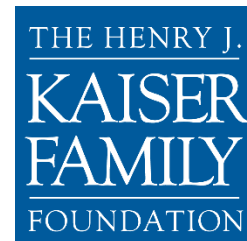


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18|11

What Can We Do About the Cost of Health Care?

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# Table of Contents

- About Initiative 18|11
- What's the Problem?
- What Can We Do About It?
- What's Next for the Profession?

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About Initiative 18|11

# How Did We Get Here?

- History
- Goals
- Phases
  - 1: Inaugural event and report
  - 2: Actionable research, strategic initiatives
  - 3: TBD
- [www.soa.org/Initiative1811](http://www.soa.org/Initiative1811)

# Our Partners

- **The SOA Team**

- Brian Pauley, Chair
- Joan Barrett
- Joe Wurzbarger, Health Staff Fellow

- **Kaiser Family Foundation**

- A health information organization that analyzes policy issues, tracks public opinion through polling, and informs the public through journalism
- Not part of Kaiser Foundation
- Key websites
  - [www.kff.org](http://www.kff.org) (in-depth articles)
  - [www.khn.org](http://www.khn.org) (Kaiser Health News: Current events)
  - [www.healthsystemtracker.org](http://www.healthsystemtracker.org) (Peterson-Kaiser joint venture, data repository)

- **Healthcare Finance Management Association**

- a membership organization that brings together executives and financial managers from provider organizations, physician practices, and health plan markets to collaborate and address the many financial challenges the US healthcare system faces today.
- [www.hfma.org](http://www.hfma.org)

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What's the Problem?

# What is the Problem and What Can Do About It?

- **What's the problem?**
  - International comparisons
  - A closer look at the U.S.
    - Organizational structure
    - Transactional view
    - Consumer view
- **What can we do about it?**

# The Health Care Identity

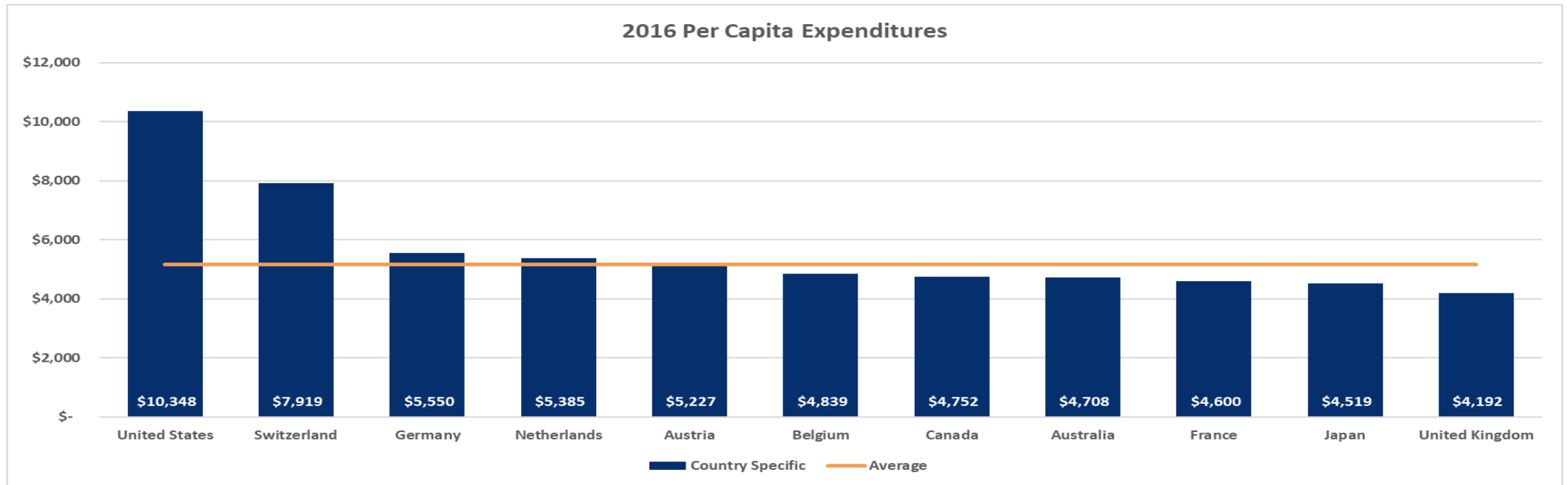
**One Person's Costs**

**=**

**Another Person's Income**



# Per Capita Expenditures



## Comments:

- The 2016 per capita expenditures in the U.S. is \$10,348, roughly twice that of comparable countries.
- This translates to 18% of GDP for the United States compared to 11% for comparable countries.

