Clinical Pharmacist in the Emergency Department

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Medicines Use and Safety Network Event
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Clinical Pharmacist in the Emergency Department (ED)

Overview

• Background - Urgent and Emergency Care
• UEC Pharmacy services – Minor Ailments/Common Illnesses
• Pharmacy services to the Emergency Department (ED)
• Winter Pressures adds pharmacist to the ED
• direct from the ED..
• Where next for pharmacists and UEC?
• Contact details
Overview of Urgent and Emergency Care (UEC)

Background

• 196 Emergency Departments in the UK (not include UCC/MIUs)
• 4-hour target – now not being met across UK
• Since Emergency Services Collaborative (2003/4)¹
  – ↑30% in attendance for UEC, 16.5 to 21.7 million (03/04–13/14)
    • walk in centres and minor injury units (type 3) ↑114% - 3.7m
    • A&E units (type 1) ↑12% – 1.6m
  – admissions have also increased – patients are more unwell
  – so far 164,000 more admissions 13/14 than 12/13, ~ 4000 pts/week
• NHS England Urgent and Emergency Care review (Keogh Aug 2014)²
  – better support for people to self-care
  – right care, right place first time
  – highly responsive urgent care outside hospital rising service pressure
  – serious/life threatening conditions – right specialist care (Trauma / Stroke)
  – connect the system together - network (Oncology / Trauma)

UEC Pharmacy Services – Minor Ailments/Common Illnesses

Research base informing service development

Pharmacy Minor Ailments Scheme

- Re-consultation rates in general practice ranged from 2.4% to 23.4%
- Patients reporting complete resolution of symptoms 68-94%
- Mean cost/PMAS consultation £1.44 - £15.90
- No. of consultations & Rx for minor ailments at GPs often declined following introduction

Medication related attendances at an A&E department

- 4% of patients presented with a drug related problem
- 8% A&E attendances could be managed by a pharmacist

A&E patients suitable for management solely by a pharmacist

- A pharmacist could treat at least 2% of adults presenting to study A&E
- A further 3% of adults presented with minor ailments, managed by nurses
- Overall a pharmacist could treat ~5,854 patients annually
- Incorporating a pharmacist may alleviate emergency staff workload & reduce waiting times

3. Bednall et al. Identification of patients attending Accident and Emergency who may be suitable for treatment by a pharmacist. Family Practice 2003;20:54-57
4. Ahmed S, Collignon U and Oborne CA. The application of explicit criteria to identify accident and emergency patients suitable for management solely by a pharmacist. Pharm J 2007;279:73-76
Pharmacy Services to the Emergency Department

Research base informing service development


• 25 NHS hospitals
• 72% had some level of pharmacy service to A&E
• skill mix, service model and pharmacy services varied
• pharmacists current roles were similar
• potential roles identified for technicians
• further benefits of pharmacists included
  – rationalisation of medicines on admission
  – identification of ADRs causing admission
  – facilitate discharge

Winter pressures add clinical pharmacist to ED

Introduction
• UK UEC services under pressure with increased patient demand
• 4-hour target performance falling - 89.63% met (95.94% - 2013)\(^1\)
• £700 million winter pressure funding announced Nov 14
• from early 2000’s ED pharmacy services in development
• similar roles to in-patient clinical pharmacists
• clinical pharmacists skills still underutilised in UEC provision

Local service drivers
1. shortage of UEC trained medical and nursing staff
2. bank and locum staff - significant unplanned cost
3. potential to optimise ED skill mix & support medicines management
4. support from Lead ED clinician
5. no operational clinical pharmacy service directly in the ED

Other factors
– Oversupply of pharmacists graduates
– Increase in presentation to UCC/MIUs
– NHS England UEC review

Winter pressures add clinical pharmacist to ED

Clinical pharmacy service
• Trust winter pressures funding
• 1 WTE clinical pharmacist on ED shop floor
• 29 Sept 14 - end April 2015
• Staffing AfC B7 / B6 (3 years qualified) pharmacists
• Roster 1-9.30pm Fri/Sat/Sun, 12-6pm Monday plus 6-9.30pm Mon-Fri

Aim
Demonstrate the impact of a clinical pharmacist in the ED

Objectives
1. Quantify operational workload undertaken in the ED by the clinical pharmacist
2. Identify drugs ED staff request support/information for and main reason for request
3. Measure the impact of ED clinical pharmacy service on the medical take ward round
Winter pressures adds clinical pharmacist to ED

**Methods**

Activity and specific drug data were collected for every shift. Standard operational data collection proforma was piloted and amended for use.

