Patient Care Process
Faculty of Pharmacy and Pharmaceutical Sciences
University of Alberta, Edmonton Alberta
Regional Pharmacy Services, Alberta Health Services

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Acknowledgements:

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Medical History

- Obtain information from the medical record and patient interview
- The scope of information gathered depends on practice site, setting of interview (home, clinic, hospital, community pharmacy), type of assessment, relevance of information, and a realistic timeframe
- Sources of information (e.g. patient, family/agent, chart, pharmacy, Netcare/PIN, health care workers)

Demographics

- Name, DOB, PHN, gender, address, telephone, marital status, language, health care workers
- Height, weight, ideal body weight (IBW), body mass index (BMI) (if relevant)

Reason for Assessment

- Why is patient seeking care? Describe condition/problem and duration.
- What is the reason for the referral or assessment?
- What is the patient agenda? (obtain complete list; negotiate what will be addressed today vs. future visits)
- Note: There may not always be a new medical problem or issues with therapy (i.e. routine refill or follow-up)

History of Present Illness (HPI)

- Line of questioning for symptom assessment:

<table>
<thead>
<tr>
<th>Location</th>
<th>Where is the symptom?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality Severity</td>
<td>What is the symptom like? Does it interfere with the patient’s lifestyle? Describe it further. What is the severity of the symptom? (mild, moderate, severe)</td>
</tr>
<tr>
<td>Quantity</td>
<td>What is the frequency of the symptom?</td>
</tr>
<tr>
<td>Timing</td>
<td>What is the duration of the symptom? When did it first present?</td>
</tr>
<tr>
<td>Setting</td>
<td>What was the patient doing when the symptom first presented?</td>
</tr>
<tr>
<td>Modifying factors</td>
<td>Are there any relieving or aggravating factors? What makes it better or worse?</td>
</tr>
<tr>
<td>Associated symptoms</td>
<td>Are there any associated symptoms? (Include absence of symptoms if relevant-i.e. no fever, no cough, no dyspnea, etc.)</td>
</tr>
</tbody>
</table>

Past Medical History (PMH)

- List medical conditions/problems (dates and duration)
- Hospitalizations, surgeries, accidents, injuries (if relevant)
- Recent specialist visits; other clinics/caregivers

Medication History (see separate template)

Family History (FH)

- Illnesses of first degree relatives (status of living and causes of death/age)
- Attention to cardiac, hypertension, hyperlipidemia, diabetes, cancer, osteoporosis, alcoholism, mental illness

Functional History (if relevant - i.e. geriatrics, stroke patient, homeless, new immigrant, etc.)

- Ability to do Activities of Daily Living (ADL) and Instrumental Activities of Daily Living (IADL)
- Describe functional decline (onset, activity impacted); Supports?

Social History (SH)

- Nutrition, exercise, education, occupation/work history, marital status, living conditions (where and with whom?)
- Substance use (caffeine, alcohol, tobacco, illicit drugs)
- Caffeine, Alcohol, Illicit Drugs: type, amount, pattern, duration, date/time last intake or history of use
- Tobacco products: type [for a smoker: # ppd and/or pack-years (#ppd x # yrs smoked)]
- Sexual History (if relevant - i.e. functional, pregnancy, STIs)

Review of Systems (ROS)

- Identify any further problems (i.e. medical problems, adverse effects); note presence/absence of symptoms
- Head to toe assessment (keep questions relevant and brief; not all systems need to be reviewed)
• The following are just examples of considerations for each system