Source: Health System Tracker, [https://www.healthsystemtracker.org/chart-collection/health-spending-u-s-compare-countries/?\\_sf\\_s=compare#item-average-wealthy-countries-spend-half-much-per-person-health-u-s-spends](https://www.healthsystemtracker.org/chart-collection/health-spending-u-s-compare-countries/?_sf_s=compare#item-average-wealthy-countries-spend-half-much-per-person-health-u-s-spends)

# Health Care System Performance Rankings

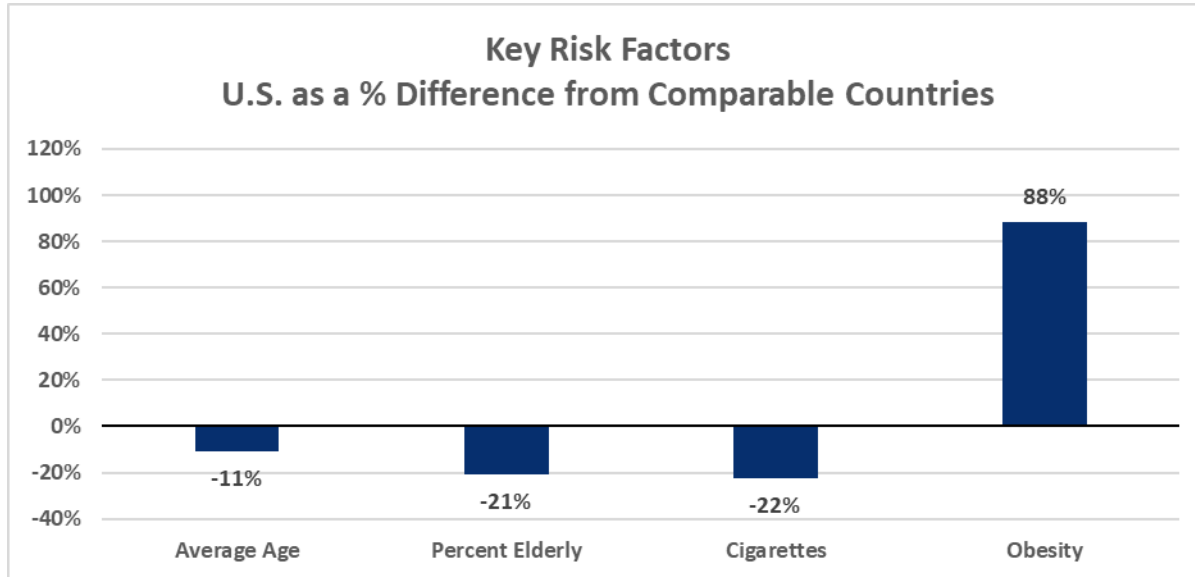
	AUS	CAN	FRA	GER	NETH	NZ	NOR	SWE	SWIZ	UK	US
<b>Overall Ranking</b>	<b>2</b>	<b>9</b>	<b>10</b>	<b>8</b>	<b>3</b>	<b>4</b>	<b>4</b>	<b>6</b>	<b>6</b>	<b>1</b>	<b>11</b>
Care Process	2	6	9	8	4	3	10	11	7	1	5
Access	4	10	9	2	1	7	5	6	8	3	11
Administrative Efficiency	1	6	11	6	9	2	4	5	8	3	10
Equity	7	9	10	6	2	8	5	3	4	1	11
Health Outcomes	1	9	5	8	6	7	3	2	4	10	11

## Comments:

- Overall, the U.S. ranks last in overall quality vs. comparable countries.
- Life expectancy in the U.S. is 78.8 vs. 82.0 in comparable countries

Sources: Commonwealth Fund, <http://www.commonwealthfund.org/interactives/2017/july/mirror-mirror>  
<https://www.healthsystemtracker.org/chart-collection/know-social-determinants-health-u-s-comparable-countries/#item-though-u-s-population-aging-younger-average-age-smaller-elderly-population-comparable-countries>

