

# A Systematic Approach to Pharmaceutical Care

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### Who we are



#### **Dr Scott Cunningham**

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## **Programme Outline**

• 2:00 - 2:30pm

Introductions



2:30 – 3:45pm

What is Pharmaceutical Care all about...

• 3:45 – 4:15pm

Coffee Break



4:15 – 5:45pm

Hands on care planning



• 5:45 - 6:00pm

Concluding discussion



# Disclosure of Relevant Financial Relationships

· Nothing to declare





## Where we are from ...





## Aberdeen in the sunshine ...











## Aberdeen in the winter ...











## Our new campus ...











### **Learning Outcome**

 At the end of the workshop, participants will be familiar with the application of the systematic approach in formulating an individualised care plan



## Interactive questions Yes or No?





- 1) Pharmaceutical care was introduced in the US by Hepler and Strand, way back in 1990.
- 2) Pharmaceutical care can only be delivered if there is access to patient notes.



## Why Pharmaceutical Care?

#### Changing emphasis of service provision

- risk management / quality
- economy
- · safe, effective & rational drug use
- more patient focussed and less supply focussed
- ALL lead to CLINICAL PHARMACY



### **Clinical Pharmacy ......**

- since 1960s pharmacist leaving dispensary and going to ward
- patient focus
- knowledge, skills & attitudes
- NO PROCESS

### NO PROCESS until......

 Hepler C & Strand L, Opportunities and Responsibilities in Pharmaceutical Care, AJHP, 1990;47:533-543





## Hepler & Strand



**Definition of Pharmaceutical Care:** 

 "....responsible provision of drug therapy for the purpose of achieving definite outcomes that improve a patient's quality of life."

#### Outcomes:

- •
- •
- •
- •



### So Pharmaceutical Care .....

• describes a systematic PROCESS



- · is patient focussed
- calls for professional responsibility for actions / advice
- defines outcomes to be achieved

So, more robust, professional philosophy of practice



## **Hepler & Strand Process**

- Pharmacist co-operates with: patient & other professionals to design, implement and monitor a therapeutic plan
- Identify potential / actual drug related problems (DRPs)
- resolve actual DRPs
- prevent potential DRPs
- ....regardless of setting



## Drug related problems

#### **Activity 1**

What FIVE (or six perhaps!) things need to be 'RIGHT' and be checked to ensure safe and appropriate drug administration to individual patients?

- •
- •
- •
- •
- •



## Drug related problems

### Hepler & Strand......

- Untreated indication
- · Improper drug selection
- · Subtherapeutic dosage
- Failure to receive drugs
- Overdosage
- Drug interactions
- · Drug use with no indications



## In Scotland....

A recognition that different models/variations of PC....

Documents in response to this

- Clinical Pharmacy in the hospital service: a framework for practice, HMSO 1996
- Clinical Pharmacy practice in primary care, HMSO 1999
- Both describe SYSTEMATIC APPROACH TO PRACTICE similar to Hepler & Strand's



## **Prescription for Excellence**

- Scottish 'Vision and Action Plan' for pharmacy
- 'Pharmaceutical care is a key component of safe and effective healthcare.' Bill Scott, formerly Chief Pharmaceutical Officer.



RoseMarie Parr, CPO from 2015



http://www.scotland.gov.uk/Resource/0043/00434053.pdf



## Systematic Approach

- 1. Gather patient information
- 2. Identify problems (needs for drug / pharmacy service)
- 3. Prioritise problems
- 4. Relate problems to medicines
- 5. Define goals for problems
- 6. Synthesise care plan care issues / actions
- 7. Implement care plan



## 1. Gather patient info.

#### **Activity 2**

 List SOURCES of information that may be used to gather patient information for a care plan.

Consider advantages and disadvantages of each.