<table>
<thead>
<tr>
<th>System</th>
<th>Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>energy levels, weight changes, ailments, pain</td>
</tr>
<tr>
<td>Integument</td>
<td>rashes, dryness, pruritus, hair loss, nails</td>
</tr>
<tr>
<td>Head/Neurologic</td>
<td>mental status, headache, syncope, seizures, tremor, weakness, vertigo</td>
</tr>
<tr>
<td>Eyes</td>
<td>redness, discharge, blurring, vision, pain, glaucoma, cataracts</td>
</tr>
<tr>
<td>Ears</td>
<td>hearing loss, tinnitus, earache, discharge</td>
</tr>
<tr>
<td>Nose/Sinuses</td>
<td>rhinitis, sinus congestion, discharge</td>
</tr>
<tr>
<td>Mouth/Pharynx</td>
<td>dentition, hoarseness, pharyngitis, ulcerations</td>
</tr>
<tr>
<td>Neck</td>
<td>swollen lymph nodes/glands, goiter, pain</td>
</tr>
<tr>
<td>Chest/Lungs</td>
<td>cough, dyspnea, wheezing, sputum, asthma, bronchitis, pneumonia</td>
</tr>
<tr>
<td>Cardiovascular</td>
<td>chest pain, murmurs, palpitations, hypertension, myocardial infarction</td>
</tr>
<tr>
<td>Gastrointestinal</td>
<td>dysphagia, odynophagia, reflux, nausea, vomiting, bowel movements, stool</td>
</tr>
<tr>
<td>Urinary</td>
<td>pain, frequency, urgency, incontinence, retention, bleeding</td>
</tr>
<tr>
<td>Hepatic/Renal</td>
<td>organ function, infection (hepatitis, pyelonephritis)</td>
</tr>
<tr>
<td>Reproductive</td>
<td>libido, discharge, infection, menstrual, menopause</td>
</tr>
<tr>
<td>Musculoskeletal</td>
<td>stiffness, pain, motion, swelling, redness, deformities</td>
</tr>
<tr>
<td>Endocrine</td>
<td>thyroid, diabetes, adrenals, estrogen, testosterone</td>
</tr>
</tbody>
</table>


Physical Exam (PE), Vital Signs (VS), Investigations/Diagnostics

Laboratory findings (Labs)

• review relevant laboratory findings in groupings (CBC, electrolytes, renal function/creatinine clearance, liver function, coagulation tests, microbiology results, etc.)
Medication History

- Obtain information from the medical record and patient interview
- The scope of information gathered depends on practice site, setting of interview (home, clinic, hospital, community pharmacy), type of assessment, relevance of information, and a realistic timeframe
- Sources of information (e.g. patient, family/agent, chart, pharmacy, Netcare/PIN, health care workers)

Allergies

- List medication/ food allergies
- Describe reaction (date, onset, signs/symptoms, management [pharmacologic/non-pharmacologic], outcome)
- Reaction to other medications in the same class?

Adverse Effects

- As described by patient, abnormal laboratory findings, documented adverse effects
- Describe adverse effect (date, onset, signs/symptoms, management [pharmacologic/non-pharmacologic], outcome)
- Tolerability to other medications in the same class?

Current Medications

- List current medications (include patient, family/agent, chart, pharmacy, Netcare/PIN, health care workers)
- Indication, dosage, schedule, duration, outcome
- Quantify use of prn medication (check on refills, ask patient)
- See section on “Medication Adherence” for more details on adherence assessment

Past Medications

- List past medications (this will depend on relevance of medical history and indication for new therapies)
- Indication, dosage, schedule, duration, outcome
- Why was drug discontinued?
- Antibiotic use in past 3 months (if relevant to the medical history)

Non-prescription Medications

- OTC, CAMs, vitamins, minerals, other supplements
- Indication, dosage, schedule, duration, outcome
Other Medications

- Eye/Ear/Nose products
- Inhalers/Patches/Creams/Ointments/Injectables/Medication samples
- Consider using prompts to question for specific drugs commonly used in a given patient population (i.e. analgesics, antiemetics, laxatives, sedative, etc.)

Immunization History

Medication Experience

- “The medication experience is an individual’s subjective experience of taking a medication in his daily life.” (Shoemaker, 2008)
- A patient’s medication experience may shape the patient's attitudes, preferences about drug therapy, and drug taking behavior.
- Be attentive to patient’s general attitude to medications, preferences, concerns, understanding, and cultural and ethical beliefs.
- Often this information is gathered indirectly in the patient interview.

