

CLINICAL LABORATORY TESTING: Life Saving Medicine Starts Here

► Evidence-Based Medicine:

Clinical laboratory tests guide more than 70% of all medical decisions made by health care providers

Clinical laboratory tests provide objective information on the functioning of the human body, so that patients can be diagnosed, treated, or monitored precisely and as quickly as possible. The information furnished by these tests, which are performed on a patient's tissues or fluids, provides the necessary data for physicians to make informed decisions—influencing more than 70% of medical decision-making.

► Personalized Medicine:

Clinical laboratory tests tailor patient care to meet individual needs & improve quality of care

The future of health care is personalized medicine which, guided by clinical lab testing, can improve the quality of care we provide to our patients. Clinical lab tests enable physicians and patients to identify disease and begin treatment earlier than ever before, detect disease before symptoms occur and utilize preventive strategies to avoid more intensive care approaches. Clinical lab testing allows diagnosis and treatment to be more precise and targeted, rather than a random or scattershot approach, and is much more efficient for the patient, clinician, and our health system. Genetic and genomic tests can provide information about the predictive risks of a disease that may be helpful in choosing among treatment alternatives.

► Cost-Saving Medicine:

Clinical laboratory tests save time, costs, and lives by enabling early detection & prevention of disease

Lab tests cut costs by enabling early identification, monitoring, and prevention of disease. More than 7 billion tests are performed in the U.S. each year, providing critical data for a relatively small expenditure.

► Localized Medicine:

Most clinical labs are regional & independent

Clinical laboratory tests are furnished in three distinct settings: independent laboratories, hospital laboratories, and physician office laboratories. The American Clinical Laboratory Association's (ACLA's) membership consists of local, regional and national independent clinical laboratories. Independent laboratories are laboratories that are not located in a hospital or physician office, and often perform tests, as ordered by health care providers, which are not available in other settings.



How do Lab Tests Impact Patients?

- Prevention
- Accurate diagnosis
- Early treatment
- Less invasive care
- Faster recovery
- Less disability
- Fewer relapses
- Slower disease progression
- Fewer complications
- More informed consumer
- Smarter utilization



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PATIENT 1
Dave
Gets Tested
Regularly

Health Effects

Years 1-5

Exercises, maintains healthy diet, monitors glucose level. Visits physician for kidney, liver, and urine tests.

Year 10

Continues daily glucose monitoring. Maintains careful diet, exercise. Because glucose is above acceptable level, doctor prescribes oral diabetes medication.

Year 15

Continues careful management through diet and exercise. Visits physician regularly for diabetes tests. Continues oral medication. Doctor finds reduction in blood glucose reading, adjusts medication.

Year 20

Visits physicians for regular diabetes tests, which shows modest increase in blood pressure but all other tests okay. Continues careful diet and exercise.

Cost of Controlled Diabetes: **\$1,684**

PATIENT 2
Dan
Doesn't
Get Tested

Health Effects

Exercises and maintains healthy diet for 6 months, but then stops. Discontinues glucose monitoring after one month. Fails to get kidney and eye tests.

Collapses at work, rushed to a hospital. Doctors diagnose heart attack; perform bypass surgery to open blocked arteries. Lab tests also show high blood glucose, high blood pressure, and elevated LDL cholesterol, as well as further kidney deterioration. Doctor prescribes cholesterol-and blood-pressure-reducing medication.

Visits doctor because sore on foot refuses to heal. Tests show nerve damage in the leg and failing kidneys, and peripheral artery disease. Undergoes leg artery bypass surgery because of dangerous blockage. Physician increases medications for cholesterol and blood pressure and increases kidney medication to reduce swelling in feet.

Goes into dialysis because kidneys fail. Undergoes amputation of right leg below the knee because nerve damage prevents leg sores from healing.

Cost of amputation & Dialysis: **\$80,553**

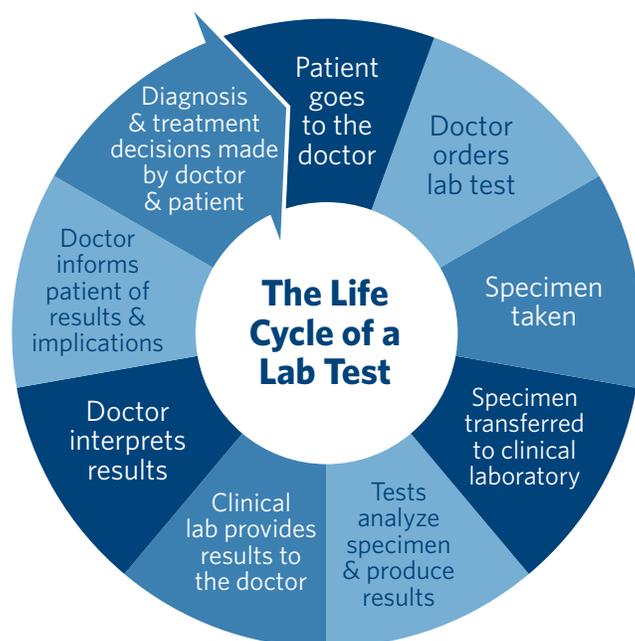
► **How Lab Testing Works**

Clinical laboratory testing plays an essential part in the delivery of quality health care. A physician or other clinician orders lab tests to diagnose, treat, manage, or monitor a patient's condition. The process begins with the collection of a sample of blood, tissue, or other biological matter from the patient, which is then sent to the laboratory where it is uniquely identified and examined to make certain that it is appropriate for the testing ordered by the health care provider. Some tests are manually evaluated, while most are performed using technically advanced instrumentation. Labs employ teams of licensed, highly skilled medical professionals specially trained to perform the requested analyses. Once the testing is complete, the lab issues a report with the findings to the ordering clinician. And once the health care provider receives the lab results, informed decisions can be made as to most appropriate treatment for the patient.

► **Regulated Medicine:**

Clinical laboratory tests are strictly regulated

The safety and quality of medical laboratory testing are regulated in various ways, including state licensing, federal quality standards, and restrictions on the use and marketing of medical devices. Furthermore, the *Clinical Laboratory Improvement Amendments (CLIA)* provides stringent federal quality standards for all clinical laboratories.



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