

Medication Reconciliation Workshops

Face-to-Face Education for Nursing & Midwifery Staff



Workshop 2

Medication Reconciliation on Admission



How to take a Best Possible Medication History (BPMH)

Do you wish to carry out a role
play before continuing the
workshop?



Role Play

- You will need a:
 - Volunteer as the interviewer
 - Facilitator as the patient
 - Medication Management Plan (MMP) or equivalent locally agreed form

Medication Management Plan (MMP)

Identifying/Tracking Issues & Assisting Discharge

NSW GOVERNMENT Health
Medication Management Plan
 Facility/Service: My Hospital

Date of admission: 25 / 6 / 2013
 Ward / Clinic: Medical 1
 Consultant: Samantha Smith

Date / Time	Issue Identified	Proposed Action	Person Responsible	Date of Action	Result of Action
<u>26/6</u>	<u>Clarithromycin prescribed increases toxicity of Atorvastatin</u>	<u>withhold Atorvastatin or consider alternative antibiotic.</u>	<u>MO</u>		
	Issue identified by: <u>Pharmacist</u> Contact number: <u>4321</u>				
	Issue identified by: Contact number:				
	Issue identified by: Contact number:				
	Issue identified by: Contact number:				
	Issue identified by: Contact number:				
	Issue identified by: Contact number:				
	Issue identified by: Contact number:				

KEEP WITH ACTIVE MEDICATION CHART - DO NOT REMOVE Please see over Page 1 of 4

MEDICATION CHANGES DURING ADMISSION

COMMENTS (e.g. medication administration, liaison required, supply notes)

MEDICATION DISCHARGE CHECKLIST

Reconciled on discharge Sign: _____ Date: _____
 Own medicines returned Sign: _____ Date: _____
 Permission for disposal of medicines Sign: _____ Date: _____
 Medication supply Sign: _____ Date: _____
 Dose administration aid Type: _____
 Script given to patient (if applicable)
 Discharge Medication Record given/sent to: Patient GP Pharmacy Other: _____
 Sign: _____ Date: _____
 Consumer Medicine Information Sign: _____ Date: _____
 Education provided Sign: _____ Date: _____
 Recommend Home Medicines Review referral (see checklist below)? Yes No

RECOMMENDING A HOME MEDICINES REVIEW REFERRAL CHECKLIST

Consider recommending a Home Medicines Review referral because:

Difficulty managing medicines Taking more than 12 doses per day
 Suspected non compliance Significant changes to medication regimen during admission
 Medication requiring therapeutic monitoring during admission
 Inability to manage drug related therapeutic devices
 Taking more than 5 medicines
 Other: _____

KEEP WITH ACTIVE MEDICATION CHART - DO NOT REMOVE Page 4 of 4

A Case

- Mrs C.P. presented to the Emergency Department of her local hospital:
 - 78 year old female
 - Independently lives at home
- Presenting problem:
 - Chest pain (7/10)
 - No history of IHD

Medical History

- Hypertension
- Diabetes
- Glaucoma
- Asthma
- Back pain
- Osteoporosis
- Osteoarthritis
- Reflux

Undertake Role Play

- Audience to record medications during the role play
- Use the MMP or equivalent form that is used within the facility

End of Role Play

Click to continue
the workshop

Objectives

- Define what a BPMH is and why it is important
- Provide a structured approach to use when interviewing patients
- Become familiar with where to document a BPMH
- Identify the types of information sources that can be used to collect/confirm a BPMH
- Demonstrate effective patient interview skills