Medication Adherence

- How is the medication prescribed vs. how does patient actually take the medication? (consider times, frequency, food; verify refill frequency)
- Describe daily routine (open-ended, non-judgemental) and how medication is taken/where it is stored?
- How often in a week does patient miss a dose of medication?
- What is the system used to manage/remember medication (i.e. supports, reminders, calendars, certain cues/times of day, blister packs, dosettes)
- Reasons for nonadherence/ potential solutions? (i.e. patient preference/beliefs, adverse effects, cost, drug formulation, dosing schedule, health literacy, memory, technique, functional ability)

Medication Management

- Community Pharmacy, Medication Payment Plan
- Concerns with cost of medication?
- Prescribing physicians/ other health care workers involved in patient’s care
- Confidentiality (i.e. who knows about medical conditions and therapies?)
- Medication sharing (i.e. does the patient share or borrow medications from others?)
- How is the following done?
  - Ordering medication refills
  - Pick-up/delivery
  - Organization (i.e. dosette)
  - Administration (i.e. ability to self-medicate, given by caregiver)
  - Monitoring (i.e. hypertension, blood glucose, laboratory work)
  - Storage (i.e. where/how are they stored?)
  - Use/functional ability (i.e. dexterity (opening vials), vision, swallowing, memory)
  - Technique (i.e. dosette filling, blister pack uses, inhalers, injections, eye drops, etc.)
Assessment of Drug Therapy

**Medical Condition/Problem**

- Is therapy indicated? (Consider non-drug management and patient preferences)
- Is drug therapy optimal (first-line) for that specific condition?

**Indication**

- Can therapy be discontinued?
- Has drug therapy been initiated?

**Efficacy**

- Why? Additional therapy required ● Non-adherence ● Low dose/dosing frequency/dose titration ● Interaction ● Onset of action ● Malabsorption ● Formulation ● Expired drug

**Adherence**

- Is the patient able to take drug therapy as prescribed?
- Why? Adverse Effect ● Incorrect dosage form/frequency ● Directions not understood (consider culture, language, education/health literacy) ● Cost/Drug access ● Patient preference, beliefs, motivators ● Patient ability to self-administer drugs (age, dexterity, vision, swallowing, memory)

**Safety**

- Is the patient at risk of or experiencing any adverse effects?
- Is the dose appropriate? (Consider weight, organ function, age) Is the patient being monitored appropriately?
- Is the dose too high? (Consider weight, organ function, age) Can the adverse effect be managed? Is a change in therapy indicated?
- Continue therapy, it appears appropriate for this patient.
- Can the interaction be managed? Is a change in therapy indicated?

**Move on to Efficacy Evaluation**

**Move on to Adherence and Safety Evaluation**

Developed by: Deon Druteika, PharmD, Pharmacy Services AHS
Adapted by: Patient Care Working Group, Faculty of Pharmacy, UofA 2011
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Process to Assess Drug Therapy

1. Gather Information:

- Before starting to work through the process of assessing drug therapy it is important to:
  - Observe the patient’s presentation (i.e. physical appearance, emotional state)
  - Gather relevant patient information
- Create a Patient Database
  - Data can be obtained from various sources including the patient, medical record, family members (with permission), other healthcare workers (pharmacist, nurse, physician, etc.), Netcare (laboratory findings)
  - Critical components of the database include a Medical History and Medication History
    - Medical History
      - Review medical record and interview the patient
    - Medication History
      - Review medical record, Netcare/PIN, interview the patient/caregivers, contact community/hospital pharmacy as appropriate

2. Assess Drug Therapy:

- Keep in mind types of Drug-Related Problems (DRPs) when assessing drug therapy.

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Type of DRP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indication</td>
<td>Unnecessary Drug</td>
</tr>
<tr>
<td></td>
<td>Additional Drug Therapy Required</td>
</tr>
<tr>
<td>Efficacy</td>
<td>Ineffective Drug- incorrect drug or drug product</td>
</tr>
<tr>
<td></td>
<td>Dose too Low (correct drug, wrong dose)</td>
</tr>
<tr>
<td>Safety</td>
<td>Adverse Drug Reaction</td>
</tr>
<tr>
<td></td>
<td>Dose too High (toxicity)</td>
</tr>
<tr>
<td></td>
<td>Drug Interaction</td>
</tr>
<tr>
<td>Adherence</td>
<td>Non-adherence (not taking enough drug)</td>
</tr>
<tr>
<td></td>
<td>Over-adherence (taking too much drug)</td>
</tr>
<tr>
<td>No DRPs identified</td>
<td>Drug therapy is appropriate for a specific patient</td>
</tr>
</tbody>
</table>
Evaluate the following parameters (Indication, Efficacy, Adherence, and Safety).

