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California Biotechnology Foundation

Medicines are helping to control rising health care costs
through their role in reducing the need for other more costly interventions.

Fact:
Patients who adhere to their medication regimens enjoy better health outcomes[1+2] and make less use of urgent care and inpatient hospital services, compared to patients with similar medical conditions who are not adherent[3+4].

Fact:
The link between prescription medicine use and spending on other health care services among Medicare D patients showed an overall savings of $13.4 billion in 2007, the first full year of the program[2].

Fact:
Prescription medicines continue to comprise only a small portion of health care spending in the United States. In fact, medicines have accounted for only 10 cents out of every health care dollar spent[3].

Fact:
The research and development process is complex, costly and time-consuming. On average, it takes 10-15 years and costs $1.2 billion to advance one potential new medicine from a research concept to an FDA-approved treatment. On average, only one of every 10,000 new compounds becomes a new drug. Roughly 95 percent of candidates entering clinical trials will eventually fail[4].

Fact:
Biopharmaceutical research companies invested an estimated $48.5 billion in new research and development in 2012 — the largest R&D investment of any sector in the U.S. economy[5].
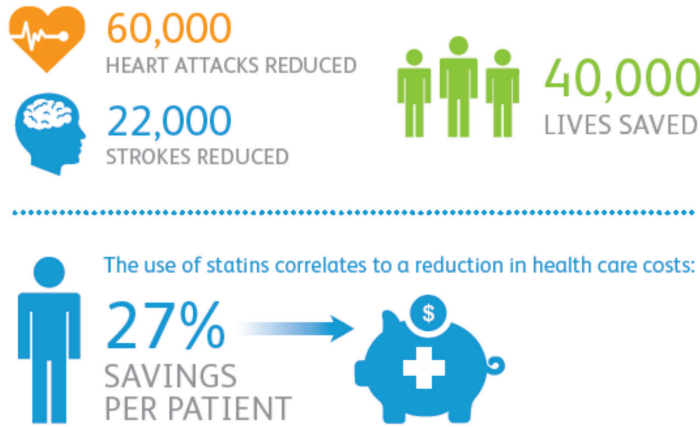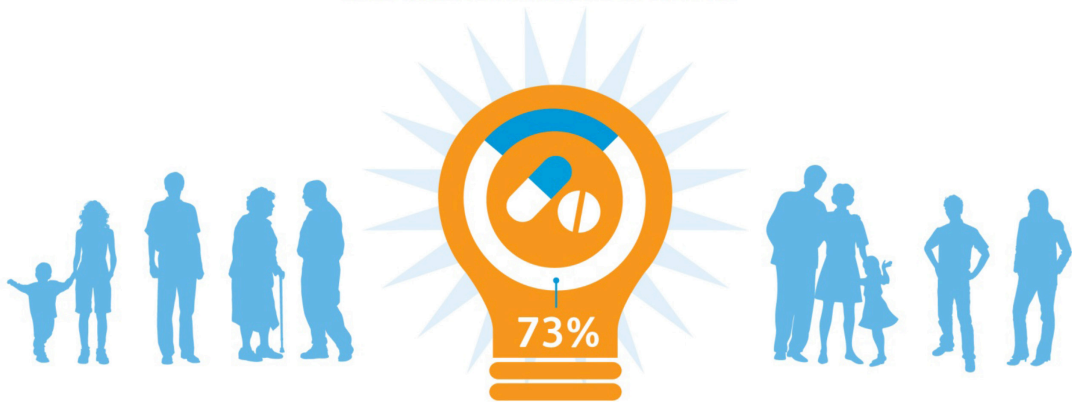
Fact:
Our health insurance system was founded on the premise of risk management where health care costs are spread across sick and healthy patient populations. This includes access to innovative medicines and preventative treatments and cures, which has been proven to reduce the use of higher cost conventional health care services.

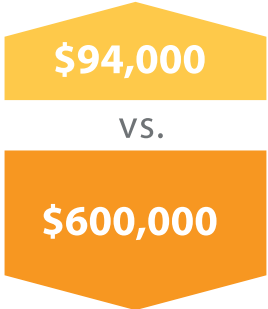**California Biotechnology Foundation**

A wide range of studies show: Improved use of recommended medications is associated with reduced total health care costs.

Biopharma innovations accounted for 73% of the total increase in life expectancy between 2000-2009 [6].

