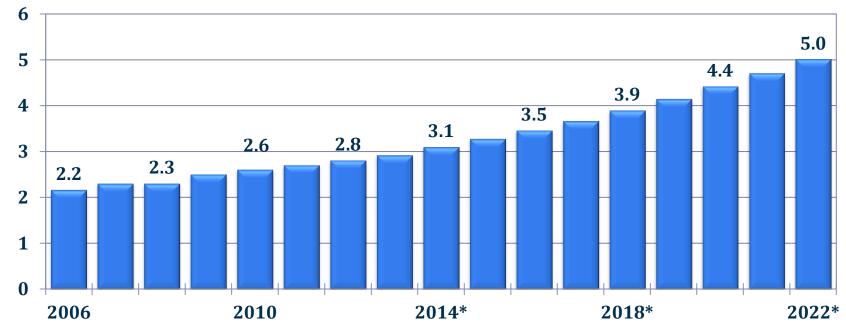
# National healthcare expenditures are projected to equal \$5 trillion by 2022



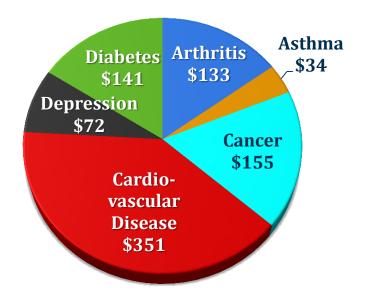
#### **US\$** trillions



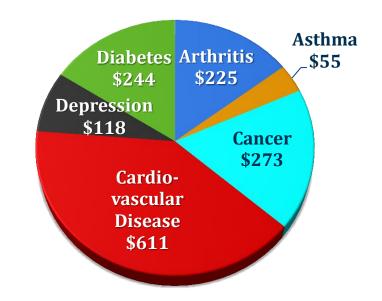
## Spending on top 6 chronic diseases will grow over 70% by 2020



