



GUIDELINES AND AUDIT
IMPLEMENTATION NETWORK

"TAKE HOME" MEDICATION SUPPLY FROM NORTHERN IRELAND EMERGENCY DEPARTMENTS

Audit Report by the Northern Ireland
Regional Emergency Department
Pharmacist Group

March 2010

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INTRODUCTION

Approximately 60,000 people attend a Northern Ireland Emergency Department (ED) every month¹. Some of these patients will require admission to hospital and some will be treated in the department and require no further ongoing treatment. However, a considerable but unknown number are discharged from Emergency Departments who require an ongoing supply of medications to treat their condition or alleviate their symptoms. This audit plans to examine how this supply takes place in practice across Northern Ireland.

There is currently little practical guidance which is specific to the supply of medicines from Trust Emergency Departments in Northern Ireland. Consequently, there is considerable variation in practice depending on a variety of factors including Trust policy, individual hospital procedure, physical cupboard space, medication concerned and staff training.

Some practices have developed which are unsafe and potentially against legal requirements governing the supply of medication. Examples of these practices include supplying loose tablets to patients in envelopes or decanting liquids into plastic tablet bottles.

In addition, there is disparity in what quantity is actually supplied to patients. While some hospitals limit supply to one or two doses of a particular drug, others may supply three to four days. Consequently, patients are having varying treatment depending on location. This has a knock on effect on primary care as patients may have to attend their GP or Out of Hours service followed by Community Pharmacy to get further supply.

¹ "Statistics and Research | Emergency Care Annual Statistics | DHSSPS (NI)" Northern Ireland - Department of Health, Social Services and Public Safety Website

The DHSSPSNI document 'Priorities for Action'² asked for a continued programme of reform in 2009/2010 to ensure enhancement of the patient experience is sustained in all A&E departments , and that all parts of the emergency care pathway operate efficiently. The supply of medications is a key part of this pathway.

'Priorities for Action' also asks for every effort to be made to optimise the safe, effective and economic use of medications. This audit will measure how this is happening at this vital access point to medications.

Outside 'Priorities for Action' there are definite legal requirements³ to be fulfilled when a medication is supplied. Currently these may not be met in all trusts. This audit will identify any areas that need to be targeted to ensure full compliance with these legal requirements.

This audit will provide a baseline from which definite guidelines can be developed. Staff training needs will be identified and addressed. Legal requirements will be enforced and re-audited in the future to ensure compliance. Future planning will be designed and resourced around the needs of patients.

The end result will be a standardised approach to supply of medicines in Emergency Departments throughout Northern Ireland. Patients will receive medications promptly, safely and in suitable quantities to ensure continuation of therapy.

² "Priorities For Action | DHSSPS(NI)." Northern Ireland - Department of Health, Social Services and Public Safety Website

³ Full list of legal references listed in audit standards

AIM

To gain a detailed overview of medication supply following treatment in Northern Ireland Emergency Departments.

KEY OBJECTIVES

- Categorise and quantify the medications supplied via emergency departments
- Identify the various methods used to supply medications
- Audit supply methods against existing legal requirements and professional standards
- Gauge the current level of training in this area
- Provide a basis to draw up definite guidelines on the supply of medications from emergency departments in Northern Ireland.



AUDIT STANDARDS

STANDARD	Target (%)	Exceptions	Source of Evidence
S1 There is an SOP in place for supply of medications by nurses in the Emergency Department.	100%		NMC Standards for Medicines Management ⁴
S2 The patient has the legal right to expect that the supply will be carried out with the same reasonable skill and care that would be expected from a pharmacist.	100%		NMC Standards for Medicines Management
S3 Medicines supplied are labelled correctly i.e. with a label showing the date, name of patient, ward, name of medicine, its strength and precise instructions for its administration.	100%	Legal requirement therefore no exceptions	Medicines Act 1968 ⁵ / Use and Control of Medicines ⁶
S4 A patient information leaflet should be supplied with every medicine.	100%	Legal requirement therefore no exceptions	Medicines Act 1968/ EC Labelling and Leaflet directive 92/27 ⁷
S5 No transfer of any medicine from one container to another, other than by pharmacy staff, takes place.	100%		Use and Control of Medicines
S6 Medicines are supplied in appropriate containers.	100%	Legal requirement therefore no exceptions	Medicines Act 1968/ Use and Control of Medicines/ Medicines
S7 If Patient Group Directives are used to supply medications these medicines should be provided to the ED by pharmacy as ready labelled pre-packs.	100%		MHRA guidance ⁸

The targets have been set at 100% as many of the standards are based on legal requirements to which there can be no margin of error applied.

⁴ "NMC Standards for Medicines Management" The Nursing and Midwifery Council Website

⁵ "Medicines Act 1968 (c.67) "The UK Statute Law Database

⁶ "Use and Control of Medicines (DHSSPS (NI)). "Northern Ireland - Department of Health, Social Services and Public Safety website

⁷ "Labelling and Package Leaflets for Medicinal Products." EUROPA - The Official Website of the European Union

⁸ "Patient Group Directions in the NHS: MHRA - Medicines and Healthcare Products Regulatory Agency - Home Page.



AUDIT DESIGN & METHODOLOGY

There were three levels to the audit; pharmacist overview (PO), nursing questionnaire (NQ) and observational study (OS). The audit was carried out in each of the thirteen Emergency Departments across the five Northern Ireland HSC Trusts.

Before any audit was carried out the details were discussed with all stakeholders both at regional and local level including Consultants, Nursing Ward Managers, Pharmacy Managers, Pharmaceutical Manufacturing Unit and the Regional ED Pharmacist Team.

Pharmacist Overview (PO, see Audit Form 1, Appendix 2)

- ED Pharmacist in each hospital reported on current practice and procedures regarding staff involved, methods of supply, Patient Group Directions (PGDs), prescribing documentation and Standard Operating Procedures (SOPs)
- A three month snapshot of medications requested by each department was extracted from trust pharmacy computer systems and grouped into therapeutic groups and route of supply (hospital pharmacy or ED)

Nursing Questionnaire (NQ, see Audit Form 2, Appendix 2)

- To avoid bias a junior member of pharmacy staff completed a questionnaire by means of a structured interview with nursing staff
- Questions asked covered supply methods, medications involved and training provided
- In total 135 interviews were carried out across Northern Ireland with a minimum of 10 per Emergency Department



Observational Study (OS, see Audit Form 3, Appendix 2)

- The pharmacist went to the department on each of the five weekdays, selecting the next two medications to be supplied from the department for a pharmacist check on each occasion. 10 items per department were checked in total.
- No more than two items were selected per staff member. If this became the case the item was discounted from results and the next item to be supplied by a different staff member checked instead.
- Where possible the nurse was not made aware the check would take place until after it was assembled.
- The ED pharmacist assessed the quality of medication prepared against the standards used in hospital pharmacy to check items before supply.
- Any errors identified during checking were rectified before the item was given to the patient.

