



Pharmacy and Medicines Optimisation: A Toolkit for Winter 2018/19

NHS ENGLAND | NHS IMPROVEMENT

Pharmacy and Medicines Optimisation: A Toolkit for Winter 2018/19

Version number: 1.7 (updated December 2021)

First published: September 2018

Prepared by: A Short Life Working Group led by Steve Brown; Regional Pharmacist
NHSI / NHSE; on behalf of the All England Chief Pharmacists Group

Classification: OFFICIAL

This information can be made available in alternative formats, such as easy read or large print, and may be available in alternative languages, upon request.

Please contact oliver.mansell@nhs.net.

Contents

Contents.....	3
1 Introduction	5
2 Priorities	5
3 Patient Flow (patient discharge from hospital)	6
3.1 Optimising medicines discharge to improve patient flow	6
3.2 Hospital Pharmacy and Patient Flow Emergencies	6
3.3 Patient Prioritisation for Discharge	7
3.4 Ward-based processes (Pharmacy).....	7
3.5 Discharge of patients with short length of stay	7
3.6 Best Use of Non-Medical Prescribers	8
3.7 Best Use of Pharmacy Technicians and Assistants	8
3.8 Use of volunteers	9
4 Patient Admissions.....	9
4.1 Pharmacists in the Emergency Department.....	9
4.2 Maintaining Control in ED	11
4.3 The role of the advanced clinical practitioner (ACP) in urgent and emergency care	12
4.4 Pharmacists within ambulance queues	14
4.5 Use of Pharmacy-based Nursing Staff	15
5 Weekend & Bank Holiday Services.....	15
5.1 Consistency of Pharmacy Service.....	15
5.2 Safe Staffing Levels	15
5.3 Bank Holiday Pharmacy Operating Hours.....	16
5.4 Staff Rostering	16
6 Hospital Systems Approach	17
6.1 Teamwork	17
6.2 Medicines Supplies – Prepacks	17
6.3 Management control	18
7 System-wide Control.....	18
7.1 Linking with CCGs – Response to public health incidents	18
7.2 Linking with Community Pharmacy	19
7.3 Integrated Pharmacy team.....	19
7.4 Linking with Clinical Pharmacists in General Practice.....	20
7.5 Compliance Aids	20
7.6 Care Home Support	21
7.7 Pharmacy Supporting Management of Flu in Care Homes	21
7.8 System-wide resilience model.....	21
7.9 Hospital FP10 Prescriptions	21
8 Mental Health	22
8.1 Mental health preparedness.....	22
9 Aseptic Services.....	23

9.1 IV preparations for Emergency Departments	23
9.2 IV preparations for patient discharge (OPAT)	23
10 Other Supporting Infrastructure	23
10.1 Pharmacy Stores	23
10.2 Medical Gases.....	24
10.3 Digital and Technological Systems.....	24
References	25
Appendix 1: Winter Pressures – Pharmacy and Medicines Optimisation Toolkit – Overview Checklist.....	26
Appendix 2 Feedback 2017/18.....	28
Appendix 3: Optimising medicines discharge to improve patient flow	30
Appendix 4: Should FP10 prescriptions be used for patient discharge from hospital?	31
Appendix 5: Acknowledgements	33

1 Introduction

- 1.1 This document provides a framework of good practice for pharmacy and medicines optimisation in readiness for managing winter pressures in the acute hospital sector and at the interface with the acute sector. It is a compilation of different perspectives on how to maintain resilient, high-quality patient care in the context of escalating workload. The document provides a toolkit for Chief Pharmacists and also a checklist for Trust boards to assess readiness for escalating service pressure. It is vital for the Pharmacy service to maximise benefit to patient care, and to make a significant contribution to the overall healthcare system during such periods.
- 1.2 The toolkit addresses what 'good' looks like in readiness for escalation of winter pressures, recognising that no system will be exemplar in all of the areas considered. Increasingly the challenge is helpfully being addressed from a system-wide perspective, so attention is not solely being focused on acute sector operations but on best management of the challenges throughout the local healthcare system.
- 1.3 The issues raised in this document are considered by the NHS England and NHS Improvement to have the greatest impact. A wide range of 'tools' are illustrated, although it is recognised that such guidance can never be fully comprehensive. The document is aimed at enabling those responsible for acute Trust services to explore service improvements that can make a difference, particularly when services are stretched and under escalating pressure.
- 1.4 This guidance was developed on behalf of the All England Chief Pharmacist Group and builds on examples from 2017/18. Through implementation and embedding these proposals, there will clearly be benefit to patient care throughout the year, and not solely additional resilience over the winter period.
- 1.5 There is presently an increased focus upon resilience of services across seven days and meeting the NHS England Seven Day Services Clinical Standards. This agenda has overlap with preparedness for winter pressures and a summary of feedback from trust Chief Pharmacists can be seen in appendix 2. Through the strategic management of the workforce and service in a planned way across seven days in accordance with the proposals detailed below, a year round more resilient and cost-effective operation will be enabled. This would clearly be of greater benefit than a system that solely responds during periods of extreme pressure.

2 Priorities

The following areas are identified as priorities, and are addressed in this document's sections below:

- Patient Flow (patient discharge from hospital) (Section 4)
- Patient Admissions (Section 5)
- Weekend and Bank Holiday Services (Section 6)
- Hospital Systems Approach (Section 7)
- System-wide Control (Section 8)
- Mental Health (Section 9)
- Aseptic Services (Section 10)
- Other Supporting Infrastructure (Section 11)

Ongoing monitoring of service benefits and patient outcomes is strongly encouraged. A tabulated checklist of the suggested priority areas can be found in **Appendix 1**.

3 Patient Flow (patient discharge from hospital)

3.1 Optimising medicines discharge to improve patient flow

(This section applies the NHS Improvement Emergency Care Improvement Programme Rapid Improvement guide 'Optimising medicines discharge to improve patient flow')

3.1.1 During periods of extreme challenge in the acute sector, the Pharmacy service has a crucial role in enabling the best possible patient flow. The most logical approach is to proactively focus upon the 'front door' and 'back door' of the hospital, and the NHSI Emergency Care Improvement Programme Rapid Improvement guide 'Optimising medicines discharge to improve patient flow' provides a short, helpful guide to some key actions, and a number of good practice examples.

3.1.2 This is available on <https://www.england.nhs.uk/south/wp-content/uploads/sites/6/2016/12/riq-optimising-medicines-discharge.pdf>

The summary of this helpful resource is in **Appendix 3**.

3.2 Hospital Pharmacy and Patient Flow Emergencies

3.2.1 Chief Pharmacists should be proactively engaged with the local healthcare system patient flow management.

3.2.2 Immediate actions for Trust Chief Pharmacists:

- Review the NHSI Emergency Care Improvement Programme Rapid Improvement guide 'Optimising medicines discharge to improve patient flow' (see link in 3.1.2)
- Address required actions and related staff mobilisation with site / Operations team

3.2.3 Immediate actions for Chief Operating Officers:

- Agree priority patient flow actions from best practice guidance (see link In 3.1.2)
- Ensure proactive link between Chief Pharmacist and site / Operations team is addressing local challenges

3.2.4 Strategic actions:

Develop supportive infrastructure improvements; these include:

- Pharmacy teams in ED
- 7 day clinical pharmacy service
- Implementation of Electronic Prescribing & Medicines Administration (EPMA)

3.2.5 Additional strategic actions proposed by the working group:

The following developments will enable improvement in patient flow, and a number are addressed in further detail in the toolkit:

- Maximise your prescribers – be clear on your strategy for training prescribers and the role they can take on medical rounds
- Develop Pharmacists as Advanced Clinical Practitioners within Emergency Portals, and the associated development of staff to undertake these roles
- Prescribe regular medicines in the Emergency Department – don't wait for admission to a ward
- Ensure any out-of-hours rewards / payment barriers are addressed
- Include pharmacy in the trust escalation policy
- Ensure that all support services are available to support the medical decision-makers
- Extend pharmacy service availability
- Plan post-take pharmacy support
- Plan pharmacy support for discharge teams at weekends
- Implement medicines housekeepers or volunteers to move medicines with the patient
- Consider satellite dispensaries and/or mobile dispensing units
- Increase ready-prepared intravenous doses prepared in pharmacy
- Implement pneumatic tubes to speed deliveries

This is not an exhaustive list but provides examples for service leaders to consider proactively, creating robust arrangements, rather than simply reacting to workload pressures.