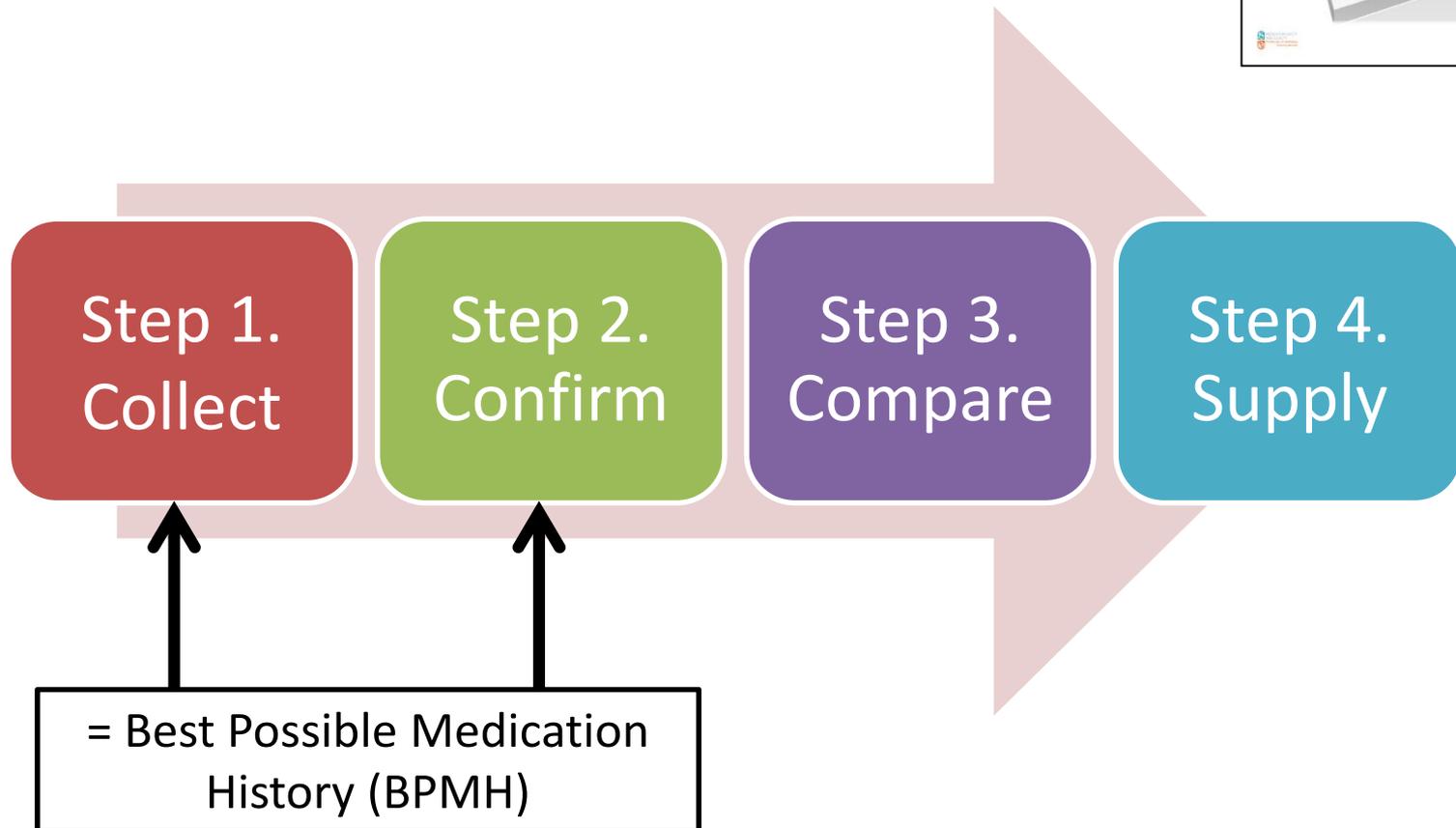
What is a Best Possible Medication History (BPMH)?

What is a BPMH?

- An accurate and complete medication history, or as close as possible
- Uses at least one other source of medicines information to confirm
- Often more comprehensive than a primary medication history

Medication Reconciliation

The Four Steps



Contents of a BPMH

- Includes prescription, non-prescription and complementary medications
- Details the following:
 - Medication name, strength, dose, route and frequency
 - How long the patient has been taking the medications
 - Patient's understanding of why they use it
 - Any recently ceased or changed medications
 - Any allergies or adverse drug reactions

Why Take a BPMH?

- 10-67% of medication histories contain at least one error¹
- Incomplete medication histories at the time of admission have been cited as the cause of at least 27% of prescribing errors in hospital²
- The most common error is the omission of a regularly used medication³
- Around half of the medication errors that happen in hospital occur on admission or discharge⁴
- 30% of these errors have the potential to cause harm^{3,5}

How to Obtain a BPMH

Obtaining a BPMH

- **Collect** a medication history:
 - Conduct a patient or carer interview wherever possible
 - OR
 - Use other source/s of medicines information
- **Confirm** the obtained information with at least one other source of information to verify the history
- These two steps may occur in succession or concurrently

Sources of Medicines Information

- Sources to consider in order of usefulness:
 - Patient or carer interview
 - Patient's own medications
 - Dose administration aid/s
 - Patient medicines list
 - Nursing home or hostel medication chart/s
 - GP medication list or referral letter
 - Community pharmacy dispensing history
 - Previous hospital discharge summary
 - HealtNet Portal