2010 Total = **US\$ 887 billion** 



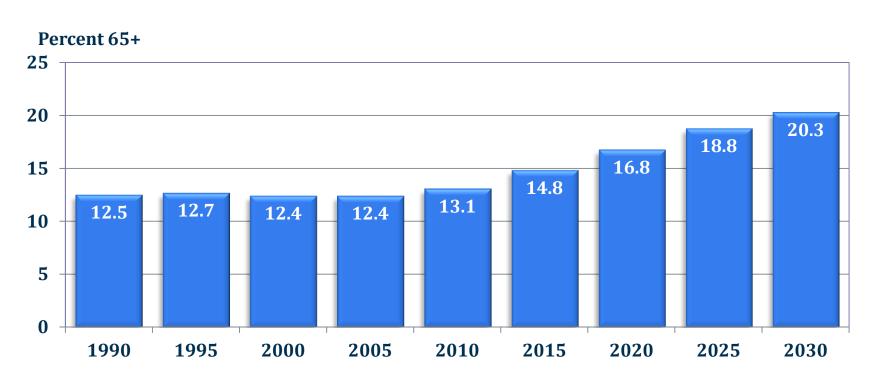
## 2020 Total = **US\$ 1.5 trillion**





## U.S. aging population is growing fast



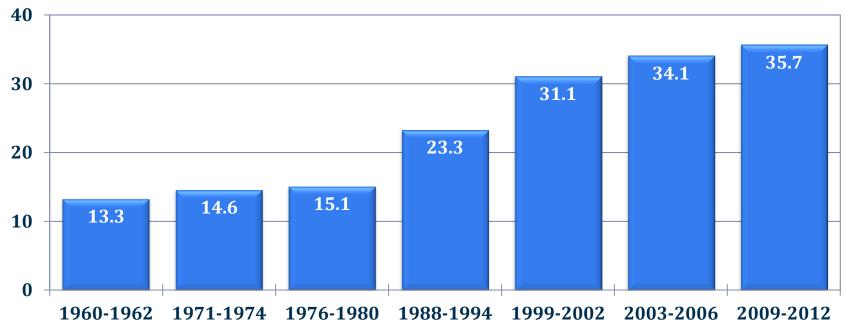




## Rising U.S. adult obesity rates



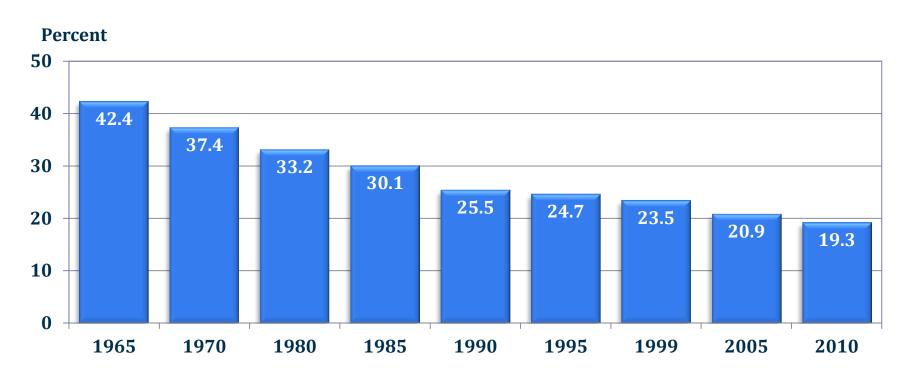
#### **Percent obese**



## Percent of current adult smokers has decreased dramatically

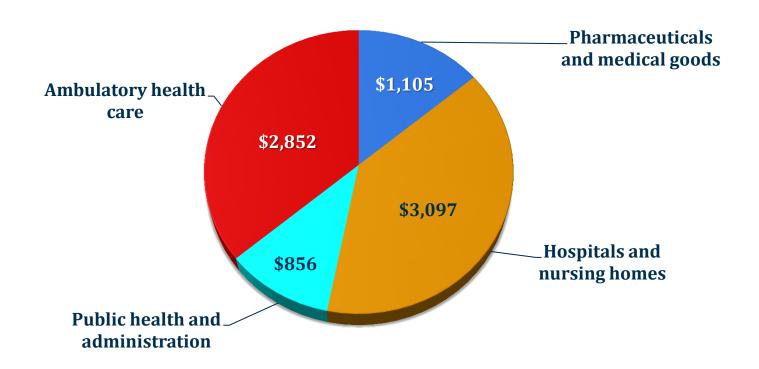
M

Percent of adults that are current smokers in the U.S.