3.3 Patient Prioritisation for Discharge

- 3.3.1 Prioritise patients for discharge at clinical reviews such as board rounds. Discharge can be accelerated through ward dispensing or through satellite dispensaries and by using e-prescribing systems at discharge. Pharmacist prescribing is helpful for some clinical teams.

3.4 Ward-based processes (Pharmacy)

- 3.4.1 Patients may be prepared for discharge when they are admitted by:

- populating the discharge prescription with information about medicines on admission
- confirming medicines brought in and those held at home

This may be supported by a team of pharmacy technicians and assistants in a service operating 7 day weeks in acute care areas. Pharmacy assistants move medicines with patients flowing through wards and prepare medicines for bedside locker storage, overseen by pharmacy technicians.

Pharmacists / pharmacy technicians can operate as a team across multiple wards, meeting in daily huddles to identify priority areas for their inputs, and attending board rounds on wards to identify patients prioritised for discharge.

3.5 Discharge of patients with short length of stay

- 3.5.1 Systems should be formalised for rapid processing of discharge prescriptions for patients with a short length of stay such as where no further medicines will be issued or where there are no changes to current medication. Local agreement can enable discharge letters to be annotated 'medicines as on admission', or 'No changes to regular medicines except: ...'

3.6 Best Use of Non-Medical Prescribers

- 3.6.1 Pharmacist prescribers can provide a useful support to help expedite safe and accurate discharge summaries and discharge prescriptions. Organisations should consider including pharmacist prescribers in their weekend and bank holiday staffing structure, but may also wish to consider the benefits of having more senior prescribers available. Whilst Trusts may be able to identify patients who may go home, by working with nursing colleagues and with knowledge of the clinical areas, senior pharmacists are often able to produce an accurate patient list and then prioritise patients using their clinical experience. Hospitals using prescribing pharmacists at band 8 are able to make decisions regarding medicines review, rather than merely providing a transcription service.

Good practice example – University Hospital Southampton

Senior prescribing pharmacists at University Hospital Southampton supported patient flow and discharges by targeting patients identified as potentially 'discharge-ready' following a previous medical or ward leader review. They made decisions regarding medicines optimisation, prescribed TTOs, and ensured that those patients had everything they needed for discharge. They identified any patient who required a final medical review before discharge. Working in this way provided a targeted review of the feasibility of discharge.

3.7 Best Use of Pharmacy Technicians and Assistants

- 3.7.1 Pharmacy technicians can be used to support the safe use of medicines if a queue develops within the Emergency Department. They can undertake medicines reconciliation as per local standard operating procedures, and at the same time identify and highlight any critical medicines that have either not been prescribed or prescribed but not been administered. This has proved valuable in reducing omitted critical medicines (such as insulin) and improving the timely administration of medicines.

Good practice example – Northumbria Trust

In Northumbria, ward medicines assistants on six base site wards allowed for better multi-disciplinary working and improved flow within the system. A two-week pilot of a ward medicines assistant resulted in very positive feedback, and nursing time was saved from medication administration rounds, especially when administering controlled drugs.

3.8 Use of volunteers

- 3.8.1 The use of volunteers to support Pharmacy Department with the delivery of urgent medicines to wards and departments can ease the burden on nursing staff and reduce the amount of time they visit the pharmacy. (Services should clearly follow local trust policies on the appointment of such volunteers).

Good practice example – Wye Valley NHS Trust

At Wye Valley NHS Trust, volunteers have been utilised to support the Pharmacy Department with the delivery of urgent medicines to wards and departments. This supplements the existing portering service provided via the PFI partner. The volunteers are used to reduce the number of times that nursing staff visit the pharmacy to pick up medicines, thereby removing them from clinical duties and patient care; speed up the delivery of urgent items for in-patients and day cases; and assist with patient flow by delivering urgent discharge medication. The volunteers are approved by the Trust and complete all required security checks to carry out the role, including level 2 safeguarding if they are delivering medicines to maternity, neonatal and child health wards. The volunteers are part of a team and they are led by a Trust volunteer co-ordinator. Trust and pharmacy induction is completed, including health and safety training for manual handling and spillages. There is a supporting standard operating procedure and a pharmacy runner tracker sheet and delivery note. Analysis has shown that the average delivery time is 5.4 minutes per delivery; 35 hours have been saved per week, the majority of deliveries are related to Cancer Services (40%), day case surgery (10%) and the discharge lounge (8%). There is 100% positive feedback from service users.

4 Patient Admissions

4.1 Pharmacists in the Emergency Department

- 4.1.1 The Five Year Forward View (1) and Securing the future workforce for emergency departments in England (2) outline alternative utilisation of pharmacy professionals across the healthcare service:

“Improving A&E services and performance is a core priority in the NHS and ensuring we have properly staffed emergency departments is central to this. We know we need more clinical staff, both senior decision-makers and those making up the broader clinical workforce, to address the significant pressure on our emergency departments. For the first time, NHS England, NHS Improvement, Health Education England and Royal College of Emergency Medicine have come together to develop a plan to address the shortages we face and ensure we have sustainable staffing in our emergency departments.” (2)

- 4.1.2 The joint workforce strategy document outlines the development of the multidisciplinary team in the Emergency Department context. This includes an increased number of advanced clinical practitioners (ACPs) and pharmacist practitioners.
- 4.1.3 The urgent care pathway is vast and complex, and in the pharmacy context can be considered to include community pharmacy, general practice, out of hours services, NHS111, urgent care centres, emergency department and acute medicine.

- 4.1.4 The Pharmacists in Emergency Departments (PIED-Eng) study (3) considered the potential for pharmacist prescribers trained in clinical health assessment skills to be deployed in Emergency Departments (EDs). The pharmacist practitioner will be an independent prescriber, and may have additional skills in patient assessment and clinical reasoning. The main role of the pharmacist practitioner will be to undertake medicines focused duties including:
- Undertaking medicines-focused duties such as pre-discharge medicines optimisation, medicines reconciliation and prescribing.
 - Optimising the use of medicines on admission to emergency and acute care.
 - Supporting medicine reconciliation pre-discharge of acutely ill patients.
- 4.1.5 Junior medical staff facing significant demands on their time often undertake these duties. The PIED-Eng study (3) demonstrated a reduction in patient waiting times, and delivery of safe patient care.
- 4.1.6 Funding from the Pharmacy Integration Fund (PhIF) is deploying pharmacists to provide 'virtual' pharmaceutical specialist skills across the NHS 111 network and within the Integrated Urgent Care Clinical Assessment Service hubs. The main duties of this role can include answering and advising on medicines related queries, advising on minor illness management and the independent prescribing of urgent medication requests.
- 4.1.7 Across England there are now over 4,000 community pharmacies registered to provide urgent prescription items that have recently been prescribed on an NHS prescription (via any NHS service) as part of the NHS Urgent Medicines Supply Advanced Service (NUMSAS). Patients and/or carers contacting NHS 111 are referred directly to participating pharmacies. The community pharmacist makes an assessment of clinical need which may lead to an Emergency Supply or will arrange an urgent prescription via GP out-of-hours services where appropriate, e.g. for controlled drugs.

