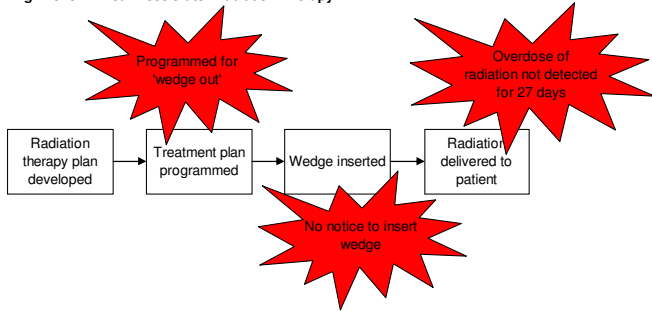
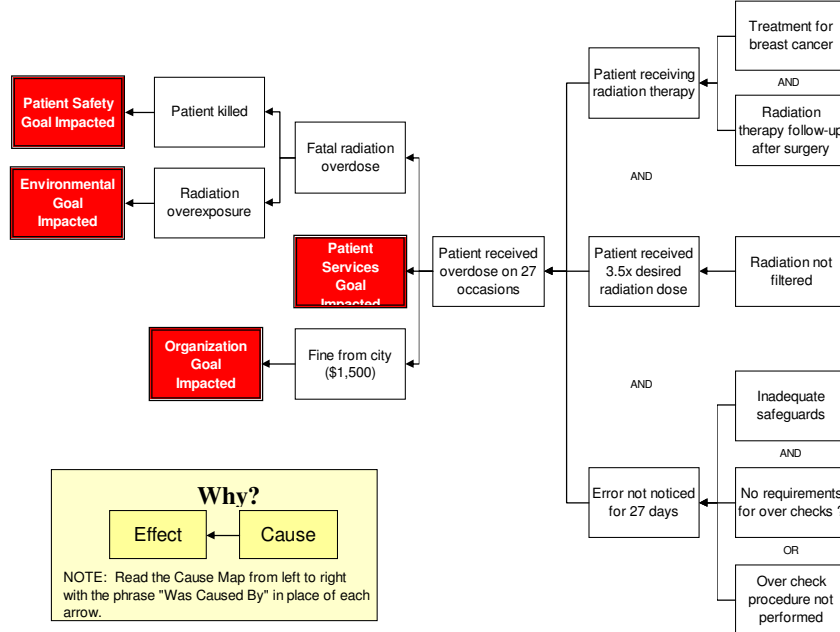


Process Map
High Level - Linear Accelerator Radiation Therapy



Fatal Radiation Overdose from Cancer Treatment
April 6, 2005

Step 2. Cause Map
Detail Level



Why?

Effect ← Cause

NOTE: Read the Cause Map from left to right with the phrase "Was Caused By" in place of each arrow.

Step 1. Define the Problem
Outline

What	Problem(s)	Fatal radiation overdose
When	Date	6-Apr-05
	Time	Over 27 days
	Different, unusual, unique	Missing filter; 3 times proper amount of radiation
Where	State, city	Brooklyn (NY, NY)
	Facility, site	State University of New York Downstate Medical Center
	Unit, area, equipment	Linear accelerator
	Task being performed	Treatment for breast cancer

Impact to the Goals

Patient Safety	Patient killed	
Employee Impact	?	
Compliance	?	
Organization	Fine from city	\$1,500
Patient Services	Patient received overdose on 27 occasions	
Environmental	Radiation overexposure	
Property, Equip, Mtls	?	
Labor, Time	?	
	This incident	\$1,500
Frequency	621 mistakes in NY state from 2001 to 2008 21 errors with beam-modifying devices in NY state in 4 years	
	Annualized Cost	\$116,438