Patient or Carer Interview

- Other sources of information should never replace a thorough patient or carer interview (if possible)
- For patients that bring in their own medicines and/or a medication list, verify each medication and how they take it
- Important since patients:
 - Frequently take medications differently to what is prescribed on the medication label
 - May not update medication lists when new medications are started, doses are changes or medications stopped
 - May not bring in or list all of their medications e.g. eye drops

A Structured Approach for Interview

1. Review relevant patient information
2. Introduce yourself and explain the purpose of the interview
3. Ask about previous allergies or adverse drug events
4. Ask about prescription, non-prescription and complementary medications
5. Use a checklist
6. Assess patient's understanding, attitude and adherence
7. Organise and document medicines information

1. Review Patient Information

- Types of information that may be useful:
 - Age, gender, social history
 - Ability to communicate, cognition, alertness
 - Previous medical history
 - Laboratory results or other findings
 - Presenting condition
 - Working diagnosis
- Identifies issues to focus on during the interview
- Aids in prioritisation of patients

2. Introduction

- Provide a clear introduction
- Explain the purpose of the interview
- Respect the patient's right to decline interview
- Determine the person responsible for management of medications
- Obtain patient consent before requesting information from other health care providers

3. Allergies or Adverse Drug Events

- Document previous allergies or adverse drug events:
 - On the National Inpatient Medication Chart (NIMC) or electronic equivalent
 - In the patient's medical record
- Document specifically:
 - Drug
 - Type of reaction
 - Date of reaction

4. Prescription, Non-Prescription & Complementary Medications

- Obtain specific details of all medications:
 - Name, strength, dose, route, formulation, frequency, duration and perceived indication
 - Any recently started, ceased or changed medications

Hints

- Treat each medication separately i.e. obtain all information before moving onto the next
- Document as you go, do not rely on memory!
- Document according to local policy

4. Prescription, Non-Prescription & Complementary Medications

- Begin with open-ended questions:
 - *What medicines do you take?*
 - *What medicines do you take when you need?*
- Ask about medications for specific conditions:
 - *What medicines do you take for your diabetes/high blood pressure?*
- End with specific prompts:
 - *How often do you take your pain medicine?*
 - *Do you take that in the morning or at night?*

5. Use a Checklist

- To avoid omitting relevant details use a written or mental checklist
- Each patient's perception of what a medication is will vary
- Ask about:
 - Once weekly or intermittent medications
 - Topical medications e.g. eye drops, creams, patches
 - Puffers, sprays or injectable medications
 - When needed medications for pain/sleep/constipation etc.
 - Oral contraceptives, hormone replacement
 - Social and recreational drugs

5. Checklist Examples

Medication History Checklist

- Prescription medications
 - Sleeping tablets
 - Inhalers, puffers, sprays, sublingual tablets
 - Oral contraceptives, hormone replacement therapy
- Non-prescription medications e.g. OTC medicines
- Complementary medications e.g. vitamins, herbal or natural therapies
- Analgesics
- Gastrointestinal medications e.g. for reflux, heartburn, constipation or diarrhoea
- Topical medications e.g. creams, ointments, patches
- Inserted medications e.g. nose/ear/eye drops, pessaries, suppositories
- Inject medications
- Recently completed courses of medication
- Other people's medicines
- Social and recreational drugs
- Intermittent medications e.g. weekly.

MEDICATION HISTORY CHECKLIST	
<input type="checkbox"/> Prescription medicines	<input type="checkbox"/> Topical medicines (e.g. creams, ointments, lotions, patches)
<input type="checkbox"/> Sleeping tablets	<input type="checkbox"/> Inserted medicines (e.g. nose/ear/eye drops, pessaries, suppositories)
<input type="checkbox"/> Inhalers, puffers, sprays, sublingual tablets	<input type="checkbox"/> Injected medicines
<input type="checkbox"/> Oral contraceptives, hormone replacement therapy	<input type="checkbox"/> Recently completed courses of medicine
<input type="checkbox"/> Over-the-counter medicines	<input type="checkbox"/> Other people's medicine
<input type="checkbox"/> Analgesics	<input type="checkbox"/> Social and recreational drugs
<input type="checkbox"/> Gastrointestinal drugs (for reflux, heartburn, constipation, diarrhoea)	<input type="checkbox"/> Intermittent medicines (e.g. weekly or twice weekly)
<input type="checkbox"/> Complementary medicines (e.g. vitamins, herbal or natural therapies)	