Case Study: Emergency Department Pharmacist, Chesterfield Royal Hospital

Sarah Lock, an ED pharmacist at Chesterfield Royal Hospital, is an independent prescriber. Her main duties include completion of medicines history and reconciliation for patients likely to be admitted and prescribing their regular medications, prescribing once only doses of urgently required medicines or pain relief, completion of falls reviews on elderly patients with polypharmacy, identification and management of ADRs, and avoiding the need for admission. Sarah is currently undertaking further studies in advanced practice, and clinical skills to assess patients independently by obtaining a full medical history and undertaking a physical examination within a defined scope of practice. Sarah is involved in teaching other members of the MDT, championing medicines safety and leading on safe prescribing.

The ENDPAPER study (Manchester University) will describe and define the role of the emergency department pharmacist practitioner, and explore the impact of the role on the quality of patient care. A total of 20 pharmacists from 15 Trusts across all four home nations of the UK have reported data about their contribution to the care of over 600 patients. Analysis is underway, with publications due later this year, which will include a proposed service specification. HEE London and the South East have developed an AFC band 7 job description for this role.

Good practice example – Northumbria Trust

In Northumbria, clinical pharmacist support to the ED was provided when there was huge demand in ED and they were desperate for support from the other teams. Pharmacy provided a prescribing pharmacist 7 days per week, 8am-4pm. The prescribing pharmacist was able to (a) support medical staff with the prescribing of critical medications, thereby saving them time and minimising risk of harm to patients; (b) support the nursing team by sourcing the required medicines and facilitating the second checking of medicines (e.g. intravenous medicines, controlled drugs); (c) facilitate discharges from ED with use of FP10 prescriptions, sourcing and labelling of the required over-labelled medication and counselling patients on new medicines; (d) help manage patients with complex medication needs that required support with medicines information and urgent prescribing of medication (e.g. polypharmacy, drug interactions, patients with swallowing difficulties, Toxbase queries and recommendations, oncology regimes, information on methadone programmes, specialist care prescribing such as renal patients).

4.2 Maintaining Control in ED

4.2.1 Pharmacy teams should be integrated into the bed management systems of the trust and actively support flow through the hospital through close integration into hospital wide flow mechanisms, making maximum use of data from electronic systems and soft local intelligence (discharge officers, board rounds, ward rounds, clinical team huddles) to identify priority patients requiring active facilitation of discharge. Mechanisms should be in place to leverage the potential of EPMA to support prescribing pharmacists deployed on ward rounds, and contingency areas without permanent ward-based medical staff to prescribe discharge medicines where appropriate, and electronically direct discharge prescriptions to the most appropriate dispensing location based on complexity. Dispensary electronic systems should also be utilised to maintain close oversight of dispensary workflow, anticipate peaks in dispensary activity later in the day, and flex staffing to mitigate unusual activity levels.

ED Control Checklist:

4.2.2 The key relationship is between the clinical pharmacist and the multidisciplinary team so this proactive engagement should resolve issues on an ongoing basis, and escalate challenging situations where necessary.

- Do you attend the bed meeting?
- Do you provide info relating to discharges being handled, queried and completed to these meetings?
- Do you attend prioritised board rounds?
- Do you have team leaders who are directly contactable by bed teams?
- Is the pharmacy team aware of their responsibilities in the escalation policy?
Are you managing mental health needs with the psychiatric liaison team?

Good practice example – The Luton and Dunstable University Hospital

Patients are triaged at arrival in ED and immediately streamed to the Urgent GP centre on site, ENP-led minor injury or illness unit or seen by a senior medical decision maker as the first contact. Those with a decision to admit go immediately onto their inpatient pathway in the admission ward or specialist unit. Maintaining control in ED is fundamentally achieved by maintaining the flow of patients through their inpatient

pathway, and this is where the pharmacy service plays an important role. The 'control room' uses a range of electronic systems on continuous stream, including the pharmacy prescription tracker system (PTS), to take the temperature of the whole system and identify potential blocks to patient flow and instigate mitigations. Bed meetings are held four times a day, and the detailed Trust status communicated to internal stakeholders, including the senior Pharmacy team. When the system reaches Opel 3 or above, a senior pharmacy leader attends the bed meetings. At the bed meetings the number of discharges per ward are identified as 'now', 'later' and 'query'; patients with complex discharge requirements including transport, medication issues and NOMAD requirements are identified by name and tracked through the system.

This information is disseminated to all pharmacy teams to complement the information they have from morning board rounds and dedicated discharge officers, and they actively work with the medical teams to expedite the prescribing of discharge medicines. Prescribing pharmacists on the ward rounds prescribe discharge medicines on ePMA during the round, and send the prescription electronically to the local dispensing satellites for minor changes to pre-dispensed medicines; or to the main dispensary for more complex dispensing. Local pharmacy teams have a clinical huddle at 2pm where the picture is updated, and the 'later' and 'query' category of discharges are prioritised for review and action. NOMADs are outsourced to local community pharmacies, and there is an agreement that requests received by 12noon will be either with the hospital pharmacy by 4pm or delivered to the patient/relative before 6pm. Requests received after noon will be done that day if possible, or be delivered to the hospital the next day.

When contingency areas are opened they receive a pharmacy service and a senior prescribing pharmacist will be on a bleep; specifically to support discharges where medical teams may be covering a number of areas. The main dispensary uses PTS and JAC DSTAT to closely monitor the quantity, flow and mix of work through the dispensing system identifying unusual drops or surges in work flow to pre-empt and flex staff to meet anticipated later work.

Benefits – The pharmacy team are actively aware of the wider hospital pressures and are a key element in the management of patient flow and discharges during the day, anticipating and responding to peaks in demand and facilitating a more even and steady flow of discharge prescriptions to the dispensary throughout the day, mitigating the effects of late surges of discharge prescriptions and maximising the number of more complex patients with transport, NOMAD or care placements cut-off, with successful discharges.

4.3 The role of the advanced clinical practitioner (ACP) in urgent and emergency care

- 4.3.1 Advanced clinical practice is delivered by experienced, registered health and care practitioners. It is a level of practice characterised by a high degree of autonomy and complex decision-making. This is underpinned by a master's level award or equivalent that encompasses the four pillars of clinical practice, leadership and management, education and research, with demonstration of core capabilities and area-specific clinical competence. Advanced clinical practice embodies the ability to manage clinical care in partnership with individuals, families and carers. It includes the analysis and synthesis of complex problems across a range of settings, enabling innovative solutions to enhance people's experience and improve outcomes. (5)

- 4.3.2 2017 saw the introduction of the Multi-professional Framework for Advanced Clinical Practice in England. This details the requirements of an advanced clinical practitioner, irrespective of their base profession. In October 2017 the Royal College of Emergency Medicine updated their curriculum for advanced clinical practice, to include allied health professionals as eligible to use the Emergency Care Advanced Clinical Practice Framework. Allied healthcare professionals will be considered for eligibility to credential as an Emergency Care Advanced Clinical Practitioner with the Royal College of Emergency Medicine in the future.
- 4.3.3 The ED workforce strategy outlines an intention to grow the ACP workforce in emergency care, with funding for 42 ACPs across 14 trusts this year, rising to 84 ACPs next year.
- 4.3.4 The PIED-Eng study concluded that following a period of additional training, pharmacists could independently assess and manage 37% of patients attending ED. An on-going pilot across HEE London and the South East is evaluating the role of pharmacists as advanced clinical practitioners within urgent care centres. The pilot sites are Queens Hospital in Romford, Whittington Health in North London and Medway Hospital in Kent. A 12-month evaluation report has identified that following a 12-month period of training, pharmacists' confidence and competence improved with time and demonstrated that trainees could provide patient assessment, clinical reasoning and management under supervision.

