



 **UCLPartners**

Outpatient Medicines Pathway Transformation Phase One Report

Authors: Emily Ward, Pharmacy Clinical Lead; Mandeep Butt, Clinical Medicines Optimisation Lead, Patient Safety Team; Libby Graham, Enterprise Manager

Contents

Introduction.....	3
Workshop Overview and Structure.....	4
Routine Medicines.....	6
Current Process.....	6
Key Challenges.....	6
Priority Areas.....	6
Proposed Solutions.....	7
1a. Electronic Prescription Service (EPS).....	7
1b. Pan-London Prescribing Policy.....	7
1c. NCL Consensus Document.....	8
Shared Care Medicines.....	9
Current Process.....	9
Key Challenges.....	9
Priority Areas.....	9
Proposed Solutions.....	10
2a. Development of shared care guidance.....	10
2b. Effective and efficient transfer of care.....	11
2c. Access to clinical information and advice.....	12
Specialist Complex Medicines (Homecare).....	13
Current Process.....	13
Key Challenges.....	13
Priority Areas.....	13
Proposed Solutions.....	14
3a. Exploring new models of supply/ care for homecare patients.....	14
3b. Digitisation to streamline process and improve communication.....	15
3c. To promote collaboration between National Homecare Medicines Committee and.....	16
providers	
References.....	17
Acknowledgements.....	18
Acronyms.....	21

Introduction

Background to the project

In response to the rapid transformation of outpatient care, there is a pressing need to review the ways in which medicines are provided following an outpatient consultation.

UCLPartners, in collaboration with Pfizer have worked with key stakeholders from across North Central London (NCL) to explore and co-develop a new outpatient hospital medicines provision model. The initial phase involved local engagement and stakeholder roundtables over a period of six months, allowing for system input, co-design and sourcing of partners interested in piloting alternative medicines provision models.

Outpatient Medicines Pathways

Outpatient medicines have been categorised into three pathways:

<p>Routine</p>	<p>Medicines which are prescribed in outpatients but are also more commonly prescribed and continued in primary care. Do not require additional monitoring and reimbursement processes are in place to support provision via community pharmacy.</p>
<p>Shared Care</p>	<p>Medicines considered suitable for shared care are those which should be initiated by a specialist, but where prescribing and monitoring responsibility may be transferred to primary care. Due to their potential side effects, shared care medicines usually require significant regular monitoring and/or regular review by the specialist is needed to determine whether the medicines should be continued. (1)</p>
<p>Specialist Complex (Homecare)</p>	<p>Medicines that are provided by specialist services who retain responsibility for prescribing and monitoring. They are predominantly provided via homecare companies who provide medicines and other healthcare products and services to patients in their own homes. Homecare services have been defined as:</p> <ul style="list-style-type: none"> • Low-tech (self-administration of oral therapy excluding oncology products). • Mid-tech (self-administration of injectable therapies which require training/ competency assessment and often have special storage requirements). • High-tech (intravenous infusions or products requiring administration by a healthcare professional) and complex care (bespoke homecare solutions for individual patients). (2)

Table 1: Outpatient Medicines Pathways

Workshop overview and structure

Launch workshop

The opening workshop brought together key stakeholders to discuss challenges and opportunities that exist within current outpatient medicines pathways and prioritise areas for improvement. The session was intentionally problem focussed and aimed to understand the issues with the current pathways and identify barriers to change within three broad medicine groups (outlined above).

The event was attended by representatives from secondary and tertiary care providers, community pharmacy, general practice, mental health, NCL ICB (Integrated Care Board) medicines management teams and patient representatives. It was held in person with an attendance of around 35 people.

During the workshop, each of the medicine groups were introduced by specialist colleagues from the group, giving an overview of their work in each area and sharing examples where possible. Each presentation was followed by a roundtable discussion on the challenges within existing pathways for each medicine group. There was widespread agreement that all three medicines pathways should be explored in further workshops.

Mapping and solutions workshops

Mapping and solutions workshops were held for each of the three outpatient medicines pathways. At each of the mapping sessions, a core group of stakeholders met to explore the current pathway and gain a shared understanding of the existing challenges, and three priority areas for each pathway were agreed.

