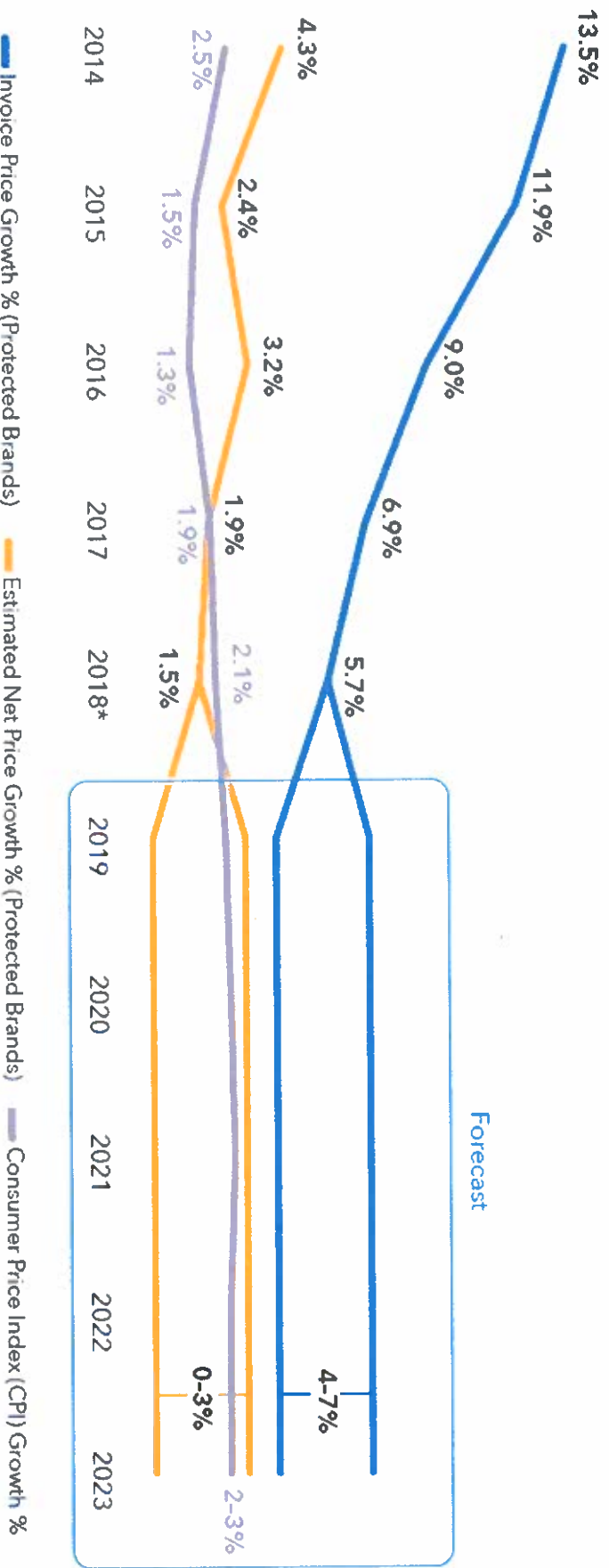


# Growth in Invoice and Net Prices Has Fallen – Net Price Growth Estimated to be 0-3% through 2023

**Exhibit 8: U.S. Price Growth Comparing Protected Brands Invoice Price and Net Price Growth, 2014-2023**

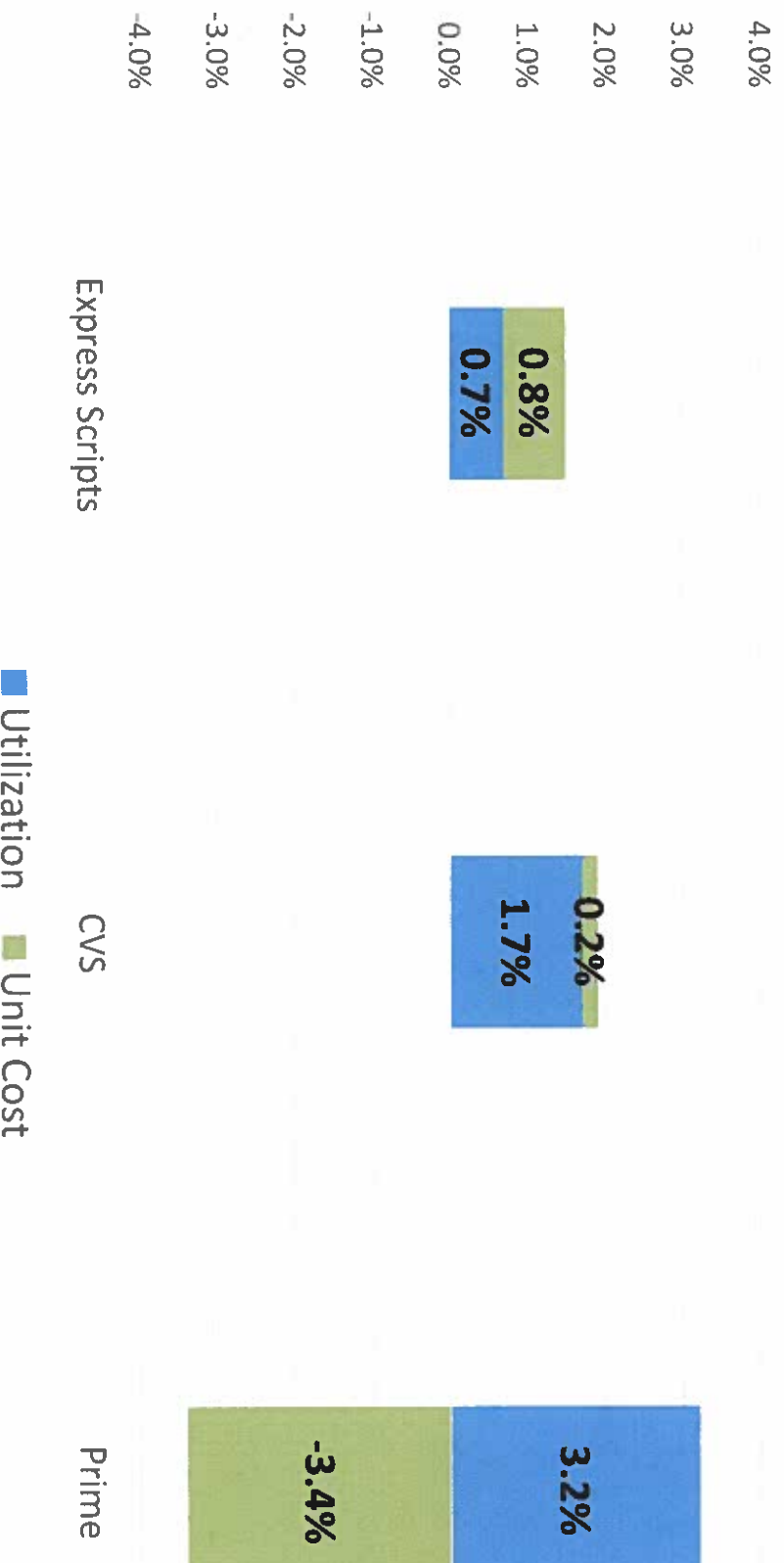


Source: IOVIA National Sales Perspectives, Sep 2018; CPI projections from Economist Intelligence Unit (EIU), Aug 2018; IOVIA Institute, Dec 2018  
 Notes: 2018 Invoice price growth to YTD September 2018; Estimated net price growth in 2018 and forecast periods based on expected base case scenarios and interim review of selected company financial results; Protected Brands excludes new brands marketed less than 24 months in each year as price growth cannot be calculated.



