

Pharmacists & Pharmacy Services in the Emergency Department

Authors

James France

RCEM Quality Lead

UKCPA Emergency Care committee

Hannah Berry | Tom Harris | Ihab Ali

Kunal Gohil | Paul Flattery

Mazen Abdul-Latif | Victoria Heald

Introduction

Patients presenting to the ED are increasingly complex with multiple co-morbidities and significant polypharmacy. Pharmacy services are uniquely qualified to ensure safe and effective use of medicines, improving quality of care and reducing unnecessary cost and treatment delays.

Pharmacists optimise medication use in the acutely unwell patient, improving prescribing quality and safety, factoring in instability and complexity of medicines used in this patient group, using evidence-based recommendations and collaborating with medical and nursing teams. In comparative studies proactive reconciliation and optimisation of both acute and chronic medicines by pharmacy teams in patients presenting to the Emergency Department has been shown to reduce medication errors and improve outcomes for patients.^[1] Evidence supporting the use of ward-based pharmacy services, from admission to discharge in emergency and acute care, shows clinical and economic benefits with significant cost savings.^[2] NICE recommends inclusion of pharmacists in the multi-disciplinary care of patients requiring emergency admission to the hospital.^[3]

Pharmacy Technicians and Assistant Technical Officers (ATO) provide invaluable expertise in medicines management, expenditure reporting and practical medication advice. Their supporting and direct patient-facing roles allow pharmacists more time to undertake medicines optimisation.

RCEM recommends the use of dedicated ED pharmacists and pharmacy services to work as part of the multidisciplinary team to help support the safe and efficient delivery of care to patients in the Emergency Department as well as in Clinical Decision Units / Observation wards.

Standards

1. All Emergency Departments must have a dedicated pharmacist. For clinical cover, RCEM recommends 0.1 WTE pharmacist per resus bed plus 0.05 WTE pharmacist per majors/high acuity bed.
2. All Emergency Departments must have a dedicated Pharmacy Technician. RCEM recommends 1 WTE as a minimum however there must be sufficient allocated Pharmacy Technician and ATO time to provide supporting roles and assist in medicines management relative to size and complexity of the ED.
3. Co-located observation wards / Clinical Decision Units must have a dedicated pharmacist supplementing the dedicated ED pharmacist to cover the area. This resource must be sufficient to ensure medicines reconciliation occurs within 24 hours of patient arrival to ED and ensure efficient and coordinated discharge.
4. The Emergency Department pharmacy service must be present seven days per week. As a minimum the service must be available five days per week and plans in place to increase to seven days per week.^[4]
5. The ED pharmacist must have a clear role description and support to allow sufficient time to be dedicated to all aspects of the role. There must be sufficient pharmacy team resource available to support non-patient facing activities as part of the ED management team.
6. ED pharmacists must be working towards or have achieved accreditation on the RPS Advanced Specialist Curriculum, Advanced Pharmacy Framework, or equivalent. Other pharmacists working in ED must be engaging with a relevant curriculum, have appropriate skills and experience and have access to the ED pharmacist for clinical support. ^[5,6]
7. RCEM does not support the use of pharmacists without additional training to see ED patients independently except for issues directly pertaining to usage of medicines.

Recommendations

1. Sufficient resource should be provided to ensure that periods of annual, sickness and educational leave are covered to ensure continuity of service to ED patients. This may be best achieved via use of a pharmacy team than individual practitioners.
2. In times of escalation and reduced patient flow from ED, additional pharmacy service resource (pharmacist or pharmacy technician) should be made available to reduce risk of patient harm.^[7] RCEM recommends where required an additional 0.05 WTE pharmacist or pharmacy technician per occupied corridor/overflow bed OR 0.05 WTE per patient waiting 12 hours or greater in the ED.
3. If not already resourced, the ED pharmacist should also provide clinical and operational support to any Emergency Department operated separate Urgent Treatment Centre.
4. Emergency Department pharmacists should be supported and encouraged to become active independent prescribers in emergency medicine and maintain appropriate Consultant/SAS clinical supervision.
5. Pharmacy Technicians should be experienced in working with acutely unwell patients and appropriately certified to take histories and reconcile medicines.

