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Patient-centred Pharmaceutical Care Assessment: Thought Process

NECESSARY: Explain whether medication (prescription/non-prescription, OTC, NHP) is necessary to treat this medical condition.

1. Describe this patient's medical condition/diagnosis in terms of pathophysiology, signs/symptoms, causes, risk factors, etc.
2. Describe the patient's signs/symptoms/lab values and whether they are consistent with this condition.
3. Explain whether any of the current medical conditions, medications or interactions contribute to this patient's medical condition.
4. Articulate the desired therapeutic outcomes for this condition. (*Consider: cure disease, prevent disease, reduce/eliminate symptoms, slow/arrest disease*)
5. Describe the therapeutic regimens recommended to achieve the therapeutic outcomes.
6. Identify the drug therapy the patient is already receiving for this condition (include dose, route of administration, frequency, dosage form, duration, maximum daily dose)
7. Discuss any additional drug therapy that may be required (*consider preventive therapy, untreated condition, synergistic therapy*)

EFFECTIVE: Explain whether this patient's drug therapy(ies) is/are effective for this condition. Discuss whether drug therapy is achieving the therapeutic outcomes for this condition. (*Compare desired outcomes with actual patient status)*

1. Identify whether this drug is indicated for this condition and describe the mechanism of action of this medication to treat this condition.
2. Discuss whether this drug is the most effective drug to treat this condition. (*Describe the more effective alternatives, if available)*
3. Discuss whether the drug therapy(ies) are optimal/appropriate for this patient. (*Consider dose, route of administration, frequency, dosage form, duration, maximum daily dose*)
4. Discuss whether the clinical onset of action is appropriate and describe the clinical expectations of the drug in achieving the therapeutic outcome(s).
5. Describe the mechanism of any severe interactions that can make the drug less effective that may result in modification of therapy. Identify whether the patient taking another product that would alter the effectiveness of this drug.

SAFE: Discuss the safety of this patient's therapy(ies) for this condition. Describe whether this patient is experiencing/at risk of experiencing an undesirable effect from this drug.

1. Describe the mechanism of any contraindications the patient has to this medication.
2. Describe the mechanism of any adverse drug reactions (ADR) the patient is experiencing or may experience
3. Discuss any duplication of therapy and whether it is harmful or potentially harmful to the patient.
4. Describe the mechanism of any severe interactions (drug-drug, drug-food, drug-condition, drug-lab test, drug-NHP) that may result in modification of therapy.

ADHERENCE: Discuss this patient's ability to adhere to therapy by addressing the following (if applicable):

- Availability of product
- Lifestyle
- Finances
- Complexity of regimen
- Culture or religious beliefs
- Dosage form
- Language barrier
- Physical or mental challenges
- Other limitations

UNMET NEEDS: Would this patient benefit from any other interventions? Explain by addressing (if applicable):

- Prophylactic therapy (e.g. vaccinations)
- Non-drug measures
- Referrals
- Other medical conditions not yet diagnosed by other health care professionals

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DTP Category Explanations

Necessary

Unnecessary Drug Therapy

- This is a DTP when a patient is taking a drug for no medically valid indication.
- A logical solution is to *discontinue* the drug because it is not necessary.

Needs Additional Drug Therapy

- This is a DTP when a patient needs a drug but one has not be prescribed or suggested (indicated or not).
- A logical solution is to *add* a drug – in this case, the patient's medical condition requires a drug, but they are not receiving one – or they are receiving one medication, but they require an additional medication for therapy to be able to meet the intended outcomes.

Effectiveness

Different Drug Needed

- This is a DTP when the patient is provided with a drug but there is a better option available, however the patient is not receiving it.
- A logical solution is to *switch* to a different drug – so in this case, a drug is needed, they are receiving a drug, however it is not the best drug for this indication.

Dosage Too Low

- This is a DTP when the patient is receiving too little (an under-dose) of the correct drug (the drug is indicated)
- A logical solution is to increase the amount of drug the patient is receiving – however you *need to identify why the patient is receiving too low of a dose* as, depending on the reason there is too little drug in the patient's system, you may want to increase the dose, the dosing interval, or change the drug due to an interaction that is reducing therapeutic levels.

Safety

Adverse Drug Reaction

- This is a DTP when a patient is receiving a therapeutic dose of a drug (or an under-dose) and is experiencing an adverse reaction from the drug (this includes allergic reactions).
- A logical solution is to change the drug (*decreasing the dose will not resolve the problem).*

Dosage Too High

- This is a DTP when the patient is receiving too much (an over-dose) of the correct drug (the drug is indicated)
- A logical solution is to decrease amount of drug the patient is receiving however you *need to identify why the patient is receiving too high of a dose* as, depending on the reason there is too much drug in the patient's system, you may want to decrease the dose, the dosing interval or change the drug because of an interaction that is increasing drug levels.

Adherence

Non-adherence

- This is a DTP when the patient needs a drug, has been prescribed or suggested one but is not actually taking it or taking it properly due to an error on the part of the pharmacy or because the patient is not being compliant.
- So, to differentiate from "different drug needed" – the patient has been prescribed the right drug (this is the drug they should be given to treat their condition) however they are not receiving it as suggested for some reason.
- A logical solution is to deal with the reason the patient is not receiving the drug.

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DTP Statements

- A statement that summarizes a particular DTP
- One DTP per statement
- DTP statements follow a logical format that include the following five components:
    1. The name of the patient
    2. The classification of the problem as actual or potential
    3. The undesirable sign, symptom or disease
    4. The cause of the undesirable sign, symptom or disease
    5. The general action plan
- Avoid using words that have negative connotations

Identifying DTPs, some tips:

✓ When identifying DTPs, start by looking at the general categories of drug-therapy problems (e.g., unnecessary drug therapy, needs additional drug) as opposed to starting with the sub-categories (e.g., no medical indication, addictive/recreational) - if you start with these, the DTP can easily be taken out of context resulting in a DTP identification that does not make sense given the details of the problem.

- The sub-categories should always be considered in the context of the general categories
- Also, the sub-categories serve to give you more detail regarding the nature of the problem and should be considered to help you more clearly identify the cause of the problem and support you in how you might resolve it.

✓ When trying to determine which general DTP category a problem is in – think about the resolution. Ask yourself "**if I select this category, what is the logical solution to this problem**?".

- For example, if you choose *different drug needed*, the logical solution is to change the drug
- If you select *needs additional drug therapy*, the logical solution is to add a drug
- Finally, if you select *dosage too high*, the logical solution is to decrease the amount of drug the patient is receiving.