Medication Review Practices at Hospital Pharmacy

Moira Kinnear

NHS SCOTLAND

EVERY PERSON EVERY TIME SCOTTISH PATIENT SAFETY PROGRAMME

Healthcare Improvement Scotland

NHS SCOTLAND

Safer Use of Medicines

1 in 5 adults in Scotland are dispensed 5 or more medicines

59% of patients over 70 years old are dispensed 5 or more medicines

Each year in primary care

101 million prescription items are issued in primary care

! 4 million prescribing errors

! 40,000 to 3.4 million dispensing errors

61,000 non-elective hospital admissions are due to medicines

5 classes of medicines account for most admissions

- NSAIDS
- Antiplatelets
- Anticoagulants
- Diuretics
- Anti-hypertensives

Each year in acute care

435,000 inpatient prescription items are prescribed in an average 500 bed acute hospital

! 32,500 prescribing errors with up to 200 causing patient harm

! 35 to 85 dispensing errors

2 million **doses of medicines administered** in an average 500 bed acute hospital

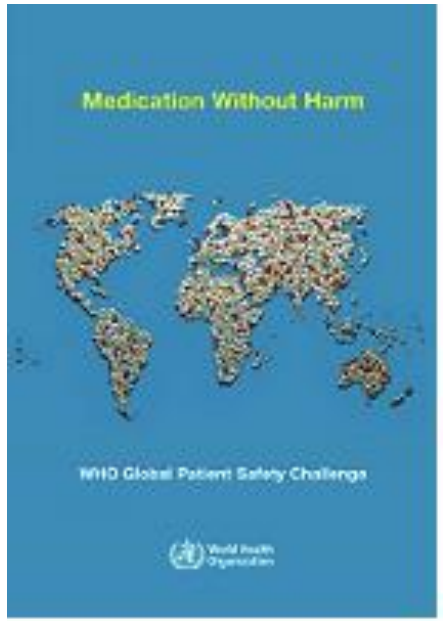
! 189,000 administration errors

! 15,000 patients admitted to all acute hospitals experience an adverse event due to medicines

up to 280 **preventable deaths** across all acute hospitals are due to medicines

Published August 2015

Originally produced by and adapted from NHS England



Patient Journey

Hospital admission → Medicines reconciliation → In-patient management → Medicines Review Changes to medicines → Discharge → Communication of any changes to medicines

'The process that the healthcare team undertakes to ensure that the list of medication, both prescribed and over the counter, that I am taking is exactly the same as the list that I or my carers, GP, Community Pharmacist and hospital team have. This is achieved in partnership with me through obtaining an up-to-date and accurate medication list that has been compared with the most recently available information and has documented any discrepancies, changes, deletions or additions resulting in a complete list of medicines accurately communicated. '

Reference source: CMO Letter Safer Use of Medicines - Medicines Reconciliation SGHD/CMO(2013)18

Prioritisation of those at highest risk

Medicine has been stopped including reason
Medicine has been started including reason
Intended duration of tx (eg antibiotics)
Dose has been changed including reason
Route of admin. has been changed including reason
Frequency of dose has changed including reason

Medicines Reconciliation

Healthcare Improvement Scotland

NHS Education for Scotland

Medicines reconciliation **e-learning module**

Target audience: Doctors, nurses, pharmacists and pharmacy technicians

Medicines reconciliation on admission - goals and measures

Medicines reconciliation on admission to hospital is the process of collecting, confirming and communicating the accurate list of medicines that a patient is taking at the point of admission in to hospital. The Scottish Government has agreed two goals and five measures.

The Goals are:

- **95% compliance** with medicines reconciliation within **24 hours of admission**
- **95% of patients** have an accurate inpatient prescription chart within **24 hours of admission**

The Measures are:

- Patient demographics documented
- Allergy status on admission documented
- 2 or more sources, one of which should be the patient/carer, used on admission to give the best possible medicines history
- Medicines Plan documented for each medicine i.e. continue, withhold, stop
- Safe and accurate transcription of clinically appropriate medicines on inpatient prescription chart

Chief Medical Officer and Public Health Directorate
Chief Nursing Officer, Patients, Public and Health Professionals Directorate
Finance, eHealth and Pharmaceuticals Directorate
Clinical Director, The Quality Unit

The Scottish Government
Riaghaltas na h-Alba

LEGACY 2014
XX COMMONWEALTH GAMES SCOTLAND

Dear Colleague

Safer Use of Medicines
Medicines Reconciliation: Revised Definition, Goals and Measures and Recommended Practice Statements for the Scottish Patient Safety Programme

Purpose

This letter and its appendices set out a number of changes and developments to build on current good practice, strengthen and consolidate compliance with Medicines Reconciliation in the Scottish Patient Safety Programme and support for NHS Boards to meet this strategic direction.

Background

Medicines are the most common intervention in western

From the Chief Medical Officer
Chief Nursing Officer
Chief Pharmaceutical Officer
Clinical Director, The Quality Unit
Sir Harry Burns MPH FRCS(Glas) FRCP(Ed) FFPH
Ros Moore RGN RNT BSc (Hons) Nursing MA
Professor Bill Scott BSc MSc DSc (Hons) FRPharm S
Professor Jason Leitch

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St Andrew's House
EDINBURGH EH1 3DG
Tel: 0131-244 2689
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19 September 2013

SGHD/CMO(2013)18

Establish multi-professional leads for medicines reconciliation (doctor, pharmacist and nurse) to drive forward improvement.

Ensuring medicines reconciliation is a core part of training for all doctors, pharmacists, nurses and pharmacy technicians; including induction training.

Adopting the medicines reconciliation e-learning module as mandatory training for all doctors, pharmacists, nurses and pharmacy technicians. This is hosted by NHS Education for Scotland and is planned to be available early 2014.

Implementing medicines reconciliation in acute receiving units as a priority area, where it should be tested, embedded and spread to other clinical areas.

The verification of the medicines reconciliation by a pharmacist provides the definition of accurate medicines reconciliation, if pharmacist verification has not been completed then an assessment would require to be made on the accuracy during the case note review process.

Medicines reconciliation- standard form

ECS- Live- Patient report

Patient Name	CHI	Date of Birth	Age	GP	GP Practice	GP Practice Code
Annie White	XXXXXXXXXX	XX/XX/XX	88	Another, A	1 Royal Infirmary	88844

Clinical Data

Allergies

Description	Date Recorded	Comments
None recorded	10 October 2004	

Sources

☐	ECS	☐	Patient's Drugs	☐	Referrer Kardex	☐	GP Practice	☐	TRAK
☐	Patient	☐	Relative/Carer	☐	Referrer Letter	☐	Comm Pharmacy	☐	Other - Specify.....

Actions

C	Continue	W	Withhold	S	Stop

Acute Medication including those greater than 30 days)

Drug ID	Formulation	Dose	Frequency	Medication Start Date	Prescription Date	Source			Action			Comments
						1°	2°	3°	C	W	S	
Co-codamol	8/500 tablets	Two tablets	4-6 hourly as required	18 August 2010	20 January 2015							

Repeat Medication

Drug ID	Formulation	Dose	Frequency	Medication Start Date	Prescription Date	Dispensed Date	Source			Action			Comments
							1°	2°	3°	C	W	S	
Ramipril	5mg tablets	One tablet	In the morning	20 June 2014	20 February 2015								
Simvastatin	40mg tablets	One tablet	At night	27 May 2006	20 February 2015								
Aspirin	75mg tablets	One tablet	In the morning	27 May 2006	20 February 2015								
Levothyroxine	50microgram tablets	One tablet	In the Morning	19 Oct 2003	20 February 2015								
Dipyridamole	200mg MR capsules	One capsule	Twice daily	27 May 2006	20 February 2015								
Ibuprofen	400mg tablets	One tablet	Three times daily	18 August 2010	20 February 2015								
Amitriptyline	75mg tablets	One tablet	At night	12 June 2005	20 February 2015								
Senna	7.5mg tablets	Two tablets	At night as required	29 July 2005	20 February 2015								
Omeprazole	20mg capsules	One capsule	In the morning	27 May 2006	20 February 2015								

Compliance Device	Name and telephone number of community pharmacy

Completed by	Designation	Grade	Date	Time	Contact Number
Reviewed by	Designation	Grade	Date	Time	Contact Number

Printed By: A Doctor on Day 1

Risks of an Incomplete History

- Fail to identify medicines that should be stopped
- Fail to identify when medicines should be started
- Fail to identify when a dose needs reducing
- Fail to identify when a dose needs altering
- Fail to identify non-adherence