# Breakdown of U.S. annual per capita health spending by category of care



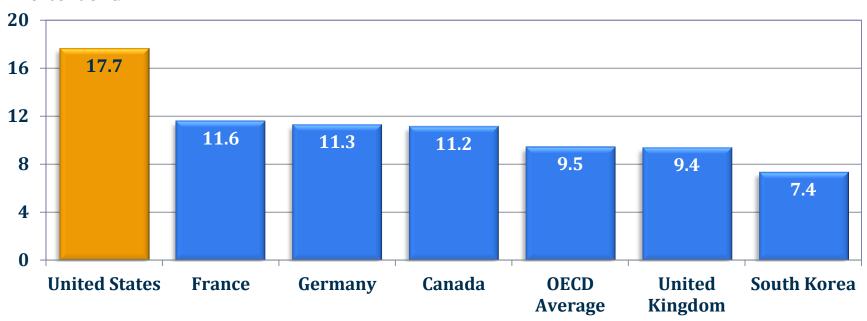


## Total expenditure on health

Percentage of the GDP in select OECD countries



#### **Percent of GDP**

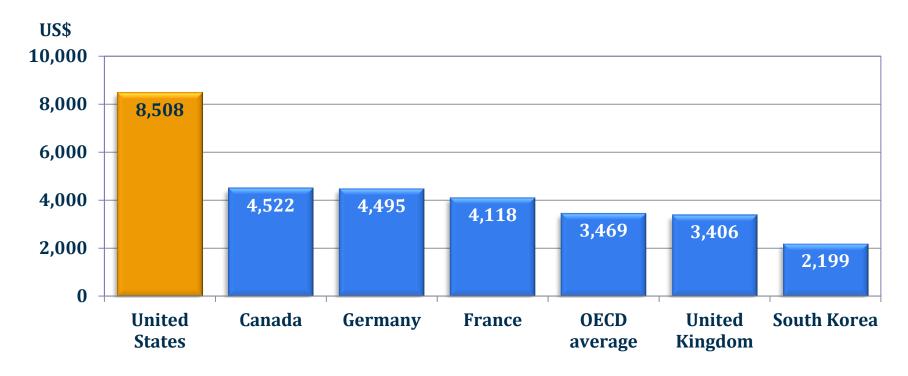




## Total expenditures on health

Per capita in select OECD countries



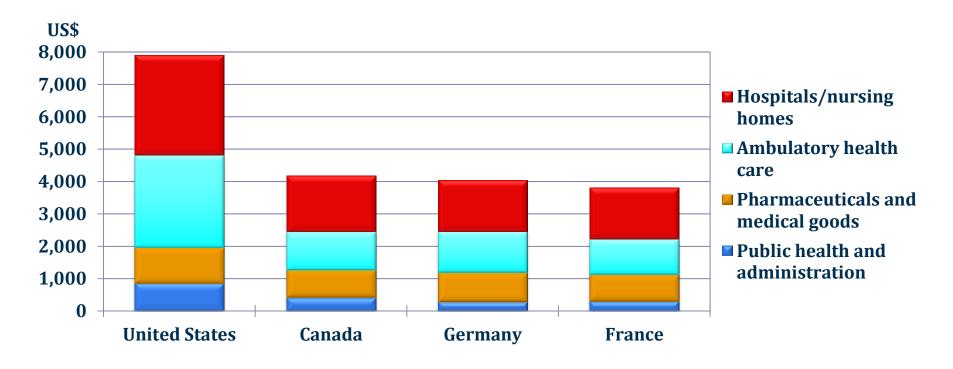




## U.S. spends more for all categories of care

Health spending per capita in select OECD countries







# Where does the U.S. spend more than other countries?



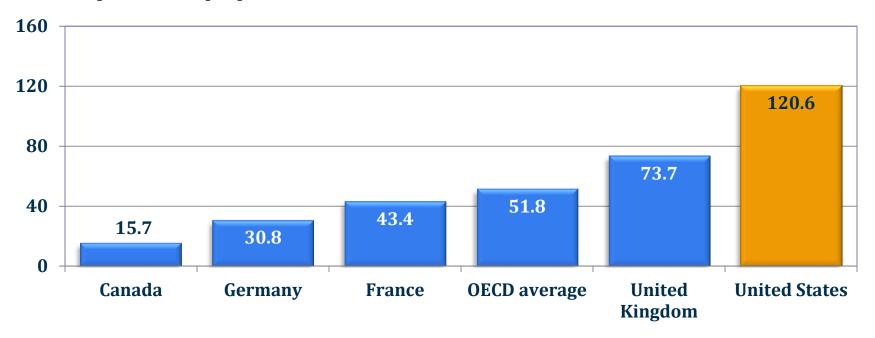
	U.S. rank compared to other OECD countries	U.S.	OECD average
MRI units per million population	2	31.6	12.5
MRI exams per 1,000population	2	97.7	46.3
<b>Tonsillectomy</b> per 100,000 population	1	254.4	130.1
Coronary bypass per 100,000 population	3	79.0	47.3
<b>Knee replacements</b> per 100,000 population	1	226.0	121.6
<b>Caesarean sections</b> per 100 live births	6	32.9	26.1

