

Calculate Your Annual Savings

from converting to

SampleSafe™ Specimen Lock Boxes

Purpose

High or low temperatures can damage clinical samples by causing hemolysis to red cells, causing white blood cells and platelets to change size and can affect sensitive test results including Hematology, Potassium, Glucose, LDL, and others. Laboratories may not be able to analyze specimens damaged by exposure to high or low temperatures during storage and transport. This calculator attempts to quantify the business cost of common bad specimens. A sample calculation is shown in the left column. The right column can be updated by entering actual values in the highlighted boxes.

Methodology

Bad specimens are costly in two ways: immediate lost revenue from tests that cannot be performed and loss of dissatisfied customers.

Cost of Bad Specimens

When the bad specimens reach the lab and are found to be unusable, the lab has already incurred the cost of collection, transportation, and record processing. Yet, since the tests cannot be performed, no revenue will be generated from these tests. These costs are estimated in the “Cost of bad specimens” section.

Lost Customers Due to Bad Specimens

A certain percentage of collection sites will choose to do business with another laboratory after having to deal with the complications of not getting test results for their patients. When this happens, the lab will lose all of that customer’s business. Business is rarely lost forever, so we are counting on this business loss to be of finite duration.

Acquired Customers Due to another lab’s Bad Specimens

New customers acquired when other labs have temperature damaged specimens may have a high retention rate if SampleSafes™ are implemented. SampleSafe™ may convert churn into a net business gain. This effect is not accounted for due to a lack of data, but could be a substantial benefit.

* To input your laboratory’s data, double click on the table
* Update numbers in the highlighted boxes; the output figures will automatically update
* Click outside the table again to save, print, or share



Instructions

Estimate Section

**Number of specimens per year**: This is the total number of specimens collected by the central lab from all its collection points in a year.

**Number of collection sites**: number of specimen collection sites using a lockbox

**Average expected life of a lockbox**: expected time in months from purchase to replacement

COST OF BAD SPECIMENS SECTION

**% bad specimens**: % of all specimens received at the lab that cannot be processed for any reason. This number is probably known for all causes combined. One way to estimate what this number will be with the SampleSafe™ (right column) is to look at the rate of bad specimens collected by onsite phlebotomists, as they are not transported and therefore not affected by storage temperatures.

The difference between that number with the current lockbox and the same number with SampleSafe™ represents the savings from eliminating temperature damage.

**Average cost per bad specimen**: The cost of collection, transportation, and processing.

LOST CUSTOMERS DUE TO BAD SPECIMENS SECTION

**Lost customers due to bad specimens**: In the absence of complete data, the percentage of bad specimens is used as a substitute for the percentage of collection sites experiencing bad specimens.

**% of collection sites lost due to bad specimens**: % of collection sites which change labs each year as a result of experiencing bad specimens. This accounts only for newly lost accounts this year.

**Average duration of lost business**: This assumes that lost customers will eventually return. This number is the average time their business is lost.

**Total business lost due to bad specimens/year**: All the lost revenue is accounted for in the year in which it starts in order to simplify the calculation, even if the loss lasts on average several years.

TOTAL COST OF USE PER YEAR SECTION

**Total cost of use per year**: The last section adds the cost of bad specimens, lost customers, and annual purchases of lockboxes to reach a complete view of the cost of ownership.