Communication

Problem solving

Therapeutics

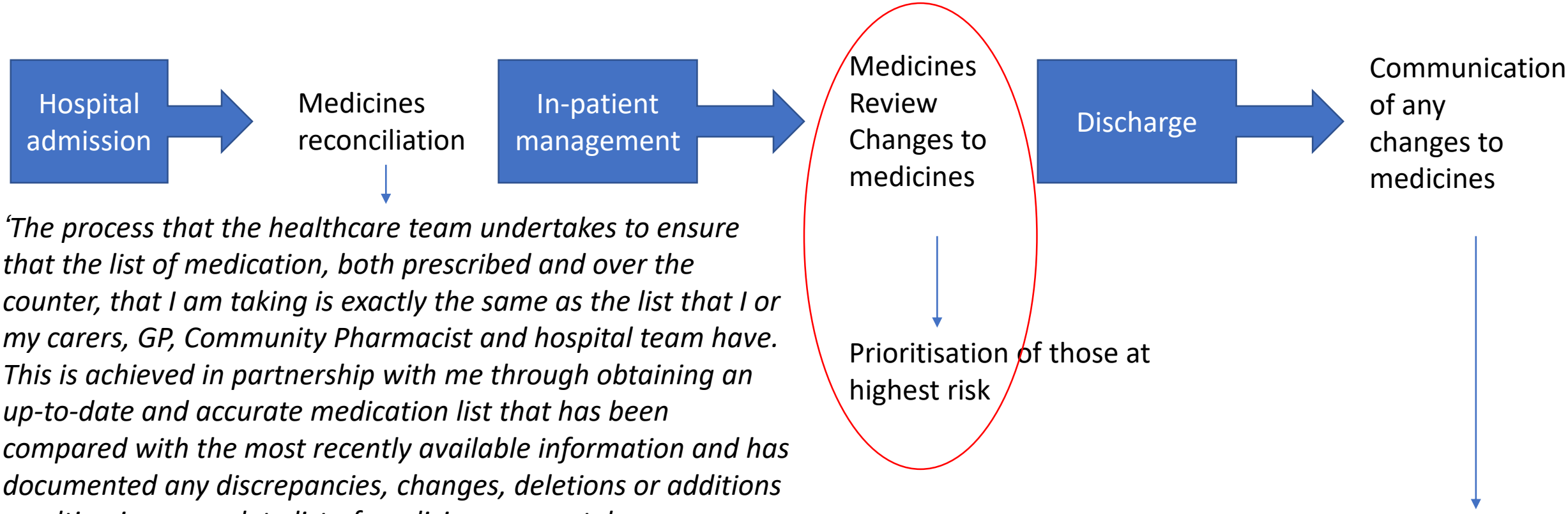
EUROPEAN JOURNAL OF
HOSPITAL PHARMACY

Original article

Consequence of delegating medication-related tasks from physician to clinical pharmacist in an acute admission unit: an analytical study

Katrine Brodersen Lind[1], Charlotte Arp Soerensen[2], Suheil Andreas Salamon[3], Hans Kirkegaard[4], Marianne Lisby[4]

Patient Journey



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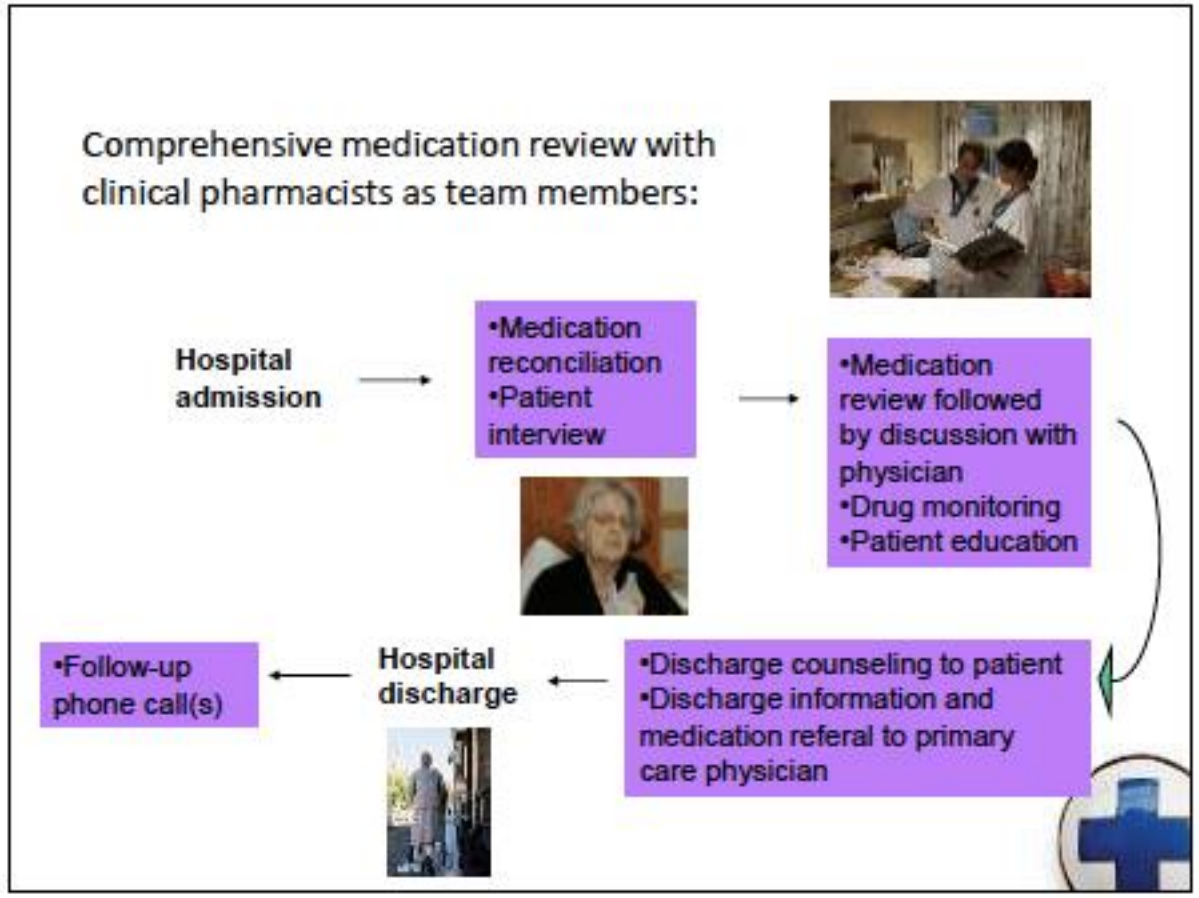
Evidence for clinical pharmacy services in inpatient care
Ulrika Gillespie @ 46th ESCP Symposium Heidelberg Germany Oct 2017



akademiska.se/MedBridge

Clinical Pharmacy: Patient Prioritisation

Editorial

Right patient, right time, right pharmacist: the time for clinical prioritisation tools?

Penny Lewis

Original article

Pharmacists' attitudes towards a pharmaceutical assessment screening tool to help prioritise pharmaceutical care in a UK hospital

Katherine J E Saxby,[1] Ruth Murdoch,[1] John McGuinness,[1] Douglas T Steinke,[1,2] Steven D Williams[1,2]

New Zealand

Validation of the assessment of risk tool: patient prioritisation technology for clinical pharmacist interventions

Nazanin Falconer[1, 2], Doreen Liow[2, 3], Irene Zeng[4], Nirasha Parsotam

Mary Seddon[6], Sanjoy Nand[2]

hospital pharmacy europe

Developing and implementing a pharmacy risk screening tool

6 December, 2013 04:35 PM

NHS Ayrshire and Arran health board has successfully developed and implemented a method of targeting their clinical pharmacy services at high-risk patients through the use of their electronic prescribing system

Richard Cottrell BSc(Hons) PGDip
Michele Caldwell BSc MSc MRPharmS
Gillian Jardine BSc(Hons) MSC MRPharmS
NHS Ayrshire & Arran, Ayr, UK
Email: richard.cottrell@aaaht.scot.nhs.uk