## 2. Identify Problems

- Patient need that requires medicine or a pharmacy service/intervention
- Symptoms / signs / abnormal results
- Disease states
- Other factors:
  - social habits (smoking/alcohol)
  - low intelligence
  - confusion
  - history poor compliance
  - inability to swallow
  - previous ADR
  - social circumstances



## 3. Prioritise problems

· Active or Inactive

#### For ACTIVE consider:

- •
- •
- •



## 4. Relate problems to drugs

e.g in a table – giving a handy overview:

<u>Problem</u> Atrial Fib.	Previous drug	Current drug Warfarin 5mg daily
High Cholesterol		Simvastatin 40mg daily
Indigestion		??
???		Amlodipine 5mg daily

- problem problem links
- problem drug links
- drug drug interactions
- · untreated problems
- drug use no indication
- · knowledge of previous drugs may help guide actions



## 5. Define goals

- · cure of disease
- elimination / reduction in symptoms
- arresting / slowing of disease process
- · preventing disease / symptoms

#### Also:

- minimise side-effects
- improve quality of life
- · prolong life



## 6. Synthesise care plan

#### **Pharmaceutical Care Issues**

- · untreated indication
- improper selection
- · sub-therapeutic dose
- overdose
- failure to receive appropriately
- ADR
- · medicine interaction
- medicine use / no indication

- duplication of therapy
- · monitoring need
- counselling need
- · seamless care need



### Pharmaceutical Care Issues - digging deeper !!!

- · Improper selection
  - not evidence based
  - contra-indication
  - lack of efficacy
  - caution
  - duration etc
- · Failure to receive appropriately
  - compliance issues
  - administration issues formulation, route, devices etc
  - frequency / timing inappropriate
- · Medicine interaction
  - medicine medicine
  - medicine food (inc. alcohol/smoking)
  - medicine laboratory



## 6. Synthesise care plan

#### **Actions**

- changes
- monitoring
- counselling
- seamless care



## 7. Implement care plan

- Manage the care issues i.e.
   make recommendations to relevant healthcare
   professionals
- Paper based
- Verbal
- BUILD IN PLANS FOR FOLLOW UP



### **Documentation**

- Very important
- Part of PROCESS
- · Medico-legal reasons (responsibility)
- · NB: Data protection / confidentiality
- Tool for peer review and audit



### **Summary**

#### Pharmaceutical Care:

- describes a systematic PROCESS
- · is patient focussed
- calls for professional responsibility for actions / advice
- · defines outcomes to be achieved
- So, more robust, professional philosophy of practice



## **Test Your Understanding**

- Which statement A-D provides the BEST answer to each of the question or statement?
- Marking correct on:
- First attempt scratch = 4 points
- Second attempt scratch = 2 points
- Third attempt scratch = 1 point
- Fourth attempt scratch = 0 points



The IDEAL role of the clinical pharmacist can best be described as:

- A Generally poorly developed and lacking definition and coherency
- B Involving patient focussed activities that lead to safe, effective and economic use of drugs
- C A well researched and established role in all hospitals
- D Involving only reviewing case notes and prescription records for patients to identify area for reduction in the drug spend



### QUESTION 1

B. Involving patient focussed activities that lead to safe, effective and economic use of drugs



## The Hepler and Strand paper from 1990 on pharmaceutical care:

- A Is out of date and not at all relevant to the modern practice of pharmacy
- B Was intended to be a template for clinical practice that should be strictly applied
- C Still provides a clear vision for and definition of how pharmacists should practise clinical pharmacy
- D Is clearly designed by and for hospital pharmacists being only relevant to their knowledge and skills base rather than practice.



### **QUESTION 2**

C. Still provides a clear vision for and definition of how pharmacists should practise clinical pharmacy



The GREATEST advantage to patients of applying a systematic approach to the practice of pharmaceutical care is that:

- A It enables pharmacists to quickly and easily build rapport with patients to enable rationalisation of their medicines
- B It provides clear steps that should be followed and so helps practitioners check that they practice to a high standard and are less likely to miss things.
- C It is a cost-effective way to use pharmacists' skills
- D It helps identify gaps in pharmacists' knowledge and skills that can be detrimental to patient care.



### QUESTION 3

B. It provides clear steps that should be followed and so helps practitioners check that they practice to a high standard and are less likely to miss things.



In gathering information for the purposes of pharmaceutical care planning:

- A Doing a drug history interview with patients should be an integral part of the process of pharmaceutical care
- B Case notes are the most important and only source of information
- C Patient medication records are usually very accurate and can be relied upon for continuation of prescribing when a patient is admitted to hospital.
- D One source of information about medicines is usually sufficient to determine accurately which medicines a patient is taking.