# Risk Factors

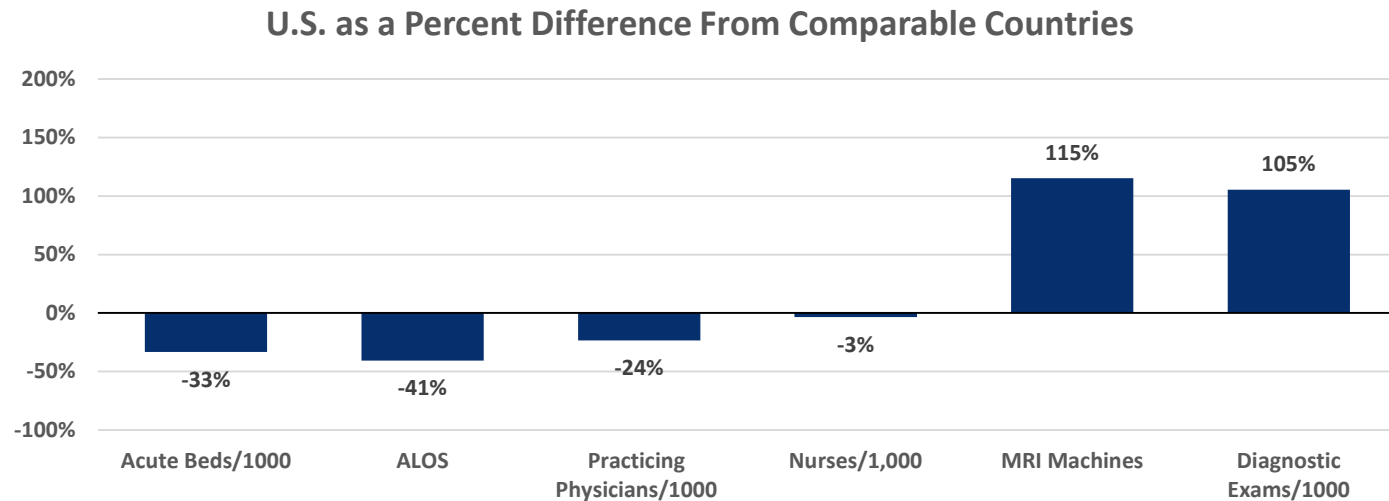


## Comments

- The U.S. tends to be younger than comparable countries and has fewer smokers.
- The obesity rate, however, is 88% higher than in other countries.

Source: [https://www.healthsystemtracker.org/chart-collection/know-social-determinants-health-u-s-comparable-countries/?\\_sft\\_category=health-well-being#item-though-u-s-population-aging-younger-average-age-smaller-elderly-population-comparable-countries](https://www.healthsystemtracker.org/chart-collection/know-social-determinants-health-u-s-comparable-countries/?_sft_category=health-well-being#item-though-u-s-population-aging-younger-average-age-smaller-elderly-population-comparable-countries)

# Relative Resources



## Comments

- The U.S. has fewer hospitals and physicians than comparable countries.
- The U.S. has more MRI machines and does more diagnostic tests than comparable countries.

Source: [https://www.healthsystemtracker.org/chart-collection/u-s-health-care-resources-compare-countries/?\\_sft\\_category=quality-of-care#item-u-s-fewer-practicing-doctors-per-1000-people-comparably-wealthy-countries](https://www.healthsystemtracker.org/chart-collection/u-s-health-care-resources-compare-countries/?_sft_category=quality-of-care#item-u-s-fewer-practicing-doctors-per-1000-people-comparably-wealthy-countries)

