultation time or time spent preparing service payment claims. [Direct NHS Mail], [PharmOutcomes, Sonar or similar pay provider platform], [TPP SystmOne Clinical System], [Other], [[Other] Please state other mode(s) of contact:]
Q23-24	To what extent do you agree that the TPP SystmOne Clinical System has improved communications between the pharmacy and practice(s)? (1 = Strongly Disagree, 2 = Disagree, 3 = Neither Disagree or Agree, 4 = Agree, 5 = Strongly Agree) [Level of agreement:] [Please explain the reason(s) for your answer:]
Q25-26	To what extent do you agree that the TPP SystmOne Clinical System has improved the relationship between the pharmacy and practice(s) (1 = Strongly Disagree, 2 = Disagree, 3 = Neither Disagree or Agree, 4 = Agree, 5 = Strongly Agree) [Level of agreement:] [Please explain the reason(s) for your answer:]
Q27-28	Since being part of the pilot, how does the pharmacy receive General Practice Community Pharmacy Consultation Service (GP CPCS) referrals? [Please tick all that apply.] [Please state other mode(s) of referral:]
Q29-32	For [NHS Mail], [Pharmrefer], [GP booked appointments via the TPP SystmOne Appointment Rota], ['other'] please select how easy you find picking these referrals up and managing them?(1 = Not at all easy, 2 = Not easy, 3 = Neither easy nor difficult, 4 = Easy, 5 = Very easy)
Q33-37	Have the associated practices used the pharmacy's TPP SystmOne Appointment Rota to refer patients for any of the following advanced services? [Hypertension Case Finding], [Contraception Services], [NMS], [Other], [[Other] For 'Other', please specify below:]
Q38	Has the pharmacy used the TPP SystmOne Appointment Rota internally to support delivery of any of the following mandatory and advanced services? [Hypertension Case Finding], [Contraception Services], [NMS], [Other]

Q42-43	To what extent do you agree that the pharmacy has found the TPP SystmOne appointment function beneficial?(1 = Strongly Disagree, 2 = Disagree, 3 = Neither Disagree or Agree, 4 = Agree, 5 = Strongly Agree) [Level of agreement:] [Please explain the reason(s) for your answer:]
Q44	Has there been any positive or negative feedback from patients regarding pharmacy appointments being offered?
Q45-51	Has the pharmacy used the TPP SystmOne Task Function to support delivery of any of the following mandatory and advanced services? Please select all that apply. [Hypertension Case Finding], [Contraception Services], [NMS], [DMS], [CPCS], [Prescription Queries], [Other]
Q52-53	To what extent do you agree that the pharmacy has found the TPP SystmOne Task Function beneficial? (1 = Strongly Disagree, 2 = Disagree, 3 = Neither Disagree or Agree, 4 = Agree, 5 = Strongly Agree) [Level of agreement:] [Please explain the reason(s) for your answer:]
Q54-55	Overall, how satisfied were you with the face to face SystmOne training? (1 = Very Dissatisfied , 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied 5 = Very Satisfied) [Level of agreement:] [Please explain the reason(s) for your answer:]
Q56-57	Overall, how satisfied were you with the bite size recorded training clips issued? (1 = Very Dissatisfied , 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied 5 = Very Satisfied) [Level of agreement:] [Please explain the reason(s) for your answer:]
Q58-59	How confident do you feel the pharmacy is in making clinical patient records on the TPP SystmOne Clinical System? (1 = Not at all confident, 2 = Not confident, 3 = Neither confident nor unconfident , 4 = Confident, 5 = Very confident) [Level of agreement:] [Please explain the reason(s) for your answer:]
Q60-61	To what extent do you agree that having the TPP SystmOne Clinical System has improved the delivery of patient services and care? (1 = Strongly Disagree, 2 = Disagree, 3 = Neither Disagree or Agree, 4 = Agree, 5 = Strongly Agree) [Level of agreement:] [Please explain the reason(s) for your answer:]
Q62-63	To what extent do you agree that having the TPP SystmOne Clinical System has improved clinical decision-making at the pharmacy when delivering patient care and treatment? (1 = Strongly Disagree, 2 = Disagree, 3 =Neither Disagree or Agree, 4 = Agree, 5 = Strongly Agree) [Level of agreement:] [Please explain the reason(s) for your answer:]
Q64	What has the pharmacy gained from using the TPP SystmOne Clinical System?
Q65	What other feedback or comments would the pharmacy like to make about community pharmacy having full clinical records access or on the pilot in general?