### INDICATION

<table>
<thead>
<tr>
<th>Review</th>
<th>Inquire</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Medical History</td>
<td>Is drug therapy indicated?</td>
</tr>
<tr>
<td>o Obtain complete list of medical</td>
<td><strong>NO:</strong> If drug therapy is not indicated, can it be</td>
</tr>
<tr>
<td>conditions/problems (consider patient</td>
<td>discontinued?</td>
</tr>
<tr>
<td>symptoms, diseases, laboratory data,</td>
<td><strong>YES:</strong> If drug therapy is indicated, has it been</td>
</tr>
<tr>
<td>physical examination findings, other</td>
<td>initiated?</td>
</tr>
<tr>
<td>investigations)</td>
<td>If drug therapy is indicated, but has not been</td>
</tr>
<tr>
<td>o Consider patient demographics (i.e.</td>
<td>initiated, why?</td>
</tr>
<tr>
<td>age, gender, ethnicity, height, weight)</td>
<td><strong>NO:</strong> Consider patient factors such as preference,</td>
</tr>
<tr>
<td>and organ function (i.e. hepatic, renal</td>
<td>beliefs, lifestyle; unintentional omission;</td>
</tr>
<tr>
<td>function)</td>
<td>deferred therapy; competing priorities; cost, etc.)</td>
</tr>
<tr>
<td>o Consider need for prophylactic/</td>
<td></td>
</tr>
<tr>
<td>preventative therapies (including</td>
<td></td>
</tr>
<tr>
<td>immunizations) based on medical history</td>
<td></td>
</tr>
<tr>
<td>o Consider possibility of the medical</td>
<td></td>
</tr>
<tr>
<td>problem being caused by a drug adverse</td>
<td></td>
</tr>
<tr>
<td>effect? (review Safety assessment below)</td>
<td></td>
</tr>
<tr>
<td>• Medication History</td>
<td></td>
</tr>
<tr>
<td>o Consider contraindications to therapy,</td>
<td></td>
</tr>
<tr>
<td>drug allergies, adverse effects when</td>
<td></td>
</tr>
<tr>
<td>initially assessing for appropriateness</td>
<td></td>
</tr>
<tr>
<td>• Patient preferences and goals of therapy</td>
<td></td>
</tr>
<tr>
<td>o Does the patient even want drug</td>
<td></td>
</tr>
<tr>
<td>therapy?</td>
<td></td>
</tr>
<tr>
<td>o Are there non-drug measures that can</td>
<td></td>
</tr>
<tr>
<td>be considered?</td>
<td></td>
</tr>
<tr>
<td>**Is drug therapy optimal (is it</td>
<td></td>
</tr>
<tr>
<td>considered the best/first-line therapy</td>
<td></td>
</tr>
<tr>
<td>for a given condition)?</td>
<td></td>
</tr>
<tr>
<td><strong>NO:</strong> Explore reasons for use of alternate</td>
<td></td>
</tr>
<tr>
<td>drug therapy (i.e. optimal therapy is</td>
<td></td>
</tr>
<tr>
<td>contraindicated, patient preference/</td>
<td></td>
</tr>
<tr>
<td>needs, drug efficacy, drug safety,</td>
<td></td>
</tr>
<tr>
<td>adherence and cost)</td>
<td></td>
</tr>
<tr>
<td><strong>NO:</strong> Consider switching to optimal</td>
<td></td>
</tr>
<tr>
<td>therapy if appropriate</td>
<td></td>
</tr>
<tr>
<td><strong>YES:</strong> Move on to efficacy evaluation</td>
<td></td>
</tr>
</tbody>
</table>

