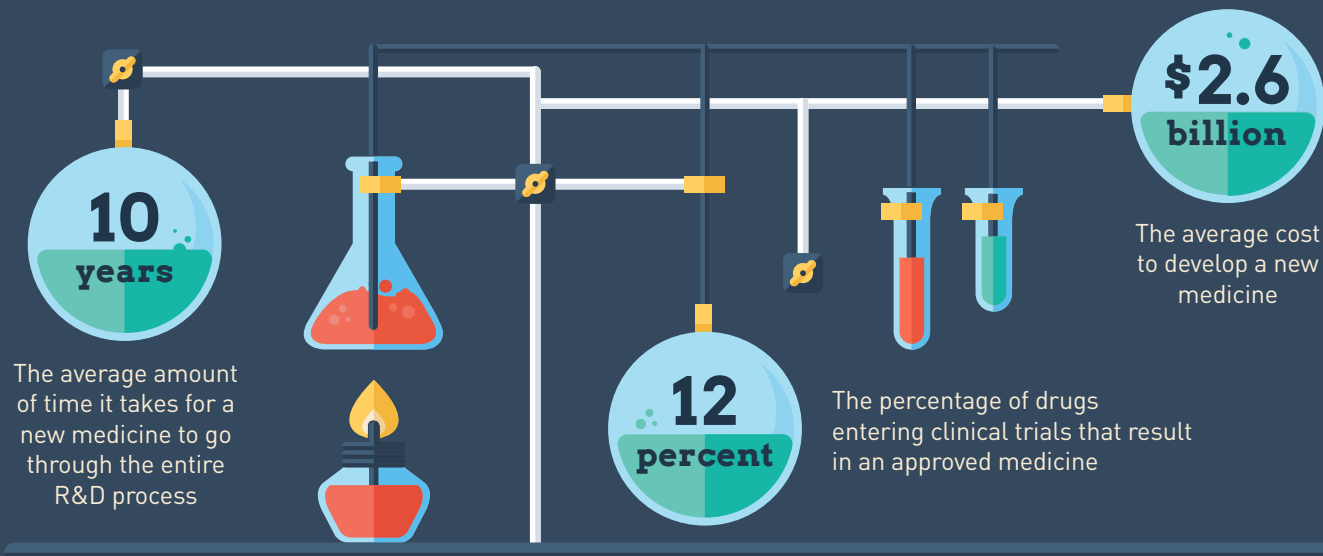


# THE CHALLENGE OF DEVELOPING NEW TREATMENTS & CURES

Innovative medicines offer great hope to patients and the health care system, but developing these new treatments and cures is a complex and risky undertaking.



## BETWEEN 1998 AND 2014:

The number of unsuccessful vs. successful attempts to develop medicines to treat certain diseases

### Unsuccessful Attempts

ALZHEIMER'S DISEASE  
**123**



### Approved Medicines

ALZHEIMER'S DISEASE  
**4**

MELANOMA  
**96**



MELANOMA  
**7**

LUNG CANCER  
**167**



LUNG CANCER  
**10**

## MORE THAN

**7,000**



The number of medicines currently in development around the world

**70**

PERCENT



The percentage of new medicines in development that are potential first-in-class therapies, meaning they use a completely new approach to fighting a disease

**42**

PERCENT



The percentage of new medicines in the pipeline that have the potential to be personalized medicines

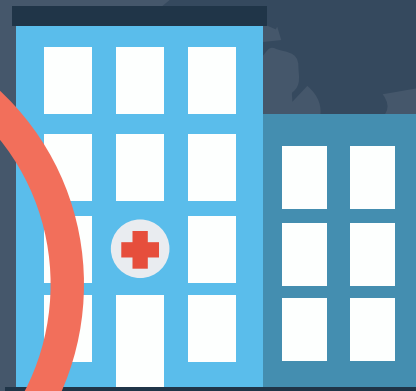
# CURBING Health Care Costs

A Look at How Medicines Can Help Patients Avoid Expensive Hospitalizations and Long-Term Care



**\$13.5 trillion**

What the U.S. will spend on hospital care in next decade



For every

**\$1**

spent on medicines



**\$3 to \$10**

in savings on hospitalizations for adherent patients with congestive heart failure, high blood pressure, diabetes, and high cholesterol



## HIV/AIDS

**23%**

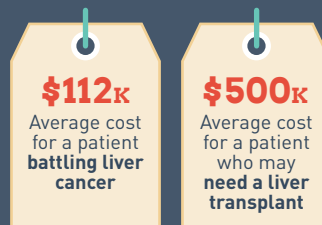
The decline in hospitalization rates between 2002 and 2007 for HIV/AIDS patients because of new medicines



## HEPATITIS C

**90%**

The cure rate for the newest generation of hepatitis C medicines. As more patients receive these treatments, we can expect to see a decline in the staggering costs of treating patients



## ALZHEIMER'S DISEASE

**\$367 billion**

The amount America would save in health services by 2050 if we develop a new medicine that delays the onset of Alzheimer's disease by just five years



Medicines save lives and are part of the solution to reducing medical spending, but only if we have a health care system that supports innovation and encourages the development of new treatments.

