Hospital Pharmacy Tutorial Series

**Tutorial series learning objectives**

- To understand the roles of hospital pharmacists, including in the continuum of patient care.
- To recognise the key role of hospital pharmacists in multidisciplinary healthcare teams.
- To further develop communication and clinical skills in preparation to undertake hospital placements and hospital pharmacist roles.

**Learning outcomes**

- To increase readiness for
  - Hospital placements (PEPs)
  - Pharmacist internship, and
  - Post-registration employment

**Tutorial overview**

3 x 2-hour tutorials supported by video case vignettes, group discussions and interactive activities

<table>
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<th>Tutorial</th>
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| #1       | Performing Medication Reconciliation  
Providing Medicines Information  
Problem solving – IV/enteral access device implications  
Communicating with other health professionals |
| #2       | Contributing to prescribing decisions  
Educating patients about medications  
Supporting continuum of care  
Communicating with other health professionals |
| #3       | Monitoring drug therapy  
Problem solving IV/enteral access device implications  
Communicating with other health professionals |
Assessment

- 2-hour Objective Structured Clinical Examination (OSCE) during the official examination period
- 40% of unit mark
- Five-station OSCE covering:
  - Medication reconciliation
  - Communication
  - Medicines information
  - Extemporaneous preparation
  - Documenting information on Medication chart
- Will test application of clinical and practical knowledge, and communication skills
- Practice OSCE in the last tutorial (# 4)

Hospital tutorial # 1

- Specific learning objectives:
  - To understand the process of medication reconciliation
    - Taking medication histories
    - Reviewing in-patient medication charts/medical records
    - Documenting information on medication charts
  - To understand the implications of IV/enteral access devices on medicine administration
  - To understand how to provide evidence-based medicines information to patients and other health professionals
  - To understand how to communicate with other health professionals and optimise medicine use and safety

Learning outcomes

- At the end of this tutorial you should be able to:
  - perform medication reconciliation in a hospital setting
    - take a medication history
    - review a medication chart and locate information in medical records
    - record information on patient’s medication charts
  - identify medication administration issues with IV/enteral devices
  - understand the pharmacist’s role in contributing to quality use of medicines in multidisciplinary teams

Medication Reconciliation
Patient’s hospital journey

**Arrival**
- Emergency Department (ED), or
- Elective or ‘planned’ admission (often via pre-admission clinic)

**Inpatient stay**
- On a ward (e.g. cardiology, surgical, medical)
- +/- need for Intensive Care Unit stay
- +/- visits/transfers to other areas/units (e.g. physiotherapy, rehabilitation)

**Leaving**
- Home, usually with discharge medicines dispensed in hospital pharmacy

Medication Reconciliation

- Transition points of admission or entry, discharge or exit, and transfer between units are ‘weak links’ in the health care chain
- Medication Reconciliation process aims to:
  - address communication breakdowns and system vulnerabilities at these ‘weak links’
- Medication Reconciliation is:
  - A formal, standardised process for compiling, recording and sharing medication data between and among care providers and the patient

Medication Reconciliation is a 3-step process:

1. Obtain medication history
   - review multiple sources of information
2. Review medication charts
   - compare medication history, medical record and medication chart
3. Resolve discrepancies through review of medical record and discussion with healthcare team
   - document in the patient’s medical record
**Medication Reconciliation: On Admission**

The process of comparing the patient's **pre-admission medicines** to those prescribed on the hospital **medication chart**

**Activity: 5 mins**

- Getting to know some different hospital forms (medical records) commonly used in hospitals
  - Familiarise yourself with the charts and forms in the folder
  - Consider what a pharmacist would write, and where

**Medication Reconciliation is a 3-step process:**

1. Obtain medication history
2. Review medication charts and medical record
3. Identify and reconcile discrepancies between the medication history and medication chart
   - discuss with healthcare team
   - document in the patient’s medical record

**Medicine Reconciliation: On Discharge**

The process of comparing the patient’s **medication chart**….with the **discharge prescription**
Medication History Taking

- Pharmacists have in-depth medication knowledge, and are trained to take more accurate and comprehensive medication histories than other health care professionals
- Preferably within **one day** following admission
- Preferably face-face interview
- Other sources as appropriate

Scenario 1:

- A 66-year-old male in Emergency Department (ED) complaining of left-sided stroke symptoms
- The ED pharmacist begins the medicine reconciliation process to find out what the patient was taking before coming into hospital

Medication History Interview

- Activity:
  - Discuss strategies to use if the patient is unavailable or unable to be interviewed? (5 minutes)
  - Each group can offer suggestions in turn until all ideas are exhausted

Medication History Interview

- If patient is unavailable for interview...
  - Patient’s own medicine list
  - Patient’s own medicine labels
  - Carer/other family members
  - Community pharmacy records
  - Other healthcare professionals
  - Webster packs/ Dosette boxes
  - GP letter
  - Hospital records from previous admission/discharge
- Use at least two sources of information for all medication histories
Medication History Interview

- Group Activity:
  - Perform a medication history interview (15 mins)
  - Form 5 groups
  - In each group one student will role play patient, another one will be the pharmacist and others will be observers
  - Patient/Observers to provide feedback to the pharmacist at the end of the interview

Medicine Reconciliation is a 3-step process:

1. Obtain medication history
2. Review medication charts and medical record
3. Identify and reconcile discrepancies between the medication history and medication chart
   - Discuss with healthcare team
   - Document in the patient’s medical record

Inpatient Medication Chart

- Important, yet complex multi-page document
- Provides information on:
  - Patient’s demographics including age and possibly weight
  - All medicines prescribed by the hospital doctors
  - Administration times of medicines by nursing staff, and their initials
  - Reasons for medicine non-administration
  - Allergies
- Used by many members of the health care team, including pharmacists

Pharmacist’s role:

- Daily (Mon-Fri) review to ensure correct medicines are prescribed (reconcile medication history information with medication chart)
- Consider appropriateness of prescribed drugs
- Check doses, administration routes and timing, drug-drug and drug-disease interactions
Medication Reconciliation is a 3-step process:

1. Obtain medication history
2. Review medication charts and medical record
3. Identify and reconcile discrepancies between the medication history and medication chart
   - discuss with healthcare team
   - document in the patient’s medical record

Use of Medical Records

- Access them for comprehensive patient information
- Document Medication Reconciliation activities in them
  - If no discrepancies identified, eg:
    - All meds prescribed correctly
  - OR
  - If discrepancies identified and action taken, eg:
    - Regular meds omitted - Xalatan eye drops 1 bd
    - Contacted [resident] & recommended to prescribe Xalatan
    - Annotate with your name, signature, profession (‘pharmacy’) and contact details such as a pager number

Medicines Information

Medicines Information: Role of Clinical Pharmacists

- Steps in providing medicines information:
  - Determine primary question and required timeframe for response
  - Develop search strategy
  - Access relevant information
  - Critically appraise information
  - Respond within agreed timeframe
Access relevant information

- Which references to use and when?
  - Standard Texts:
    • dosing, indications, drug interactions, compatibility, common ADRs
  - Literature search:
    • investigational drugs, off-label use for marketed drugs, rare ADRs
  - Time may be limited on the wards
    • May need to enlist assistance from Medicines Information Centre/Pharmacist

Activity: 15 mins

- You are reviewing a medication chart for Mr John Brown on your ward.
- The nurse asks for your advice about how to give the regimen via a nasogastric tube.
  - Diltiazem CD 240mg capsule
  - Asasantin capsules (Aspirin 25 mg tablet inside a capsule containing 200 mg SR dipyridamole beads)
  - MS Contin (morphine SR) tablets 30 mg
  - Efexor XR (venlafaxine) capsules
  - Omeprazole 20mg tablet

Activity: 15 mins

- Form 5 groups
- Access the relevant information and formulate a response
- For medications that can be given as prescribed, endorse the orders so as to ensure the doses are given correctly
- For medication orders that need to be changed, determine what you would recommend the doctor prescribe so that the regimen can be given via the NG tube
- In each group one student will role play nurse, another one will be the pharmacist and others will be observers
- Nurse/Observers to provide feedback to the pharmacist at the end of the medicines information session

References

- SHPA Standards of Practice for Clinical Pharmacy
- Clinical Skills for Pharmacists, A Patient-Focused Approach (Tietze, J, ed 3)
- Pharmacy Practice Experiences – A Students Handbook (Setlak, P)
- Hospital Pharmacy (Stephens, M ed 2)
- Australian Medicines Information Training Workbook (ed 1)