### EFFICACY

<table>
<thead>
<tr>
<th>Review</th>
<th>Inquire</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Goals of therapy and timeframes to</td>
<td>Is drug therapy effective for each indication?</td>
</tr>
<tr>
<td>achieve these goals for each medical</td>
<td><strong>NO:</strong> Consider additional therapies, non-adherence,</td>
</tr>
<tr>
<td>problem</td>
<td>low dose/dosing frequency/titration, interaction, onset</td>
</tr>
<tr>
<td>• Efficacy Monitoring Parameters for drug</td>
<td>of action, malabsorption, formulation, expired drug</td>
</tr>
<tr>
<td>therapy</td>
<td></td>
</tr>
<tr>
<td>o Consider drug efficacy, subjective/</td>
<td><strong>YES:</strong> Move on to Adherence and Safety Evaluation</td>
</tr>
<tr>
<td>objective parameters; timeframe</td>
<td></td>
</tr>
<tr>
<td>anticipated to achieve the desired</td>
<td></td>
</tr>
<tr>
<td>outcome.</td>
<td></td>
</tr>
</tbody>
</table>

### ADHERENCE

<table>
<thead>
<tr>
<th>Review</th>
<th>Inquire</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Medication History/Refill History</td>
<td>Is the patient able to take drug therapy as prescribed?</td>
</tr>
<tr>
<td>• Medical History</td>
<td><strong>NO:</strong> Consider adverse effects, incorrect dosage</td>
</tr>
<tr>
<td>• Patient factors</td>
<td>form/frequency, directions not understood, cost/drug</td>
</tr>
<tr>
<td></td>
<td>access, patient preference, beliefs, motivators, ability</td>
</tr>
<tr>
<td></td>
<td>to self-administer drugs (i.e. age, dexterity, vision,</td>
</tr>
<tr>
<td></td>
<td>swallowing, memory)</td>
</tr>
<tr>
<td></td>
<td><strong>YES:</strong> Can the medication taking be enhanced?</td>
</tr>
<tr>
<td></td>
<td><strong>NO:</strong> Consider medication packaging, caretaker</td>
</tr>
<tr>
<td></td>
<td>support, drug substitution, motivational</td>
</tr>
<tr>
<td></td>
<td>interviewing, scheduling, and addressing patient</td>
</tr>
<tr>
<td></td>
<td>specific barriers</td>
</tr>
<tr>
<td></td>
<td><strong>YES:</strong> Move to Safety Evaluation</td>
</tr>
</tbody>
</table>
## SAFETY

<table>
<thead>
<tr>
<th>Review</th>
<th>Inquire</th>
</tr>
</thead>
</table>
| • Safety Monitoring Parameters for drug therapy | ADVERSE EFFECTS
| • Signs & symptoms experienced by the patient | Is the patient at risk of or experiencing a medical problem/adverse effect that could be caused by drug therapy? |
| • Medication History | ○ Consider safety monitoring parameters |
| o Review past and current medication history | o Consider causality, onset, timeframe, dose, and type of reaction [i.e. dose-related, idiosyncratic, hypersensitivity] |
| o Review allergy history and past adverse effects to medications | NO: Ensure that the dose is appropriate to prevent future adverse effects (consider weight, organ function, age). Ensure the patient is being monitored appropriately. |
| • Medical History | YES: |
| o Consider possibility of the medical problem and/or laboratory data abnormality being caused by drug therapy (review likelihood of drug vs. disease-related causes) | • Is the drug dose too high? |
| • Patient factors (diseases, when drugs are taken relative to meals, spacing medications, etc.) | ○ Consider weight, organ function, age, drug kinetics/therapeutic index, duration of therapy |
| • Drug interactions (drug-drug, drug-disease, drug-food, drug-laboratory) | • Can the adverse effect be managed? |
| | ○ Consider dose decrease, patient education, timeframe, need for additional drug therapy, nonpharmacologic intervention |
| | ○ If the drug is discontinued, is there another appropriate therapy instead? |