1. Routine Medicines	<ul style="list-style-type: none"> a) Electronic Prescription Service (EPS) b) London Procurement Partnership (LPP) Prescribing guidance c) NCL Consensus document
2. Shared Care Medicines	<ul style="list-style-type: none"> a) Development of shared care guidance b) Effective and efficient transfer of care c) Access to clinical information and advice
3. Specialist Complex (Homecare) Medicines	<ul style="list-style-type: none"> a) Explore new models of supply/ care for homecare patients, including 'low tech' medicines (which may release capacity to manage 'mid/high tech' medicines) b) Multiple bespoke platforms have been developed to manage homecare patients. Explore potential to streamline transfers of care and communication c) To promote collaboration between National Homecare Medicines committee (NHMC) and providers.

Table 2: Priority areas identified in mapping workshops

These priority areas were explored in detail at the solution focussed workshops, the outputs of which are presented in the rest of this report. These virtual sessions were well attended by key stakeholders representing general practice, community pharmacy, secondary and tertiary care, mental health, patient representatives, ICB digital, transformation and medicines management teams.

Routine Medicines

Current process

After attending an outpatient appointment (either virtually or in person), patients may be directed to:

- the outpatient pharmacy to have a prescription dispensed.
- their GP to obtain a prescription.
- a pharmacy to purchase over the counter (OTC) preparations.

In some cases, patients will receive medicines from a combination of these processes.

The increasing use of virtual appointments has made the use of outpatient pharmacies less practical. Patients may need to make a journey into the hospital to collect medicines, or postage/courier services are used to deliver medicines.

Writing to the GP to request a prescription following an outpatient appointment results in a duplication of work, the shifting of clinical responsibility and prescribing costs, increased potential for error, delays to treatment and poor patient experience.

Key Challenges

- Hospital electronic prescribing and medicines administration (EPMA) systems are not currently able to generate prescriptions that can be sent to community pharmacy via EPS. Developing this functionality is nationally recognised as a key priority for the NHS, however the expected timelines for this implementation are presently unclear.
- Physically transporting medicines dispensed in hospital to patients who have virtual appointments.
- Understanding the true system cost of current provision models. While medication acquisition costs, dispensing and delivery fees are easy to measure, the impact on the workforce and capacity within the system must also be considered.
- Ensuring that policies and prescribing guidance effectively support improving the pathway.

Priority Areas

- Explore use of EPS platforms, e.g. Cleo Solo.
- London Procurement Partnership review of a London wide prescribing guidance (historically included in Trust contracts).
- NCL Consensus document being finalised for adoption across all sectors.

Routine Medicines

Proposed Solutions

1a. Electronic prescription service	
Proposed Solution	Considerations
<p>Proposed Solution:</p> <p>Hospital EPMA systems are not currently able to generate prescriptions that can be sent to community pharmacy via EPS. Developing this functionality is nationally recognised as a key priority for the NHS, however, the expected timelines for this implementation are presently unclear. Multiple EPMA systems are currently in use across NCL, e.g. Careflow, EPIC, Cerner and clarification of anticipated timelines for EPS with each of these would help to prioritise sites for alternative interventions.</p> <p>Cleo Solo is a standalone, third-party digital solution that has been developed to enable hospital prescribers to send prescriptions to community pharmacy via EPS. It is the only product that is currently available to meet this need.</p> <p>Currently being explored at one site in NCL and many others are interested – a NCL wide approach could be of benefit.</p>	<p>Considerations:</p> <ul style="list-style-type: none"> Financial implications requiring a business case – acquisition, implementation, and ongoing annual licensing fee. Building formulary into Cleo Solo needs to be done locally and comes at an additional cost. Any assessment of cost impact should encompass the capacity released within the system through reducing unnecessary duplication of work by general practice along with drug budgets. <p>Depending anticipated EPS timelines, alternative options considered were:</p> <ul style="list-style-type: none"> Hospital collection points e.g., Northwick Park drive through service or 24hr prescription pick up machines. Hospital delivery services.
1b. Pan-London prescribing policy	
<p>London Procurement Partnership (LPP) is reviewing the prescribing policies of the five ICSS to produce a London-wide prescribing policy. The workshop provided a valuable forum to share the draft consultation and generate feedback, for the relevant groups, as part of the LPP consultation process.</p>	<p>The development and approval of this guidance will continue outside of this project.</p> <p>Establishing agreed definitions of when medicines are considered “urgent” v “non-urgent” was considered critical to this document (as well as for 1c).</p>

