Department of Pharmacy
Pharmaceutical Care Workup Tool - User Guide

Introduction:
This tool is designed to help pharmacy students and residents manage the information that is needed to be gathered in order to successfully identify drug therapy problems (DTPs) and develop follow up/monitoring plans for their patients. It is meant to guide you through a thought process where you **think about**, rather than copy down, each piece of information gathered.

Page 1:

Reason for referral (RFR):
This could be the reason for admission to hospital which may be the patient's main complaint. It does not necessarily have to be a diagnosis as this may not be evident right away. RFR may also be the reason you were asked to see the patient (ie. a specific drug question related to this particular patient or a need for a full medication review).

Workup date: The date you started the patient work up ie. today/now! This may or may not be the same as admission date. There is no point in identifying DTPs that have occurred in the past and are already resolved by other team members.

Name: self-explanatory.

Admission date: Date patient admitted to hospital. This may or may not be the date that you are seeing the patient. If you are working in an outpatient setting, you may modify this to suit you patient population. For example, if you are working the hemodialysis unit, you may modify this field to be "dialysis start date".

Unit: Nursing unit or ward that patient is currently on. Could also be used in an ambulatory setting (ie. Hemodialysis unit, family health team etc.) in which case you would indicate the location in which you are seeing the patient.

Admitted from: This is where the patient came from (home, nursing home, shelter, another hospital unit etc.) This will help to give you a perspective on the patient's level of functioning prior to this encounter as well as information about medications. For example: if patient came from home they are likely to be getting medications from a community pharmacy whereas if they came from a nursing home they may have had medications administered to them by a nurse. It may also indicate risk factors for certain diseases ie. infections, VTE etc.

Discharged to: This is where the patient is likely to go once discharged. This may or may not be the same location from which the patient came. This information is helpful for discharge planning as well as the choice of medication alternatives and your care plans for the patient while under your care. Will they return to the community and their regular community pharmacy? Are they going to need rehab? Long term care?

MRN: Medical record number (hospital specific). May also be used as a check for positive patient identification.

Age: self-explanatory. You may list patient's actual age or date of birth in this field. Useful for position patient identification, calculation of creatinine clearance, drug dosing, risk factors for medical conditions, etc.

Sex: self-explanatory in most cases, useful for calculation of creatinine clearance, risk factors for medical conditions, etc.

Height/Weight/BMI: self-explanatory. If not available this field may be left blank and filled in at a later date. Important for drug dosing, BSA calculation, renal function assessment, also may be risk factor for medical condition (both height and weight and at both spectrums of the scale)

BPMH completed: Tick this box once BPMH completed. This shows at quick glance that this has been done. Please follow the unit specific procedure for documenting BPMH in the patient's chart. You can also use the space on page 2 to indicate the home medications, which is a useful reference upon patient discharge.

History of Present Illness (HPI): This is a description of the relevant signs and symptoms experienced by the patient in the time leading up their presentation to hospital. This should be summarized in chronological order. Note this is NOT the location to list all current and past medical problems and their corresponding medications (see page 2).

Social History: This information may lead to DTPs arising while in hospital. Patients may experience withdrawal from alcohol/nicotine etc. that requires treatment. You should also consider whether using any (or discontinuation) of these substances may impact on care plans you develop for the patient. (ie. drug interactions, monitoring, compliance etc.). Note any language issues in addition to potential family members/translators that the patient may have. Communication issues may also include dementia/confusion/barriers to sight/hearing/inability to read in addition to language barriers.

Allergy History: Patient allergies, reaction and date of reaction should be noted. You should also be considering the impact of this information on current and future care plans that you may develop for your patient. (ie. Will this penicillin allergy impact use of beta-lactams while in hospital or upon discharge?)

Compliance History: The person responsible for medication administration should be identified if it is not the patient themselves (could be family member, caregiver, nursing home staff etc.) Compliance can be assessed during your BPMH and may be noted here. Include name and contact information for community pharmacist/pharmacy and whether the patient has a drug plan (i.e. include any information that will help determine if actual or potential DTPs exist)

Potential Drug Therapy Problems (DTPs):

As you learn about your patient's information in all the domains noted on page one of the workup you can use the information to postulate what types of DTPs the patient is likely to encounter. For example: an 80 year old female admitted with hypoglycemia to a general medicine ward should bring to mind a host of DTPs that you might expect she could encounter (i.e. osteoporosis requiring treatment, adverse

effect of antihypertensive meds, risk of CAD requiring treatment, etc.). By contrast, a 32 year old male admitted for knee surgery will bring to mind a different set of potential DTPs. (i.e. may need VTE prophylaxis, treatment for post-surgical infection, etc.) The social, allergy, compliance and language domains should also trigger thoughts about what types of DTPs may be encountered by that patient. You should also consider DTPs that may arise simply due to hospitalization (ie. risk of VTE, difficulty sleeping requiring therapy, prevention or treatment of nosocomial infections etc.). Also consider concerns related to alterations in drug efficacy or toxicity (ie. renal impairment, low albumin, hepatic disease etc.)

IMPORTANT TIP #1: Please keep in mind that you are NOT simply COPYING information from the patient's chart. The idea of the work up tool is to assist you with gathering and organizing information related to the patient that will assist you in identifying and preventing drug therapy problems. **You should be THINKING about each piece of information that you transcribe and how this could potentially affect the care plans you develop and the DTPs you identify.**

Page 2: Medical Conditions and Medications

This section is used to provide an up-to-date and detailed view of the patient's current medical issues and their associated drug therapies. Past medical problems and past medications (as at home and any transferring institution) should be reconciled against the patients' current medical problems and medications. Use the information gathered here to begin assessing for actual DTPs.