### **QUESTION 4**

A. Doing a drug history interview with patient should be an integral part of the process of pharmaceutical care



In the practice of pharmaceutical care the multidisciplinary team (MDT) needs to:

- A Agree clear and well defined goals for each patient to avoid repeating the same tasks
- B Work only with professionals within their own discipline to review patients.
- C Agree clear and well defined goals for each patient to ensure everyone is working towards and achieving the best care for the individual patient
- D Ensure patient safety by clearly defining their traditional roles and avoid extending beyond that



### **QUESTION 5**

C. Agree clear and well defined goals for each patient to ensure everyone is working towards and achieving the best care for the individual patient



## The prioritisation of 'Problems' in pharmaceutical care is influenced by:

- A The evidence base of drug use in particular conditions and guidelines linked to this
- B A practitioner's own level of experience and competency within specific therapeutic areas
- C The desire and wishes of the patient
- D All of the above



### **QUESTION 6**

D. All of the above



#### The pharmaceutical care plan document:

- A Is an essential component for medico-legal reasons related to the part of the definition of pharmaceutical care on 'taking responsibility'
- B Is a document that all practitioners should consider integrating into their practice for each patient reviewed
- C Should always be in paper form with signatures of practitioner linked to each recommendation
- D Is confidential to the patient and the practitioner that developed it and should not be used for any other purposes.



### QUESTION 7

A. Is an essential component for medicolegal reasons related to the part of the definition of pharmaceutical care on 'taking responsibility'



#### In relation to categories of pharmaceutical care issues:

- A Identifying 'Monitoring Needs' is essential only when a patient is prescribed medications for a long period of time
- B 'Counselling Need' only relates to situations when new medicines are prescribed
- C If a patient was not taking a medicine as prescribed this would be an example of an issue in the category 'Failure to receive medicines appropriately'
- D 'Seamless care' deals only with the transfer of information about medicines from secondary to primary care when the patient is being discharged



### **QUESTION 8**

C. If a patient was not taking a medicine as prescribed this would be an example of an issue in the category 'Failure to receive medicines appropriately'



## In relation to implementing the pharmaceutical care plan:

- A Actions to resolve medication related care issues are undertaken only by the pharmacist
- B The care plan does not need to be updated or reviewed following implementation
- C Actions should always be provided in written form to other practitioners or the patient
- D Implementation should always involve follow up to determine the positive or negative consequences of recommendations



### **QUESTION 9**

D. Implementation should always involve follow up to determine the positive or negative consequences of recommendations



In the UK, for implementing actions linked to care plans:

- A Pharmacist Independent Prescribers can only prescribe medicines if practising in a hospital environment
- B A Pharmacist Prescriber cannot prescribe controlled drugs such as morphine
- C A Pharmacist Practitioner who is an independent prescriber is responsible for the assessment of the patient and making decisions about the clinical management of that patient, including prescribing medicines
- D Only pharmacists and medical doctors can prescribe other healthcare professionals cannot.



### **QUESTION 10**

C. A Pharmacist Practitioner who is an independent prescriber is responsible for the assessment of the patient and making decisions about the clinical management of that patient, including prescribing medicines



## Henrietta Brown





## Henrietta Brown

Medical problem	Care issue	Proposed action
Iron/vitamin deficiency	Medicine use without indication: no indication for ferrous sulphate or vitamin BPC. Appeared to be initiated post surgery. Patient has balanced diet.	Check FBC. If no iron deficiency, stop ferrous sulphate Stop vitamin BPC.
	ADR: indigestion/ferrous sulphate	As above – review FBC and consider stopping ferrous sulphate. Changer to ferrous fumarate if still required
	Monitoring need: no monitoring carried out – FBC required	FBC. If patient still iron deficient and ferrous sulphate continued, monitor every 3 months
	Counselling need: drug changes	Discontinued drugs, continued monitoring if required, maintain
		balanced/healthy diet ROBERT GORDO ROUSENSITY ABERDEE

## Interactive questions Yes or No?

- 1) Pharmaceutical care was introduced in the US by Hepler and Strand, way back in 1990. YES
- 2) Pharmaceutical care can only be delivered if there is access to patient notes. NO