# Healthcare Systems Models

Model	Description	Applications
Bismarck Model	<ul style="list-style-type: none"> <li>• Private Initiatives/companies</li> <li>• Non-Profit only</li> <li>• No pre-existing conditions</li> <li>• Government cost-control</li> </ul>	<ul style="list-style-type: none"> <li>• Germany and Japan</li> <li>• U.S. commercial, except for non-profit requirement and government cost control</li> </ul>
Beveridge Model	<ul style="list-style-type: none"> <li>• Government is single-payer</li> <li>• Most doctors are government employees</li> </ul>	<ul style="list-style-type: none"> <li>• United Kingdom</li> <li>• U.S.: Native Americans, military personnel and veterans</li> </ul>
National Health Insurance	<ul style="list-style-type: none"> <li>• Government is single-payer</li> <li>• Providers are private entities</li> </ul>	<ul style="list-style-type: none"> <li>• Canada</li> <li>• U.S. Medicare</li> </ul>
Out-of-Pocket	<ul style="list-style-type: none"> <li>• Most services paid out of pocket</li> <li>• Some core services may be available</li> </ul>	<ul style="list-style-type: none"> <li>• India, most poor countries</li> <li>• U.S. uninsured</li> </ul>

## Comments:

- Micro-insurance and non-government organizations play a key role in out-of-pocket countries like India and many African countries.

Source: T.R. Reid, "The Healing of America: A Global Quest for Better, Cheaper and Fairer Health"

# Overview of Administrative Responsibilities

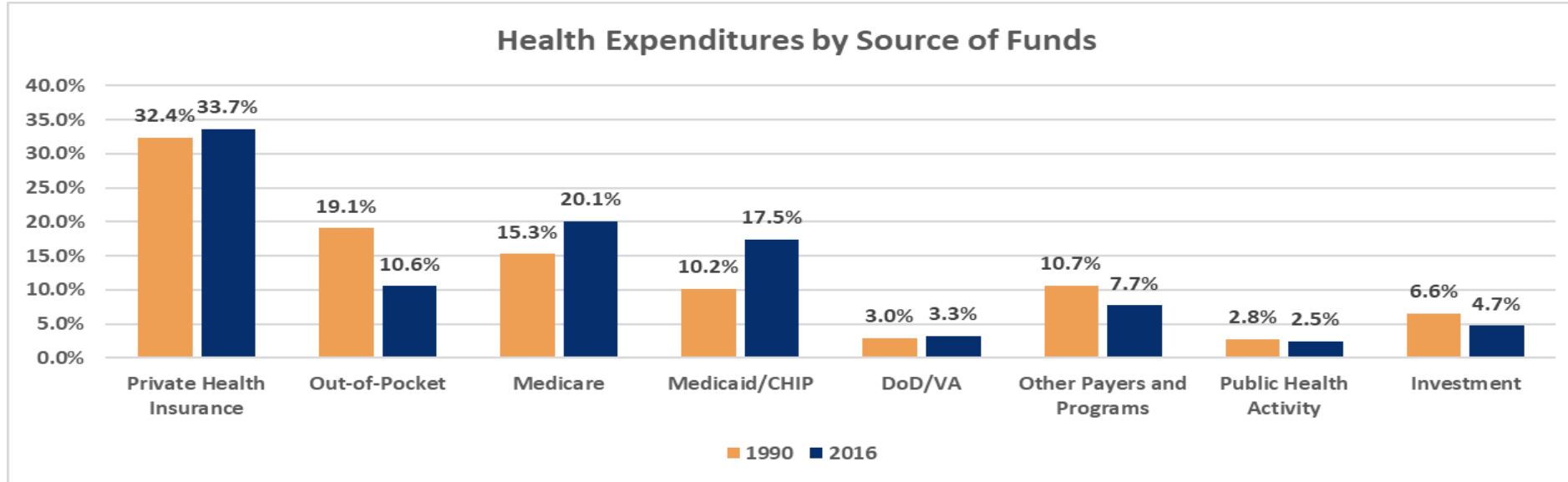
Business	Primary Funding	Major Risk Taker	Plan Suite Design	Primary Eligibility Owner	Claims Adjudication and Provider Contracting
Individual Insurance	<ul style="list-style-type: none"> <li>• Policyholder</li> </ul>	<ul style="list-style-type: none"> <li>• Health Plan</li> </ul>	<ul style="list-style-type: none"> <li>• Health Plan</li> </ul>	<ul style="list-style-type: none"> <li>• Health Plan</li> </ul>	<ul style="list-style-type: none"> <li>• Health Plan</li> </ul>
Group Insurance	<ul style="list-style-type: none"> <li>• Employer</li> </ul>	<ul style="list-style-type: none"> <li>• Health Plan</li> </ul>	<ul style="list-style-type: none"> <li>• Health Plan</li> </ul>	<ul style="list-style-type: none"> <li>• Employer</li> </ul>	<ul style="list-style-type: none"> <li>• Health Plan</li> </ul>
Self-Insured	<ul style="list-style-type: none"> <li>• Employer</li> </ul>	<ul style="list-style-type: none"> <li>• Employer</li> </ul>	<ul style="list-style-type: none"> <li>• Employer</li> </ul>	<ul style="list-style-type: none"> <li>• Employer</li> </ul>	<ul style="list-style-type: none"> <li>• Health Plan</li> </ul>
Traditional Medicare	<ul style="list-style-type: none"> <li>• CMS</li> </ul>	<ul style="list-style-type: none"> <li>• CMS</li> </ul>	<ul style="list-style-type: none"> <li>• CMS</li> </ul>	<ul style="list-style-type: none"> <li>• CMS</li> </ul>	<ul style="list-style-type: none"> <li>• Medicare Administrative Contractors</li> </ul>
Medicare Advantage	<ul style="list-style-type: none"> <li>• CMS</li> </ul>	<ul style="list-style-type: none"> <li>• Health Plan</li> </ul>	<ul style="list-style-type: none"> <li>• Health Plan</li> </ul>	<ul style="list-style-type: none"> <li>• CMS</li> </ul>	<ul style="list-style-type: none"> <li>• Health Plan</li> </ul>
Fee-for-Service Medicaid	<ul style="list-style-type: none"> <li>• CMS/State</li> </ul>	<ul style="list-style-type: none"> <li>• CMS/State</li> </ul>	<ul style="list-style-type: none"> <li>• State</li> </ul>	<ul style="list-style-type: none"> <li>• State</li> </ul>	<ul style="list-style-type: none"> <li>• State determined</li> </ul>
Managed Medicaid	<ul style="list-style-type: none"> <li>• CMS/State</li> </ul>	<ul style="list-style-type: none"> <li>• Health Plan</li> </ul>	<ul style="list-style-type: none"> <li>• Health Plan</li> </ul>	<ul style="list-style-type: none"> <li>• State</li> </ul>	<ul style="list-style-type: none"> <li>• Health Plan</li> </ul>