Table 3. GP pre survey

Q1	Role
Q2	Practice Name
Q3	On an average day how many times, in total, does the practice contact the community pharmacies listed in the accompanying email (only those involved in the pilot) regarding patient services, care, treatment and prescription queries? Please consider all types of contact.
Q4-8	How much time does the practice currently spend, in total, contacting the listed community pharmacies in the following ways per day?(Please note time options go up

	to 121+ minutes, if not visible on your screen please ensure you scroll across, using the bar beneath "other", if required) [Phone], [Email], [Shared electronic platform], [Other], [Please state other mode(s) of contact here:]
Q9	On an average day how many times is the practice contacted by the listed community pharmacies, regarding patient services, care, treatment and prescription queries? Please consider all types of contact:
Q10-14	How much time does the practice spend dealing with incoming communications from the listed community pharmacies per day? (Please note time options go up to 121+ minutes, if not visible on your screen please ensure you scroll across, using the bar beneath "other", if required) [Phone], [Email], [Shared electronic platform], [Other], [Please state other mode(s) of contact:]
Q15	Community Pharmacy currently communicates the outcome of Advanced Services, such as GP CPCS and Hypertension Case finding, by email to general practice, how are these emails currently dealt with by the practice: Please select the option closest to your current procedure.
Q16	Does the practice currently make referrals to the Community Pharmacists Consultation Service
Q17	How does the practice currently make referrals to the Community Pharmacist Consultation Service?
Q18	Please detail why referrals to the Community Pharmacist Consultation Service are not currently being made:
Q19	How easy is it making referrals to the Community Pharmacist Consultation Service? 1: Not at all easy 2: Not easy 3: Neither easy nor difficult 4: Easy 5: Very Easy
Q20	What are the positives to the current two-way communications between the practice and listed community pharmacies? Please detail below:
Q21	What are the negatives of the current two-way communications between the practice and listed community pharmacies? Please detail below:
Q22	What do you as a practice want to gain from this pilot?
Q23	What concerns, if any, does the practice have about this pilot?

Table 3. GP post survey

Q1	Role
Q2	Practice Name
Q3	On an average day how many times in total does the practice contact the community pharmacies listed in the accompanying email (only those involved in the pilot) regarding patient services, care, treatment and prescription queries?Please consider all types of contact.
Q4-10	How much time per day does the practice currently spend contacting the listed community pharmacies in the following ways? [Phone], [Email], [IT platform such as PharmOutcomes], [Tasks via TPP SystmOne Clinical System], [Booking Pharmacy Appointments via remote TPP SystmOne Clinical System], [Other], [[Other] Please state other mode(s) of contact:]