Table 3: Routine medicines proposed solutions

1c. NCL consensus document	
Proposed Solution	Considerations
<p>NCL interface steering group are leading on the development of an agreed set of principles between primary and secondary care to build local relationships. Initially focused on secondary care and primary care providers, with plans to later extend to tertiary care, mental health, community care and social care providers.</p>	<p>The workshop provided an opportunity to share highlights from the draft document and discuss. Feedback has been fed into the relevant NCL groups.</p> <p>Establishing agreed definitions of when medicines are considered “urgent” v “non-urgent” was considered critical to this document (as well as for 1b).</p>

Table 3: Routine medicines proposed solutions

Shared Care Medicines

Current process

The NCL Shared Care group is a subgroup of NCL Medicines Optimisation Board, whose purpose is to ensure a robust decision-making process for the development of shared care guidelines, fact sheets and management of red list medicines. The group assess the clinical safety and appropriateness of any proposed shared care pathway and if deemed appropriate, co-ordinate development of an interface document and seek approval through a consultation process.

Where shared care guidance is in place, specialist prescribers should stabilise a patient on treatment and then request that the GP agree to share care in line with the roles and responsibilities outlined in the guidance. Acceptance of shared care is assumed unless the GP responds specifically, to decline. Shared care guidelines are available on the NCL Medicines Optimisation Network website: www.ncl-mon.nhs.uk.

GPs review the patient and prescribe medicines in line with the shared care guidance. Prescriptions are sent to community pharmacy for screening and dispensing via EPS, and patients collect medications from community pharmacy. Patients are reviewed periodically by their specialist who advises on the ongoing management, in view of response to treatment and disease progression. At this review (either virtual or face to face), changes to treatment regimens may be made. Any change to treatment regimens is communicated to primary care in an outpatient letter.

Key Challenges

- Ensuring that it is feasible to adhere to shared care guidance and that all parties are aware of their roles and responsibilities.
- Ensuring capacity in all sectors to safely share care.
- Ensuring that robust communication processes are in place between care providers and patients.
- Lack of ability to easily audit the current process.

Priority Areas

- Development of NCL shared care guidance: Process needs review including adequate clinical (GP/Local Medical Committee (LMC)) involvement in the guideline development.
- Effective and efficient transfer of care: Review process of transferring care, including acceptance / rejection of shared care of specific medicines. Process to be digital and auditable.
- Access to clinical information and advice (including recommendations and results for monitoring)

Shared Care Medicines

Proposed Solutions

2a. Development of shared care guidance	
Proposed Solution	Considerations
Undertake a collaborative review of existing guidance.	<ul style="list-style-type: none"> • Inclusion of all critical information including communication processes. • Assess the suitability of the medicine for shared care. • Accessibility and readability. • Feasibility of implementation.
Improve the process of guideline development	<ul style="list-style-type: none"> • Build a consensus around what appropriate clinical input looks like (including those who actively share care in practice). • Ensure appropriate clinical input at all stages of the process (GPs, PCN pharmacists, specialist clinicians). • Explore ways of streamlining the process to be less time consuming.
Support the adoption of shared care guidance in practice	<ul style="list-style-type: none"> • Improve dissemination strategy including the use of GP webinars, digital champions, GP communications website, hospital specialty governance meetings, staff inductions in specialist rotations, clinical nurse specialist (CNS)/ pharmacist champions in hospital. • Explore EPMA prompts on both sides, e.g. templates in primary care and flags on hospital side.