Medication Management Plan

CEC Best Possible Medication History Interview Guide

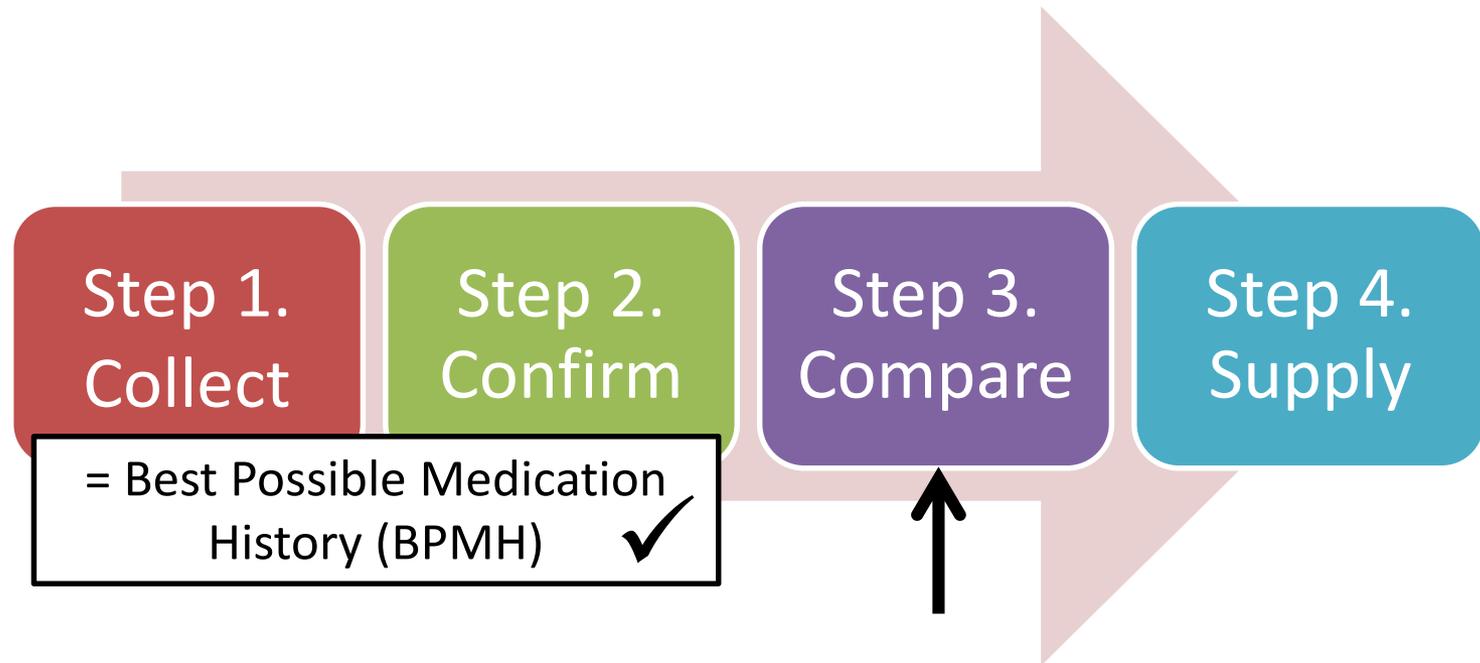
6. Assess Patient's Understanding, Attitude & Adherence

- Patient's understanding of:
 - Their illness
 - Indication of each medication
 - Effectiveness
 - Perceived side effects
 - Current monitoring of disease/medication use
- Assess adherence by asking:
 - *People often have difficulty taking their medicines for one reason or another...have you had any difficulty taking your medicines?*
 - *How often would you say you miss taking your medicines?*

7. Organise & Document Information

- Document the BPMH according to local policy:
 - Dedicated form e.g. MMP
 - In the electronic medical record
 - Front of the NIMC
- Ensure availability at point of care e.g. with the current medication chart
- Ensure the following details are clearly documented:
 - Patient details
 - Date of documentation
 - Name and contact details of clinician completing history
 - List of medications, including all details
 - Source/s of information
 - Information about previous allergies or adverse drug events
 - Recently started, ceased or changed medications

How the BPMH can Reduce Adverse Events on Admission



Nurses & midwives can play a role in identifying medication-related issues when comparing the BPMH with the medications prescribed for the patient on admission

- The next step in the Med Rec process...