Good practice example – Barking, Havering and Redbridge NHS Trust

Ravinder Cholia is a trainee ACP (pharmacist) at Queens Hospital in Romford (Barking, Havering and Redbridge NHS Trust). His main duties include:

- History and physical assessment of patients with acute medical presentations
Requesting investigations such as bloods, ECG, x-ray or CT
- Forming a differential diagnosis
- Planning treatment which could include prescribing medicines, referral, admission or discharge

Ravinder works under the supervision of a Consultant in Emergency Medicine or a General Practitioner to a scope of practice defined by the Royal College of Emergency Medicine (level 1). HEE London and the South East has developed an AFC band 8a job description for this role.

Good practice example – University Hospitals North Midlands NHS Trust

At the University Hospitals North Midlands NHS Trust the pharmacy department worked closely with the ED to establish the pharmacy staffing requirements. During this period the pharmacy ran a pilot of a daily service to Clinical Decision Unit and explored the role of the ACP Pharmacist in the ED.

The pharmacist involved was a qualified independent prescriber, with a background in acute medicine. They worked as a 'trainee' ACP (i.e. undertaking the clinical review and assessment of patients from the 'queue' in majors, minors and resuscitation areas of the ED) with supervision from nominated medical and ANP staff. Enhanced training was undertaken during the course of this pilot. This included modules from the MSc in

ACP, covering enhanced clinical assessment skills and clinical decision-making. These along with a RPS Faculty portfolio, mapped to the four pillars of advanced practice recognised by the new multi-professional framework for ACP.

The pilot demonstrated that the pharmacist ACP was able to contribute to patient management in an equivalent way to those staff from a nursing background, both in range of patients seen and efficiency of management; and, in addition, brought skills and knowledge valued by the wider ED team in terms of prescribing of complex medicines in the ED settings – particularly relating to drugs such as insulin, heparin, vancomycin and gentamicin, which are frequently incorrectly prescribed and generate many of the drug related errors seen in this department.

Development of this workforce was identified as a positive approach to augmenting the ED team. The individual has been adopted permanently into the ED team as an ACP, working as part of the ANP team currently, but the need to develop successive individuals which would allow 24/7 coverage of the ED rota with an ACP pharmacist was also considered important, with one of a number of new ACP posts being ring-fenced for pharmacist specific recruitment.

Good practice example – Worcester Acute Hospitals NHS Trust

At Worcestershire Acute Hospitals NHS Trust (WAH) there is a team of Advanced Clinical Practitioner Pharmacists to support admission avoidance, secondary admission avoidance and prevention of clinical deterioration of patients attending the ED due to medicine-related issues and care. All have undertaken enhanced training, funded and commissioned by Health Education West Midlands to underpin and support their role.

ACP Pharmacist service delivery within WRH is currently focussed on:

- The Emergency Department (ED) – service commenced 2013 and operates from 8-6pm Mondays to Fridays and 8-4pm Saturdays and Sundays.
- The Ambulatory Emergency Care Clinic (AEC) within Acute Medicine – via direct referral or in-reach from ED. Started in 2016 and ACP pharmacists provide 8-8pm cover within the clinic. The ACP pharmacist manages the AEC single-handedly, in conjunction with the Consultant and a ward clerk.
- The Frailty Assessment Unit (FAU) – via direct referral or in-reach from ED at Alexandra Hospital Redditch. Started Sept 2017 and currently operates from 9-5pm Mondays to Fridays currently with approved plans to expand to 8-8pm 7 days a week from winter 18/19.

The team clinically assess patients meeting clinic/assessment criteria on a take basis, clerking patients, undertaking the clinical examination, interpreting and ordering necessary tests, prescribing and de-prescribing necessary treatments and either determining if admission or discharge appropriate and navigating/referring patients to alternative care providers as appropriate.

4.4 Pharmacists within ambulance queues

4.4.1 The use of pharmacists within ambulance queues can reduce significant delays before their arrival within the Emergency Department.

Good practice example – Portsmouth Hospitals

During an extended period of system-wide Opel 4 response, ambulance queues became unavoidable and patients experienced significant delays before their arrival within the Emergency Department. The ED pharmacist reviewed the patients being cohorted by the ambulance service and the ambulance control list, in order to identify patients on critical medicines. She then visited these patients within their holding ambulance, undertook a rapid medicines reconciliation, prescribed, and assisted the patient to take their regular medicines (requesting supply from the pharmacy department where necessary). The most notable examples involved two patients with Parkinson's Disease, whereby the usual dosage schedule of medicines was maintained despite a long wait for admission.

Benefits – Patients do not miss doses of the critical medicines, therefore are not subject to an extended hospital stay due to further deterioration of their chronic condition.

4.5 Use of Pharmacy-based Nursing Staff

- 4.5.1 Many pharmacies now employ nursing staff to support the medicines optimisation agenda. During winter, consideration should be given to deploying these staff on an ad-hoc shift basis, to support the safe use of medicines within the Emergency Department e.g. undertaking drug administration rounds.

5 Weekend & Bank Holiday Services

5.1 Consistency of Pharmacy Service

- 5.1.1 There is a wide variation in Pharmacy service operating hours across the NHS. Provision of a comprehensive service across Saturdays and Sundays significantly improves patients discharge and flow at the weekend. This also reduces Pharmacy workload on Mondays, leads to an improvement in medicines reconciliation rates across 7 days, and supports patient discharge preparation for Mondays.
- 5.1.2 A continued focus on implementing the NHS England recommendations in 'Transformation of seven day clinical pharmacy services in acute hospitals' (see <https://www.england.nhs.uk/wp-content/uploads/2016/09/7ds-clinical-pharmacy-acute-hosp.pdf>) is warranted.
- 5.1.3 The measurement of impact of the service should be the key determinant; for example, the number of patients' discharges handled, TTA turnaround time, medicines reconciliation performance, and service availability. The delivery of 7 day services should be a key element of the ongoing implementation of the Hospital Pharmacy Transformation Plan.

5.2 Safe Staffing Levels

- 5.2.1 Allocate team leaders to co-ordinate the dispensary and ward-based clinical work. They should have sufficient experience to manage the process and ensure the pharmacy service is co-ordinated. Roster swaps should be within allocated roles, to ensure weekend and evening skill mix is maintained.

As part of her Doctorate of Pharmacy thesis, a validated pharmacy workforce calculator has been developed by Ruth Bednall (Principal Pharmacist Clinical Transformation) at the University Hospitals North Midlands NHS Trust. This has been shared with the NHS Improvement Pharmacy Workforce Deep Dive and HoPMOp teams, and the work undertaken was presented at the Hospital Pharmacy Transformation Plan – 1 year event in 2018. The calculator can be used to calculate the pharmacy staffing levels required to support the opening of additional beds, new wards and/or business cases impacting on Pharmacy and Medicines Optimisation.

