

LABORATORY ERRORS CAN CAUSE PATIENT HARM

Cause Map

Billions of lab tests performed yearly; even small error rate impacts large number of patients

"We have every right to assume that our safety, our health, is not being compromised by something stupid."

- Sharon Ehrmeyer, professor of pathology and laboratory medicine, University of Wisconsin School of Medicine and Public Health

1 Problem

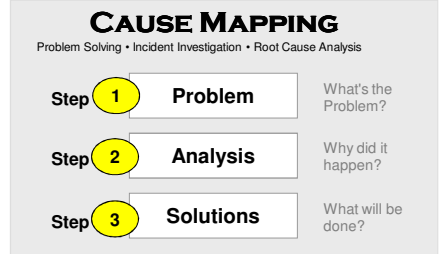
What	Problem(s)	Patients impacted by errors with lab testing
When	Date	Proactive
	Different, unusual, unique	?
Where	Facility, site	Medical laboratories
	Task being performed	Testing medical samples

Impact to the Goals

Patient Safety	Potential for patient harm
Employee Safety	Potential for employee harm
Patient Services	Potential for incorrect information to patients

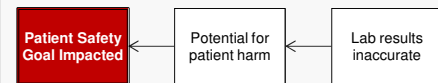
Frequency	7 to 10 billion lab tests are performed each year in the US
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Cause Mapping is a Root Cause Analysis method that captures basic cause-and-effect relationships supported with evidence.

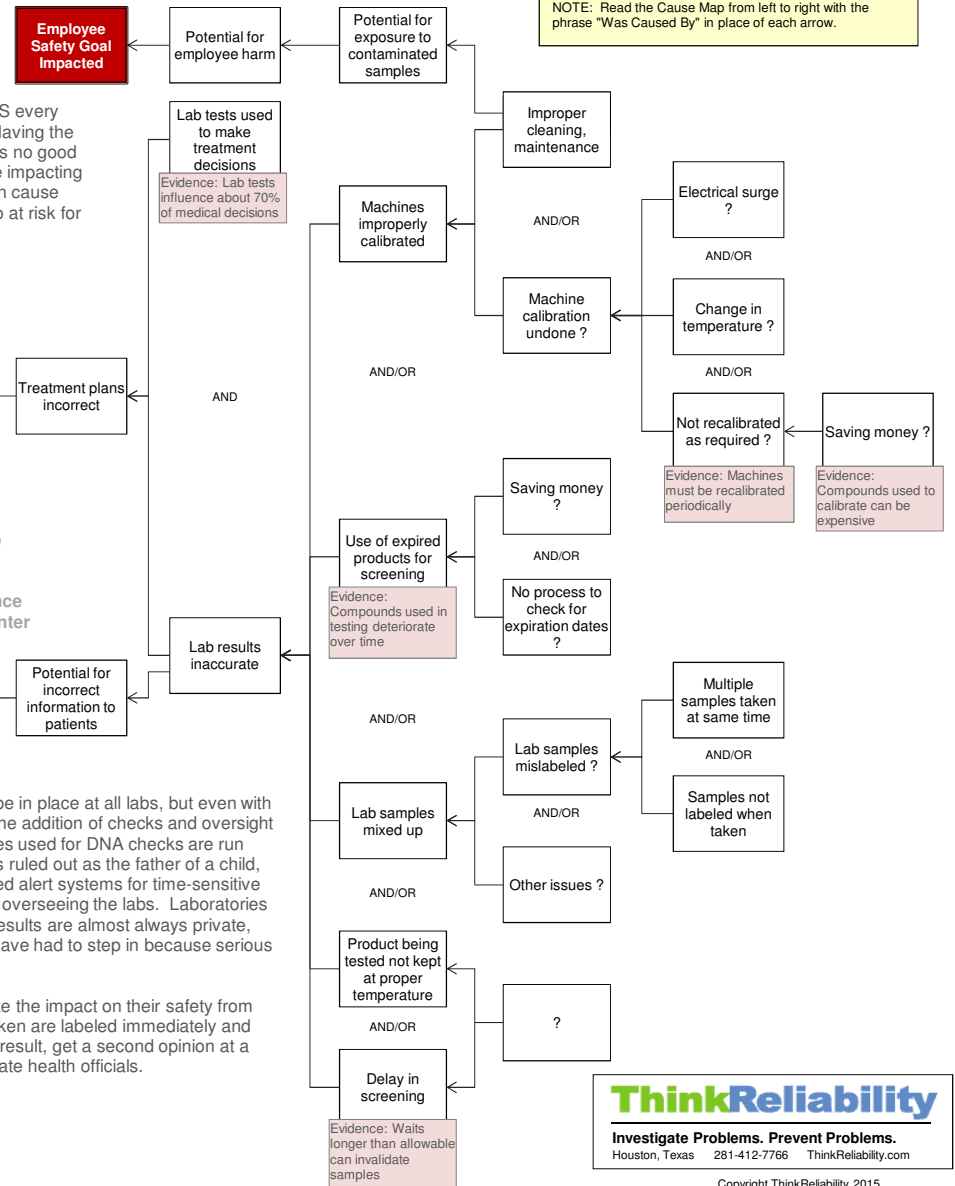


2 Analysis

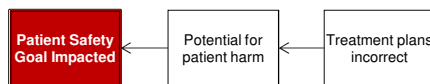
Basic Level Cause Map - Start with simple Why questions.



More Detailed Cause Map
Add detail as information becomes available.



There are 7 to 10 billion medical laboratory tests run in the US every year. Lab tests influence about 70% of medical decisions. Having the wrong information from these tests can be deadly, but there is no good data about how many lab tests may be inaccurate, or may be impacting patient safety. Information that doesn't impact health, but can cause other problems, may also be inaccurate. Employees are also at risk for harm if a testing machine malfunctions.



"I will agree that mistakes are something that can happen whatever you do. You just need to have the appropriate controls in place for when a mistake happens, (so) you can catch it before it goes out the door."

- Michael Baird, chief science officer and laboratory director, DNA Diagnostics Center

3 Solutions

Actions that reduce the risk of inaccurate lab results should be in place at all labs, but even with a well-planned process, mistakes can happen. That makes the addition of checks and oversight into the process incredibly important. At one DNA lab, samples used for DNA checks are run independently by two different technicians and when a man is ruled out as the father of a child, there is a double-check in place. Other labs have incorporated alert systems for time-sensitive specimens and have hired technical directors responsible for overseeing the labs. Laboratories are generally overseen by accrediting organizations but the results are almost always private, and there have been recent cases where federal regulators have had to step in because serious deficiencies in lab processes were identified.

There are also steps patients themselves can take to minimize the impact on their safety from potential lab testing errors. First, ensure that any samples taken are labeled immediately and with accurate information. If you're at all unsure about a test result, get a second opinion at a different lab. Complaints about a lab should be directed to state health officials.

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