Background

The following are examples of core duties of the Emergency Department pharmacy service and should be considered when designing and implementing team structures

Medicines reconciliation and treatment optimisation

ensuring an accurate drug list is available and acute/chronic treatments optimised as soon as a decision to admit has been made, aiming to reduce length of hospital stay.

Focus on high-risk patient groups

Patients who are elderly (STOPP/START Tool; a medication review tool), have renal failure, or a disease requiring time-critical medication to manage to help ensure these patients do not deteriorate whilst in the Emergency Department or if subsequently admitted; as well as considering drug interactions. The promotion and monitoring of safe prescribing in children.

'Ward based' activity

Anecdotally pharmacy cover has been scanty for Clinical Decision Units / Observation Wards; the rapid turnover often complex patients (e.g. older patients after a fall, awaiting therapy or social input) may result in issues with drug prescription and administration, as described above.

As part of the ED management team

Drug budget analysis, safe management of controlled drugs, development of guidelines / drug monographs, prescription charging, liaison role with the rest of hospital regarding medicines policies and impact upon the Emergency Department, electronic prescribing and 'automated' dispensing.

Liaison with primary care

To provide feedback to general practitioners regarding their patients who have attended the Emergency Department and who may be on less than optimum drug therapy (too many, too few, wrong ones) irrespective of presenting complaint and to coordinate complex changes at the point of discharge.

Patient safety

Embedded in clinical governance as part of the ED management team, prevention and reporting of drug errors, drug safety alerts, review and advice regarding high-risk medicines such as warfarin, insulin and anti-cancer agents, promotion of safe prescribing. Ensuring time critical medications are prescribed and administered correctly, providing alternative plans for those patients.

Clinical decision support

For Emergency Department professionals encompassing safe prescribing, drug location and drug administration. Specific issues for the Emergency Department include antidote availability, compliance with national guidance relating to pharmaceuticals (e.g. recalls). Pharmacists have a key role in staff education of use of medicines.

Dispensing of prescriptions

Rapid access to palliative care discharges, fast tracking of prescriptions for patients waiting to be discharged, to avoid breach emergency access standard ('4-hour target'), particularly if the hospital pharmacy is located some distance from the Emergency Department.

Patient education

New drug prescriptions, inhaler technique, use of injector pens.

References

1. *What is the evidence that a pharmacy team working in an acute or emergency medicine department improves outcomes for patients: A systematic review.* Punj et al, Sep 2022.
<https://bpspubs.onlinelibrary.wiley.com/doi/full/10.1002/prp2.1007>
2. *Emergency and acute medical care in over 16s: service delivery and organisation.* NICE. 2018.
<https://www.ncbi.nlm.nih.gov/books/NBK564916/>
3. *Chapter 30 Pharmacist support: Emergency and acute medical care in over 16s.* NICE guideline 94. Mar 2018.
<https://www.nice.org.uk/guidance/ng94/evidence/30.pharmacist-support-pdf-172397464669>
4. *Transformation of seven-day clinical pharmacy services in acute hospitals.* NHS England. Sep 2016.
<https://www.england.nhs.uk/wp-content/uploads/2016/09/7ds-clinical-pharmacy-acute-hosp.pdf>
5. *Royal Pharmaceutical Society Advanced Practice Curriculum.* RPS.
Core Advanced Executive summary.pdf (rpharms.com)
6. *Royal Pharmaceutical Society Advanced Pharmacy Framework.*
RPS. 2013. RPS Advanced Pharmacy Framework.pdf (rpharms.com)
7. *Harm caused by delays in transferring patients to the right place of care.* HSIB. Aug 2024.
<https://bpspubs.onlinelibrary.wiley.com/doi/full/10.1002/prp2.1007>