5.3 Bank Holiday Pharmacy Operating Hours

- 5.3.1 Pharmacy services within a Trust serve many purposes. When considering the opening times necessary over any Bank Holiday, it is important to take into account the balance of clinical, technical and supply service required, in addition to the length of “closure” compared to the normal pharmacy service. By maintaining focus on admission and discharge, the flow within the Trust may be maintained. However it is also important to provide a more comprehensive clinical pharmacy service in order to maintain pharmaceutical care and patient safety. Weekend and Bank Holiday opening is likely to require similar opening hours to the normal service, but with a reduced staffing level to match that elsewhere across the organisation. Sufficient staffing must also be available to compensate for any additional workload pressures after the weekend / Bank Holiday.

Good practice example – Thames Valley & Wessex

Chief Pharmacists across Thames Valley & Wessex provided details of their services over the Christmas and New Year period. Most hospitals provided a daily pharmacy service including Christmas Day, with many including clinical services every day. Some hospitals provided an on-call only service on Christmas Day. Chief Pharmacists should consider the impact that such limited provision has on their patients and staff, and the impact of lone working by the on-call pharmacist.

- 5.3.2 It is recommended that Chief Pharmacists consider the requirements of their patients, liaising with their organisational team to ensure that services are adequate. Availability of the pharmacy team on Bank Holidays should reflect the anticipated work from both unscheduled and scheduled care. However, once pharmacy services have completed their clinical duties, the whole team should not be held back “just in case” for possible discharges.

5.4 Staff Rostering

- 5.4.1 Staff rostering is an important function and can help with incident planning and to ensure there is enough cover during particularly busy periods. E-rostering can help with planning workforce shifts in advance, ensure the off-duty roster is fair to all staff and release time to focus on direct care. The system makes shift allocation fairer, so is less divisive and popular with staff.

Good practice example - East Kent Hospitals University NHS Foundation Trust

The clinical pharmacy team at East Kent Hospitals University NHS Foundation Trust introduced full job planning and electronic rostering, in order to improve workforce visibility across their three acute sites, optimise staff deployment, and increase management accountability for forward planning. The trust has improved staff

recruitment and retention, and substantially reduced sickness absence and unauthorised leave. In addition, they have released the time of a band 6 staff member from manual rota creation for clinical work, and are more adaptable to local issues such as staffing levels over the Chinese New Year.

6 Hospital Systems Approach

6.1 Teamwork

- 6.1.1 An integrated teamwork approach amongst pharmacy teams and technicians not only improves medicine reconciliation and discharge planning, but the additional control it provides has been found to have a positive impact on both readmission rates and length of stay for patients who are re-admitted.

Good practice example - Leeds Teaching Hospitals NHS Trust

Leeds Teaching Hospitals NHS Trust pharmacy team work closely together, and non-registrants, pharmacy technicians and pharmacists meet each morning to prioritise their activity, particularly in the context of medicines reconciliation and discharge planning. This teamwork maximises the use of 'patients' own medicines' and the local connection with community pharmacy has impacted on both readmission rates and length of stay for patients who are re-admitted.

6.2 Medicines Supplies – Prepacks

- 6.2.1 The NHSI Rapid Improvement guide on Optimising Medicines Discharge <https://www.england.nhs.uk/south/wp-content/uploads/sites/6/2016/12/rig-optimising-medicines-discharge.pdf> states that pharmacy dispensing at the point of discharge should be the exception. This process may enable more efficient patient discharge, but should be risk-assessed locally. Prepacks provide an opportunity to support nurse-led discharge in addition to supporting near patient dispensing by ward pharmacy teams. By proactively working with medical and nursing colleagues, services are able to match ward prepack stockholding (range and quantity) to clinical practice developments.
- 6.2.2 In addition, pharmacy utilise prescribing reports on a regular basis to identify further opportunities to create new prepacks, and ensure existing prepacks are held on all the relevant wards. Good communication with prepack suppliers is key to timely introduction of new lines. A senior pharmacist (clinical lead or above) should authorise any new requests, to ensure appropriate governance is in place in terms of the safety of the medication and the clinical area it is used for. A competency programme for nurses in the context of issuing prepacks may be helpful, and has been implemented in some hospitals.

Good practice example Northumbria

In Northumbria, the model of medicines supply includes extensive use of over-labelled drugs to support timely discharge. The vast majority of patients can be discharged at the time a decision is made to discharge because the medicines are already in the patient's bedside or available as over-labelled ward stock.

6.3 Management control

- 6.3.1 Communication is key – a senior member of Pharmacy staff needs to maintain an open channel of communication, reporting to bed meetings on discharges handled, discharges in process, and discharges likely to take place. This liaison often provides useful triangulation for bed managers and provides a route for escalation of issues from the Pharmacy team.
- 6.3.2 During times of acute escalation and pressure on beds, it is helpful to set up a framework for pharmacy escalation. This has a two-fold benefit in that it protects the daily pharmacy work-flow from interference from Trust Operations; and escalation pressure which can then just exacerbate waiting times, but it also keeps pharmacy fully engaged and seen as a co-operative enabler rather than a blockage.

Good practice example – Portsmouth Hospitals NHS Trust

During known pressure points or periods of likely escalation, Portsmouth Hospitals NHS Trust introduced a second tier on-call pharmacist and junior support staff on standby to attend and provide services to dispense discharge medication, thereby releasing beds for ED intake.

On Monday to Friday from 6pm, further members of staff were on standby until 8pm to enable any late work to be completed safely, and a senior Pharmacist was also on-call as a second management tier overnight. The higher management cover enabled a degree of operational control by allowing prioritisation, cohorting and recommendation of alternatives rather than individual clinical areas creating pressure on the on-call pharmacist. Over weekends, this two tier on-call availability was maintained in case of increased demand or late discharges.

The second tier on-call is therefore in place to provide a buffer between the operations centre and pharmacy team, and acts as a decision-maker between hospital control and the pharmacy staff. It also ensures that the on-call pharmacist receives some respite time during extremely busy periods.

7 System-wide Control

7.1 Linking with CCGs – Response to public health incidents

- 7.1.1 CCGs are responsible for ensuring that their contracted NHS providers provide a clinical response to incidents which threaten the health of local people and communities. Hospital pharmacy services can play a pivotal role in the clinical response to such public health incidents; relieving pressure on emergency departments and out-of-hours services, and reducing the risk of transmission of disease to others.

Good practice example – Dudley

Teams from public health, the local authority, CCG, and the acute Trust came together in Dudley to produce a Health Protection Co-operation Agreement, in order to deliver an effective and timely response to public health incidents. This agreement was utilised in winter months in order to mobilise resources, and facilitate the dispensing of anti-viral medication in the event of an outbreak of seasonal influenza in a residential care home setting.

Once the outbreak was triggered, the CCG pharmaceutical team followed protocol to identify potential contacts who required prophylaxis, and completed a patient specific direction proforma according to renal function and weight. This is then shared with the GP (or urgent care centre when out-of-hours) when assessing the patients. The dispensing is fulfilled by the hospital pharmacy department and delivery is arranged. The process ensured timely administration of anti-viral medication to affected individuals, prophylaxis for residents in the care home, and avoided the presentation of infectious individuals at GP surgeries, out-of-hours centres and emergency departments.

