Problem

1. What
   What's the Problem?
   Cause Mapping is a Root Cause Analysis method that captures basic cause-and-effect relationships supported with evidence.

2. When
   Why did it happen?
   Unknown (patient privacy concerns)

3. Where
   Task being performed
   Hospital
   Removal of kidney with suspected renal cell carcinoma

Impact to the Goals

1. Patient Safety
   Patient left dependent on dialysis
   Patient underwent additional surgery

2. Employee Safety
   N/A

3. Compliance
   Error required to be reported to The Joint Commission

4. Patient Services
   Healthy left kidney was removed in error
   Additional surgery required
   Additional long term treatment required

Healthy kidney removed by mistake

The Patient Safety Network presented a case study where a patient with suspected kidney cancer had the wrong kidney removed. Instead of the right kidney that showed suspected renal cell carcinoma in a CT scan, the healthy left kidney was removed. A second surgery was then performed to remove the right kidney and the patient was left dependent on dialysis after losing both kidneys. The patient wasn't a candidate for a kidney transplant because of the cancer.

The Joint Commission defines wrong-site surgery as any surgery performed on the wrong site, any procedure performed on the wrong patient, or performance of the wrong procedure. The Joint Commission ranked wrong-site surgery as the second most frequently reported sentinel event between 1995 and 2005, with 455 of 3548 events.

Once the causes that contributed to an issue have been identified, the final step in the Cause Mapping process is to identify and implement solutions to prevent a problem from reoccurring. One way to prevent similar errors is to require labeled radiology images to be available to the surgeon prior to any surgery. Requiring a review of images prior to the surgery would build in a double check to ensure the surgery is performed at the correct site. Building in a double check of medical records may also reduce errors like the wrong kidney being listed as potentially cancerous or a patient transferred with medical files missing important radiology images.

For a free copy of our Root Cause Analysis Template in Microsoft Excel used to create this page, visit our web site.