Difficulties Encountered

Two hospitals did not have a pharmacist working in the particular ED at the time of audit and had limited staff resources to allocate to data collection. As the Observational Study was the most time consuming strand of the audit this was omitted in these two hospitals. Useful information was still gathered via the Pharmacist Overview and the Nursing Questionnaire in both hospitals.

This Observational Study was perceived as a close monitoring of practice by some nursing staff but reassurances were given to the anonymous nature of reporting and the results can be seen as representative of normal practice.

BACKGROUND INFORMATION

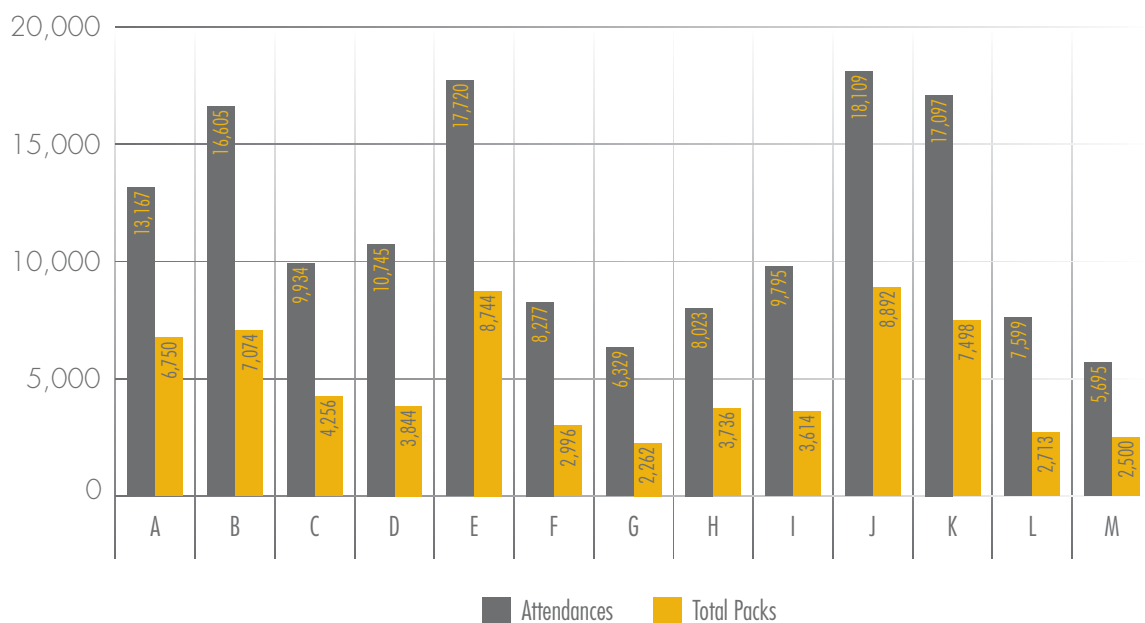
In addition to audit standards information was gathered which will enable future planning to take place and covered the methods used to supply medications as well as the categories and quantities supplied.

A1 Quantities of medications supplied

The total number of packs issued in a 3 month representative period in 2009 across Northern Ireland was 64,879, this equates to 435 packs per 1000 ED attendances.

There were no significant outliers to this and number of packs issued broadly tracked number of attendances in every hospital as shown below. Each hospital has been given a random letter identifier.

Chart 1 Comparison of attendances vs. packs issued by hospital for 3 months, Sep-Nov 2009 (source PO)



Throughout the results the source will be indicated as follows:

PO – Pharmacist Overview

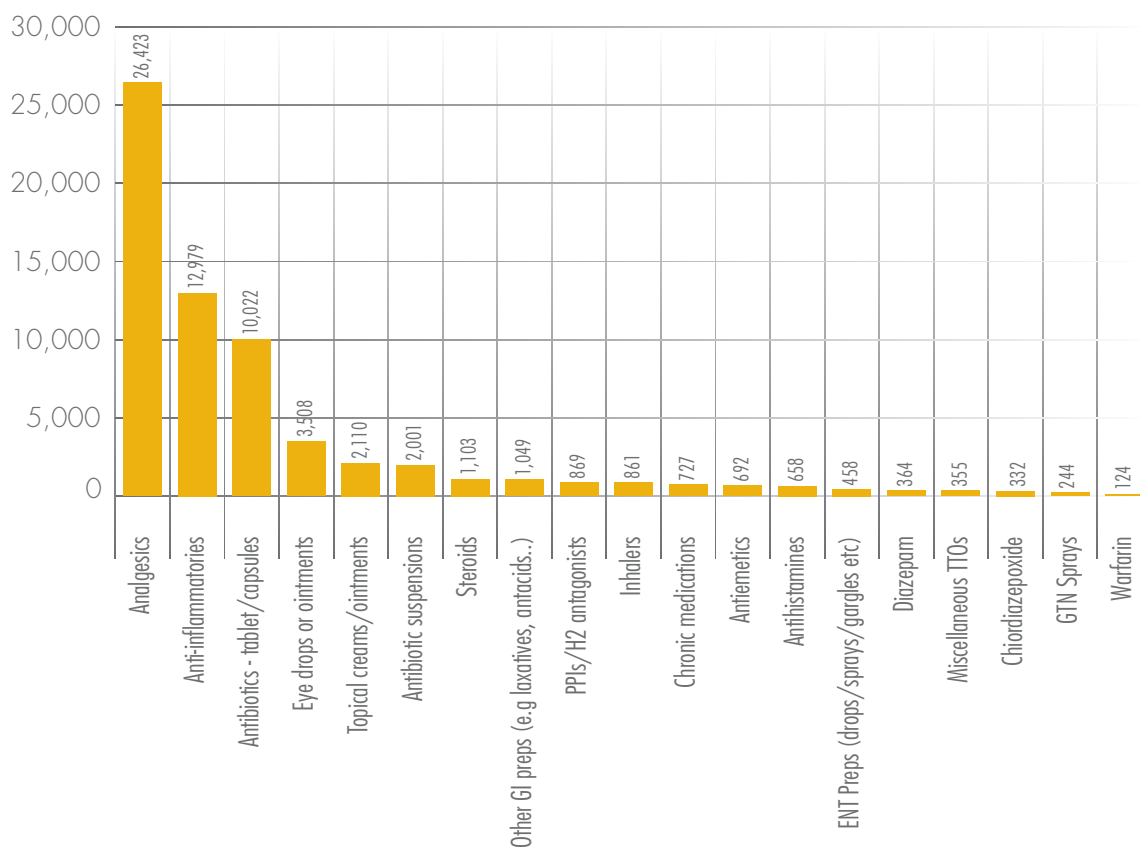
NQ – Nursing Questionnaire

OS – Observation Study

A2 Categories of medications supplied

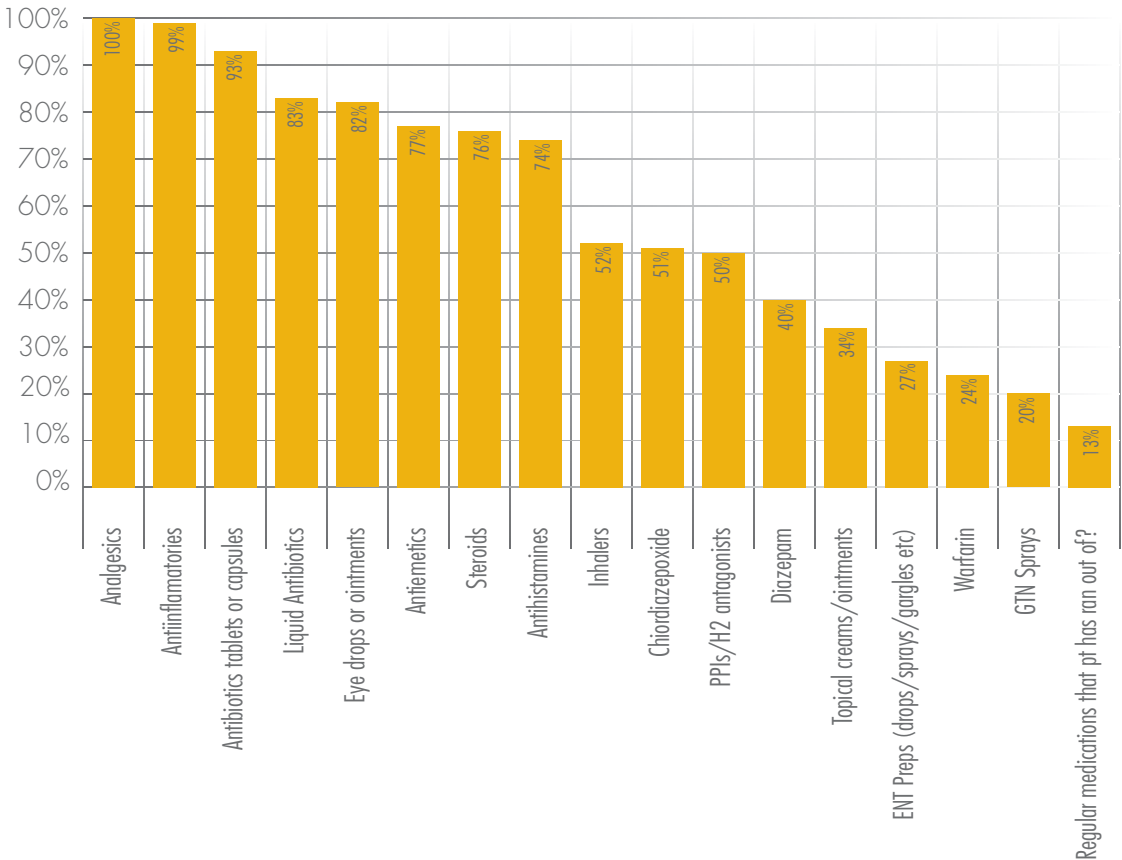
Relevant information was extracted from pharmacy computer systems identifying the categories of medications that are supplied to the Emergency Department which are likely to be used for take-home medications.

Chart 2 Total packs issued to NI Emergency Departments as indicated by pharmacy computer systems for 3 months, Sep-Nov 2009, by medication category (source PO)



Nursing staff were also asked to identify the medications which they considered they supplied frequently. Although this is more subjective it gives an indication of any medications that are routinely supplied in smaller quantities than a full pack, which the pharmacy figures would not identify.

Chart 3 Percentage of nurses indicating that they “frequently” supplied a medication category (source NQ)



A3 In-hospital methods of supplying medications to ED attendees

There are a variety of means employed to ensure continuing supply of medications following ED attendance, some approved and some unapproved. Supply can take place within the ED, within the hospital (i.e. hospital pharmacy) or external to the hospital (i.e. referred elsewhere). In hospital methods are shown in the tables below. All hospitals use more than one method depending on situation.

Table 1 Methods used to supply patients with medications within NI hospitals following treatment in the ED (source PO)

Ready labelled packs are supplied in bulk by pharmacy. Nursing staff add basic details to label e.g. date and patient name and supply to patient	12 out of 13 hospitals
Blank labels or partially completed template labels are supplied by pharmacy. Nursing staff complete full details on label e.g. name of drug, dose, date and name of patient, attach to packaging and supply to patient	12 out of 13 hospitals
Empty boxes or bottles are supplied by pharmacy. Nursing staff transfer medications from larger packs into this packaging, complete a blank label, attach label to packaging and supply to patient	11 out of 13 hospitals
Nursing staff transfer medications to unapproved packaging e.g. envelopes or plastic bags, write directions either directly on packaging or on a label and supply to patient*	8 out of 13 hospitals
Pharmacy accepts prescriptions issued in the ED and dispenses medication against them**	12 out of 13 hospitals
Medications are not routinely supplied when patient's own GP surgery is open. An advice note is written for the patient to bring to GP to arrange supply	2 out of 13 hospitals

* as indicated by presence of unapproved packaging in preparation area

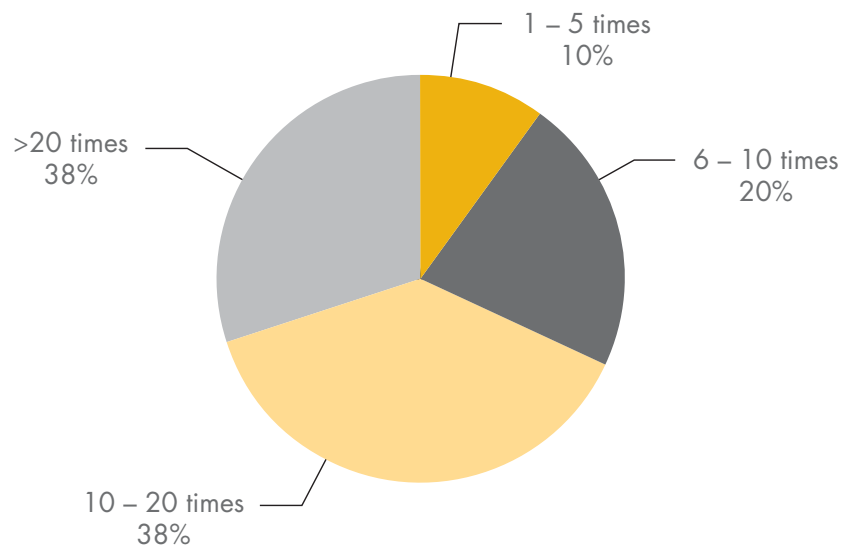
** Note: while 12 out of 13 hospital pharmacies accept ED issued prescriptions, only 1.6% of medications are supplied in this manner



A4 Frequency of supply actually in the ED

Nursing staff were asked to indicate how often they supplied take-home medications directly to patients in the ED

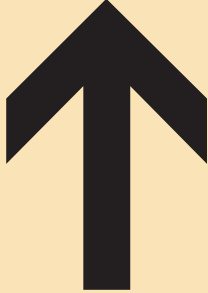
Chart 4 How many times per day do nurses supply medications to patients, as percentage of respondents (source NQ)



A5 Routes of supply used when a medication is not issued directly in the ED

The majority of medications are supplied directly to patients in the ED, however this is not always possible. Other routes used are indicated below.

