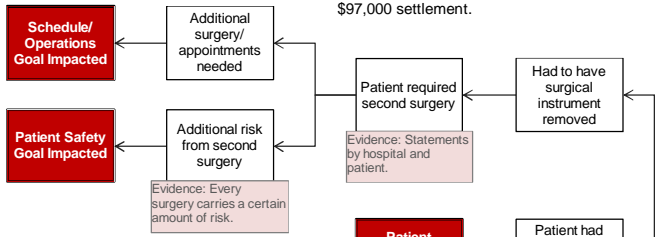


# 13-Inch Surgical Tool Left In Patient for Months

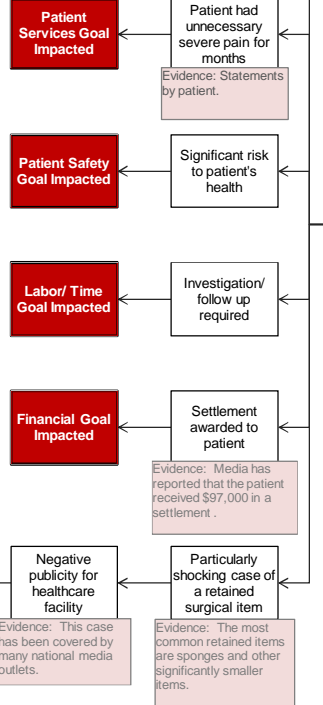
For about two months after surgery to remove a large malignant tumor Donald Church complained of severe pain. Initially, he was told that it was normal pain associated with recovery from a major surgery, but an x-ray was ordered after his physician felt a lump in his abdomen. The x-ray revealed that a malleable retractor similar in size to a ruler had been left inside his body after surgery. A second surgery was done to remove the tool. Mr. Church is not expected to suffer from long term health consequences and received a \$97,000 settlement.

## 2 Analysis



## 3 Solutions

A simple solution to reduce the risk for retained surgical items is to institute a formal procedure for counting surgical supplies and tools before and after surgery. Simple manual counts are a decent first step, but errors still occur, especially in the often hectic and stressful environment in an operating room. Some hospitals use a visual inventory system where tools are brought in a special storage bag with an individual compartment for each item. As items are done being used they are put back into their specific spot. If all compartments are full, everything is accounted for so it's easy to tell if something is missing. Another solution that is gaining in popularity is use of an electronic tracking system. The most common use of electronic systems is to track sponges, which are by far the most common object left inside patients. Each sponge has an electronic tag and the patient is scanned after surgery to verify that none were left behind. The sponge tracking systems add about \$8 to \$12 to the cost of each surgery and have dramatically reduced the number of retained sponges when used.



## 1 Problem

What	Problem(s)	Tool left in patient after surgery
When	Date	June 1, 2000
	Different, unusual, unique	??
Where	Facility, site	University of Washington Medical Center
	Unit, area, equipment	Operating room
	Task being performed	Removal of a large malignant tumor

## Impact to the Goals

Patient Safety	Significant risk to patient's health
	Additional risk from second surgery
Patient Services	Patient had unnecessary severe pain for months
	Negative publicity for healthcare facility
Schedule/ Operations	Additional surgery/appointments needed
Financial	Settlement awarded to patient
Labor/ Time	Investigation/ follow up required

Cause Mapping is a Root Cause Analysis method that captures basic cause-and-effect relationships supported with evidence.

### CAUSE MAPPING

Problem Solving • Incident Investigation • Root Cause Analysis

**Step 1**

**Problem**

What's the Problem?

**Step 2**

**Analysis**

Why did it happen?

**Step 3**

**Solutions**

What will be done?

**ThinkReliability**

Investigate Problems. Prevent Problems.  
Houston, Texas 281-412-7766 ThinkReliability.com