The federal government supports different and equally necessary types of health research across a continuum in universities, medical centers, state and local health departments, and businesses across the nation.

**Basic research** increases our knowledge about how living organisms work and what causes disease.

Once we know how a disease works through basic research, **clinical research** determines how to prevent and treat that disease in people. Federally-funded clinical research provides the basis for drug and device development in the private sector.

**Population-based research** (public health research) studies how to improve the health of the population by addressing and preventing injury, illness, and disease through non-medical means in communities where people live, work, learn, and play.

Once we have the treatments and interventions in hand, **health services research** determines how to best deploy them. Health services research improves our understanding about what works, for whom, in what settings, under what circumstances, and at what cost. It studies how our health system works, how to support patients and providers in choosing the right care, and how to improve health through care delivery. Findings from health services research have helped make care safer, more effective, and more affordable.

**Translational research** studies how best to move evidence across the research continuum, from the lab bench to the patient’s bedside, and from there to the “curbside” — communities where patients and their families live, learn, work, and play. The faster the uptake of credible evidence, the quicker health care and health may improve, and the greater the returns on the nation’s research investment.

*AcademyHealth*
These components of the research continuum work in concert, and each plays an essential role—any one type of research on its own cannot effectively or appreciably improve health.

**Take heart disease as one example…**

**Basic research**
discovered the contributions of elevated blood pressure, elevated cholesterol, and tobacco use to heart disease.

**Clinical research**
determined which treatments were safe and effective to treat hypertension, hypercholesterolemia, tobacco addiction, and to prevent and treat heart disease, in general.

**Population-based**
research identified strategies to reduce the risks of heart disease in communities through non-medical interventions, such as reduction of trans fats in food and tobacco control measures to reduce smoking.

**Health services research**
Once these discoveries were made—and the non-medical, preventive strategies were identified—health services research determined how to best deploy these interventions to different groups of patients and populations to achieve the best outcomes. This research helped identify who had the least access to the interventions and what barriers to access existed, as well as how to mitigate them. Health services research also led to the development of quality measures that are now used throughout health care to report on the quality of cardiac care.