# DRUG PRICES ARE GROWING IN LINE WITH HEALTH CARE SPENDING

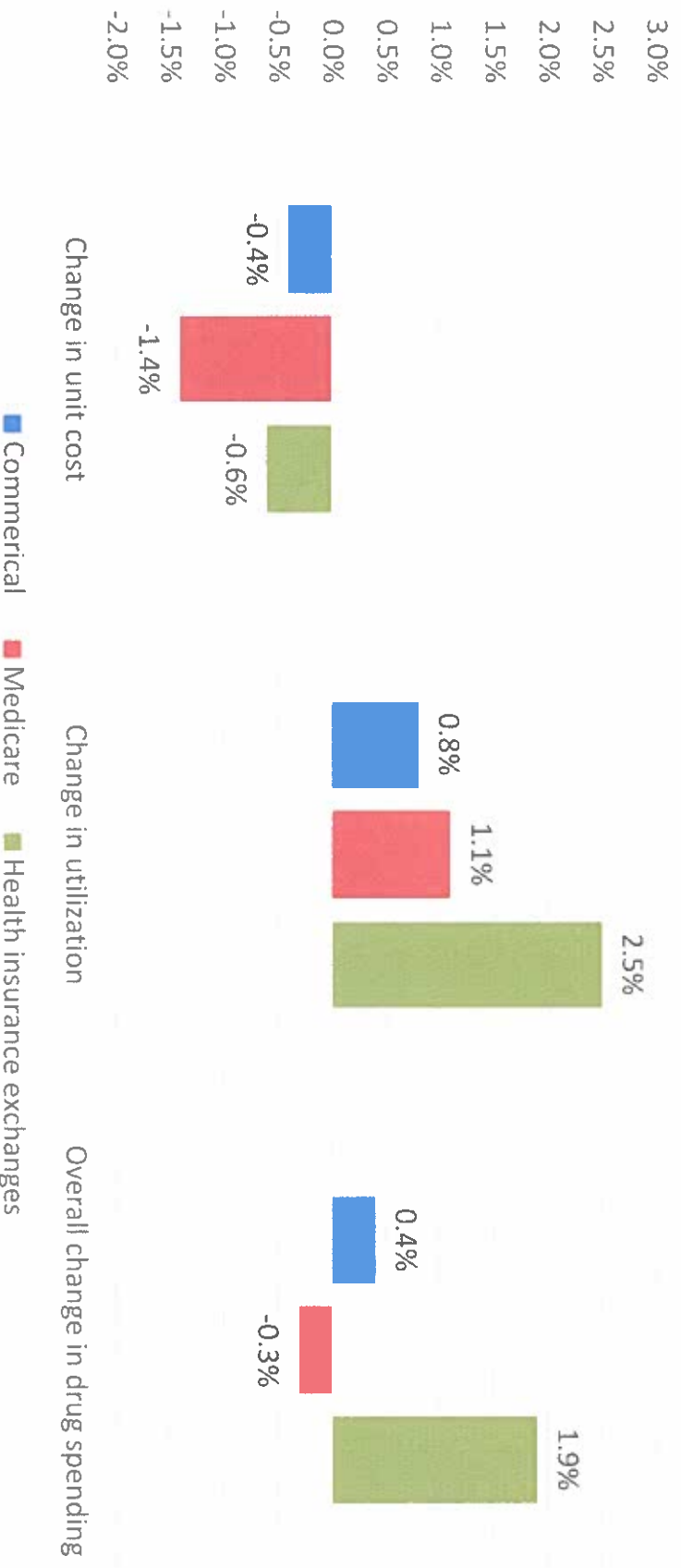
Leading Pharmacy Benefit Managers report that utilization – not price – was the driver of commercial drug spending in 2017





