

# TG 100 and Beyond

## (Session 3 of the TG 100 Certificate Course)

### O, S and D Table

Rank	Occurrence (O) of Cause		Severity (S) of Effect		Detectability (D) of Failure Mode	
	Qualitative description	Frequency in %	Qualitative description	Descriptive	Qualitative description (likelihood of detection)	Probability of going undetected in %
1	Remote probability	0.01	No effect	No effect	Detection almost assured	0.01
2	Failure unlikely	0.02	Inconvenience	Inconvenience	Very high likelihood	0.2
3	Low probability - few failures	0.05	Minor effect	Effect only seen when reviewing large populations	High likelihood	0.4
4	Moderate probability	0.1	Noticeable effect	Suboptimal care for a patient	Moderate likelihood	1.0
5	Intermediate probability	<0.2	Limited toxicity	Minor undertreatment or small overtreatment	Intermediate likelihood	2.0
6	Occasional failures	<0.5	Undesired effect	Care that worsens the patient's life	Some likelihood	5.0
7	High probability	<1	Serious effect	Treatment or diagnostic failures that affect patient function	Low likelihood	10
8	Very high probability	<2	Possible very serious toxicity	Very negative effects on patient	Very low likelihood	15
9	Repeated failures	<5	Sentinel failure	Serious injury	Serious detection problem	20
10	Failure inevitable	>5	Catastrophic effect	Death or very serious injury	Detection unlikely	>20

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### Exercise 1

**Major Process:** Patient Database Information

**Step:** Entry of patient data into electronic database or written chart.

<b>Potential Failure Mode</b>						
<b>Causes</b>						
<b>Effects</b>						
<b>Current Controls</b>						
<b>Occurrence (O)</b>						
<b>Detectability(D)</b>						
<b>Severity (S)</b>						
<b>RPN = O x D x S</b>						
<b>Corrective Actions (Quality Management)</b>						

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### Exercise 2

**Major Process:** RTP Anatomy

**Step:** Import images into RTP database.

<b>Potential Failure Mode</b>						
<b>Causes</b>						
<b>Effects</b>						
<b>Current Controls</b>						
<b>Occurrence (O)</b>						
<b>Detectability(D)</b>						
<b>Severity (S)</b>						
<b>RPN = O x D x S</b>						
<b>Corrective Actions (Quality Management)</b>						