Q11	On an average day how many times is the practice contacted by the listed community pharmacies, regarding patient services, care, treatment and prescription queries?Please consider all types of contact:
Q12-17	How much time per day does the practice spend dealing with incoming communications from the listed community pharmacies? [Phone], [Email], [IT platform such as PharmOutcomes, Sonar (MESH)], [Tasks via TPP SystmOne Clinical System], [Other], [[Other] Please state other mode(s) of contact:]
Q18-19	To what extent do you agree that the TPP SystmOne Clinical System has improved communications between the practice and pharmacy/pharmacies? (1 = Strongly Disagree, 2 = Disagree, 3 = Neither Disagree or Agree, 4 = Agree, 5 = Strongly Agree) [Level of agreement:] [Please explain the reason(s) for your answer:]
Q20-21	To what extent do you agree that the TPP SystmOne Clinical System has improved the relationship between the practice and the pharmacy/pharmacies? (1 = Strongly Disagree, 2 = Disagree, 3 = Neither Disagree or Agree, 4 = Agree, 5 = Strongly Agree) [Level of agreement:] [Please explain the reason(s) for your answer:]
Q22	Does the practice currently make referrals to the Community Pharmacists Consultation Service? (GP CPCS)
Q23-24	How does the practice currently make referrals to the Community Pharmacist Consultation Service? (GP CPCS) [Please tick all that apply.] [Please state other mode(s) of referral:]
Q25	Please detail why referrals to the Community Pharmacist Consultation Service (GP CPCS) are not currently being made:
Q26-29	For [NHS Mail], [PharmOutcomes/Similar IT Platform], [Booking patients into Pharmacy Appointments via TPP SystmOne Clinical Records System], [Other] please select how easy you find making referrals? (1 = Not at all easy, 2 = Not easy, 3 = Neither easy nor difficult, 4 = Easy, 5 = Very easy)
Q30-34	Has the practice used the pharmacy's TPP SystmOne Appointment Rota to refer patients for any of the following advanced services? [Hypertension Case Finding], [Contraception Services], [New Medicine Service], [Other], [[Other] Please state other mode(s) of service:]
Q35-36	To what extent do you agree that the practice has found having access to community pharmacy appointments beneficial?(1 = Strongly Disagree, 2 = Disagree, 3 = Neither Disagree or Agree, 4 = Agree, 5 = Strongly Agree) [Level of agreement:] [Please explain the reason(s) for your answer:]
Q37	Have you received any positive or negative feedback from patients when they have been offered a booked appointment with the pharmacy?Please detail below:
Q38-44	Has the TPP SystmOne Task Function been used between the pharmacy and practice to support delivery of any of the following mandatory and advanced community pharmacy services? [Hypertension Case Finding], [Contraception Services], [NMS], [CPCS either (NHS 111 or GP)], [Prescription Queries], [Other], [[Other] For 'Other', please specify below:]
Q45-46	To what extent do you agree that the practice has found the TPP SystmOne Task Function between the practice and pharmacy beneficial? (1 = Strongly Disagree, 2 = Disagree,3 = Neither Disagree or Agree, 4 = Agree, 5 = Strongly Agree) [Level of agreement:] [Please explain the reason(s) for your answer:]
Q47-48	To what extent do you agree that it has been beneficial having Community Pharmacy Clinical Service records directly recorded into the electronic patient record.(1 = Strongly

	Disagree, 2 = Disagree, 3 = Neither Disagree or Agree, 4 = Agree, 5 = Strongly Agree) [Level of agreement:] [Please explain the reason(s) for your answer:]
Q49	What has the practice gained from having the pharmacy/ pharmacies on the same clinical records system?
Q50	What other feedback or comments would the practice like to make about community pharmacy having full clinical records access or the pilot in general?

Appendix 5. Interview topic guides

Topic guide for pharmacy round 1 interview

1. Please can you describe your role in the pharmacy and your involvement in the Community Pharmacy Clinical Record System (SystmOne) pilot?
2. Please can you share any reflections you have about your experiences of downloading and installing the SystmOne Clinical Records Unit?
   Has the pharmacy used the SystmOne Clinical Records Unit for appointment booking and/or recording any patient consultations and services?

For those who answer "NO" to the above

4a What are the reasons for the pharmacy not implementing the use of the clinical records unit?

5a Can you identify any support, assistance or any other enabler that would enable you to implement the use of the system?

For those who answer "YES"

4b Can you tell me how it has been used and what has been recorded?

5b Based on the pharmacies experience, what, if any, have been the enablers or barriers to implementing the clinical records system/processes in the pharmacy?

6b We asked in the pre live survey, about the pharmacies hopes, expectations and concerns about the pilot, can you tell me more about:

   a. Did you have any hopes and expectations and reflect on theses being met so far?
   b. Did you have any concerns about the pilot and reflect on these so far.

7 How have you found using the clinical system and the community pharmacy templates?

8a What have been the positives so far of:

   1. The appointment rota
   2. Accessing and recording in patient clinical records

8b What have been the negatives so far of:

   1. The appointment rota
   2. Accessing and recording in patient clinical records

8c What other functionality of the system has the pharmacy used that has proved useful so far?

9 Since using the clinical records system have interactions and communications with the GP Practices involved changed? If yes, what are the changes?

10 Have any patients refused you access to their records in order to carry out a consultation?

And where there any that then did not want the outcome their consultation to be shared with their GP practice?

   a. If yes ……What were the reasons given for the refusal
   b. Have you had any other feedback from patients?

11.Do you have any suggestions for how the pilot could be improved?

   a. Anything to increase pharmacy and practice engagement.
   b. Anything to increase likelihood of success.
   c. Anything that would help improve any future scale up and sustainability

Topic guide for general practice round 1 interviews

1. Please can you describe your role in the pharmacy and your involvement in the Community Pharmacy Clinical Record System (SystmOne) pilot?

