

Sample Failure Mode, Effect, and Criticality Analysis for Hypothetical Medication Use Process in O.R.

Process	<div style="border: 1px solid black; padding: 5px; display: inline-block;">Pharmacy</div>	Dispense →	<div style="border: 1px solid black; padding: 5px; display: inline-block;">O.R.</div>	Transfer →	<div style="border: 1px solid black; padding: 5px; display: inline-block;">Sterile field</div>	Administer →	<div style="border: 1px solid black; padding: 5px; display: inline-block;">Patient</div>
Potential failure modes	Look-alike drugs Multiple concentrations	Wrong drug Wrong concentration		Switched drugs Contamination		Wrong drug Wrong dose	
Potential effect on patient	8	8		10		10	
Frequency of failure mode	7	3		2		3	
Likelihood of reaching patient	3	4		6		10	
Criticality of failure mode	168	96		120		300	
Root causes	Open formulary Ambiguous labels	Alphabetical storage Ambiguous labels		Unnecessarily complex process Approved procedure not consistently followed		No means of verifying drug/dose after transfer to sterile field	
Strategies	P&T Committee review/redesign of formulary content & process	Redesign storage system. Introduce bar coding.		Simplify procedure. Eliminate open-vessels for IV drugs. Monitor compliance.		No action needed. Risk eliminated earlier in process.	