Sources: <https://www.cms.gov/Medicare/Medicare-Contracting/Medicare-Administrative-Contractors/What-is-a-MAC.html>

# Examples of Quality Measure Developers

Organization	Type	Products	Comments
National Quality Forum (NQF)	<ul style="list-style-type: none"> <li>Non-Profit</li> </ul>	<ul style="list-style-type: none"> <li>Recommendations to federal agencies</li> </ul>	<ul style="list-style-type: none"> <li>400 member organizations</li> </ul>
National Committee for Quality Assurance (NCQA)	<ul style="list-style-type: none"> <li>Non-Profit</li> </ul>	<ul style="list-style-type: none"> <li>Evidence-based program for case-management accreditation</li> <li>Consumer Assessment of Healthcare Providers and Systems</li> </ul>	<ul style="list-style-type: none"> <li>HEDIS measures health plan performance</li> </ul>
Healthy People	<ul style="list-style-type: none"> <li>Government</li> </ul>	<ul style="list-style-type: none"> <li>Prioritizes health efforts</li> </ul>	<ul style="list-style-type: none"> <li>Current version Healthy People 2020</li> </ul>
American Society of Health Risk Management	<ul style="list-style-type: none"> <li>Provider association</li> </ul>	<ul style="list-style-type: none"> <li>Credentialing</li> <li>Education</li> </ul>	<ul style="list-style-type: none"> <li>Emphasis on patient care</li> </ul>
Other	<ul style="list-style-type: none"> <li>Health Plans</li> <li>Software Developers</li> </ul>	<ul style="list-style-type: none"> <li>Provider profiling</li> <li>Network contracting</li> <li>Marketing/Employer reporting</li> </ul>	