## U.S. chronic disease management needs improvement

Asthma hospital admissions per 100,000 people in select OECD countries



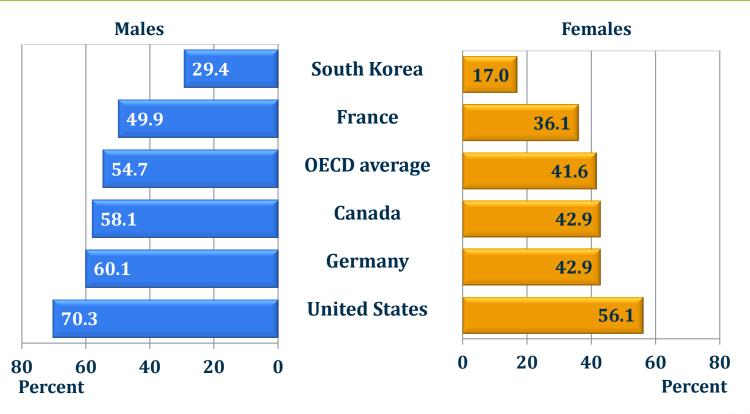
#### Number per 100,000 people



## U.S. tops the OECD in percent of overweight adults

Percent of overweight or obese adults in select OECD countries

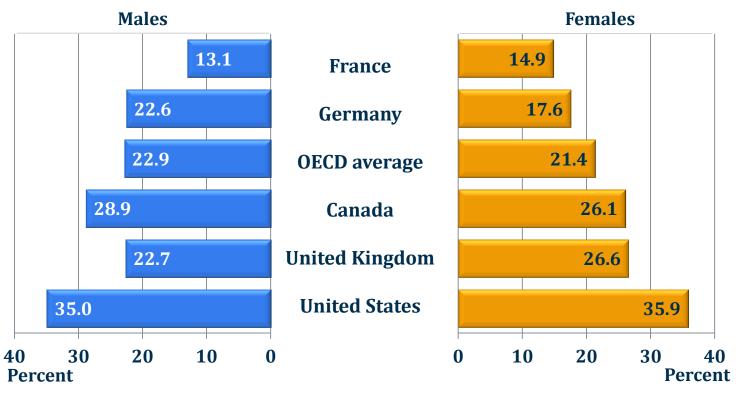




### Over one third of U.S. children are overweight

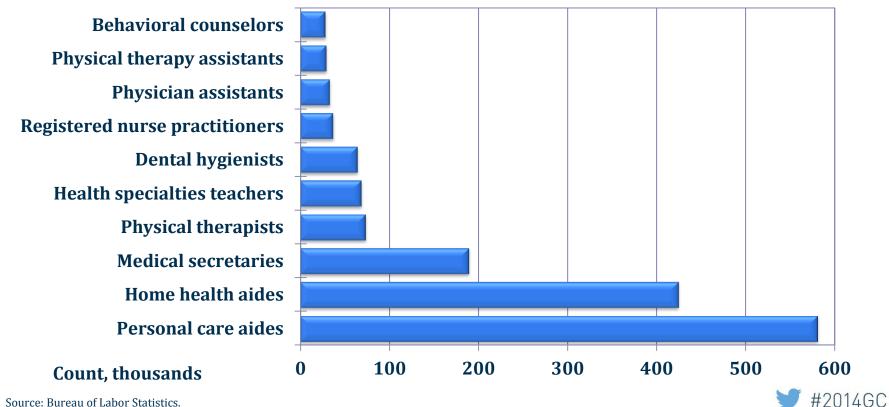
Percent of overweight or obese children in select OECD countries





## Healthcare projected to represent a third of job growth by 2022

New jobs in 1,000s



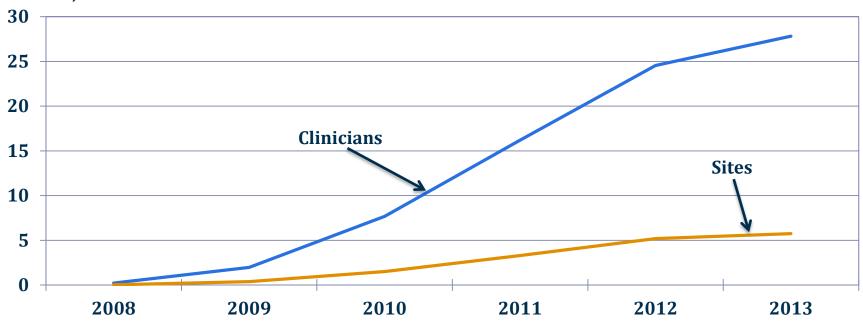
Source: Bureau of Labor Statistics.