Medical problem: This can be a disease condition (ie. hypertension) or a symptom (ie. pain). Note this is a dynamic list. All medical conditions that the patient comes to hospital with as well as those arising during their hospital stay should be documented here. Consider the answers to the questions noted in the top of the column as you document the medical problems here. You also may find that you don't know much about this medical problem or how to monitor or treat it (ie. primary pulmonary hypertension which wasn't reviewed in class). In that case, you should make a note to read up on this condition in order to be able to properly assess and care for your patient.

Onset: Refers to the onset of the medical problem. You can be very general ("x years") which is appropriate for chronic medical conditions. This will give you an idea of how long the patient has had the problem. Sometimes it is appropriate to be more specific, such as if this is the new problem that brought the person to hospital (ie. admitted for hypoglycemia) or if it arises during the time you are caring for the patient (ie. insomnia – you may put a specific date ie. March 24).

Drug therapy: This is the medication(s) that the patient takes for the medical problem. Note that patients could have problems with no medication or medications for no discernable problem. This tool will help you identify these types of DTPs. You should also consider the answers to the questions noted in the top of the column as you document the medications here. As you identify what types of things you need to monitor to assess efficacy and toxicity of the medication you can note these on the monitoring form (page 3). You may also find that you are not familiar with a medication that your patient is taking. In that case you will need to read about the medication in order to asses for proper dose, monitoring for efficacy and toxicity, drug interactions etc. Note the answer to the question: prophylactic therapy needed? This is meant to remind you to assess whether the patient may require prophylaxis as a result of this current therapy (eg. GI protection with NSAID use, etc.)

Start: This refers to when the DRUG was started. Again, this could be very specific (March 24) or very general (many years) depending on the particular situation.

Stop: This refers to when the drug was stopped. This may be blank (if the drug is still ongoing), may have been recently stopped prior to hospitalization or may be discontinued during their hospital stay.

Comments: allows you to make a quick note of relevant info. Could include things to research, a note about the drug (recent dose change) etc.

IMPORTANT TIP #2: Please keep in mind that you are NOT simply COPYING diseases and drugs from the patient's chart. You should be THINKING about each piece of information that you transcribe and how this could potentially affect the care plans you develop and the DTPs you identify. You should also be IDENTIFYING drugs and diseases that you are not familiar with so you can learn about them in order to apply the information to your patient.

Past medications: This allows you the space to reconcile home vs hospital meds. If current therapy is the same as home you can simply tick off the box. If the medication at home (or from the transferring institution) was different this space allows you to record this. This may be relevant when planning for discharge to assess if a medication should be switched back to one they were on at home (ie. hospital therapeutic substitution).

IMPORTANT TIP #3: You may need more than one copy of this page if your patient is on many medications or they have a long hospital stay. Feel free to print out extra copies of this page and insert into your patient work up.

Page 3:
This is your monitoring page. Note that many commonly monitored items are pre-printed on the form. You should add on any parameters that you identify need to be monitored. You may identify monitoring parameters from multiple areas in the work up tool including:

- potential DTP section on page 1
- medical conditions
- efficacy and toxicity monitoring parameters from current medications
- monitoring parameters determined in your pharmacy care plan

IMPORTANT TIP #4: You may also need more than one copy of this page if your patient has a long hospital stay. Feel free to print out extra copies of this page and insert into your patient work up.

IMPORTANT TIP #5: Just because something is pre-printed on the form does not mean it MUST be noted. **YOU decide** what is necessary to monitor for each individual patient that you are caring for.

Page 4:
This page includes extra space for noting the results of other tests, consults, drug levels or microbiology.

Page 5:
Progress notes can be used to document any additional issues chronologically. This area is not intended to be for care plan documentation. It should be limited to information about the patient that is not already included under labs, diagnostic tests, microbiology etc.
Examples of items that could be documented here:
June 19: DI question asked by Dr. Smith about use of LMWH in this patient.
June 20: patient had a line inserted for hemodialysis; line is usable right away
June 21: family and team meeting scheduled for Wednesday June 25 to determine discharge plan

IMPORTANT TIP #6: Progress notes do NOT replace appropriate chart documentation.

Page 6:
The care plan worksheet is the most important part of the profiling tool. The information gathered on the preceding pages should be used to assess for drug therapy problems. A care plan for each issue identified should be outlined in this section. You may also need to print out multiple copies of this worksheet for your patient.

DTP/Issue: Description of the drug therapy problem or medication issue identified

Goals of therapy: This is the overall goal you and the patient are trying to achieve with pharmacotherapy. Refer to your pharmaceutical care textbook for full explanation. Remember to be specific. Consider the parameter, desired degree of change and timeframe. (eg. reduce fever to normal within 48 hours, prevent herpes zoster infection for the next 5 years)

Assessment of alternatives/determine interventions: Use this area to assess the alternatives that could be used to resolve the DTP. You can consider drug and non-drug interventions (ie. education, preventative therapy, referrals etc.) Don't forget to consider interventions that prevent further related DTPs. You may consider multiple interventions but must consider all aspects of the patient (patient wishes, goals of therapy, concurrent medications and medical conditions etc.) in coming to the best alternative.

Plan/recommendation: After discussion with preceptor and team, provide a summary of the plan for the DTP. Include all details of the plan (when to start/stop a medication, education required, referrals etc.)

Follow up/monitoring plan: This should be clear and specific. Include parameters to monitor (considering efficacy and toxicity) and time frame. You should refer to your goals of therapy to assess if they are being met. This should also include an assessment for any new DTPs.

IMPORTANT TIP #7: When creating your follow up plan, it should be clear and specific enough for another pharmacist or student to pick up your plan and know exactly what needs to be monitored and when.

IMPORTANT TIP #8: Don't forget to assess for any new DTPs while doing daily patient monitoring.