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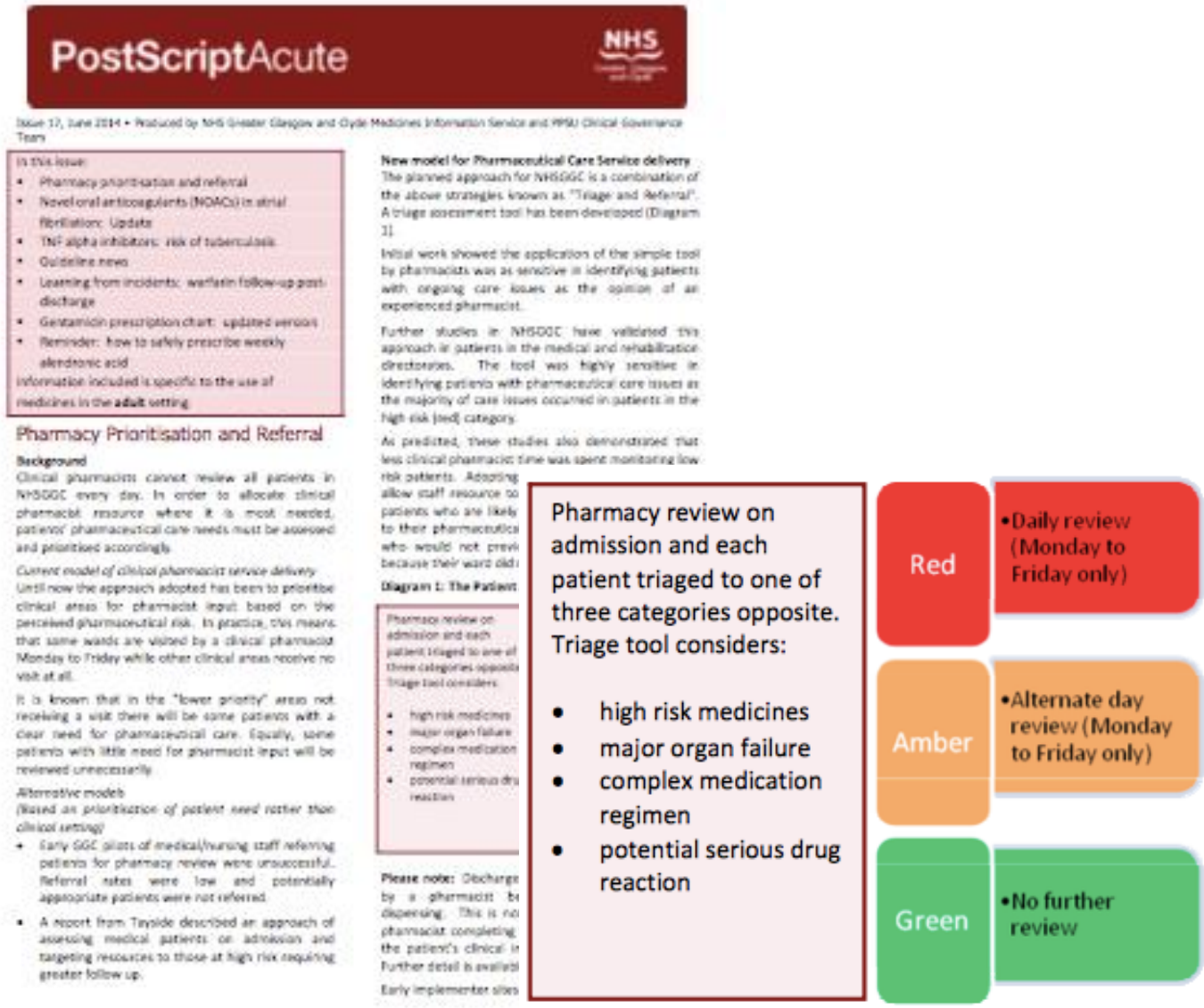


http://www.ggcprescribing.org.uk/media/uploads/postscript_acute/ps_acute_issue_17_june_2014.pdf

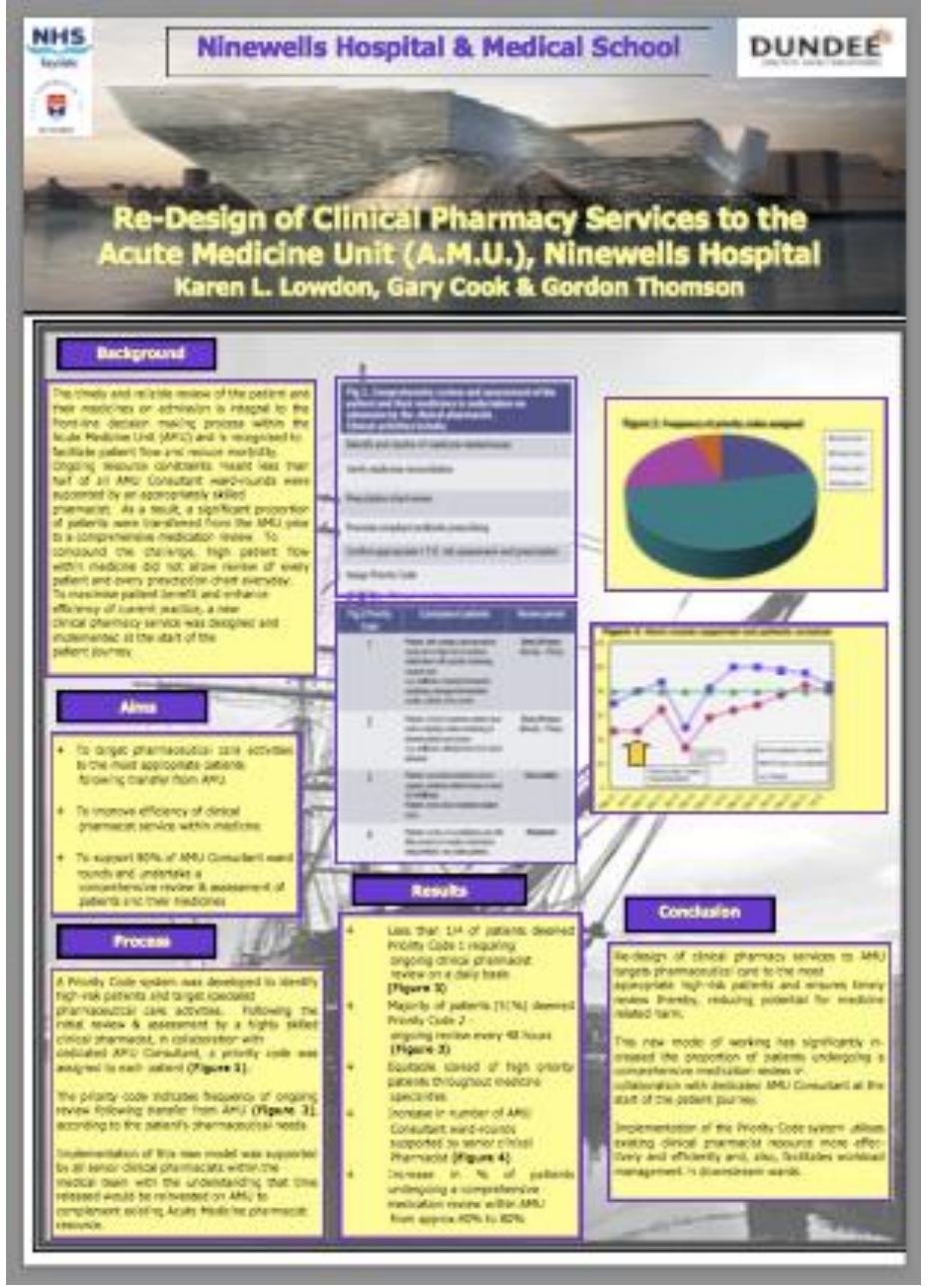


Fig 2.Priority Code	Examples of patients	Review period
1	Patients with complex pharmaceutical needs and at high risk of medicine-related harm with specific monitoring requirements e.g. medicines requiring therapeutic monitoring, deranged biochemistry results, patients nil by mouth	Every 24 hours (Monday – Friday)
2	Patients at risk of medicine-related harm and/or requiring routine monitoring of pharmaceutical care issues e.g. medicines withheld due to low blood pressure	Every 48 hours (Monday – Friday)
3	Patients prescribed medicines but no ongoing medicine-related issues or need for monitoring. Patients at low risk of medicine-related harm.	Once weekly
4	Patients on few or no medicines and with little prospect of complex medications being initiated; very stable patients.	Nil planned

http://www.acutemedicine.org.uk/wp-content/uploads/2013/10/sod24-re-designofclinicalpharmacyservicestotheamuninewellshospital.pdf

Clinical Pharmacy Priority Coding Tool

Prioritisation Codes :

Phar: 1 Review Daily
Phar: 2 Review Every 3rd day (range 2 - 4 days)
Phar: 3 Review Weekly (range 5-9 days)
Phar: 4 Review at 14 days or re-referral

Patients may fulfill criteria in more than one of the prioritisation criteria - in this situation, **allocate to the highest level of code.**
In the absence of specific examples relevant to each individual patient, **allocate based on clinical judgement.**

Phar 1 Criteria :

High risk medicine / medicine requiring TDM
e.g. SACTs, cytotoxics, digoxin, lithium, phenytoin, theophylline, vancomycin, warfarin, etc.
NB Considered Phar 1 if some indication of toxic or subtheraputic effect

Severe chronic renal impairment (Est. CrCl ≤ 30ml/min)
NB Considered Phar 1 if on medications requiring close adjustment.

