

Components of drug therapy problems (DTPs)

Components of DTPs	Subclassifications	Causes of drug therapy problem
Indication-related problems	Unnecessary drug therapy	<ul style="list-style-type: none"> • there is no valid medical indication for the drug therapy at this time • multiple drug products are being used for a condition that requires single drug therapy • the medical condition is more appropriately treated with nondrug therapy • the drug therapy is used to treat an avoidable adverse reaction associated with another medication.
	Need for additional drug therapy	<ul style="list-style-type: none"> • the medical condition requires the initiation of drug therapy • Preventive drug therapy is required to reduce the risk of developing a new condition • the medical condition requires additional drug therapy to achieve synergistic or additive effects.
Efficacy-related problems	Ineffective drug therapy was considered when:	<ul style="list-style-type: none"> • the least effective drug is used while the most effective drug is available • the drug is used for medical condition which is refractory to the drug product • the drug product used is not an effective product for the medical condition being treated
	Dosage too low was considered when:	<ul style="list-style-type: none"> • the dose of the drug is too low to produce the desired response • the drug interaction occurs that could reduce the amount of active drug available • the duration of drug therapy is too short to produce the desired response • the dosage interval is too infrequent to produce the desired response
Safety-related problems	Dosage too high was considered when:	<ul style="list-style-type: none"> • the dose is too high • dosing frequency is too short • the duration of drug therapy is too long • the drug interaction occurs that could result in a toxic reaction to the drug product • the dose of the drug was administered too rapidly
	Adverse drug reaction was considered when:	<ul style="list-style-type: none"> • the drug causes an undesirable reaction that was not dose-related • the drug interaction causes an undesirable reaction that is not dose-related • the drug causes an allergic reaction

		<ul style="list-style-type: none">• the drug is contraindicated due to risk factors• the dosage regimen administered or changed too rapidly
Compliance-related problems	It is considered if a patient fails to take medications appropriately due to one of the following reasons:	<ul style="list-style-type: none">• lack of understanding the instructions• preference not to take the medication• forgetfulness• inability to swallow or self-administer the drug product appropriately• affordability and availability problem