7.2 Linking with Community Pharmacy

- 7.2.1 The level of provision of community pharmacy services can vary significantly across different geographies. In many areas, there is a community pharmacy open for extended hours over weekends and bank holidays whilst other areas have minimal cover. Chief Pharmacists will usually have local knowledge of pharmacies offering extended hours or nearby 100 hour pharmacies. NHS England can provide detail regarding opening hours within the locality.
- 7.2.2 Chief Pharmacists should provide these lists to pharmacy staff working over the bank holiday period, so that they can assist patients obtain their usual medicines if necessary. Consideration should also be given to making this information available to their Trust Operations and medical teams, enabling judgement to be made regarding the use of FP10s for simple discharge requests.
- 7.2.3 Chief Pharmacists should consider how best to meet the local needs of patients requiring palliative care if Controlled Drugs are likely to be unavailable in primary care.
- 7.2.4 The NHS.uk 'Find a Pharmacy' (<https://www.nhs.uk/service-search/pharmacy/find-a-pharmacy>) provides patient facing information about all opening hours of pharmacies including bank holidays and local community pharmacy services such as delivery and flu immunisation.

7.3 Integrated Pharmacy team

- 7.3.1 There is emerging evidence that pharmacy teams – pharmacists and pharmacy technicians have an important role to play and can make a significant contribution towards helping manage clinical workloads across primary and secondary care.

Good practice example – Northumbria

In Northumbria, an integrated pharmacy team supported patients on discharge, sped up discharge and prevented admission. The team worked with colleagues in primary care, to allow patients to be discharged in the knowledge that adjustment to treatment would happen out of hospital, thus avoiding delay. Having the capacity of a larger pharmacy team, (i.e. as part of an integrated service), allowed the service to bring clinical staff into the acute hospital setting to help manage clinical workload when the system was under significant periods of stress.

7.4 Linking with Clinical Pharmacists in General Practice

- 7.4.1 The increasing number of Clinical Pharmacists in General Practice provides further opportunities to improve communication channels on patient discharge.

Good practice example – Wirral University Hospital NHS Foundation Trust

Wirral University Hospital NHS Foundation trust employs 'shared' pharmacist posts with GP practices, with half the time in hospital and half in the GP practice. These cross-sector GP clinical pharmacists allow integration of clinical service provision independent of location. For the practices involved, there is a hotline for 'deteriorating patients' linking community pharmacists. The staff delivering the service have access to GP and primary care information. There is also a medicines hotline for all patients following discharge, to allow for follow up advice and support if required.

7.5 Compliance Aids

- 7.5.1 To ensure the appropriate use of compliance aids and management across the interface, engagement from key organisational leaders is required (such as the discharge manager, director of operations, social care lead, care home leads, CCG medicines management, community pharmacy, domiciliary care, local council). A holistic review of the use of these devices is helpful, with supportive training provided where required.
- 7.5.2 The key is to be able to support discharges in a timely manner when a compliance aid has been properly assessed as the best option to support safe transfer of the patient. Where patients use blister packs, it requires good processes for pharmacy staff to follow to allow patients to leave in a timely way; either through working with the patient's regular community pharmacy to update the blister pack, or working with the patient and carers to agree a safe interim measure (such as antibiotics or a new medicine supplied in standard packaging until a new blister pack organised).

Good practice example – Dudley Hospital Group Foundation Trust

In Dudley Hospital Group Foundation Trust, rapid turnaround of discharge prescriptions requiring a monitored dosage system (MDS) was achieved by outsourcing supply to a local provider. Discharge medicines were clinically checked at source and faxed to the provider who is responsible for assembly and checking of the MDS and any peripheral items required. The Trust receives two deliveries each day during the week and one delivery on Saturdays, Sundays and Bank Holidays. Delivery is made directly to the ward, where the nurse looking after the patient signs for receipt of the medicines.

During periods of high capacity, additional deliveries are arranged to support timely discharge from hospital and patient flow. Additional quality features embedded within the service include a medicines reconciliation check by the provider, to ensure robust communication of all medicines changes at discharge; a telephone call to the patient within seven days of discharge to ensure any medicine-related queries are identified and addressed and communication with the patients' usual community pharmacy, and notifying them of the hospital admission and detailing supplies made.

7.6 Care Home Support

- 7.6.1 The Chief Pharmacist should prepare a directory of local care home pharmacy staff, in order to ensure good communication channels are maintained with those staff working in this environment.

7.7 Pharmacy Supporting Management of Flu in Care Homes

- 7.7.1 Multidisciplinary teams have an important role to play in the management of flu in Care Homes. When undertaking a patient-centred review, you not only improve quality and safety but can release healthcare resources and funding.

Good practice example – Royal Wolverhampton NHS Trust

At the Royal Wolverhampton NHS Trust, a multidisciplinary team were commissioned to see patients in care homes suspected of having flu. A rapid response nursing team assessed and decided on treatment. A decision was then made on prophylaxis for contacts within care homes. Pharmacy received prescriptions, clinically screened including checking weight and renal function, and then supplied to care homes with advice and support regarding administration. From December 2017 to April 2018, 987 prescriptions were supplied following attendance at 38 outbreaks. No patients with flu were admitted from care homes following a visit from the team. The rate of flu in the care homes was reduced from the previous year.

7.8 System-wide resilience model

- 7.8.1 Work to enable flexible staffing is ongoing, such as ‘passporting’ in order to ensure liability cover and ‘streamlining’ in order to speed up HR processes (including pre-employment checks concerning qualifications, references, statutory requirements).
- 7.8.2 The different parts of the pharmacy service across the system experience pressures at different times. While community pharmacy and general practice pharmacy colleagues are likely to be equally busy over the winter period and in the run-up to bank holidays, colleagues within CCGs may have less pressing clinical needs to manage. With developments across systems, Acute Chief Pharmacists may wish to consider developing long-term flexible solutions including rotational or joint posts.

Good practice example – Portsmouth

Within the Portsmouth geography, the CCG medicines management team offered to provide support to backfill aspects of the acute pharmacy service. Unfortunately, there remained unanswered questions regarding reciprocity arrangements to cover governance, registration, and maintaining competence; which meant it was not possible to use this additional resource. Trusts may wish to investigate whether similar arrangements can be put in place in advance of periods of increased pressure.

7.9 Hospital FP10 Prescriptions

- 7.9.1 A question is often asked by a number of trusts concerning the potential use of FP10s to enable more efficient patient discharge, or to provide an alternative route of medicines supply on discharge.
- 7.9.2 A consideration of relevant issues concerning FP10 discharge medicines prescribing is appended (**Appendix 4**).

8 Mental Health

8.1 Mental health preparedness

8.1.1 In 2016/17, 54,000 inpatient admissions to acute trust hospitals were attributed to patients with a coding of schizophrenia. There are many publications that show mental health patients have a high utilisation of acute hospital services, with increased lengths of stay compared to non-mental health patients. (6)

In readiness for winter pressures, there should be a focus on mental health challenges as below:

8.1.2 Acute Trusts:

Checklist:

- Prepare a contact list of key local mental health pharmacy staff
- Ensure awareness and understanding of the All England Chief Pharmacists' 'top tips' Mental Health documents
- Ensure 'essential supplies' and guidance are available for key medicines such as clozapine
- Consider employing/seconding a mental health pharmacist for the winter period or skilling up a named pharmacist if there is no psychiatric liaison pharmacist already employed
- Urgent care pharmacists should be 'up-skilled' in mental health
- Make links with the local psychiatric liaison team for direct feedback when issues arise or medication changes are made
- Make mental health medicines information resources available for professionals and accessible for patients
- Prevent falls due to the cholinergic burden of medicines; link with the local falls team

8.1.3 Mental Health Trusts

Checklist:

- Mental health trusts to do their own preparedness for winter – campaign for staff to review physical health care of mental health community patients
- Engage with flu vaccination campaign for mental health patients and carers (work with recovery colleges where applicable)
- Actively check if inpatients have had the flu vaccine and follow up offer of vaccination
- Communications around 'do not run out of medicines' message to patients and carers
- Address any issues arising from supervised daily supplies, and ensure services have contingency services to prevent ED attendances
- Investigate how many mental health patients attend ED locally and why. Consider if there are any issues to be addressed from this data.
- Prevent falls due to cholinergic burden of medicines; link with the falls team

Good practice example - Guy's and St Thomas' NHS Foundation Trust (GSTT) and South London and Maudsley NHS Foundation Trust

The NCEPOD (National Confidential Enquiry into Patient Outcome and Death) 'Treat as One' report identified medicines reconciliation for patients with co-morbid psychiatric illnesses who are admitted to acute hospitals as frequently being completed late, and inaccurately recorded

(http://www.ncepod.org.uk/2017report1/downloads/TreatAsOne_FullReport.pdf)

Unique difficulties arise when psychiatrists prescribe medications that are not noted on GP prescribing systems (including clozapine, depot injections, and newly available medicines). This is therefore a particularly hazardous area for medicines reconciliation.

The project on acute admissions wards at GSTT followed up from the Treat as One project:

40% of all admissions had a psychiatric diagnosis, and of those with a psychiatric diagnosis only 40% are reviewed by psychiatric liaison teams.

More medication doses were missed by patients with a psychiatric diagnosis than those without, and medicines reconciliation took longer (>24h) in those with a psychiatric diagnosis than those without.

9 Aseptic Services

9.1 IV preparations for Emergency Departments

- 9.1.1 Supporting evidence has demonstrated substantial nursing time can be saved through IV being reconstituted and prepared within pharmacy, instead of the Emergency Department.

Good practice example – University Hospitals North Midland NHS Trust

At the University Hospitals North Midlands NHS Trust, the MHRA-licensed manufacturing facility started to prepare batches of Piperacillin/Tazobactam infusion for the Emergency Department, in order to free up nursing time to care for patients. The reconstitution is a lengthy process (approximately 20 minutes in duration per vial), and it was identified that this could be save substantial nursing time by being reconstituted and prepared within pharmacy. Supporting stability data was available.

9.2 IV preparations for patient discharge (OPAT)

- 9.2.1 Outpatient antibiotic therapy (OPAT) services are frequently adopted in order to enable patient discharge and release bed capacity. Pharmacy engagement in supply and quality assurance (with regard to stability of products) is required.

10 Other Supporting Infrastructure

10.1 Pharmacy Stores

- 10.1.1 It is important to consider the impact of the pharmacy supply chain as part of the ability to provide core pharmacy services over the winter period and over Bank Holidays. Hospitals must balance adequate stockholding (especially of those medicines deemed to be critical by the Trust and/or with known supply chain issues) against the

stockholding level suggested by the Lord Carter Report. Many manufacturers close over the Christmas and New Year period, so a “just in time” ordering schedule must be bolstered by contingency stock. There can also be reduced stock-holding apparent over Easter holiday periods when they may coincide with the end-of-year stocktakes.

- 10.1.2 Pharmacy departments should ensure that those working over weekends and Bank Holidays know how to obtain emergency deliveries of drugs from pharmaceutical wholesalers. It is helpful to have a storekeeper available over extended Bank Holiday periods, so that there is a member of staff present who is used to the supply chain requirements. In some circumstances, it may be possible to arrange for an additional delivery through the usual supply route.

10.2 Medical Gases

- 10.2.1 In times of emergency pressure, it is important to ensure the continued availability of medical gases to those patients requiring them. When patients are queuing on trollies or there are numerous additional beds, hospital staff often use portable oxygen cylinders, which can impose a pressure on availability for replenishment. There is also no alarm mechanism on many cylinders, therefore the patient is reliant on frequent nursing checks to ensure that the cylinder does not run out, causing additional nursing resource pressures.

- 10.2.2 It is best practice to position any patient who requires oxygen therapy within a bed space with piped supply. Should piped oxygen run low, hospitals have an alarm system which is triggered. This is safer for individual patient care by ensuring that their gas supply is uninterrupted, and by maintaining sufficient cylinders available for those who need portable cylinders, such as patients being transferred. Some hospital trusts have risk assessed oxygen cylinder usage in their ED services and introduced alarmed cylinders for use in ED queues only.

10.3 Digital and Technological Systems

- 10.3.1 Pharmacy digital and technological systems are critical to manage escalating pressures. Prescription trackers, which support dispensary prioritisation and provide a live view of work progress should be available on all wards so that such critical information is fully and easily available to pharmacy, ward and operations staff. Electronic prescribing provides major benefits in prescribing safety and process efficiency so should result in a significant improvement in patient flow.

- 10.3.2 Pneumatic delivery tube systems can enable very efficient transfer of medicines.
-

References

- (1) Five Year Forward View (NHS England, 2014)
- (2) Securing the future workforce for emergency departments in England. Health Education England, NHS England, NHS Improvement, Royal College of Emergency Medicine. October 2017
- (3) Pharmacists in Emergency Departments. Health Education England. 2015.
- (4) Integrating Community Pharmacy into Urgent and Emergency Care (UEC) Pathways. Medway School of Pharmacy. November 2017.
- (5) Multi-professional framework for advanced clinical practice in England. Health Education England. 2017.
- (6) e.g. Acute hospital service utilization by inpatients in psychiatric hospitals. *General hospital psychiatry*, 2015, 37(6), pp.577-580; The impact of psychiatric comorbidities on the length of hospital stay in patients with heart failure. *International journal of cardiology*, 2016, 207, pp.292-296; Psychiatric illness and mortality after hip fracture. *The Lancet*, 2001;357(9264), pp.1264-1265.

Appendix 1: Winter Pressures – Pharmacy and Medicines Optimisation Toolkit – Overview Checklist

(Red = not being delivered; Amber = partial delivery; Green = full delivery; Black = not applicable locally. Consider the service needs across 7 days in assessing local position)

	Red	Amber	Green	Black
<u>3 Patient Flow (patient discharge from hospital)</u>				
3.1 Optimising medicines discharge to improve patient flow				
3.2 Hospital Pharmacy and Patient Flow Emergencies				
3.3 Patient Prioritisation for Discharge				
3.4 Ward-based processes (Pharmacy)				
3.5 Discharge of patients with short length of stay				
3.6 Best Use of Non-Medical Prescribers				
3.7 Best Use of Pharmacy Technicians and Assistants				
3.8 Use of Volunteers				
<u>4. Patient Admissions</u>				
4.1 Pharmacists in ED				
4.2 Maintaining Control in ED				
4.3 The role of the advanced clinical practitioner (ACP) in urgent and emergency care				
4.4 Pharmacists within ambulance queues				
4.5 Use of Pharmacy Based Nursing Staff				
<u>5. Weekend and Bank Holiday Services</u>				
5.1 Consistency of Pharmacy Service				
5.2 Safe Staffing Levels				
5.3 Bank Holiday Pharmacy Operating Hours				
5.4 Staff Rostering				
<u>6. Hospital Systems Approach</u>				
6.1 Teamwork				
6.2 Medicines Supplies – Prepacks				
6.3 Management control				
<u>7. System-wide Control</u>				
7.1 Linking with CCGs – Response to public health incidents				
7.2 Linking with Community Pharmacy				
7.3 Integrated Pharmacy team				
7.4 Linking with Clinical Pharmacists in General Practice				
7.5 Compliance Aids				
7.6 Care Home Support				
7.7 Pharmacy Supporting Management of Flu in Care Homes				
7.8 System-wide resilience model				
7.9 Hospital FP10 prescriptions				
<u>8. Mental Health</u>				
8.1 Mental Health preparedness				
8.1.1 Acute Trusts				
8.1.2 Mental Health Trusts				
<u>9. Aseptic Services</u>				
9.1 IV preparations for ED				
9.2 IV preparations for patient discharge (OPAT)				
<u>10. Other Supporting Infrastructure</u>				
10.1 Pharmacy stores				

10.2 Medical gases				
10.3 Use of volunteers				
10.4 Use of pharmacy-based nursing staff				
10.5. Pharmacy supporting management of flu in care homes				
10.6 Digital and Technological Systems				

Appendix 2 Feedback 2017/18

A brief telephone review was undertaken with four trust Chief Pharmacists responsible for services, in four of the trusts facing the most challenging winter pressures in early January.