Table 2 Most common routes of supply. Figures in brackets refer to percentage of nurses indicating they used this route for a least one patient every working shift (source NQ)

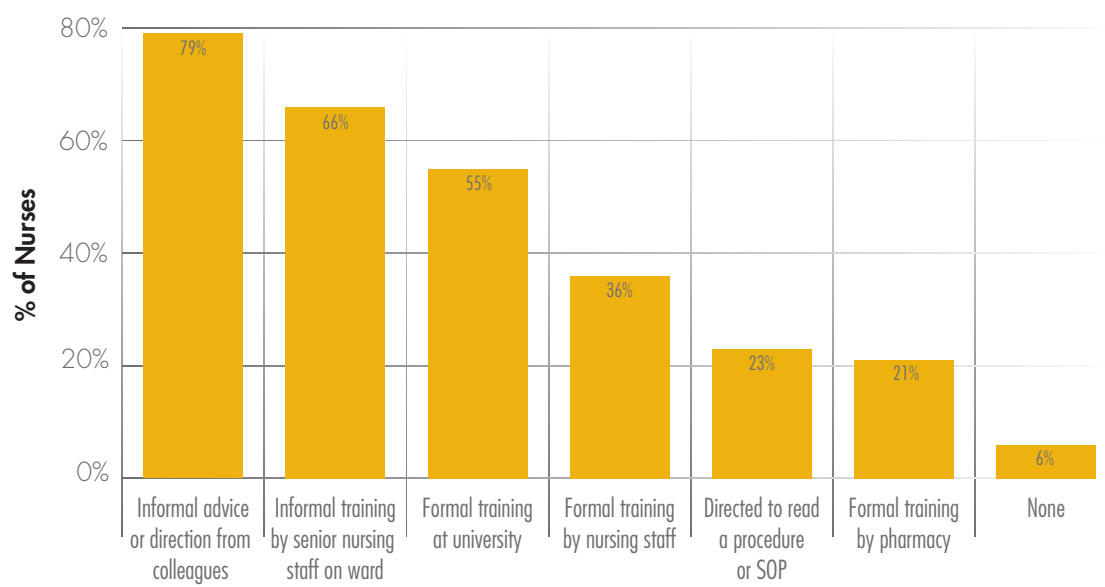
Most likely to refer to	Direct supply in ED (100%)
	General Practitioner (50%)
	Use own supply at home (37%)
	Purchase in supermarket (24%)
	Community Pharmacy (16%)
	Hospital Pharmacy (4%)
Least likely to refer to	Minor Ailments Scheme (3%)
	Use another family member's supply (1%)

Figures in brackets refer to percentage of respondents indicating they referred to this route at least daily



A6 Training provided to nursing staff on medication supply

Chart 5 What method(s) of training on medication supply did nursing staff report receiving at some point in their career or nursing education? (source NQ)



AUDIT RESULTS

S1 There is an SOP in place for supply of medications by nurses in the Emergency Department

Target 100% Achieved 46%

Pharmacists were asked if there was a Standard Operating Procedure in place in the ED. Nursing staff were also asked.

Chart 6 How many EDs have an SOP? (source PO)

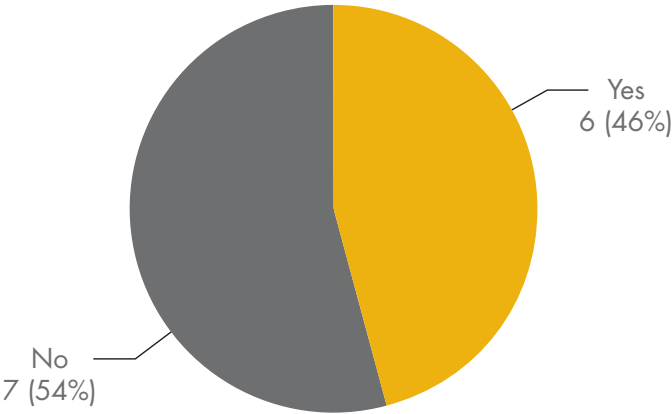
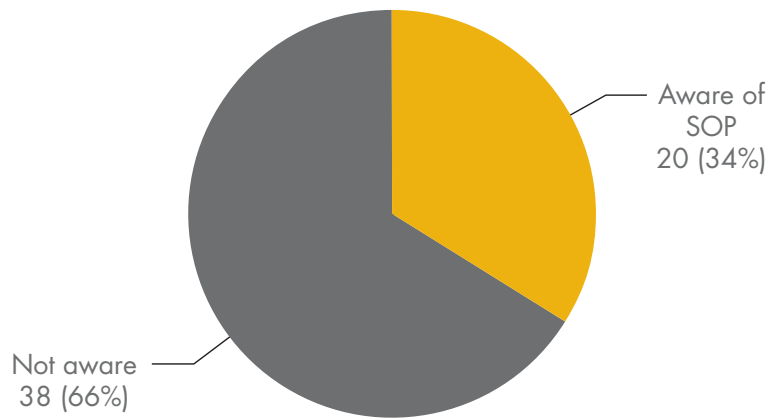


Chart 7 In EDs with SOPs, how many nurses were aware of it? (source NQ)



S2 The patient has the legal right to expect that the supply will be carried out with the same reasonable skill and care that would be expected from a pharmacist.

Target: 100% Achieved: 64%

Pharmacists randomly selected 10 medications prepared for supply to patients in the ED and assessed against the same standards used to supply via pharmacy.