## Growth of patient-centered medical homes

Number of recognized sites and clinicians in thousands



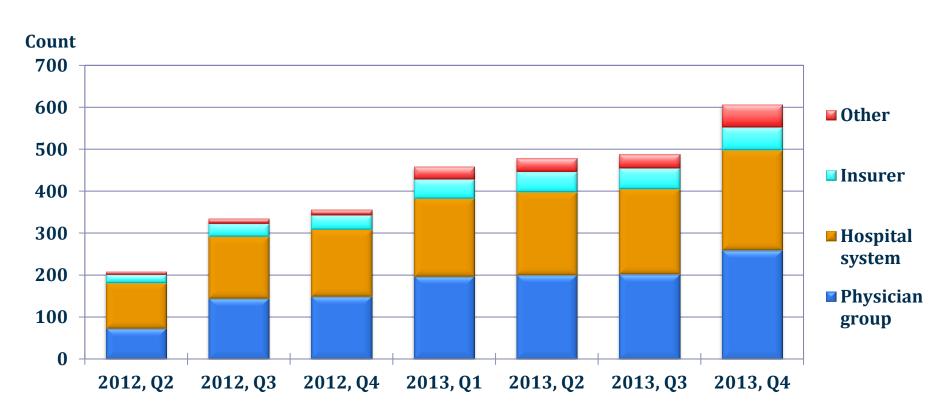






# Increasing prevalence of accountable care organizations (ACOs) By sponsor type





### Greater access to care with connected health and telemedicine



- Telemonitoring (weight, BP, heart rate, pulse oximetry)
- Time- and place-independent access to specialty physicians
- eReferral to reduce wait times for specialties
- Tele-ICU intensivist coverage over more intensive care unit beds
- Greater medication regime adherence





# Free smartphone apps for medication adherence



App	Feature(s)
Care4Today	Monitor medication use of loved ones. Donate to charity when taken on time.
<b>Med Helper</b>	Export results to doctors, nurses and caregivers.
MedCoach	Connect to your pharmacy to order refills.
MediSafe	Supports English and non-English languages.
Pill Monitor	Email a log of prescriptions taken.
Pill Reminder	Set up accounts for multiple family members through www.drugs.com.
RxmindMe	Export prescription information through Walgreens.

## Healthcare providers in the future



- Projected physician shortage:
  - > 2012: 950k practicing physicians
  - 2020: 90k more providers needed (1/2 primary care)
  - 2025: 130k more providers needed (1/2 primary care)

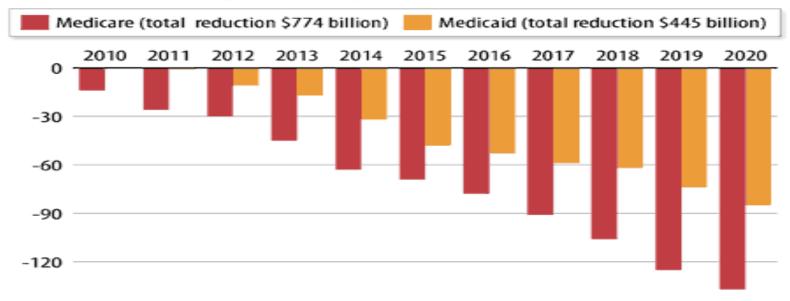




# Medicare and Medicaid projected to cost \$1.2 trillion less than under earlier projections



Difference between Congressional Budget Office's March 2010 and May 2013 projections



#### -\$150 billion

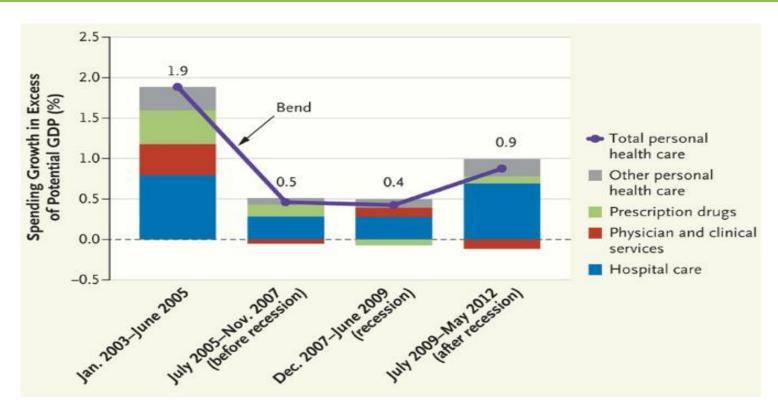
Note: Data exclude changes in spending attributable to enacted legislation and updates in the economic forecast