Table 4: Shared care medicines proposed solutions

2b. Effective and efficient transfer of care

Proposed Solution	Considerations
<p>Explore scale/spread of the existing digital solution (piloted at RFH with rifaximin).</p> <p>A database has been developed at the Royal Free Hospital to automate shared care requests. Relevant information is populated from the hospital EPMA system and shared care requirements included. GPs actively accept or decline shared care requests responses are tracked, allowing the process to be audited.</p>	<ul style="list-style-type: none"> • Scope any other solutions in use across the country – the group are not currently aware of any. • Clarification of intellectual property ownership, host organisation and relationship with IG spectrum. • Collaborative decision required as to which medicines would be appropriate for the platform and the templates requiring development. • Need to establish baseline data for chosen medicines (engaging patients, specialist prescribers, pharmacists, clinical nurse specialists and GPs.) • Platform costs and business case. <p>Potential for a sharp increase in shared care requests to be met with high rejection rates due to capacity issues in primary care.</p>
<p>Explore the potential to retain prescribing and monitoring within specialist care for specific medicines.</p>	<ul style="list-style-type: none"> • Workforce implications and use of NMPs (non-medical prescribers), noting that repeat prescribing is not supported by deanery posts. • Delivery mechanisms and EPS. • Ability for specialists to order monitoring tests closer to home.
<p>Use of specialist community hubs, designed to centralise services closer to home, pooling regional resources and improving accessibility.</p> <p>Existing examples of this model include nurse led monitoring services for virtual wards and diagnostic hubs. Establishing a specialist multi-disciplinary team in a hub environment would support the delivery of specialist care outside of hospital.</p>	<ul style="list-style-type: none"> • Funding. • Staffing models and recruitment. • Digital infrastructure. • Real estate.

2c. Access to clinical information and advice

Proposed Solution	Considerations
<p>Explore the use of dashboards to support ongoing oversight of pathway.</p> <p>HealthIntent is a digital platform which links together clinical information from different providers, allowing health professionals in NCL to provide more proactive care.</p> <p>Creating dashboards for specific patient cohorts could improve access to relevant clinical information and help to visualise care pathways.</p>	<p>Dashboards already in development e.g. sodium valproate.</p> <ul style="list-style-type: none"> • Information governance requirements for patient specific use. • Agree and design required functionality. • Cost of developing and maintaining dashboards.

Specialist Complex Medicines (Homecare)

Current process

The homecare ecosystem is highly complex. Unlike other medicines provision pathways, the delivery of homecare services requires active collaboration between homecare companies and market authorisation holders, along with NHS providers and patients. This mix of private and public involvement has resulted in fragmentation of the pathway and a lack of visibility of the process end to end.

In response to widespread national concern regarding the safety of current homecare medicines provision, the House of Lords Public Services Committee published a report in November 2023, on the standard of homecare service delivery in England. The inquiry has focus on the structures and regulations designed to ensure the quality of these services. The absence of consistent valid and reliable data that can be easily interrogated to facilitate decision making has been acknowledged within the enquiry.

Alongside the inquiry, the Chief Pharmaceutical Officer for England is leading a review into homecare services to understand the scope of arrangements currently in place and their associated accountabilities.

Key Challenges

- Demand for homecare services is continually increasing, creating capacity issues.
- Significant safety concerns regarding the performance of homecare companies and a lack of publicly available data to measure the quality of service provision.
- Lack of transparency around the cost of homecare when pricing is bundled.
- Reimbursement mechanisms for specialist medicines are currently limited to specialist care providers and homecare companies.
- Paper based prescribing and invoicing processes are laborious and not easily auditable.
- Ensuring meaningful and proactive engagement of provider Trusts and the National Homecare Medicines Committee.

Priority Areas

- Exploring new models of supply/ care for homecare patients, including “low tech” medicines (which may release capacity to manage “mid/high tech” medicines).
- Multiple bespoke platforms have been developed to manage homecare patients. There is scope to explore the potential of streamlining transfers of care and communication.
- To promote collaboration between National Homecare Medicines Committee and providers.

3a. Exploring new models of supply/ care for homecare patients

When considering alternative supply models, the initial priority would be to focus on “low tech” oral medicines which do not require refrigeration. In these instances, homecare companies are essentially being used as a delivery service rather than a ‘homecare’ service. Finding alternative provision models for these items can release capacity within homecare to provide the “mid-tech” and “high-tech” services.

Community pharmacy has a potentially significant role to play in establishing new models of provision. Any new roles for community pharmacies would require careful consideration of competition laws, reimbursement mechanisms and training requirements.