Some of the innovative and positive actions that are happening across these trusts include:

- Pharmacy teams actively speaking to patients queued in the back of ambulances or waiting in corridor queues, to assess drug histories, prepare prescriptions should they be admitted, and take action to ensure key medications (for Diabetes, Parkinson's or serious infections) are not missed before they get admitted.
- Pharmacists taking on discharge prescribing duties across the organisations.
- Extended pharmacy opening times and/or 'reshape' weekend opening hours to move later in the day – to allow work on wards to have progressed further.
- Re-directing pharmacy staff to support flow.
- Near-to-the-patient/ward supply of discharge medicines.
- Close senior pharmacy engagement with Trust operations teams to ensure they are proactive in supporting flow – planning for the next cohorts of potential discharge patients. Plus a clear communication escalation flow chart, for any medication-related issues for bed managers/site teams.

One exemplar Trust was also contacted and it was apparent that the culture of the organisation appeared to be different in that they have not had to make any specific changes to their pharmacy service, including no increase in hours or requirement to directly support the ED.

System-wide challenges and themes identified included the following:

- i. Lack of IT systems – electronic prescribing and medicines administration (EPMA) was seen as very positive in those Trusts with it – but also patient management systems/active whiteboards etc. that support patient management also support workload management. Where Trusts don't have basic electronic discharge systems the teams do not know that prescriptions have been written. The roll out of EPMA remains a key strategic need.
- ii. Universally commented on were Trust leave processes at Christmas. Pharmacy and other support services manage this closely and moderate the percentage of staff allowed leave, and how long they individuals are allowed off to balance with the workload. Maximum levels of 30-40% staff allowed to be off at any one time, and a maximum of 3 days leave per individual over the holiday period, were among the examples given. It appears that this approach is not taken with some other teams.
- iii. Several health economies also mentioned that getting packages of care arranged in the community is a cause of discharge delay.
- iv. Flu is a serious issue, with very high levels in some areas. There appear to be some local anecdotal suggestions of issues with efficacy this year – with staff who have been vaccinated still getting an attenuated (less severe and shorter duration) version of flu, however, pharmacy staff uptake of the vaccine is very high in each Trust.

- v. There are clearly rewards/payment barriers. Staff are often being expected to work with lieu time being the reward – especially when they are the more senior (and hence clinically skilled and useful). This means that a ‘time bomb’ of lieu is accruing at a significant rate that will then impact on services in coming months. Several trusts have ‘sorted’ equitable and universal reward schemes – others have not, and are relying on good will.

Appendix 3: Optimising medicines discharge to improve patient flow

<https://www.england.nhs.uk/south/wp-content/uploads/sites/6/2016/12/rig-optimising-medicines-discharge.pdf>

Clinical pharmacy services underpinning the key principles of optimising medicines discharge can include (but are not limited to):

- Pharmacist prescribers in admissions units and wards.
- Pharmacists or pharmacist prescribers writing discharge prescriptions. This can be done on one-stop ward rounds to prevent batching (see SAFER patient care bundle).
- Pharmacists working hours in acute medical units matching work demands and patient flow into and out of acute units.
- Near patient pharmacy discharge teams.
- Pharmacy technicians/dispensing assistants embedded in ward teams to improve communication, counselling and supply.
- Pharmacy staff on board rounds.
- Pharmacy workforce hours which reflect decision-making times on the ward e.g. start at 8am if the board round starts at 8.30am.
- Pharmacy pre-admission clinics.
- Seven day clinical pharmacy services to high admission/discharge areas to reduce delays to discharges over the weekend and on Mondays.
- Providing information to the patient's usual community pharmacy to support reconciliation with medicines prescribed in primary care where appropriate (<http://wessexahsn.org.uk/projects/54/transfers-of-care-around-medicines-tcam>)

Principle 1 Consider the need for medicines supply at discharge

Principle 2 Start preparing for discharge at admission (or pre-admission if elective)

Principle 3 Reduce discharge prescription and medicine processing time (as the patient experiences it). Think minutes, not hours, from decision to discharge to the patient leaving.

Principle 4 Separate streams for urgent work and non-urgent work i.e. discharge medicines and routine work (with flexibility to respond to increased demand).

Principle 5 Just try it! Make it clear to teams that they don't need permission to try new things.

Appendix 4: Should FP10 prescriptions be used for patient discharge from hospital?

There are a number of important considerations:

- Prescription charges – can be an issue as patients should not be charged at discharge from hospital, but community pharmacy would be required to comply with exemption checking
- Risk that the handing over of a prescription is considered as sorting the medication, whereas medication review is required
- Prescription writing needs to be linked to a proper review of the discharge medicines, i.e. the simple transcription of all medicines must be avoided; alongside this, the checking of patients own medicines is required to assess which medicines require prescribing
- If a significant number of drugs is prescribed and the prescription is eligible for payment, this would be a financial burden for the patient
- Costs of the medicines are likely to be higher via FP10 compared to hospital supply
- FP10 data flow is delayed, so there is a lag before information regarding medicines prescribed is available
- Traffic light system red/amber drugs may not be easily accessible in community pharmacy so the patient or relative may need to search branches, potentially returning to the hospital at a later date to access the medicine
- Foundation year 1 doctors cannot sign FP10s
- Out-of-hours discharge may be problematic in accessing community pharmacy branches that are open
- Hospital doctors do not routinely complete the requirements around an FP10, and so may omit a number of required details
- Hospital pharmacy address a large number of clarifications and corrections for patient discharges in busy periods; these are a higher risk for community pharmacy, where there is not the same level of experience of hospital specialties
- It is difficult to get hold of the doctor from outside the hospital if there are issues to check, and also accessing the correct person if the prescriber has finished their shift
- Hospitals mostly use electronic discharge IT systems with letter and prescription linked – there is a risk that the eDischarge letter won't be completed
- Risk that the information between the letter and the FP10 will not be the same if the processes are separated
- Risk re FP10 security as FP10 prescription pads are controlled stationery, so a high level of administrative control is required; especially in complex and busy ward areas

- The use of FP10s as discharge prescriptions therefore creates risks and issues, which must be managed proactively if this route of supply is to be safely adopted.

Appendix 5: Acknowledgements

Grateful acknowledgement is made to the following senior pharmacists for their contribution to this document:

Amanda Cooper
Andrew Davies
Anne Joshua
Anne Tyrrell
David Campbell
Elizabeth Kay
Evelyn Allen
Mary Evans
Pippa Roberts
Richard Cattell
Ruckie Kahlon
Stephen-Andrew Whyte
Susan Thomson