## ADVERSE EFFECTS
Is the patient at risk of or experiencing a significant drug interaction?

<p>| NO: Continue therapy; it appears appropriate for this patient |
| YES: Can the drug interaction be managed? |
| ○ Consider onset/offset, dosage adjustment, spacing apart, food effect, drug substitution, increased monitoring, therapeutic drug monitoring (TDM) |
| ○ If the drug is discontinued, is there another appropriate therapy instead? |</p>
<table>
<thead>
<tr>
<th>MEDICAL CONDITIONS AND/OR DRPs</th>
<th>GOALS OF THERAPY</th>
<th>ALTERNATIVES</th>
<th>RECOMMENDATIONS/PLAN</th>
<th>MONITORING PARAMETERS</th>
<th>FOLLOW-UP</th>
</tr>
</thead>
<tbody>
<tr>
<td>List and prioritize each medical condition first, followed by any DRPs identified for a given condition. Although some medical conditions may not have a DRP, a care plan is still necessary for ongoing patient monitoring. <strong>DRP Categories:</strong> unnecessary drug • additional drug required • ineffective drug • dose too low • adverse drug reaction/interaction • dose too high • nonadherence</td>
<td>For each medical condition and/or DRP state desired goals of therapy/timeframe. <strong>Goals:</strong> cure, prevent, slow/stop progression, reduce/eliminate symptoms, normalize a lab value. Consider realistic goals determined through patient discussion. Goals of therapy are measurable or observable parameters that are used to evaluate the efficacy and safety of therapy.</td>
<td>Compare relevant drug and non-drug therapies that will produce desired goals. List the pros and cons of each therapy. <strong>Consider:</strong> Indication Efficacy Adherence Safety Cost/coverage</td>
<td>In collaboration with the patient and other health care providers, select the best alternative and implement the plan. Provide a rationale for the chosen plan. <strong>Consider:</strong> Drives: correct drug, formulation, route, dose, frequency, schedule, duration, medication management. <strong>Non-drug:</strong> non-drug measures, education, patient referral.</td>
<td>Determine the parameters for monitoring efficacy and safety for each therapy. <strong>Consider:</strong> Clinical &amp; laboratory parameters The degree of change The time frame</td>
<td>Determine <em>who, how and when</em> follow-up will occur.</td>
</tr>
</tbody>
</table>

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Initial Considerations:

- Reason for patient assessment/consultation
  - Comprehensive assessment
  - Consult letter
  - Medication history/reconciliation
  - Allergy assessment
  - Therapeutic drug monitoring
  - Patient follow-up
  - Patient education
  - Interventions

- Practice setting (i.e. community, ambulatory, hospital)
- Timeframe (i.e. urgency, quick chart note, detailed assessment)
- Documentation Systems (i.e. patient profile computer entry, free-hand note in a chart, type-written consult note)

General Considerations:

- Scope
  - Keep notes focused on the problem/purpose of the note
  - Keep documentation notes within the scope of your practice
  - Avoid making unrealistic suggestions- tailor the note to your patient

- Writing
  - legible, clear, concise, logical, objective, professional
  - black ink in charts
  - Errors- cross out errors with a single line and initial
  - Avoid rewriting, deleting, or removing any part of the record
  - Avoid leaving blank spaces/lines when possible
  - Clearly indicate if documentation extends to another page

- Communication- diplomatic, appropriate tone
  - Appropriate terms: may benefit from, may improve with, may no longer require, suggest, recommend, consider, patient would prefer, patient unlikely to adhere to, patient stated
  - Avoid these terms: wrong, unnecessary, must, should, inappropriate/ not appropriate, patient does not want
  - Avoid being judgmental, criticizing or blaming others for errors in documentation
  - Focus on solutions, not problems
  - If relaying quotes stated by patient, ensure to indicate this clearly with quotation marks

- Include significant and relevant information only
• Abbreviations- use common or approved abbreviations only
  o Spell out drug names, directions (i.e. spell out IU, U, QD, qd)
  o Zeros: do not include a zero after a decimal point; always put a zero before a decimal point
  o Avoid other dangerous abbreviations
  o [link](http://www.ismp-canada.org/download/ISMPCanadaListOfDangerousAbbreviations.pdf)