**PhRMA** | RESEARCH  
PROGRESS  
HOPE

[www.PhRMA.org/cost](http://www.PhRMA.org/cost)

# THEN & NOW: HOW PRESCRIPTION DRUG PRICES FALL SIGNIFICANTLY OVER TIME

Biopharmaceutical companies invest in pioneering research to bring new treatments to patients, and over time those medicines become available as lower-cost generic copies. The cost of a generic medicine is typically up to 80 percent less than that of the brand medicine. Our nation's competitive market is why we have seen such tremendous – and sustainable – progress against the most costly and challenging diseases.

MEDICINE		BRAND NAME THEN	vs.	GENERIC NOW	% CHANGE
<b>DIOVAN HCT<sup>®</sup></b> <i>Hypertension</i>	2010	<b>\$87</b>		<b>\$13</b>	<b>-85%</b>
<b>LIPITOR<sup>®</sup></b> <i>Cholesterol</i>	2010	<b>\$85</b>		<b>\$4</b>	<b>-95%</b>
<b>PLAVIX<sup>®</sup></b> <i>Blood Thinner</i>	2011	<b>\$166</b>		<b>\$5</b>	<b>-97%</b>
<b>SEROQUEL<sup>®</sup></b> <i>Schizophrenia</i>	2010	<b>\$87</b>		<b>\$3</b>	<b>-97%</b>
<b>ZYPREXA<sup>®</sup></b> <i>Schizophrenia &amp; Bipolar Disorder</i>	2010	<b>\$393</b>		<b>\$8</b>	<b>-98%</b>

Figures represent the average annual price for 30 pills of the most commonly dispensed form and strength. "Then" price represents the average price in the year prior to generic entry. "Now" price represents the average price in CY 2014.

Source: IMS analysis for PhRMA, May 2015

Learn more at [www.PhrMA.org/cost](http://www.PhrMA.org/cost)

# Biopharmaceutical Sector Impact on the U.S. Economy



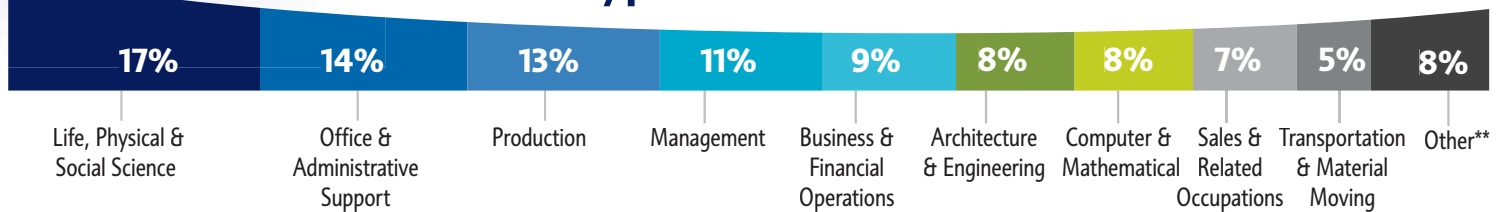
**813,523** Direct Jobs

The Biopharmaceutical sector directly supported more than 810,000 U.S. jobs in 2011. These jobs are often high-skill, high-wage professions.

**3,363,347** Total Jobs

The industry also supported another 2.5 million jobs outside the biopharmaceutical sector, for a total of about 3.4 million jobs. These additional jobs are with vendors and suppliers such as construction companies and I.T. companies, and jobs generated by the sector's employees such as day care centers and restaurants.

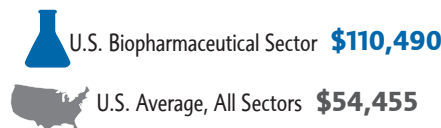
## Types of Direct Jobs



## Total Personal Taxes Supported \$42B

Workers whose jobs were supported by the biopharmaceutical sector paid a total of \$42 billion in personal taxes in 2011—\$36 billion in federal taxes and \$6 billion in state taxes. \$17 billion of the \$42 billion was paid by workers in the direct biopharmaceutical sector.

## Compensation per Direct U.S. Employee



Average wages and benefits for direct biopharmaceutical sector workers were more than twice the overall U.S. average, an indication of the high-quality jobs the biopharmaceutical industry provides to U.S. workers.

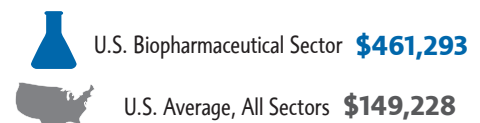
## Total Direct Compensation \$90B

Wages and benefits (total compensation) totaled \$90 billion in 2011 for direct biopharmaceutical sector workers, and \$225 billion for all workers whose jobs were supported by the sector.

## Economic Output Supported

Economic output represents the value of the goods and services produced by a sector. In 2011 the biopharmaceutical sector supported \$789 billion in U.S. economic output—including \$375 billion generated directly by the sector, and another \$414 billion through its vendors and suppliers and through the economic activity of its workforce.

## Direct Output per Direct Employee



The biopharmaceutical sector's high output per employee, a measure of productivity, indicates the sector's important contribution to U.S. economic competitiveness and its potential to drive economic growth.

**\$375B**  
DIRECT

**\$414B**  
INDIRECT

**\$789B in Total  
Economic Output in U.S.**

\*Types of direct biopharmaceutical jobs in U.S. are for 2012. All other estimates are for 2011.

\*\*Other occupations include areas such as Installation, Maintenance, & Repair (2%), Healthcare Practitioners (2%), Arts, Design, & Media (1%), and Building & Grounds Maintenance (1%), among others.