## What is a Clinical Trial?

Clinical trials are studies by scientists that test new ways to prevent, detect, diagnose, or treat disease. Scientists ask volunteers to help test new medicines or ways of doing things during these trials.

Some of the things that clinical trials test include:

- New devices, such as blood glucose testers for people with diabetes, pacemakers, or implants
- New drugs, such as painkillers, medicines that lower your blood pressure, or treatments for cancer
- New vaccines
- New ways to do surgery or other procedures, such as a new kind of knee replacement, or surgery to repair the heart after someone has a heart attack, and
- New routines to improve a person's health, such as changes to diet and exercise

Clinical trials have helped us learn how to live longer with illnesses like cancer, high blood pressure, or diabetes. Clinical trials have also helped us use some vaccines to eliminate some diseases like polio in the United States.

Each clinical trial has a research plan in place that explains how the study will be run. This plan includes information about who the scientist will ask to participate.

Sometimes scientists are looking for people who have a specific disease to participate in the clinical trial. Sometimes scientists need healthy people to participate in the clinical trial.

The purpose of a clinical trial is to determine if the treatment, prevention, or behavior changes that are being studied are safe and effective.

Clinical trials are reviewed, approved, and monitored by a group of people not involved in the study. This group makes sure that the study is being conducted in an ethical manner and that the rights and welfare of the participants are being protected. These groups are called Institutional Review Boards or IRBs.

In the United States, a clinical trial must have an IRB if it is studying a drug, biological product, or medical device that the U.S. Food and Drug Administration (FDA) regulates, or if the clinical trial is funded or conducted by the federal government.