73%

60,000 HEART ATTACKS REDUCED

22,000 STROKES REDUCED

40,000 LIVES SAVED

The use of statins correlates to a reduction in health care costs:
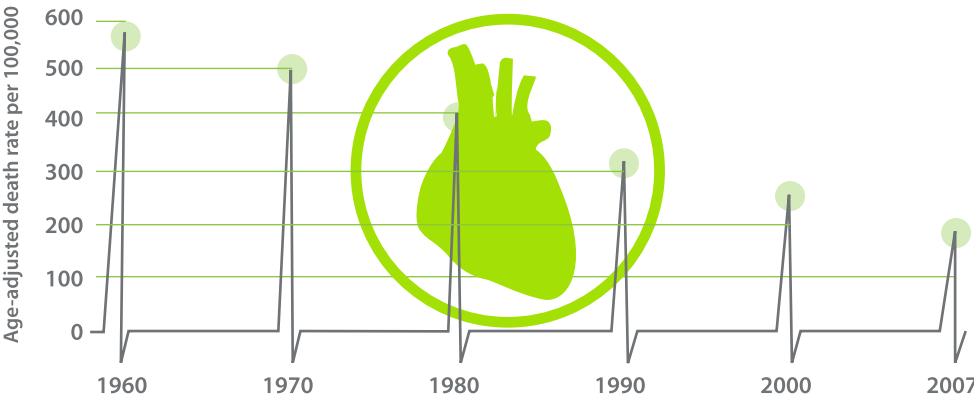
27% SAVINGS PER PATIENT

In one year alone, statins saved 40,000 lives, prevented 60,000 heart attacks and 22,000 strokes and reduced related health care costs by 27% per patient [7].

MEDICATION THERAPY ACCOUNTS FOR ABOUT 1/3 OF THE REDUCTION IN CARDIOVASCULAR DISEASE MORTALITY [8].

Age-adjusted death rate per 100,000

600
500
400
300
200
100
0

1960 1970 1980 1990 2000 2007

US Age-Adjusted Death Rate for Heart Disease: 1960-2007

INNOVATION SAVES LIVES + MONEY

$94,000

vs.

$600,000

Innovations in Hepatitis C treatments are providing a cost-effective cure to the disease: $94,000 for a three-month course of treatment [9] vs. $600,000 liver transplant + $6,000 ongoing monthly costs post-surgery [10].

THE VALUE OF MEDICINE AND PREVENTION

$1 MORE spent on diabetes medicines = $7.10 LESS spent on other services [11]
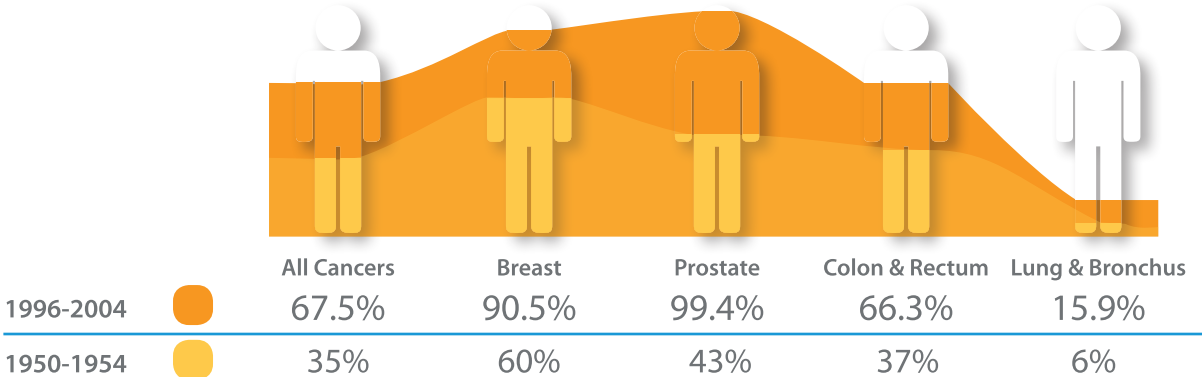
$1 more

$7.10 less

For every **$1.00** the U.S. spends on childhood vaccinations,

$10.20 is saved in disease treatment costs. [12]

INNOVATIVE CANCER TREATMENTS HAVE RESULTED IN 30% INCREASE IN SURVIVAL RATES IN THE U.S. [13]

	All Cancers	Breast	Prostate	Colon & Rectum	Lung & Bronchus
1996-2004	67.5%	90.5%	99.4%	66.3%	15.9%
1950-1954	35%	60%	43%	37%	6%

MEDICATION AND SUPPLIES ACCOUNT FOR ONLY 12% OF THE TOTAL COST OF DIAGNOSED DIABETES IN THE U.S. [14]

	TOTAL COST	Inpatient and Outpatient Care	Diabetes Medication and Supplies
2007	$174B	59%	12%
2012	$245B	60%	12%

See back page for sources