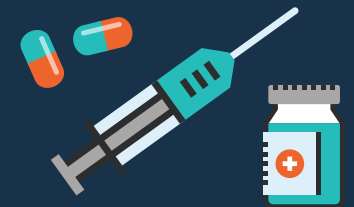


# Medicine Development in a Complex, Collaborative Ecosystem

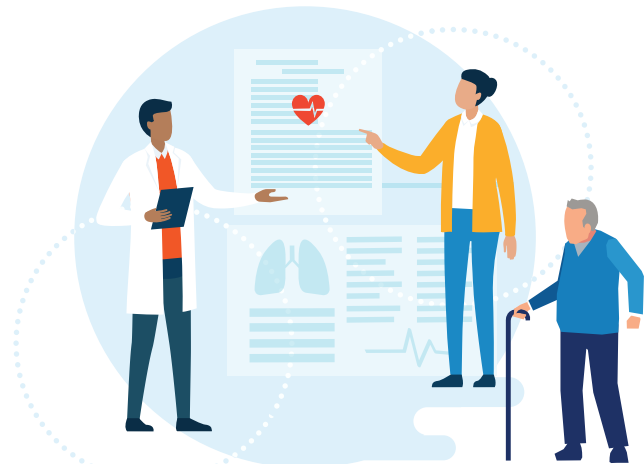
How the biopharmaceutical industry's expertise, infrastructure, and ability to bear risk enables it to translate years of collaborative research into life-saving products.



## PATIENT

### THE NEED

The drive to help patients motivates scientists across industry, academia and government to boldly search for new cures.



## PATIENT

### PRODUCT DELIVERY

After **many years and many millions of dollars in research**, the company can manufacture the product so it can be **delivered to patients**.

The journey from the bench to bedside is not guaranteed. In fact, only about **1 in 10,000** potential candidates becomes a medicine.

## POTENTIAL



### BASIC RESEARCH

## PROMISE



### IDEA GENERATION

## PROVE



### PRODUCT DEVELOPMENT

Regulatory Review and Approval

INVESTMENT, RISK, AND COMPLEXITY INCREASE AS THE PROCESS PROGRESSES

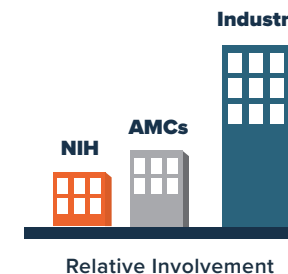
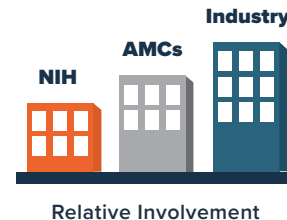
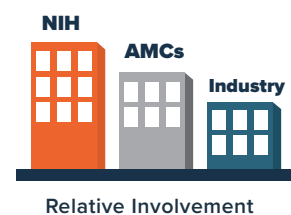
LOW HIGH

NIH, academic medical centers and the pharmaceutical industry are continually conducting research and exploring new ideas to improve understanding of diseases and newly discovered molecules.

Public sector and private sector scientists build on research about certain molecules, exploring promising ideas and developing new hypotheses for how to treat a disease.

Product development companies lead the effort, bringing **infrastructure, expertise, time, and resources** to translate these ideas into medicines through clinical research. If successful, clinical trials progress and can include thousands of patients. Manufacturing scales up.

After approval, industry's work goes on: Continued safety monitoring, additional innovation, provider and patient education



Each new medicine put in the hands of patients is the product of its own scientific success story.