Acute kidney injury (urea ≥ 10, creat ≥ 30 from baseline)
NB Considered Phar 1 if on potentially nephrotoxic medcines.

Severe hepatic impairment (LFT's ≥ 3x upper limit of normal)

Polypharmacy ≥ 10 regular medications
NB Considered Phar 1 if complex regimen e.g. drug-drug or drug-disease interactions, non-compliance with evidence based guidelines.

Nil by mouth/ swallowing difficulties
NB Considered Phar 1 if essential medicine or medical condition must be treated.

Short term use of antipsychotics/ benzodiazepines in delirium/ agitation
NB Considered Phar 1 for patients with contra-indication/ cautions for use of antipsychotics e.g. Parkinsons, Lewy body dementia etc.

Significant drug interaction
NB Considered Phar 1 if indication of toxic/ subtherapuetic effect resulting from interaction

Significant adverse drug reaction (ADR)
NB Considered Phar 1 if noted ADR e.g. recent fall or prolonged QTc >500ms

Unresolved medicines reconcilliation or supply issue e.g. non-formulary and ULM use

Patient with daily aseptic need e.g. on Total Parenteral Nutrition, antibiotic infusion

Discharge issue resolution by next working day e.g. counselling, MCD, MAR

Phar 2 Criteria :

High risk medicine / medicine requiring TDM
e.g. SACTs, cytotoxics digoxin, lithium, phenytoin, theophylline, vancomycin, warfarin, etc.
NB Considered Phar 2 if no indication of toxic or subtheraputic effect.

Severe chronic renal impairment (Est. CrCl ≤ 30ml/min)
NB Considered Phar 2 if not on medications requiring dose adjustment.

Acute kidney injury (urea ≥ 10, creat ≥ 30 from baseline)
NB Considered Phar 2 if no potentially nephrotoxic medicines.

Moderate hepatic impairment (LFT's > ULN but < 3X ULN)

Polypharmacy ≥ 10 regular medications
NB Considered Phar 2 if polypharmacy in absence of complex regimen and compliant with evidence based guidelines.

Nil by mouth/ swallowing difficulties
NB Considered Phar 2 if no essential medicine or medical condition to be treated.

Short term use of antipsychotics/ benzodiazepines in delirium/ agitation
NB Considered Phar 2 for patients with no obvious contra-indication to pharmacological management.

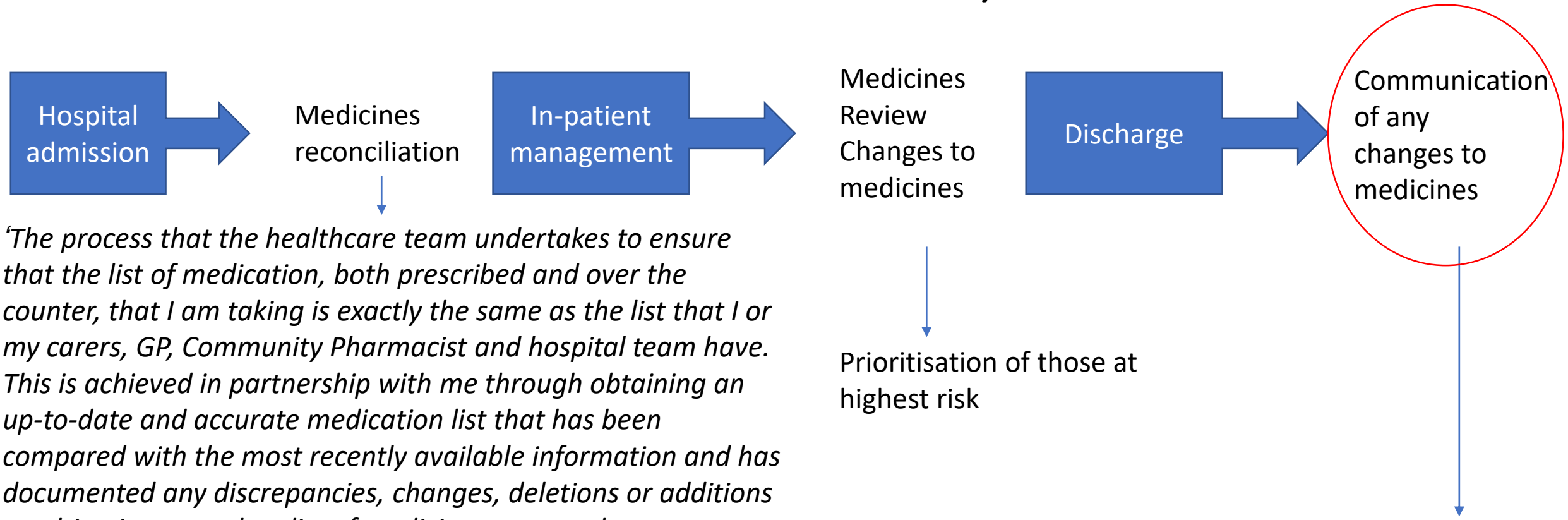
Significant drug interaction
NB Considered Phar 2 if no indication of toxic/ subtherapuetic effect resulting from interaction

Significant adverse drug reaction
NB Considered Phar 2 if no current indication of ADR e.g. history of falls or prolonged QTc- monitor for any changes to medication

Multiple new medications for new/ acute medical condition requiring monitoring/ education

Phar 3 Criteria :	**Patient stable with no acute issues but requires weekly review**
Phar 4 Criteria :	**Patient stable with no acute issues - review at 14 days or at re-referral**
Phar D Criteria:	**Patient assessed as suitable for discharge with professionally checked IDL**

Patient Journey



'The process that the healthcare team undertakes to ensure that the list of medication, both prescribed and over the counter, that I am taking is exactly the same as the list that I or my carers, GP, Community Pharmacist and hospital team have. This is achieved in partnership with me through obtaining an up-to-date and accurate medication list that has been compared with the most recently available information and has documented any discrepancies, changes, deletions or additions resulting in a complete list of medicines accurately communicated. '

Communication - on discharge

At discharge, any changes to a patient's medication should be documented clearly on the Immediate Discharge Letter (IDL). In addition to this, the reason for any changes also should be documented on the IDL.

Here are five useful tips that should be followed when completing the dicharge documentation:

1. Prescribe all medicines accurately on the discharge letter. This includes all the medicines that a patient should be taking not just those that need dispensed on discharge.