Chart 8 Would the medication sampled have passed the standards of a check made in pharmacy before supply? (source OS)

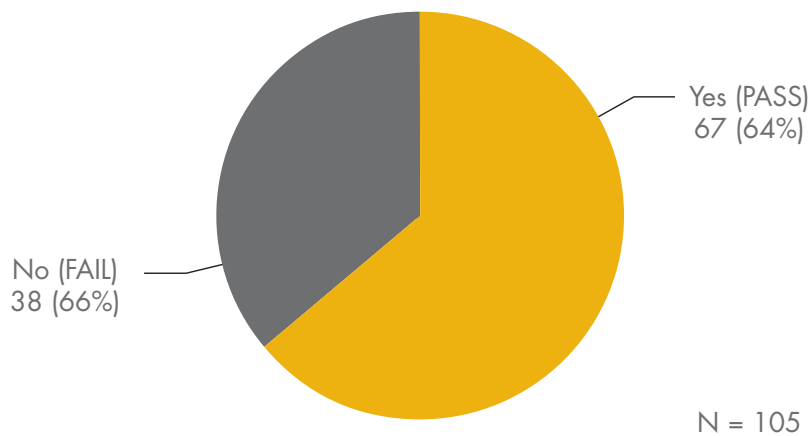
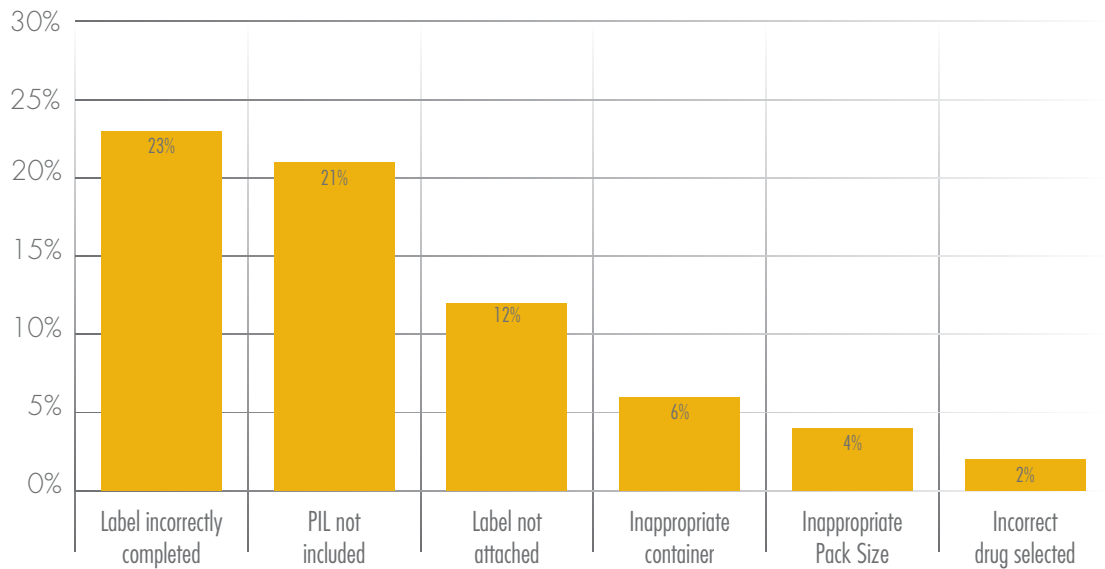


Chart 9 Why did the medications fail to meet the standards of a pharmacy check?
(source OS)



S3 Medicines supplied are labelled correctly i.e. with a label showing the date, name of patient, ward, name of medicine, its strength and precise instructions for its administration

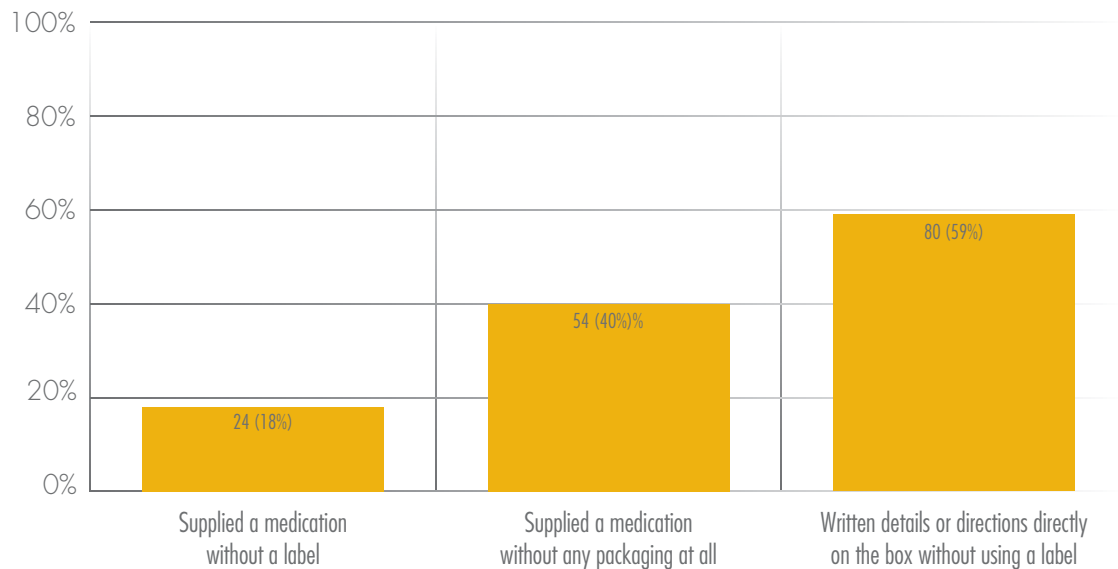
Target: 100% Achieved: 75% (OS)

By observation, 23% did not have a correctly completed label. 12% of medications did not have a label attached at all. Due to overlap in results overall 25% of medications were not labelled correctly (source OS).

As part of the questionnaire, nursing staff were asked if they had carried out any unapproved labelling practises in the last month as shown below.



Chart 10 Unapproved labelling practises carried out at least once in the previous month as indicated by nursing staff (n= 158, source NQ)



S4 Patient Information Leaflet (PIL) supplied with every medicine

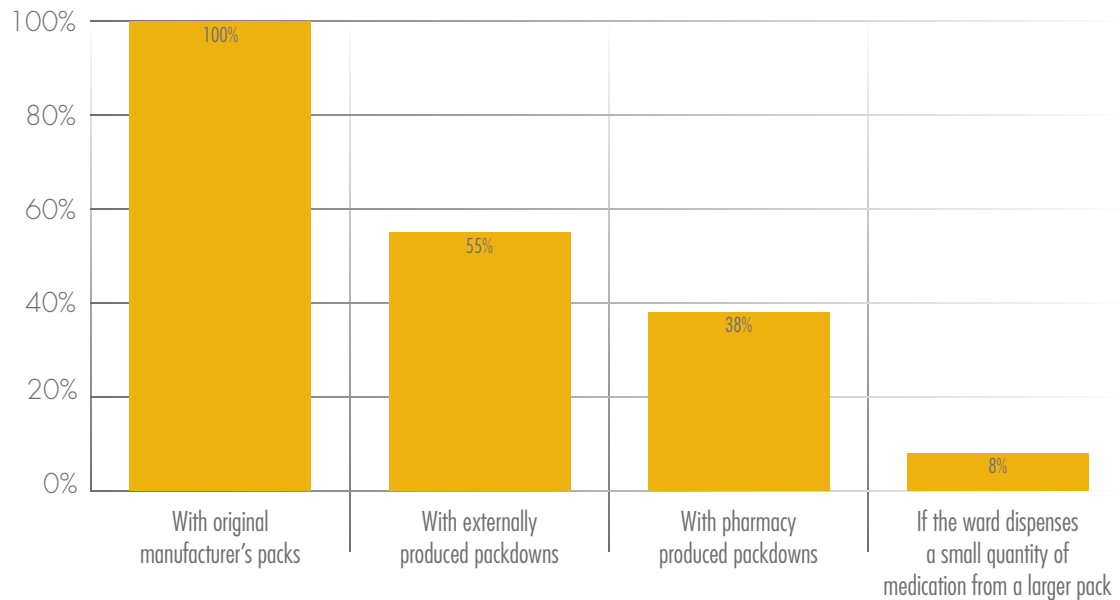
Target 100% Achieved 79% (OS)

By observation 21% of medications supplied did not have a PIL included for the patient (source OS.) This was confirmed by nursing staff with only 19% indicating that they had been able to supply a PIL with every medication in the previous month (source NQ).