# National Expenditures by Source of Funds



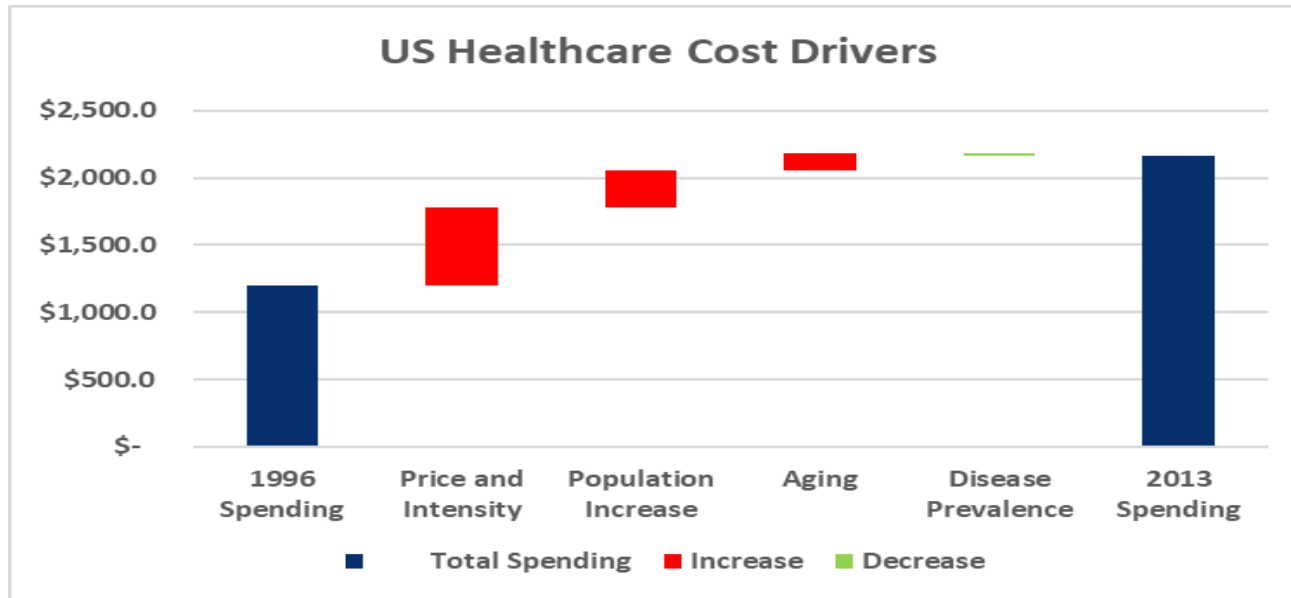
## Comments

- Total spending in the U.S. in 2016 was approximately \$3.3 trillion or 18% of GDP.
  - In 2016 dollars, a 1.0% change in expenditures translates to \$33 billion and a 0.1% change translates to \$3 billion.
- There has been a significant decrease in out-of-pocket spending since 1990 offset by increases in private health insurance, Medicare and Medicaid spending.

Source: CMS, <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsHistorical.html>