2. Be sure to include the patient's demographical information and document any allergies.

3. Include the indication of any newly started medicines on discharge documentation.

4. Include specific details such as device names to improve clarity of the discharge information.

5. Be explicit as to how long medices are to be continued: some medicines are only intended for short-term use!

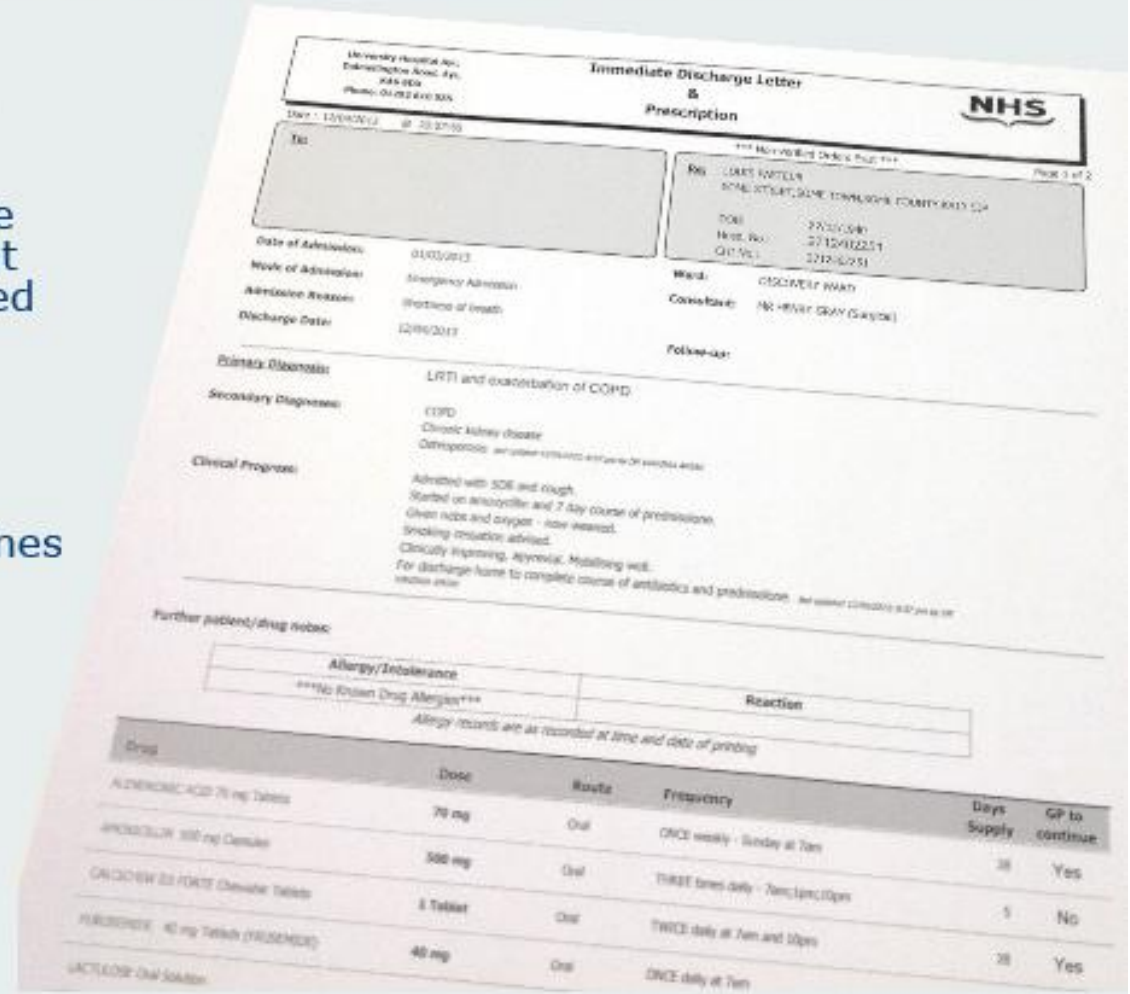
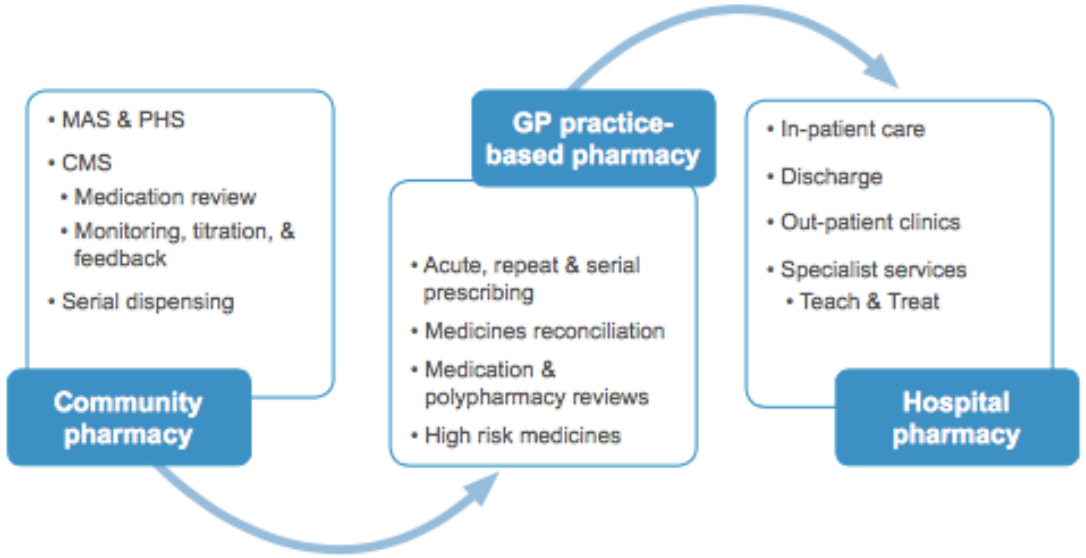

Immediate Discharge Letter
&
Prescription
NHS
To:
Date of Admission:
Mode of Admission:
Admission Reason:
Discharge Date:
Ward:
Consultant:
Follow-up:
Primary Diagnosis:
LRTI and exacerbation of COPD
Secondary Diagnosis:
COPD
Chronic kidney disease
Osteoporosis
Clinical Progress:
Admitted with SOB and cough.
Started on amoxycillin and 7 day course of prednisolone.
Given nebs and oxygen - now weaned.
Smoking cessation advised.
Clinically improving. Afebrile. Mobilising well.
For discharge home to complete course of antibiotics and prednisolone.
Further patient/drug notes:
Allergy/Intolerance
Reaction
No Known Drug Allergies
Allergy records are as recorded at time and date of printing
Drug
Dose
Route
Frequency
Days Supply
GP to continue
ALENDRONIC ACID 70 mg Tablets
70 mg
Oral
ONCE weekly - Sunday at 7am
28
Yes
AMOXICILLIN 500 mg Capsules
500 mg
Oral
THREE times daily - 7am/1pm/10pm
5
No
CALCICHEW D3 FORTE Chewable Tablets
1 Tablet
Oral
TWICE daily at 7am and 10pm
28
Yes
FUROSEMIDE 40 mg Tablets (FRUSEMIDE)
40 mg
Oral
ONCE daily at 7am
LACTULOSE Oral Solution

Figure 3: Integrated pharmacotherapy service



Case Study - Pharmacy support in Caithness

Pharmacists and pharmacy technicians are already developing an increased, specialised role within primary care multi-disciplinary teams. They are well placed to support GPs to focus on their role as expert medical generalists by ensuring workload is distributed more appropriately, undertaking prescribing improvement work, and providing medication reviews and specialised clinics.

In Caithness in NHS Highland, pharmacist prescribers are embedded in the primary care MDT. One pharmacist, who works in a GP practice with 5,447 patients, has taken over all the medication reviews that were previously provided by the practice GPs, and completed a total of 2,811 reviews in an 18-month period. This includes re-authorising repeat prescriptions and transferring suitable patients to serial prescribing. They also triage all daily acute requests, carry out all medicines reconciliation for hospital discharges and clinic letters and manage individual patients requiring more intensive medicines input, such as dose titration of a pain medicine. Caithness pharmacists also provide domiciliary medication reviews for patients in care homes and patients receiving care at home, reducing the number of visits required by GPs.

The pharmacist input has resulted in a marked reduction in GP time spent on medicines-related activities, enabling them to focus on other activities. Patient response has also been overwhelmingly positive.

"Having an in-house pharmacist has shown many benefits for patients including reducing polypharmacy, being able to monitor more closely patients on high risk medications, and supporting patients though medication changes after hospital discharge."

GP, Caithness

http://www.gov.scot/Resource/0052/00527530.pdf

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NHS Circular No 1988(GEN)32

Previous Circular No
Cancelled/Amended None

Your ref

General Managers of Health Boards
General Manager Common Services Agency

Our ref PLW/1/15

Date 24 October 1988

Dear Sir

HEALTH SERVICES MANAGEMENT

THE WAY FORWARD FOR HOSPITAL PHARMACEUTICAL SERVICES

SUMMARY

This circular sets out the policy aims and action required of pharmaceutical services taking into account the recommendations made in the Nuffield Report on Pharmacy. The policy aims are the achievement of better patient care and financial savings, through the more cost effective use of medicines, and improved use of pharmaceutical expertise obtained through the implementation of a clinical pharmacy service.