The pharmacy overview is able to provide insight into this indicating that only when an original manufacturer’s pack is supplied is provision for a PIL guaranteed:



Chart 11 Percentage of hospitals routinely supplying PILs in the given situation (source PO)



S5 No transfer of any medicine from one container to another, other than by pharmacy staff, takes place

Target: 100% Achieved: 8% of EDs comply in all circumstances (PO)

73% of nurses indicated they had to transfer tablets or liquids from one container to a smaller box or bottle to supply less than one manufacturer's pack in the previous month (source NQ). Pharmacy indicated that only one ED in NI never transferred medications (source PO).

S6 Medicines are supplied in appropriate containers

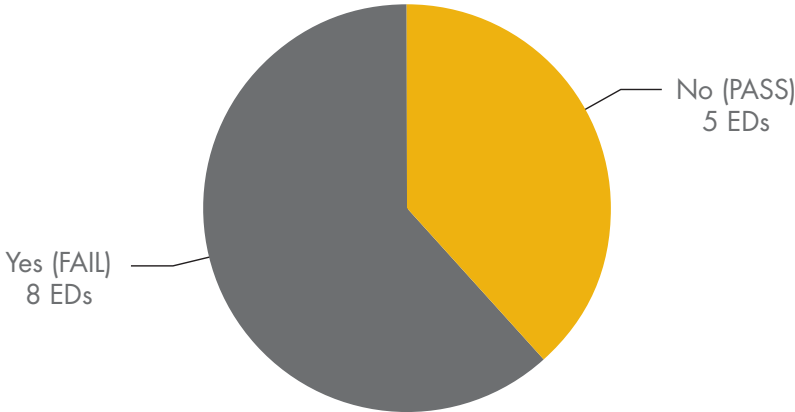
Target: 100% Achieved: 38% of EDs comply in all circumstances (PO)

44% nurses indicated they had supplied a medication in packaging not provided by pharmacy such as a brown envelope or plastic bag in the previous month (source NQ).



This was confirmed by pharmacy from past experience or by checking medication preparation area in the ED.

Chart 12 Does the ED ever supply medications in unapproved packaging such as envelopes or plastic bags not issued by pharmacy? (source PO).



S7 If Patient Group Directives are used to supply medications these medicines should be provided to the ED by pharmacy as ready labelled pre-packs.

Target: 100% Achieved: 18% of EDs which use PGDs (PO)

11 out of 13 hospitals supply under PGD, of these 9 do not routinely use pharmacy produced pre-packs in all cases.



CONCLUSIONS

Key Points

There is a large quantity of medications supplied through NI Emergency Departments (approximately a quarter of a million medications per year).

There is a wide variety of medications supplied however the majority fall into one of three categories-analgesia, anti-inflammatories, antibiotics.

The majority of medications are supplied directly to patients in the ED.

Other methods used include referral to GP, advised to use an existing supply at home or directed to buy in a shop or community pharmacy.

Although all hospital pharmacies accept some form of prescription from the ED it is one of the least common routes of supply.

When medications are supplied directly to the patient in the ED legal and professional requirements are often not met, most notably with regard to labels and leaflets.

Double-checking of medications by a second member of staff is not common practice in all EDs.

Training in supply of medications varies greatly. The most commonly reported method is by informal training on the ward.

A minority of EDs have a Standard Operating Procedure in place for supplying medications. Within these EDs the majority of staff are unaware of the procedure.



Volume and Range of Medications

The audit indicated 64,879 individual medication supplies were made in the three month audit period. This equates to approximately 250,000 supplies of medication made to patients in Northern Ireland every year following Emergency Department attendance.

There is a wide range of potential take-home medications supplied by hospital pharmacies to EDs. The audit indicated 19 different categories in a 3 month period. However, the audit also showed that the majority of medications (76%) fall into the top three categories of analgesics, anti-inflammatories and antibiotics.

Nursing staff indicate they supply some medications more often than pharmacy statistics would suggest. This indicates small quantities are decanted from large packs for supply to patients. Notable examples are anti-emetics, steroids, diazepam and chlordiazepoxide. These medications are generally not available in suitable manufactured pack sizes for issuing directly to ED patients.

It was thought before the audit that EDs may have been used as a supply route for patients who had run out of regularly prescribed medications. However this was ranked lowest category of supply by nursing staff and drugs deemed “chronic medications” made up only 1% of all medications supplied by pharmacy.

Routes of Supply

Unsurprisingly the most common method of supply is for a medication to be issued directly to the patient in the ED, and due to the 24 hour nature of the service much of the time this may be the only option available. 38% of nurses indicated they supplied 10 to 20 medications per day in this manner and a further 30% indicated they supplied over 20 medications per day.



When a supply is made in the ED a variety of methods are used depending on the actual medication issued:

- Ready labelled packs requiring only addition of basic details such as date and patient name. These meet legal and DHSSPSNI guidance requirements⁹.
- Blank templates/labels which the nurses complete before attaching to medications. If completed correctly these would meet legal requirements however on observation 23% of labels were incorrectly completed and 12% of medications were not labelled at all.
- 11 out of 13 EDs transfer medications to pharmacy supplied containers if need be, this is against DHSSPSNI guidance.
- 8 out of 13 EDs had evidence of unapproved packaging such as postage envelopes being used as packaging for medications; this is in breach of the Medicines Act¹⁰ and is not a legal method of supply.

When a medication is not available in the ED the most common route of supply is by referring patient to their own GP to issue an NHS prescription. 50% of nurses do so at least once daily and 2 EDs indicated that during GP normal hours this would be the most common means of supplying patients. Although not assessed by this audit this may result in delays to patients receiving medications and may increase GP surgery workload.