Source: Congressional Budget Office



### When the cost curve bent

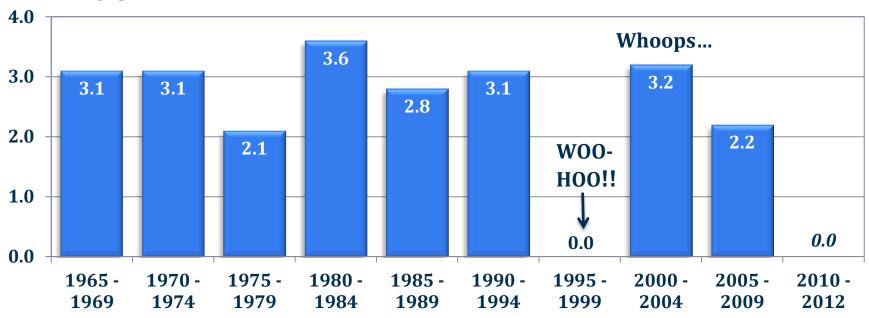




# Average annual difference between growth in real GDP per capita and growth in real health expenditures per capita, 1965-2012



### **Percentage points**



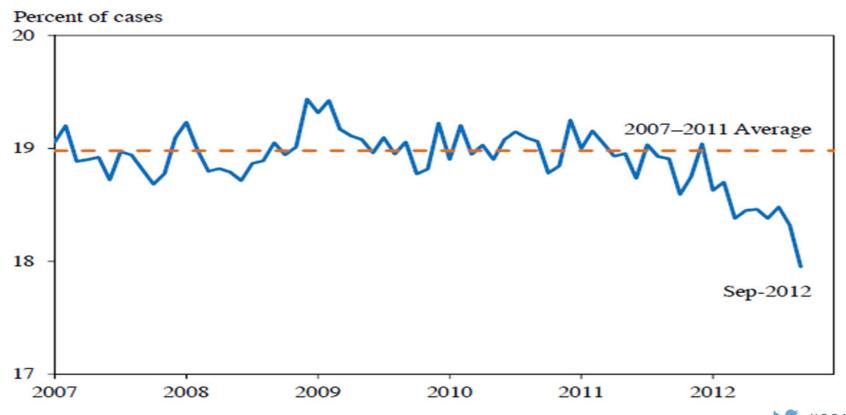
Source: Bureau of Economic Analysis, National Income and Product Accounts, Centers for Medicare and Medicaid Services, National Health Expenditure Accounts, CEA calculations.





# Acute care hospital readmission rates 2007-2012





### What's "hot"



## The six major themes of 2013 comprise almost 50% of all funding for the entire year



EHR AND CLINICAL WORKFLOW

\$245M

Electronic health records and surround applications, including clinical workflow support



ANALYTICS AND **BIG DATA** 

\$161M

Data aggregation and analysis to support a wide range of healthcare use cases



DIGITAL MEDICAL **DEVICES** 

Hardware/software designed to treat a specific disease or condition



WEARABLES AND BIOSENSING

Wearable consumer devices that measure specific biometrics



POPULATION **HEALTH** MANAGEMENT

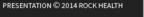
Comprehensive platforms designed to manage the health of populations under the shift to risk-based payment models



**HEALTHCARE** CONSUMER ENGAGEMENT

Consumer tools for the purchasing of healthcare services or health insurance (B2B and B2C)

Source: Rock Health funding database Note: Rock Health categorizes companies into 24 categories



#2014GC

## Who is paying?



Solutions must be compelling enough for stakeholders to buy on recurring basis -Consumers are not conditioned to pay for healthcare solutions















## Process innovation is a key change agent



### \$765 billion annually wasted in the healthcare system

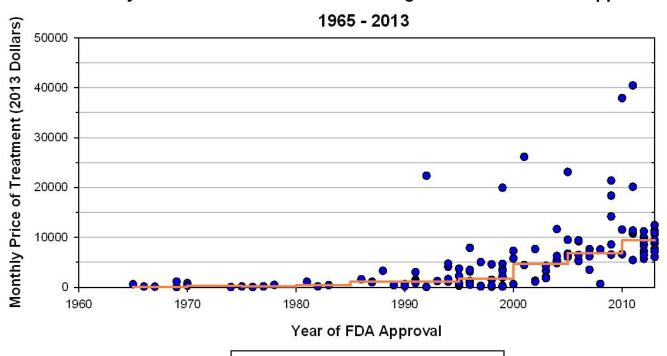
--Technology-enabled solutions and outsourced services are key enablers



## Skyrocketing cost of cancer drugs



#### Monthly and Median Costs of Cancer Drugs at the Time of FDA Approval



Individual Drugs

Median Monthly Price (per 5 year period)



## Way to health





















## **Automated hovering**



## Multi-directional connectivity