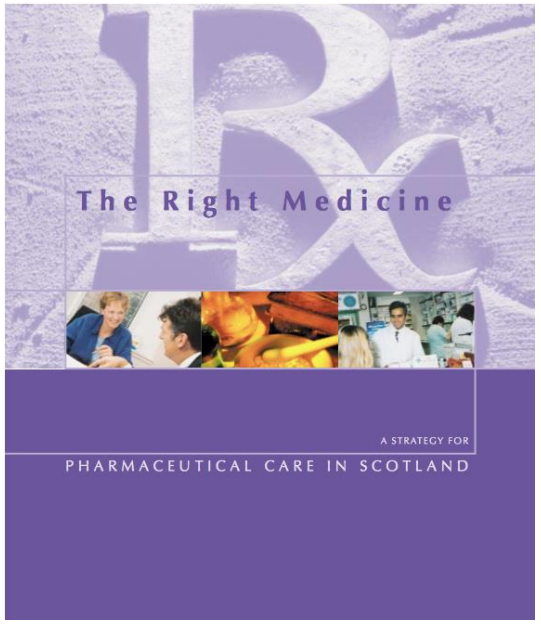
The circular also includes revised advice on the essential components and organisation of pharmaceutical services for the Hospital and Community Health Services.

ACTION

1. Health Boards are asked to review their pharmaceutical services and in particular plan for the implementation of clinical pharmacy and formulary management systems.

2. Health Boards should have the implementation of clinical pharmacy incorporated in their planning programme for 1989/90.

1988



2002

THE SCOTTISH OFFICE
National Health Service in Scotland

CLINICAL PHARMACY IN THE HOSPITAL PHARMACEUTICAL SERVICE: A FRAMEWORK FOR PRACTICE

1996

Prescription for Excellence

A Vision and Action Plan for the right pharmaceutical care through integrated partnerships and innovation

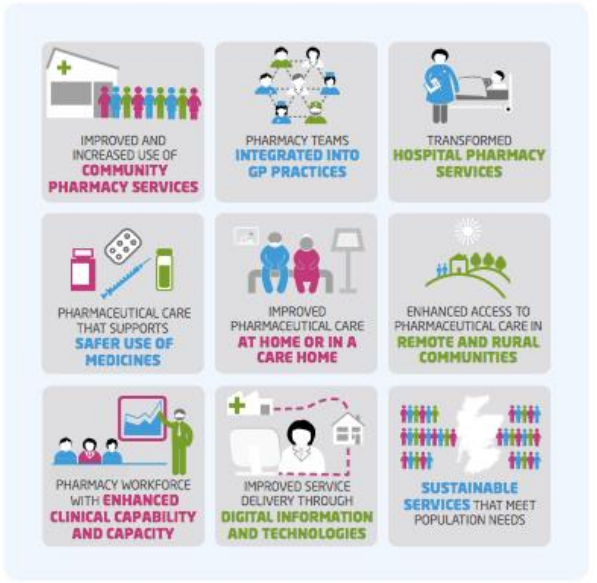
September 2013
Scottish Government

The Scottish Government
Riaghaltas na h-Alba

NHS SCOTLAND

ACHIEVING EXCELLENCE IN PHARMACEUTICAL CARE

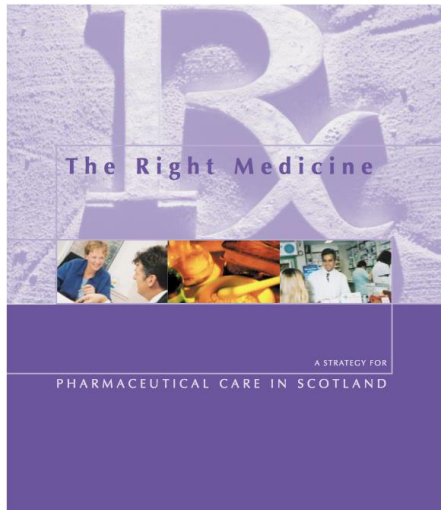
A STRATEGY FOR SCOTLAND



Scottish Government
Pharmacy and Medicines Division
Directorate for Chief Medical Officer

Healthier Scotland
Scottish Government

2017



http://www.gov.scot/Resource/Doc/158742/0043086.pdf

NHS Boards will be asked to work with the profession to develop models of practice to ensure that every patient has their medicines reviewed and medication problems addressed before their discharge from hospital. (December 2004)

http://www.gov.scot/Resource/0043/00434053.pdf

All patients, regardless of their age and setting of care, receive high quality pharmaceutical care from clinical pharmacist independent prescribers.

Establish an education and training framework to help pharmacists deliver pharmaceutical care to patients in all settings

NHS SCOTLAND

ACHIEVING EXCELLENCE IN PHARMACEUTICAL CARE

A STRATEGY FOR SCOTLAND

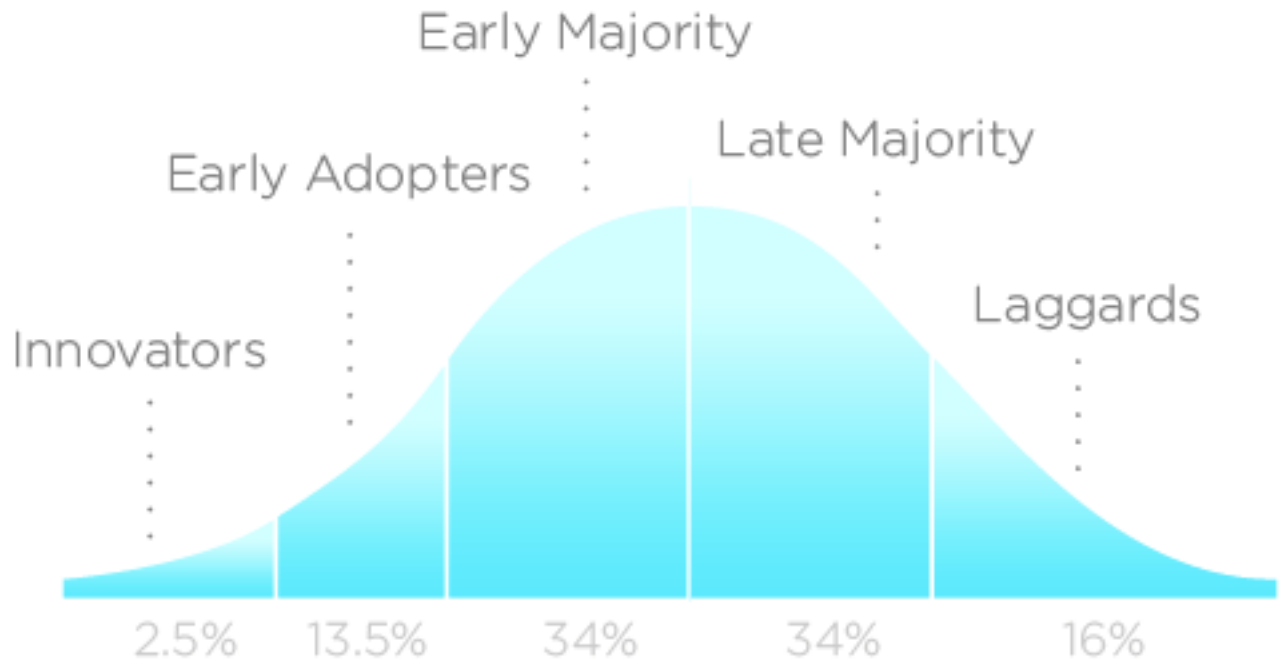
Scottish Government
Pharmacy and Medicines Division
Directorate for Chief Medical Officer

Healthier Scotland
Scottish Government

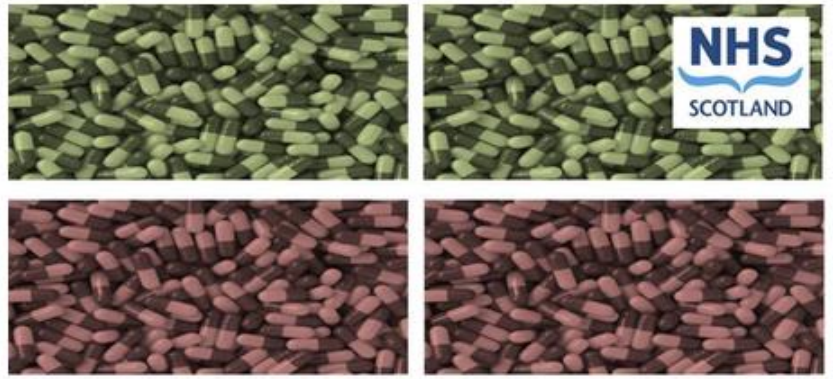
http://www.gov.scot/Resource/0052/00523589.pdf

ACTIONS

- Transformation requirements
- Discharge process
- Quality improvement & performance measures
- Modern Outpatient Programme