2. Please can you share any reflections you have about your experiences of downloading and installing the SystmOne Clinical Records Unit?

3. Has the pharmacy used the SystmOne Clinical Records Unit for appointment booking and/or recording any patient consultations and services?

For those who answer "NO" to the above

4a What are the reasons for the pharmacy not implementing the use of the clinical records unit?

5a Can you identify any support, assistance or any other enabler that would enable you to implement the use of the system?

6a Do you have any questions or anything else that you would like to add?

For those who answer "YES" to Q4

4b Can you tell me how it has been used and what has been recorded?

5b Based on the pharmacies experience, what, if any, have been the enablers or barriers to implementing the clinical records system/processes in the pharmacy?

6b We asked in the pre live survey, about the pharmacies hopes, expectations and concerns about the pilot, can you tell me more about:

   a. Did you have any hopes and expectations and reflect on theses being met so far?
   b. Did you have any concerns about the pilot and reflect on these so far.

7 How have you found using the clinical system and the community pharmacy templates?

8a What have been the positives so far of:

   1. The appointment rota
   2. Accessing and recording in patient clinical records

8b What have been the negatives so far of:

   1. The appointment rota
   2. Accessing and recording in patient clinical records

8c What other functionality of the system has the pharmacy used that has proved useful so far?

9 Since using the clinical records system have interactions and communications with the GP Practices involved changed? If yes, what are the changes?

10 Have any patients refused you access to their records in order to carry out a consultation?

And where there any that then did not want the outcome their consultation to be shared with their GP practice?

   c. If yes ……What were the reasons given for the refusal
   d. Have you had any other feedback from patients?

11. Do you have any suggestions for how the pilot could be improved?

d. Anything to increase pharmacy and practice engagement.
e. Anything to increase likelihood of success.
f. Anything that would help improve any future scale up and sustainability.

Topic guide for pharmacy round 2 interviews

1. To aid our analysis please can you briefly describe your role in the pharmacy and your involvement in the Community Pharmacy Clinical Record System pilot?

2. Please can you describe your experiences of using the SystmOne Clinical Records Unit during the pilot?

3. Please can you describe how implementing the system has changed how you contact the GPs? How has this impacted time spent in contacting GPs? How has it impacted the relationship between pharmacy and GP practice?

4. Has your use changed over the pilot phase, and if so, how has it changed?

5. What, if any, have been the enablers or barriers to using the clinical records system/processes in the pharmacy?

6. How has implementing the Community Pharmacy Clinical Record System impacted the patient pathway?

7. What have been the impacts of implementing the system?

8. What would you identify as the main benefits of the Community Pharmacy Clinical Record System?

9. What have been the main challenges or limitations to using the system?

10. Have you received any feedback from patients? Please can you describe this?

11. Were there any functions/services not on the system that you would have liked to see included, or any improvements to the services/functions that were included in the system?

12. What have you taken from the pilot that you would like to see in future strategies or thinking around ways of working?

13. Person specific question(s) Check surveys and add in questions if anything needs clarifying, confirming or exploring more fully from their previous responses and feedback

14. Is there anything else you would like to tell us about?

Topic guide for general practice round 2 interviews

1. To aid our analysis please can you briefly describe your role in the practice and your involvement in the Community Pharmacy Clinical Record System pilot?

2. Please can you describe your experiences of using the SystmOne Clinical Records Unit during the pilot?

3. Did the pilot affect how you communicated with the pharmacies involved?

4. During the course of the pilot did your level of engagement change?

5. What, if any, have been the enablers to implementing the clinical records system pilot?

6. How has implementing the Community Pharmacy Clinical Record System pilot impacted the patient pathway?

8. What would you identify as the main benefits of this pilot for your practice?

9. What have been the main challenges or limitations to implementing this pilot?

10. Have you received any feedback from patients who have had an appointment booked in with a pharmacist? Please can you describe this?

11. Were there any services on the system that were not used in the pilot that you would have liked to have seen included?

12. What have you taken from the pilot that you would like to see in future strategies or thinking around ways of working? Any suggestions for how adoption and implementation could have been improved?, for how engagement from pharmacy and practices may have been improved?, anything that would help inform any future scale up and sustainability?

13. Person specific question(s) Check surveys and add in questions if anything needs clarifying, confirming or exploring more fully from their previous responses and feedback

14. Is there anything else you would like to tell us about that we have not already mentioned?