Pharmacists tasks were identified as:

- drug history fully completed
- medicines reconciliation fully completed (prioritise high risk patients\(^1\))
- allergy status confirmed (if incomplete)
- drug charts transcribed
- identification and check of patients' own medicines (PODs)
- patients/relatives asked to bring PODs in to hospital
- medicines advice to patients
- items supplied from dispensary
- out-patient prescriptions screened
- staff information / resource provision
- clarification of antibiotic prescriptions
- referral to doctor or another healthcare professional
- contact with GP or Community pharmacist

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\(^1\) Standard Operation Procedure Procedure for pharmacists providing a clinical pharmacy service in the Emergency Department (winter pressures pilot) March 2015
Winter pressures add clinical pharmacist to ED

Results

• 149 shifts (802hrs) completed to 9.02.15
• 1492 patients seen by pharmacist
• 10 patient seen/shift
• 5 pharmacist tasks completed/pt
• 32 mins/pt (average)
• Staff support/information - 388 individual drugs
Winter pressures add clinical pharmacist to ED

Results - tasks completed by pharmacist

- Drug History fully completed: 75% (1124/1492)
- Medicine reconciliation fully completed: 49% (733/1492)
- Allergy status confirmed: 50% (749/1492)
- Drug chart transcribed by a pharmacist: 43% (641/1492)
- No. of patients who brought POD: 33% (496/1492)
- PODs checked and suitable for use: 1623 (4.9/pt checked, 3.3/pt suitable)
- No. of patients where pharmacist requests POD to come in: 19% (284/1492)

- Antibiotic prescriptions clarified: 26 (duration = 48, indication = 71)
- Medicines per patient supplied from pharmacy: 0.3
- Patients counselled: 13% (189/1492)
- Patients who had medicines in compliance aid: 15% (221/1492)
- Out patient Rx screened: 27
- Staff information/resource provision occasions/drugs: 233/388

- Referral to Dr / HCP: 103 / 33
- Contact with GP / Community Pharmacist: 72 / 64
Winter pressures add clinical pharmacist to ED

Results cont...

Reasons for support / information
• 60% - safety to prevent an ADR (233/388)
• 32% - efficacy (123/388)
• 10% - length of stay (39/388)
• 16% - compliance/concordance (62/388)
• 6% safety in relation to an ADR (24/388)

Support / information requests by system
• 26% CNS (101/388)
• 23% CVS 23%
• 21% infection (81/388)

Results on the impact on the post take ward round – to be reported shortly
Winter pressures add clinical pharmacist to ED

Discussion

First study outlining provision of a clinical pharmacy service to main ED
DH and MR completed before admission
  - 75% of patients had a completed DH
  - 49% had medicines fully reconciled
  - 50% had allergy status confirmed providing a medicines safety barrier – supports safe prescribing
  - in high risk ED environment

Pharmacists transcribing
  - 43% of patients had their chart written, freeing time from admitting team
  - supports ED/Trust skill mix
  - improves workflow - allows admitting doctor to focus on history & examination
  - role for independent prescribing pharmacists

Patients Own Drugs
  - emergency patients less likely to have medicines with them
  - ED pharmacist can ask relatives or carers to bring PODs on return
  - 929 further usable PODs were expected
  - enhances quality DH and MR
  - facilities discharge
  - may provide a cost saving
Winter pressures adds clinical pharmacist to ED

Discussion cont…

The ED pharmacist ensured
- medicines quality and safety – clinical review of patients individual treatment
- supported Trust to achieving antibiotic CQUIN targets
- availability of all required medicines – avoids missed / delayed doses
- medicines information – direct provision for 13% of patients
- discharge support through liaison with community pharmacists and GPs - highlights need for
- appropriate patient referrals into community pharmacist NMS

This pilot should be continued to further evaluate the patient and service savings and the additional staff costs to the ED
direct from the ED…

“…of all the things we’ve tried in A&E this [pharmacy pilot] is one of the best….”  A&E staff nurse

“…we thought we had an Ebola patient… in the end it was malaria… the pharmacist was brilliant, she sorted everything… she just got it done….”  A&E Consultant

“… when patients are acutely unwell and going off our role [as pharmacists] changes…”  A&E pharmacist

“…in the space of 15mins I saw a cardiac arrest, a patient fitting and massive haematemesis… it was great experience [as a pharmacist] to be directly involved in the care of these patients..”  A&E pharmacist

“… getting referrals is good, now they know us… they tannoy for us….”  A&E pharmacist

“…some of the processes are barriers to care.. getting notes scanned to get patients to the ward….”  A&E pharmacist
Where next for Pharmacists and UEC?

**Strategic change needed…**
- National English Common (Minor) Ailments Scheme
- Identification of high risk A&E patients for clinical pharmacist review, drug history and discharge planning.
- Ambulance transfer of patients medicines to hospital (Green Bag & Bottle schemes)
- Information exchange - Summary Care Record and links to community pharmacies
- Regional co-ordination and arrangements for poison and antidote supplies

**Health Education England**
- HE West Midlands Pilot in 2013 of Pharmacists in Emergency Department (ED)
- Major review of potential role for pharmacist in ED
- National pilot of pharmacy services - expressions of interest Jan 15\(^1\)
  - Independent Prescribing Pharmacist completing whole episodes of care
    - Medicines related and Minor Illness focus

**How to get involved…**
- UKCPA Emergency Care Specialist Interest Group
- Local Emergency Care Networks in development

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our contact details...

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