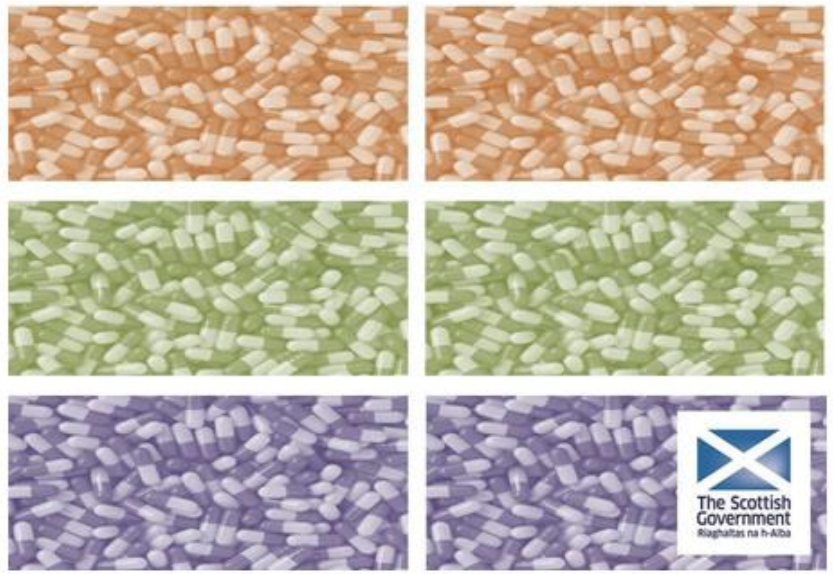


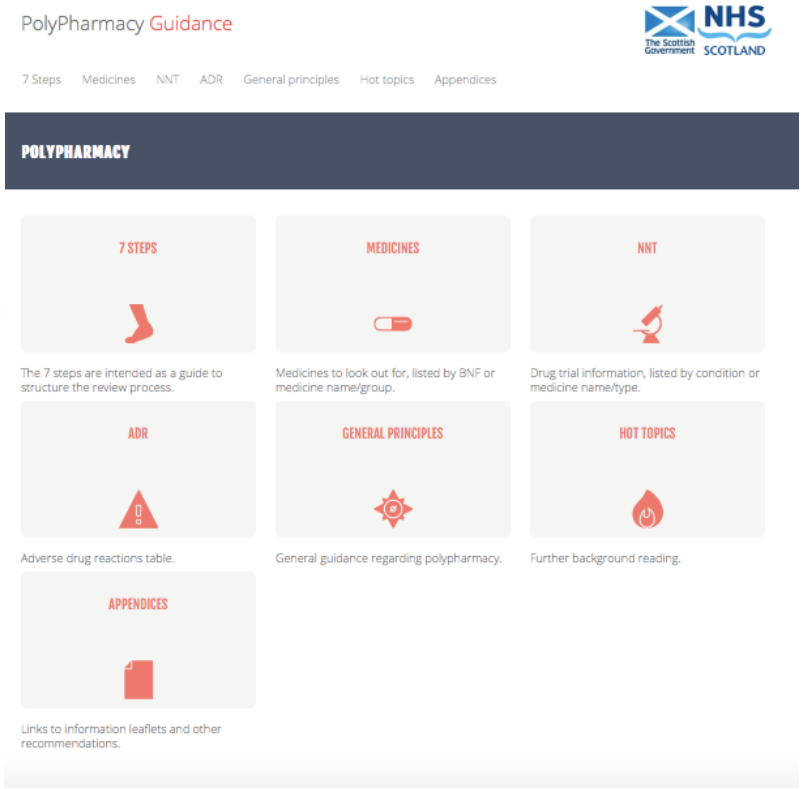
INNOVATION ADOPTION LIFECYCLE



Polypharmacy Guidance

March 2015





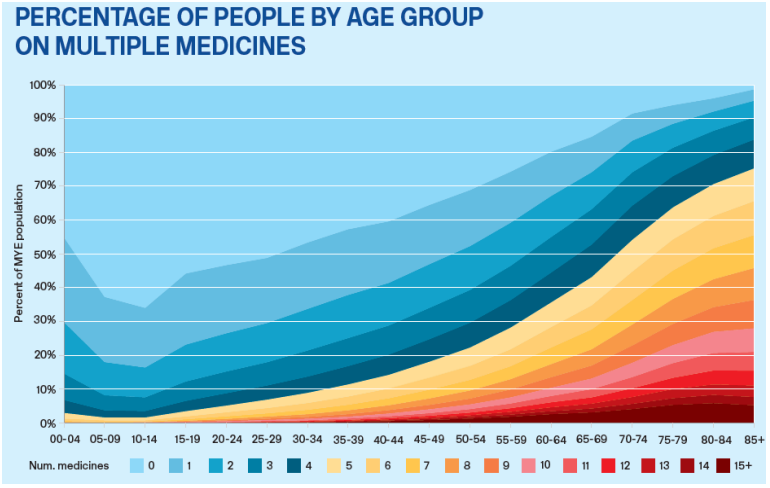


Table 2a: An overview of the '7-steps' with Links to section of greater detail

Domain	Steps	Process
Aims	1. Identify objectives of drug therapy	**Review diagnoses and identify therapeutic objectives with respect to:** ➢ Management of existing health problems ➢ Prevention of future health problems
Need	2. Identify essential drug therapy	**Identify essential drugs (not to be stopped without specialist advice)** ➢ Drugs that have essential replacement functions (e.g. thyroxine) ➢ Drugs to prevent rapid symptomatic decline (e.g. drugs for Parkinson's disease, heart failure)
	3. Does the patient take unnecessary drug therapy?	**Identify and review the (continued) need for drugs** ➢ with temporary indications ➢ with higher than usual maintenance doses ➢ with limited benefit in general for the indication they are used for ➢ with limited benefit in the patient under review (see Drug efficacy & applicability (NNT) table)
Effectiveness	4. Are therapeutic objectives being achieved?	**Identify the need for adding/intensifying drug therapy in order to achieve therapeutic objectives** ➢ to achieve symptom control ➢ to achieve biochemical/clinical targets ➢ to prevent disease progression/exacerbation
Safety	5. Does the patient have ADR or is at risk of ADRs?	**Identify patient safety risks by checking for** ➢ drug-disease interactions ➢ drug-drug interactions (see ADR table) ➢ robustness of monitoring mechanisms for high-risk drugs ➢ drug-drug and drug-disease interactions ➢ risk of accidental overdosing **Identify adverse drug effects by checking for** ➢ specific symptoms/laboratory markers (e.g. hypokalaemia) ➢ cumulative adverse drug effects (see ADR table) ➢ drugs that may be used to treat ADRs caused by other drugs
Cost-effectiveness	6. Is drug therapy cost-effective?	**Identify unnecessarily costly drug therapy by** • Consider more cost-effective alternatives (but balance against effectiveness, safety, convenience)
Adherence/ Patient centeredness	7. Is the patient willing and able to take drug therapy as intended?	**Identify risks to patient non-adherence by considering** • Is the medicine in a form that the patient can take? • Is the dosing schedule convenient? • Is the patient able to take medicines as intended? • Might the patient benefit from the Chronic Medication Service (CMS)? • Is the patient's pharmacist informed of changes to regimen? **Ensure drug therapy changes are tailored to patient preferences by** • Discuss with the patient/carer/welfare proxy therapeutic objectives and treatment priorities • Decide with the patient/carer/welfare proxies what medicines have an effect of sufficient magnitude to consider continuation or discontinuation

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Inter-professional prescribing masterclass for medical students and non-medical prescribing students (nurses and pharmacists): a pilot study

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Abstract

Background and aims: Prescribing errors cause significant patient morbidity and mortality. Current legislation allows prescribing by different health professions. Inter-professional collaboration and learning may result in safer prescribing practice. This study aimed to develop, pilot and test the feasibility of a simulated inter-professional prescribing masterclass for non-medical prescribing students, medical students and pharmacists.

Methods and results: A three-scenario, simulated patient session was designed and implemented by an expert panel. Medical students, non-medical prescribing students and pharmacists worked together to formulate and implement evidence-based prescriptions. The Readiness for Inter-professional Learning Score (RIPLS) and a self-efficacy score were administered to the students and the Trust in Physician Score to the simulated patients. Overall, the RIPLS and self-efficacy scores increased. Pharmacists showed the highest rating in the Trust in Physician score. Post masterclass group discussions suggested that the intervention was viewed as a positive educational experience.

Conclusion: An inter-professional prescribing masterclass is feasible and acceptable to students. It increases self-efficacy, readiness for inter-professional learning and allows students to learn from, about and with each other. A larger study is warranted and the use of feedback from simulated patients explored further.