Proposed Solution	Considerations
Expansion of community pharmacy as a collection point	<ul style="list-style-type: none"> Internationally, there are examples of vending machines located at community pharmacies to facilitate medicines collection.
Explore the potential for interface prescribing for “low-tech” items	<ul style="list-style-type: none"> Ideally using EPS (as outlined in routine medicines). The ability of community pharmacy to acquire the medicines to dispense, as well as the consequent reimbursement mechanisms, funding and training required. Existing pilot being undertaken at community pharmacies in southwest London.
Alternative sites for medicines administration	<ul style="list-style-type: none"> Mobile infusion buses. Community hubs for medicines administration. Use of community pharmacies as sites for infusion clinics.

Table 5: Specialist complex medicines (homecare) proposed solutions

3b. Digitisation to streamline processes and improve communication

Proposed Solution	Considerations
Explore ways of reducing paper-based prescribing	<ul style="list-style-type: none"> Validated e-signatures to overcome wet signature requirements – DocuSign is currently being piloted in Leicester. Consider layering systems rather than waiting for large scale change. Prescribing portals have been used in some settings.
Explore digitisation of invoicing	<ul style="list-style-type: none"> Focus on larger providers as smaller providers may lack infrastructure. Information governance requirements for patient specific invoicing. Requirement for proof of delivery on invoicing.
Explore expansion of existing patient facing apps	<ul style="list-style-type: none"> Patient representatives reported a positive experience using the app to order prescriptions and track deliveries. Support may be required for patients to engage with the app. Acknowledged lack of integration with NHS App and Trust patient portals.
Explore digital solutions to streamline monitoring requirements	<ul style="list-style-type: none"> Digital technologies available to pool results from various providers, issue patient reminders about tests and plan monitoring e.g., medicines monitor. Consider alternative sites for phlebotomy including community hubs and pharmacies.

3c. To promote collaboration between National Homecare Medicines Committee and providers

Anecdotal evidence indicates that NCL provider Trusts have reported a series of challenges to safely and effectively delivering homecare services. These include issues regarding patient enrolment, poor customer service, medication errors, and a lack of nursing/training support.

A need to improve information sharing between NHMC, LPP and provider Trusts was expressed. It was felt that greater collaboration between all these parties could support improvement and innovation in this sector. Gaining a greater widespread understanding of what communications strategies are currently in place would be of value.

References

1. RMOG (North), Shared Care for Medicines Guidance - A Standard Approach. 2021.
[Shared Care for Medicines Guidance – A Standard Approach \(RMOG\) – SPS - Specialist Pharmacy Service – The first stop for professional medicines advice.](#)
2. Royal Pharmaceutical Society, Handbook for Homecare Services in England. 2014.

Acknowledgements

Many thanks to all those who were involved in this project and took time to participate in workshops, roundtables and meetings:

Patient and Public Involvement and Engagement Network

Particular thanks to all the patients from our lived experience network who participated in this project.

North Central London Integrated Care System (NCL ICS)

Amalin Dutt *Head of Medicines Management (Islington)*
Dhara Thakar *Clinical & Care Director - Digital*
Dominic Roberts *Clinical Director*
Ey Cheung *Deputy Head of Medicines Management (Camden)*
Gurpal Grewal *Lead Pharmacist IPMO Programme Team*
Haider Al-Shamary *Assistant Director of Delivery*
Jennie Hurley *Patient Partner (NCL Medicines Optimisation Committee)*
Kristina Petrou *Community Pharmacy Lead*
Maninder Kaur Singh *Head of Medicines Management (Barnet)*
Paul Gouldstone *Head of Medicines Management (Enfield)*
Saloni Maru *Joint Formulary and Medicines Optimisation Pharmacist*
Sejal Amin *Principal Pharmacist Joint Formulary & Medicines Optimisation*
Shahid Gani *Lead Pharmacist IPMO Programme Team*
Sonali Kinra *Deputy Medical Director*
Poonam Varu *Senior Pharmacist - Joint Formulary & Medicines Optimisation*

Camden and Islington NHS Foundation Trust

Lucy Reeves *Chief Pharmacist*
David Rogalski *Deputy Chief Pharmacist*

Central and North West London NHS Foundation Trust

TF Chan *Chief Pharmacist*
Alan Sebti *Lead Pharmacist, Operations*

Great Ormond Street Hospital for Children NHS Foundation Trust (GOSH)