Compare the BPMH with Prescribed Medicines

- Check for any apparent differences between the two:
 - Compare 'like for like'
- Check for any differences based on clinical or patient factors:
 - *Do the prescribed medicines match the patient's past medical history?*

Examples of Medication Errors on Admission

Patient takes
irbesartan 150mg daily
Charted for 300mg
daily

Higher dose given
for 5 days before
error identified
Patient was
hypotensive

Caused
temporary
harm

Patient from aged care
facility admitted and
regular clonazepam oral
drops omitted

Patient experienced
seizures during
admission
Seizures controlled
when clonazepam
re-started

Caused
temporary
harm and
required
intervention

Patient with AF
All regular medications
omitted, including
digoxin

Patient developed
rapid AF and
required IV digoxin
Patient
subsequently died

May have
contributed to
patient's death

Common Pitfalls when Obtaining a BPMH

Sources of Medicines Information Activity

- Work in pairs or small groups
- Consider two sources of medicines information per group:
 - What might be some of the limitations with the sources?
 - How might you overcome these?

Patient or Carer Interview

- May not be able to recall all of their medications
- Non-English speaking
- Non-adherent patients may not reveal how they really take medications
- Acutely ill or confused patients unable to provide accurate or any information

Overcoming pitfalls?

- Ask family or carers
- Use an interpreter
- Take a non-judgemental and open approach
- Use other sources to gather information
- Build rapport and try not to rush

Patient's Own Medications

- Some medications may be ceased
- Patient may not actually take the medication
- Directions on labels may be incorrect
- Medications may be placed in incorrect packaging
- Not all medications may be brought in
- Relative's medications may be brought in

Overcoming pitfalls?

- Check the patient's name on packaging
- Ask the patient how they take each medication
- Check contents
- Check date of dispensing

Dose Administration Aid/s

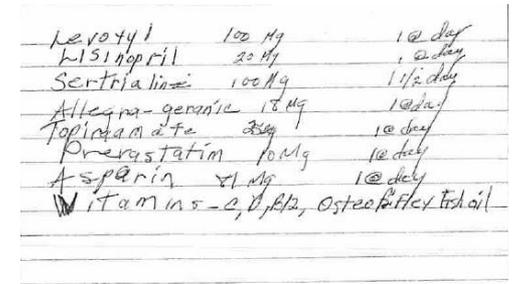


- Does not contain non-oral medications
- May not contain all medications e.g. when needed, medications with special storage requirements
- May be more than one dose administration aid
- May not indicate the name and strength of what is inside

Overcoming pitfalls?

- Check contents against list if available
- Ask about other medications not included in the aid
- Ask who packs the aid

Patient Medicines List



A handwritten list of medications on lined paper. The list includes: Levothyron 100 Mg 1 @ day, Lisinopril 20 Mg 1 @ day, Sertraline 100 Mg 1 1/2 @ day, Allegra-gemine 18 Mg 1 @ day, Topiramate 250g 1 @ day, Pravastatin 40mg 1 @ day, Aspirin 81 Mg 1 @ day, and Vitamins - a, b, b12, Osteobitex Fish oil.

Levothyron	100 Mg	1 @ day
Lisinopril	20 Mg	1 @ day
Sertraline	100 Mg	1 1/2 @ day
Allegra-gemine	18 Mg	1 @ day
Topiramate	250g	1 @ day
Pravastatin	40mg	1 @ day
Aspirin	81 Mg	1 @ day
Vitamins - a, b, b12, Osteobitex Fish oil		

- May not be up to date
- May indicate old dose regimens that have changed
- May have missing information
- May not list all medications e.g. non-prescription, complementary medications, when needed
- May not contain non-oral medications

Overcoming pitfalls?

- Go through the list with the patient and ask about each medication
- Ask what other medications they may take apart from the ones written

Nursing Home or Hostel Chart/s

- May contain ceased medications
- Sometimes illegible
- May not send all current charts

Overcoming pitfalls?

- Check dates on chart
- Thoroughly check for ceased medications
- Check with the pharmacy that supplies the nursing home or hostel

GP Medication List or Referral Letter

*'86% of GP referral letters included a medication list with inaccurate information regarding medications taken and medication doses'*⁶

- Contains all medications prescribed for the patient, including medications that may have been ceased
- Patients may see more than one doctor
- Often do not include non-prescription medications
- Patients may vary how they take prescribed medications

Overcoming pitfalls?