• Generics vs. Brand Names
  o Generic names are preferred whenever possible; consider setting, intent, and recipient of documentation
  o Do not capitalize in the middle of a sentence
  o Use of Brand names only for longer combination products (i.e. triamterene/hydrochlorothiazide- Dyazide®) or to clarify a specific product/dosage form (i.e. Cardizem CD® vs. Tiazac®)
  o If a brand name is used, follow it by ®

• Document in a timely manner (proximate to encounter)

Documentation Styles:

• Need to be flexible about different types of documentation styles depending on purpose of documentation and practice site
• Unstructured and semi-structured notes- may be appropriate for a clarification, routine follow-up, patient care activities (i.e. education), an intervention (i.e. IV to PO conversion, dosage adjustment for renal/hepatic dysfunction, use of a non-formulary drug, a drug interaction or adverse effect, a contraindication, therapeutic duplication)
• Pre-printed forms (i.e. medication reconciliation, consultation note, clinic visit sheet, history intake form)
• Systematic documentation
  o DAP (data, assessment, plan)
  o SOAP (subjective, objective, assessment, plan)
  o FARM (findings, assessment, recommendations, monitoring)
  o DRP (drug-related problem, recommendation, plan)
  o DDAP (drug-related problem, data, assessment, plan)

Patient Care Note Components:

• Essential:
  o Date of encounter and purpose of note (i.e. Pharmacist Note RE lipid therapy)
  o Time written
  o Pharmacist identifier at end of note (i.e. name, signature, contact number)
- Other potential components:
  - Depending on type of note, other components in documentation will vary
  - Avoid irrelevant repetition of information already documented in the patient record. Ensure to include only the relevant and necessary information required to support your recommendations
  - See specific examples (i.e. DAP note, full assessment note, consult letter, etc.)

**DAP Note:**

- Before documentation, refer to the pharmacy care plan worksheet you have made for your patient. Decide what is necessary and relevant to document. Not all components of a detailed care plan are necessary to document in the patient’s medical record.
- Multiple problems
  - Ensure to prioritize problems and list primary issue first
  - Organize notes well
  - Multiple problems: those with inter-related themes may be merged in one DAP segment; avoid repetition of the same data for multiple problems. Avoid lengthy notes.

| **D-DATA** (or description of problem) | **Patient concerns/goals/preferences**  
|                                         | **Relevant subjective and objective data about the patient**  
|                                         | **Includes pertinent orders, labs, vitals, patient concerns or statements, etc.** |
| **A-ASSESSMENT**                      | **Assessment of the problem or working hypothesis**  
|                                         | (professional interpretation)  
|                                         | **Supporting rationale**  
|                                         | **Identification of therapeutic goals/targets/desired outcomes**  
|                                         | **Avoid introducing new data here** |
| **P-PLAN**                            | **Clearly number items in plan in appropriate order (i.e. priority or temporal sequence)**  
|                                         | **Recommendations (drug and non-drug)**  
|                                         | **Include drug regimen/product, dose, dosage form, route, duration**  
|                                         | **Necessary patient education or referrals**  
|                                         | **Monitoring plan and follow-up (tailor to practice site)** |
Comprehensive Initial Assessment Note:

- Depending on the type of assessment/consultation and practice setting, a comprehensive initial assessment may be conducted. In this case, a different format other than a DAP format is recommended.

- Components of an initial assessment stem from the information you have gathered to create a patient database (i.e. medical and medication history). The following components may be included in the assessment:
  - Date of encounter and title of note (i.e. Pharmacist Note); Time written (depending on setting)
  - Patient identifier (i.e. name, DOB, PHN)
  - Purpose for assessment/consultation
  - Relevant components of the patient database that you have created via patient interview and information gathering
    - refer to outlines for taking medical and medication histories
  - Drug-related problems or issues identified
  - Pharmacist assessment
  - Plans to resolve any problems/issues, including collaboration with other health care providers
  - Monitoring plan and follow-up
  - Pharmacist identifier (i.e. name, signature, contact number)
References

Patient Care Process:


Documentation:

Peters Institute for Pharmaceutical Care. College of Pharmacy, University of Minnesota.