Stephen Tomlin *Director of Children's Medicines Centre*

Moorfields Eye Hospital NHS Foundation Trust

Naheed Phul *Chief Pharmacist*
Edward Hindle *Advanced Specialist Pharmacist*
Stephanie Ghartey *Advanced Specialist Pharmacist*

Acknowledgements

North Middlesex University Hospital NHS Trust

Rakhee Shah *Lead Pharmacist*

Royal Free London NHS Foundation Trust

Fatema Jessa *Lead Hepatology and Liver Transplant Pharmacist*

Iris Samuel *Medicines Optimisation Lead Pharmacist*

Jay Mehta *GP Registrar*

Prof. Kevin Moore *Professor Of Hepatology*

Meera Thacker *Deputy Chief Pharmacist*

Wendy Spicer *Chief Pharmacist*

Royal National Orthopaedic Hospital NHS Trust

Abigail Saffer *Clinical Pharmacist*

Ashik Shah *Chief Pharmacist*

Karishma Mistry *Specialist Pharmacist - Governance and Medicine*

Tariq Azamgarhi *Antimicrobial Pharmacist*

Vishaka Patani *Chief Pharmacy Technician*

University College London Hospitals NHS Foundation Trust (UCLH)

Jatinder Harchowal *Chief Pharmacist*

Peter Hutchins *Lead Pharmacist – Patient services*

Zahraa Hammoud *Homecare & Procurement Lead Pharmacist*

Whittington Health NHS Trust

Adam Heffer *Adult and Community Service Pharmacy Lead*

Delaram Salehifard *Superintendent Pharmacist, Whittington Pharmacy CIC*

Nadine Jeal *Clinical Director Adult Community Services*

Sana Ahmed *Pharmacist*

Stuart Richardson *Chief Pharmacist*

Primary Care

Dr Alpesh Patel *GP, White Lodge Medical Practice*

Dr Barry Subel *GP, Ravenscroft Medical Centre*

Dr Deepak Hora *GP, Camden and Islington*

Dr Farzana Vanat *GP, PHGH Doctors*

Dr Karl Roberts *GP, Mildmay Medical Practice*

Shivani Patel *Lead Pharmacist Haringey GP Federation*

Sophie Murray *Senior Clinical Pharmacist, Haringey GP Federation*

Soumia Kolli *Lead Pharmacist Islington GP Federation*

Dr Tina Archana Agrawal *GP, The Museum Practice*

Dr Vicky Weeks *Medical Director, NCL London-wide Local Medicines Committee (LMC)*

Acknowledgements

Community Pharmacy

Marsha Alter *Community Pharmacist, Middlesex Pharmacy*

Yogi Parmar *Chief Executive, Camden & Islington Local Pharmacy Committee*

Vasundra Tailor *Senior Pharmacist, Middlesex Local Pharmacy Committee*

UCLPartners

Ambra Paduraru *Enterprise Coordinator*

Erin Walker *Patient Involvement and Engagement Lead*

Jess Thomas *Director of Solutions*

Michael Duffin *Senior Enterprise Manager*

Natt Day *Patient Involvement and Engagement Lead*

Industry

Amanda Pickering *Head of Strategy and NHS Partnerships, Alliance Healthcare*

Stephanie Westwood *Head of NHS Hospital Services, Alliance Healthcare*

Fouad Lawal *Senior Manager, Access Innovation, Pfizer*

Leanne Parkinson *Commercial Channel Strategy Director, Pfizer*

Libby Hamson *Strategy Director, Global Access and Value, Pfizer*

Acronyms

CNS	Clinical Nurse Specialist
EPMA	Electronic prescribing and medicines administration
EPS	Electronic prescription service
GP	General Practitioner
ICB	Integrated Care Board
ICS	Integrated Care System
IG	Information Governance
LMC	Local Medical Committee
LPC	Local Pharmacy Committee
LPP	London Procurement Partnership
NCL	North Central London
NHMC	National Homecare Medicines Committee
NMP	Non-medical prescribers
OTC	Over the counter
RFH	Royal Free Hospital