Keywords

Prescribing safety, team working, simulation

implementation of the european statements of hospital pharmacy

European Statements of Hospital Pharmacy

Section 4

Clinical Pharmacy Services

Statement 4.1
"Hospital pharmacists should be involved in all patient care settings to prospectively influence collaborative, multidisciplinary therapeutic decision-making; they should play a full part in decision making including advising, implementing and monitoring medication changes in full partnership with patients, carers and other health care professionals."

Statement 4.2
"All prescriptions should be reviewed and validated as soon as possible by a hospital pharmacist. Whenever the clinical situation allows, this review should take place prior to the supply and administration of medicines."

Statement 4.3
"Hospital pharmacists should have access to the patients' health record. Their clinical interventions should be documented in the patients' health record and analysed to inform quality improvement interventions."

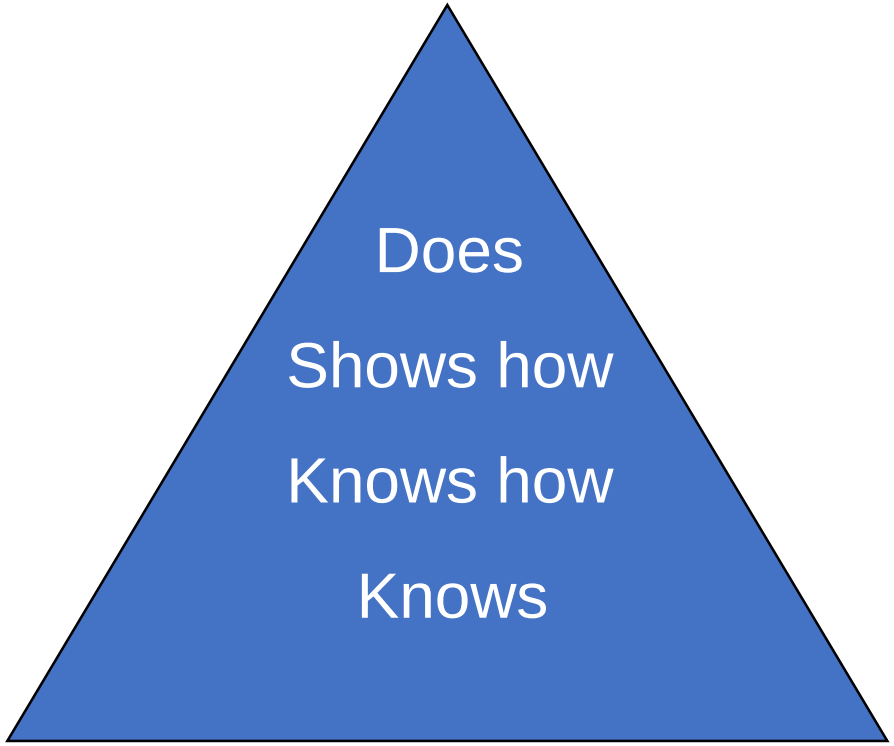
Statement 4.4
"All the medicines used by patients should be entered on the patient's medical record and reconciled by the hospital pharmacist on admission. Hospital pharmacists should assess the appropriateness of all patients' medicines, including herbal and dietary supplements."

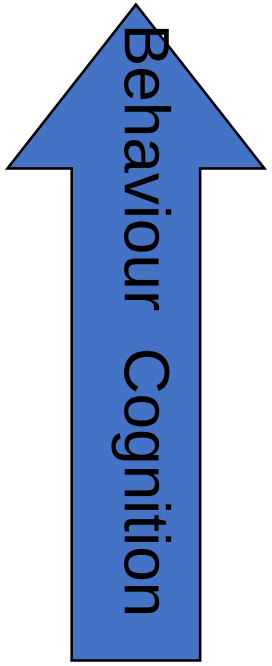
Statement 4.5
"Hospital pharmacists should promote seamless care by contributing to transfer of information about medicines whenever patients move between and within healthcare settings."

Statement 4.6
"Hospital pharmacists, as an integral part of all patient care teams, should ensure that patients and carers are offered information about their clinical management options, and especially about the use of their medicines, in terms they can understand."

Statement 4.7
"Hospital pharmacists should inform, educate and advise patients, carers and other health care professionals when medicines are used outside of their marketing authorisation"

Statement 4.8
"Clinical pharmacy services should continuously evolve to optimise patients' outcomes."





Actual practice

Simulation

Problem solving

Recall

Miller GE. The assessment of clinical skills/competence/performance. Academic Medicine (Suppl) 1990; 65: S63-S67.

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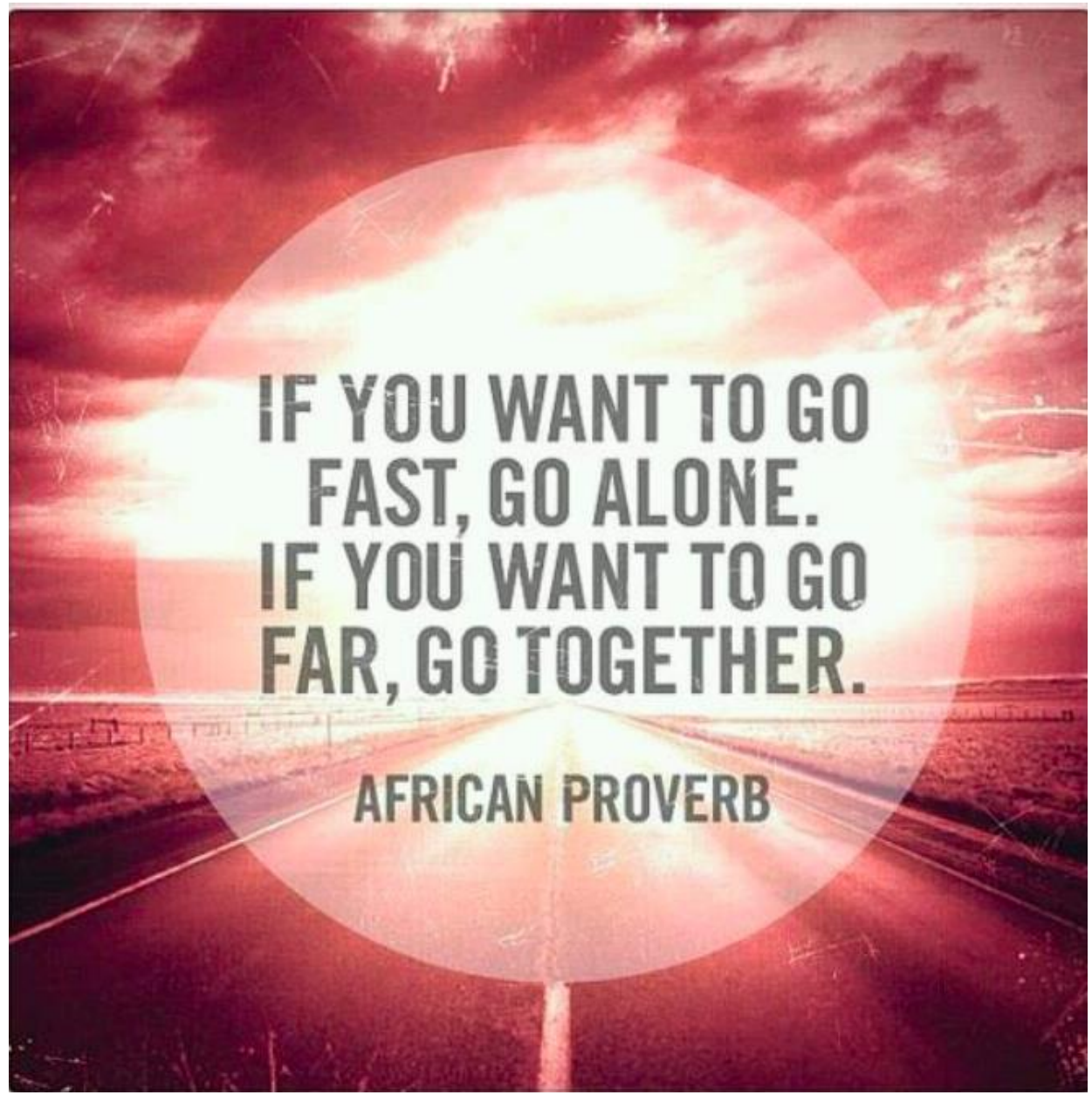
Summary- Medication Review Practices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