Although 12 out of 13 hospital pharmacies accept prescriptions for items not available in suitable packaging in the ED this route of supply is not generally used with only 1.6% of medications supplied in this manner and nurses ranking it 5th out of 7 possible routes of supply. Barriers to this route of supply include pharmacy opening hours, staff resources to deal with large volumes of ED prescriptions and

⁹ "Use and Control of Medicines | DHSSPS(NI)." Northern Ireland - Department of Health, Social Services and Public Safety website.

¹⁰ "Medicines Act 1968 (c.67)" The UK Statute Law Database



physical location in relation to the ED. There could also be a knock on increased handling time for other pharmacy services such as outpatient dispensing and inpatient discharges resulting in patient delays external to the ED.

Training

The results highlighted that informal instruction by colleagues or senior nursing staff is the most common form of training on supply of medications received by ED nursing staff. Some nurses did report they had received formal training at university but it is unknown if this was specific to drug supply or if it was the broader topic of drug administration.

Without proper training and SOPs in place it follows that other professional and legal standards will not be met and this has been shown by the results of the other parts of the audit.

Legal and Professional Standards

Standard Operating Procedures (SOPs)

The NMC Standards for Medicines Management require that if supply of a medication is made by a nurse in a department then there should be an SOP in place in that department. Only 46% of departments actually have an SOP and in those departments almost two-thirds of staff are not actually aware of the SOP. SOPs are therefore not only needed in all EDs but must also be publicised to the staff who should be working to them.

There is a need for a double-check by another member of staff to be part of any SOP. This is likely to be a contentious issue in busy EDs. However as indicated by the fact 36% of medications failed in the observation study and 2% were not actually the medication prescribed it can be seen as a necessary procedure.



Patient Information Leaflet (PIL)

It is a legal requirement when a medication is supplied that a Patient Information Leaflet (PIL) is included. 21% of medications observed did not have a PIL included.

One reason for the lack of PIL is that medications may be dispensed in small quantities from a larger pack on ward which only include one leaflet.

However it was also noted that when the hospital pharmacy packed down medications into smaller packets for issuing in the ED only 38% of dispensaries included a PIL in all packs. Some pharmacies externally source the smaller packs but even in that case 45% of pharmacists reported not all packs included leaflets.

Labeling

By law all packs must be correctly labelled before supply- only 75% of medications observed were labelled in a proper manner, with 12% not labelled at all. 59% of nurses stated they had written directions directly on to a box without a label in the previous month at least once.

All except one ED uses ready-labelled packs requiring only name of patient and date (and in some cases name of hospital) to be added. However these are not available for all medications and it varies between each hospital as to what packs are actually available.

Packaging

Packaging must also meet legal standards. 62% of EDs had evidence of unapproved packaging usage such as envelopes or plastic bags. By observation 6% of medications were not in suitable packaging. 44% of nurses indicated they had supplied a medication in an envelope or plastic bag in the previous month and



40% indicated they had supplied medications with no packaging at all (i.e. a strip of tablets). Again, this comes down to the availability of ready labelled packs in suitable pack sizes.

Transfer of medications

Although not illegal, DHSSPSNI guidance on containers states that transfer of any medicine from one container to another other than by pharmacy staff is forbidden in the hospital environment¹¹. Only one pharmacist indicated that this did not happen in the ED and 73% of nurses had carried out such a transfer in the previous month.

Transfer of medications is seen as normal practice in some departments and indeed 85% of pharmacy departments facilitate this by providing empty pharmacy boxes and bottles for use in the ED. This is the case in an attempt to more closely mirror preferred practice and is often the only option with current resources.

Patient Group Directives (PGDs)

MHRA guidance states when a medication is supplied it should be in pre-packs made up by a pharmacist wherever possible. Only 18% of EDs which supply under PGD comply with this. When supply takes place under a PGD the practitioner in question must personally make the supply and not direct another person to do so. As such, it presents an additional risk if they must label packs before making supply rather than using ready labelled pre-packs.

¹¹ "Use and Control of Medicines | DHSSPS(NI)." Northern Ireland - Department of Health, Social Services and Public Safety website.



RECOMMENDATIONS

REGIONAL GUIDELINES should be put in place as a priority to ensure equitable, safe and transparent practice throughout Northern Ireland.

REGIONAL GUIDANCE SHOULD COVER:

The situations which are appropriate for supply

The staff appropriate to make this supply

What should be supplied

The correct procedure to be followed when a supply is made in the Emergency Department

Referral procedures for patients unable to obtain immediate supply

The legal obligations of all those involved in the supply

This list is not exhaustive and other requirements may be added as deemed appropriate by those drawing up the guidance

A REGIONAL FORMULARY of medications suitable for supply in the Emergency Department should be put in place to provide cost-effective standardised care. Ideally this should be part of the regional guidelines.

PRE-LABELLED PACKS of the medications on this formulary should be available in all Emergency Departments. They should include Patient Information Leaflets in all cases. This is key to ensuring medications are supplied in a legal and low-risk manner.

STANDARD OPERATING PROCEDURES should be put in place in all Emergency Departments to cover supply of medications. A regional template may be appropriate to this.

DOUBLE CHECKING medications by another member of staff is recommended as part of any SOP and guidance- this may represent a major change in practice for some.

PROPER TRAINING should be put in place. This may be locally arranged for existing staff or by involvement of universities for future nursing staff. It should cover legality and practice.

ACTIONS

Audit results and recommendations to be disseminated to key stake-holders for discussion and action.

Audit results and recommendations to be disseminated to the members of staff in the Emergency Departments who make supply and who were involved in this audit i.e. all levels of nursing staff.

Formulate a multidisciplinary working group to work on recommendations

- To develop regional guidance on supplying medications in the ED
- To develop a Northern Ireland formulary for the supply of medications in the ED
- To determine a means for current and future staff training in this area

ADDITIONAL INFORMATION

The Northern Ireland Regional Emergency Department Pharmacist Group has applied for further support from GAIN to develop regional guidelines and this has been approved.



APPENDIX 1 CONTRIBUTORS AND ACKNOWLEDGEMENTS

Project Team

Matthew Dolan	Regional Emergency Department Pharmacist Team Leader (Project Lead)
Claire McKay	Emergency Department Pharmacist SHSCT (Deputy Project Lead)
Aisling O'Hagan	Emergency Department Pharmacist SHSCT
Stephanie Garvin	Emergency Department Pharmacist SHSCT
Joanne O'Donnell	Emergency Department Pharmacist WHSCT
Helen Cuning	Emergency Department Pharmacist WHSCT
Helen Quinn	Emergency Department Pharmacist SEHSCT
Catherine Rice	Emergency Department Pharmacist SEHSCT
Leanne Stewart	Emergency Department Pharmacist BHSCT
Mal Gribbon	Clinical pharmacist BHSCT
Chris Hutchinson	Admissions pharmacist NHSCT
Helen Graham	Emergency Department Pharmacist NHSCT

Funding

This audit was funded by the Guidelines and Audit Implementation Network (GAIN). The project team would like to thank GAIN for their much valued support.