- Go through the list with the patient
- Ask about medications other doctors may have prescribed or non-prescription medications

Community Pharmacy Dispensing History

- Patient may pick up medications from multiple pharmacies
- Patient may be taking medications differently to the directions in the dispensing record
- May list ceased medications
- Does not contain non-prescription medications

Overcoming pitfalls?

- Ask about non-prescription medications
- Check if patient only uses one pharmacy
- Go through the list with the patient

Previous Hospital Discharge Summary

- May be out-dated
- Changes may have occurred post-discharge
- May have been incorrect when completed

Overcoming pitfalls?

- Check the date of writing
- Confirm that changes have not been made post-discharge
- Go through the list with the patient

HealtheNet Portal



- The HealtheNet Portal is a way of sharing information between hospitals, primary care (GPs and pharmacies) and the patient
- Sharing occurs through the Portal via eMR and the My Health Record
- Registering with My Health Record is currently **voluntary**
- Medicines information viewed via the Portal may not be a complete or current medication record
- Paper PBS prescriptions dispensed in the community may take two weeks to display on the My Health Record

Overcoming pitfalls?

- Check information against the dates displayed in the Portal
- Check and confirm with the patient if any medication has been dispensed or changed over the last 2 weeks

How to overcome pitfalls...

Consider:

is it **complete**

is it **current**

is it what the patient is **actually** taking?

Avoid relying on one source of information

Conclusion

- A BPMH is vital for ensuring continuity of care:
 - Helps reduce the risk of medication errors
 - Has patient safety and organisational benefits
- A dedicated form (e.g. MMP) will facilitate the process of documenting a BPMH
- Be aware of the limitations with sources of medicines information
- For more information on the MMP visit the ACSQHC website www.safetyandquality.gov.au

Do you wish to carry out a role
play before ending the
workshop?



Did you List All of the Following?

Medicine Name / Strength	Dose	Frequency	Indication
Telmisartan (Micardis) 80mg	1 tablet	morning	Hypertension
Lantus Solostar	50 units	night	Type 2 diabetes
Novorapid Flexpen	10 units	breakfast, lunch & dinner	Type 2 diabetes
Latanoprost (Xalatan) eye drops	1 drop each eye	at night	Glaucoma
Seretide 250/25 MDI	2 puffs	twice a day	Asthma (preventer)
Ventolin 100microg MDI	2 puffs	twice a day	Asthma (reliever)
Rabeprazole 20mg	1 tablet	night	Reflux
Paracetamol (Panadol Osteo) 665mg	2 tablets	three times a day	Pain
Buprenorphine (Norspan) 5microg/hr patch	1 patch	weekly on Mondays	Back pain
Calcium (Caltrate) 600mg	1 tablet	night	Osteoporosis
Cholecalciferol (Ostelin) 1000 units	1 capsule	morning	Osteoporosis
Risedronate (Actonel) 35mg	1 tablet	weekly on Sundays	Osteoporosis
Blackmores glucosamine 1500mg	1 tablet	morning	Osteoarthritis
Blackmores Fish oil 1000mg	2 capsules	morning	Osteoarthritis
Movicol sachets	2 sachets	when required (once or twice a week)	Constipation

References

1. Tam V, Knowles SR, Cornish PL, Fine N, Marchesano R, Etchells EE. Frequency, type and clinical importance of medication history errors at admission to hospital: a systematic review. *CMAJ* 2005;173:510-5.
2. Dobrzanski S, Hammond I, Khan G, Holdsworth H. The nature of hospital prescribing errors. *Br J Clin Govern* 2002;7:187-93.
3. Cornish PL, Knowles SR, Marchesano R, Tam V, Shadowitz S, Juurlink DN, Etchells EE. Unintended medication discrepancies at the time of hospital admission. *Arch Interned* 2005;165:424-9.
4. Sullivan C, Gleason KM, Rooney D, Groszek JM, Barnard C. Medication reconciliation in the acute care setting: opportunity and challenge for nursing. *J Nurs Care Qual* 2005;20:95-8.
5. Vira T, Colquhoun M, Etchells EE. Reconcilable differences: correcting medication errors at hospital admission and discharge. *Qual Saf Health Care* 2006;15:122-6.
6. Australian Council on Safety and Quality in Health Care. Second national report on improving patient safety: improving medication safety. Canberra: Australian Council on Safety and Quality in Health Care, 2002

End of Workshop 2

If this is the last workshop you will complete today, please make sure you fill out a post-workshop survey before you leave and hand it to your facilitator