# DRUG PRICES ARE GROWING IN LINE WITH HEALTH CARE SPENDING

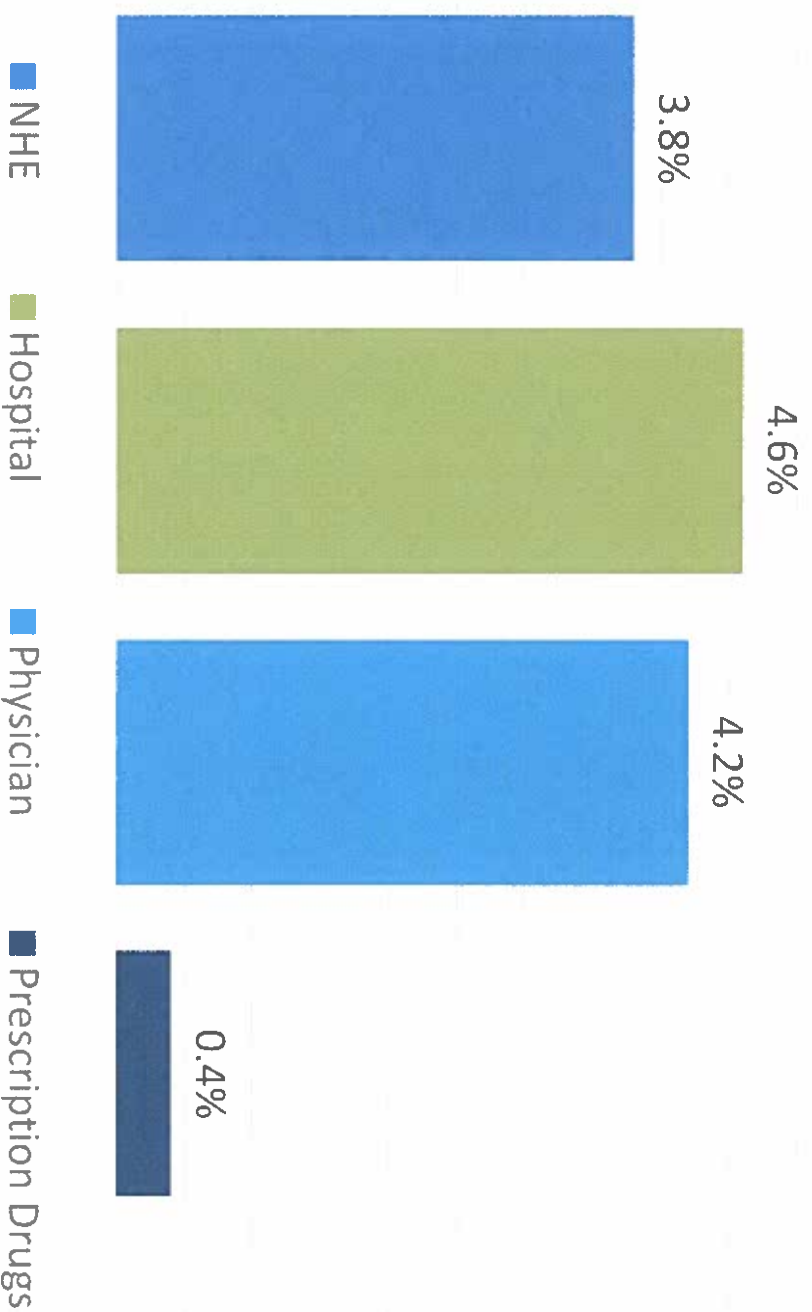
Updated 2018 data from Express Scripts confirm unit cost decreases across markets



Source: "Express Scripts Confirms It (Again): Minimal Growth in Drug Spending and Prescription Costs" <https://www.drugchannels.net/2019/02/express-scripts-confirms-it-again.html>



# CMS DATA SHOW DRUG SPENDING GROWING FAR SLOWER THAN OTHER CATEGORIES



Source: CMS, National Health Expenditures, Annual Percent Change, by Type of Expenditure: Selected Calendar Years 1960-2017. December 2018





# Insurance Cost-Shifting to Patients Disproportionately High for Drugs

Financial exposure to prescription drugs is disproportionate to its share of overall health spending:

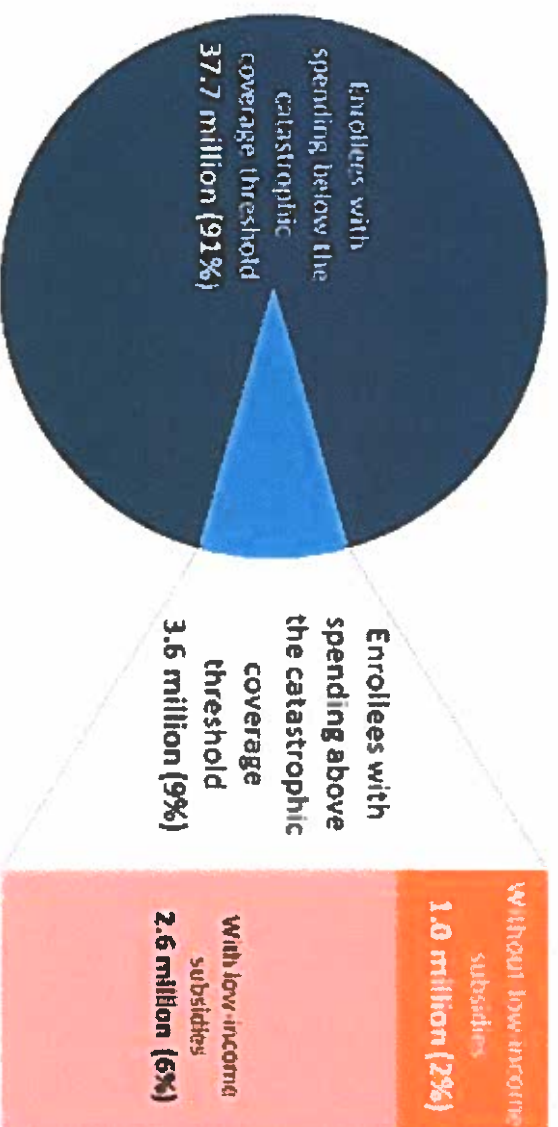
	Proportion of Personal Health Care Spending	Proportion of Category Spending as OOP
Hospital Care	37%	3.0%
Physician and Clinical	23.5%	8.7%
Prescription Drugs	11.4%	14%

Source: CMS, National Health Expenditures, Annual Percent Change, by Type of Expenditure: Selected Calendar Years 1960-2017. December 2018



# Many Medicare Beneficiaries Face Substantial Cost Sharing

**Figure 2**  
**Nearly 1 in 10 Medicare Part D enrollees had drug spending above the catastrophic coverage threshold in 2015, most of whom received low-income subsidies—but 1 million did not**



**Total Part D enrollment, 2015: 41.3 million**

NOTE: Analysis includes Part D enrollees in stand-alone prescription drug plans and Medicare Advantage drug plans.  
SOURCE: Kaiser Family Foundation analysis of a five percent sample of 2015 Medicare prescription drug event claims from the CMS Chronic Conditions Data Warehouse.