Pre-audit discussions

The audit was discussed with representatives from key areas/groups/professions for input before being conducted.



Profession/ specialty /Trust	Representative		
	Name	Job Title	Date Agreed
Emergency Dept Pharmacists	Regional A+E Pharmacist group	Details as Project Team	17/9/09
Emergency Dept Nurses	Geraldine Byers	Nurse Consultant Emergency Care, BHSCT	30/9/09
Emergency Dept Medical Staff	Mr Seamus O'Reilly	Consultant Doctor in Emergency Care, SHSCT	15/10/09
Pharmaceutical Manufacturing Unit	Collette McBride	Production Manager, Victoria Pharmaceuticals	6/10/09
Trust Pharmacy Departments	Lyn Watt	Patient Services Manager, Pharmacy Dept, SHSCT	15/10/09

Audit Support

BHSCT Audit Department provided valuable guidance and was responsible for processing the audit results. The project team would like to thank Simon Dunlop and the BHSCT audit department for their assistance with this.

Hospital Participation

Thank you to all the various nursing staff from each of the hospital sites listed below who took part in this regional audit – the project team very much appreciated your support – without your help this regional audit could not have taken place.

Altnagelvin Hospital

Belfast City Hospital

Causeway Hospital

Downe Hospital

Lagan Valley Hospital

Royal Victoria Hospital

Ulster Hospital

Antrim Area Hospital

Craigavon Area Hospital

Daisy Hill Hospital

Erne Hospital

Mater Hospital

Royal Belfast Hospital for Sick Children



APPENDIX 2 AUDIT FORMS

These are paper versions. In practice much of the information (in particular in Audit Form 1) was entered directly onto a data collection spreadsheet which is available from the Project Lead if required.

Audit Form 1: To be completed by ED Pharmacist

1. Please tick as appropriate

Who issues medications to patients in A&E? (tick all that apply)	ED Nurse <input type="checkbox"/>	ED Doctor <input type="checkbox"/>	Pharmacist in ED <input type="checkbox"/>	Pharmacy Technician in ED <input type="checkbox"/>	Pharmacy dispensary <input type="checkbox"/>
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2. Which of the following do you use in ED?

(Please tick as appropriate)

Containers:

Skillets Glass Bottles Plastic bottles

Labelling and Leaflets:

Labels – non specific blank templates

Labels – blank template specifically for tablets

Labels – blank template specifically for liquids

Labels – drug specific labels with directions etc.



Over-labelled packs produced in pharmacy

Over-labelled packs from external company

3. PGDs

Are PGDs used to supply medicines in the department? Yes / No

Are all PGD medications supplied to the ED by pharmacy already in over-labelled pre-packs? Yes / No

4. What form of prescription is accepted by pharmacy (please tick)

Out-patient prescription form	Discharge prescription	Kardex	Flimsy	None
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



5. The following section looks at the range of medication requested by the Emergency Department over the last 3 months (outside the agreed stock list). It will identify items which are frequently required by EDs and highlight those medications which may be necessary to have as pre-packs.

	Total packs issued	Prescribed (i.e. via out-patient prescription, discharge letters, flimsy or kardex)	Requisition (non-stock items only)
Antibiotics			
Analgesics			
Antiemetics			
Steroids			
Chlordiazepoxide			
Diazepam			
Warfarin			
Antihistamines			
PPIs/H2 antagonists			
Inhalers			
Regular medications			

6. Is there an SOP in place for supply of medications by nurses in the Emergency department?

Yes / No



Audit Form 2: Nursing Questionnaire

(to be carried out by junior pharmacy staff)

Please read the following to each nurse before carrying out audit:

"The information gathered during this audit will remain anonymous. The purposes of the audit are to improve services to patients and identify training needs. At no point will the information gathered be linked to individuals. The final report will not identify specific hospitals"

Band _____

Working hours Day staff / Night staff / Both

(please circle as appropriate)

1. Do you supply medications to patients going home from ward stock? Yes / No

If you have answered "YES" to Question 1 please complete the remainder of the questionnaire.

2. On average, how many patients would you dispense medications for per day?

0 1-5 6-10 10-20 >20 (please circle)

3. Does your practice differ depending on whether pharmacy is open or closed? Yes / No



4. Think of patients you have supplied medication to over the past month.

Have you:

- Always supplied pre-labelled patient pre-packs? Yes / No
- Given a strip of medication from a stock box? Yes / No
- Given loose tablets? Yes / No
- Always given a patient information leaflet? Yes / No
- Supplied medication in an envelope? Yes / No
- Supplied medications in a pharmacy box/skillet? Yes / No
- Supplies medication in a plastic bag? Yes / No
- Always completed a label on medications either using pre-labelled packs or labels supplied by pharmacy? Yes / No
- Provided a patient with a smaller quantity of a stock liquid in an amber glass bottle? Yes / No



5. How often would you direct patients to use the following sources to obtain medication?

	Always	Frequently	Occasionally	Rarely	Never
Hospital pharmacy					
Community pharmacy					
Minor Ailments Scheme					
GP					

6. Please tick those medications would you supply to patients on a regular basis?

Antibiotics	
Analgesics	
Antiemetics	
Steroids	
Chlordiazepoxide	
Diazepam	
Warfarin	
Antihistamines	
PPIs/H2 antagonists	
Inhalers	
Regular medications (those which patient is normally on at home)	



7. Do you use a designated area for preparing medications when supplying home with patients? Yes / No

8. Are you aware of an SOP for supplying medications home with patients? Yes / No

9. What training have you received in the supply of medications to patients? Please tick as appropriate:

Formal training from nursing staff i.e. teaching session / workshop training	
Formal training from ward pharmacist	
Training at university	
Informal training by senior nursing staff on ward	
Informal advice from colleagues	
Directed to read procedure / SOP	
None	



Audit Form 3: Checklist for observational study

- The ED pharmacist should select 10 medications which have been prepared by nursing staff for patients going home.
- These 10 items should be selected when the nurse has finished the preparation process and before they have been given to the patient.
- Select 2 items each day of the week from Monday-Friday.
- No more than 2 items should have been prepared by one member of staff.
- The nurse should not be aware that you will review this item prior to it being given to the patient.
- Any errors identified during checking should be rectified before the item is given to the patient.

Please fill in YES or NO or N/A for each answer

	Medication									
	1	2	3	4	5	6	7	8	9	10
Medication within expiry date?										
Appropriate pack size used?										
Appropriate container used?										
Label attached?										
Label correctly completed?										
Patient information leaflet?										
Double check received by colleague?										



NOTES



Copies of this Audit report may be
obtained from the GAIN Office

GAIN Office
DHSSPS
Room C4.17
Castle Buildings
Stormont
BELFAST
BT4 3SQ

Telephone: 028 9052 0629

Email: gain@dhsspsni.gov.uk

Alternatively you may visit the GAIN website
at: www.gain-ni.org

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