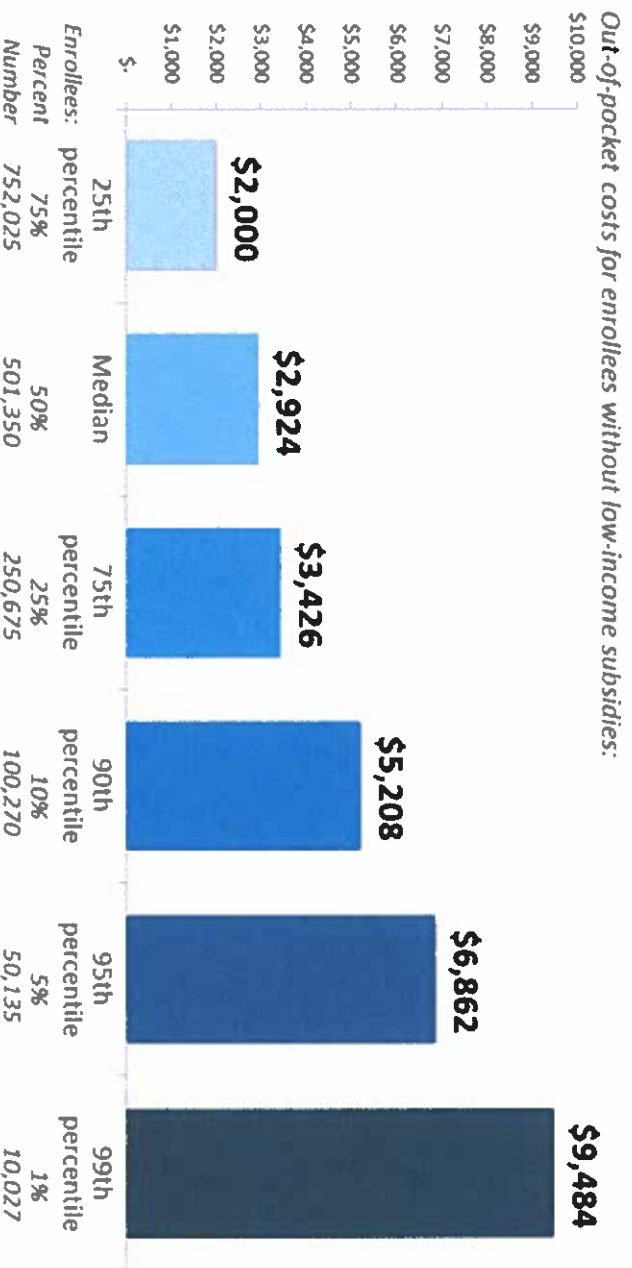




# Many Medicare Beneficiaries Face Substantial Cost Sharing

Figure 5

**One in 10 Part D enrollees with high out-of-pocket drug costs spent at least \$5,200 on their prescription drugs in 2015**



NOTE: "High out-of-pocket drug costs" refers to Part D enrollees without low-income subsidies who incurred drug spending above the catastrophic coverage threshold. Analysis includes enrollees in stand-alone prescription drug plans and Medicare Advantage drug plans. Out-of-pocket costs include Part D drug costs, but not Part D premiums or costs for Part B-covered drugs.

SOURCE: Kaiser Family Foundation analysis of a five percent sample of 2015 Medicare prescription drug event claims from the CMS Chronic Conditions Data Warehouse.





# High Out-of-Pocket Costs Impact Medication Adherence

FIGURE 1: New Patient Abandonment by Patient Out-of-Pocket Cost (Commercial, Top Brands, 2017)



Note: Sample limited to new patient approvals across Top Brands which span over 25 traditional and specialty therapeutic areas  
Source: IQVIA Formulary Impact Analyzer dataset (2013-2017); IQVIA analysis







Biotechnology  
Innovation  
Organization

25 YEARS  
OF INNOVATION

# MARYLAND'S 36,194 BIOTECHNOLOGY WORKERS are HEALING, FUELING & FEEDING the World

Maryland's bioscience industry is helping to diversify and grow the U.S. economy. American bioscience innovation in health, energy and agriculture are creating high-skill, high-wage jobs, driving economic growth and helping to improve the quality of life for Americans from coast to coast.



## HEALING

Since 1982, biotechnology drugs and vaccines have helped improve the quality of life for more than 250 million patients living with debilitating diseases such as cancer, diabetes, and HIV/AIDS. Currently there are more than 900 biotechnology drugs in clinical development targeting cancer, cardiovascular disease, HIV/AIDS and thousands of rare or "orphan" diseases.



## FUELING

Industrial and environmental biotechnology companies are developing technologies to reduce waste, improve industrial processes, and reduce our reliance on foreign sources of energy. Successful commercialization of cellulosic biofuels and renewable chemicals have created 8,000 new jobs in the past five years.



## FEEDING

Agricultural biotechnology benefits farmers, consumers and the environment by increasing crop yields and farm income, decreasing pesticide applications, increasing environmental sustainability, and enhancing the nutritional profile of many foods - while also spurring America's economy.

EMPLOYEES:  
**36,194**



ESTABLISHMENTS:  
**2,281**



ANNUAL AVERAGE WAGE:  
**\$107,146**



**MARYLAND'S  
COMPETITIVE  
BIOSCIENCE  
INDUSTRY**

ESTABLISHMENTS:

**85,107**



EMPLOYEES:  
**1.73M**



TOTAL EMPLOYMENT IMPACT:  
**8.9M JOBS**



ANNUAL AVERAGE WAGE:  
**\$99,151**



**AMERICA'S  
COMPETITIVE  
BIOSCIENCE  
INDUSTRY**