# “It’s The Prices, Stupid”

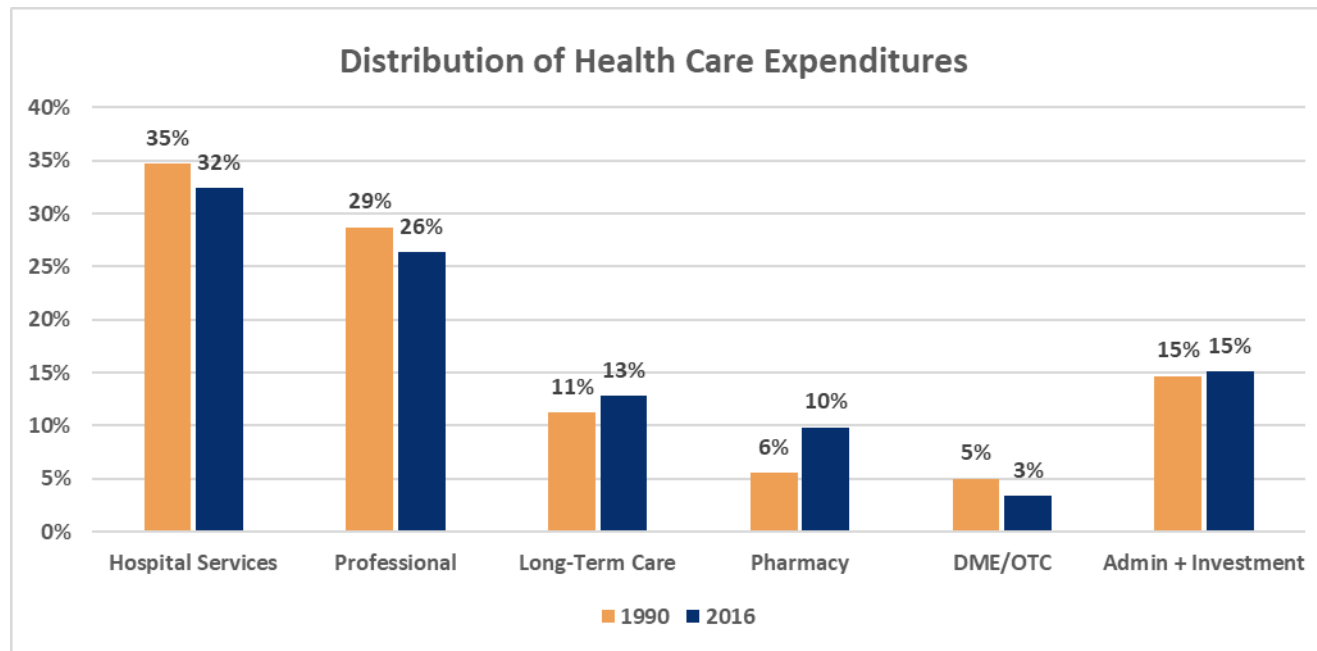


## Comments:

- Several studies have shown that prices have been the major driver of trends
- In the much-acclaimed article “It’s the Prices, Stupid”, the authors demonstrated that prices in the U.S. appear to be higher than comparable countries on a service by services basis

Source: <https://jamanetwork.com/journals/jama/fullarticle/2594716>

# Distribution of Spending by Service Type



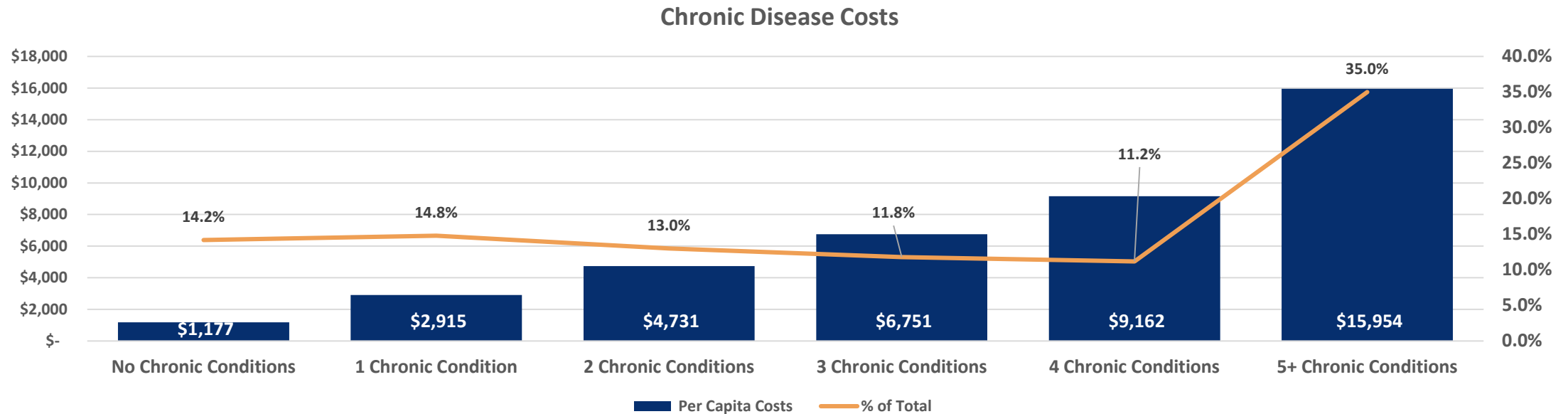
## Comments

- Since 1990 there has been a shift from hospital and professional services to long-term care and pharmacy spending.
- Admin, which refers to insurance-related services, has remained steady over the years.
- Admin, however, does not include provider-related services

## Sources:

- <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/Downloads/highlights.pdf>
- <http://www.healthcostinstitute.org/report/2016-health-care-cost-utilization-report/>

# Chronic Disease Overview



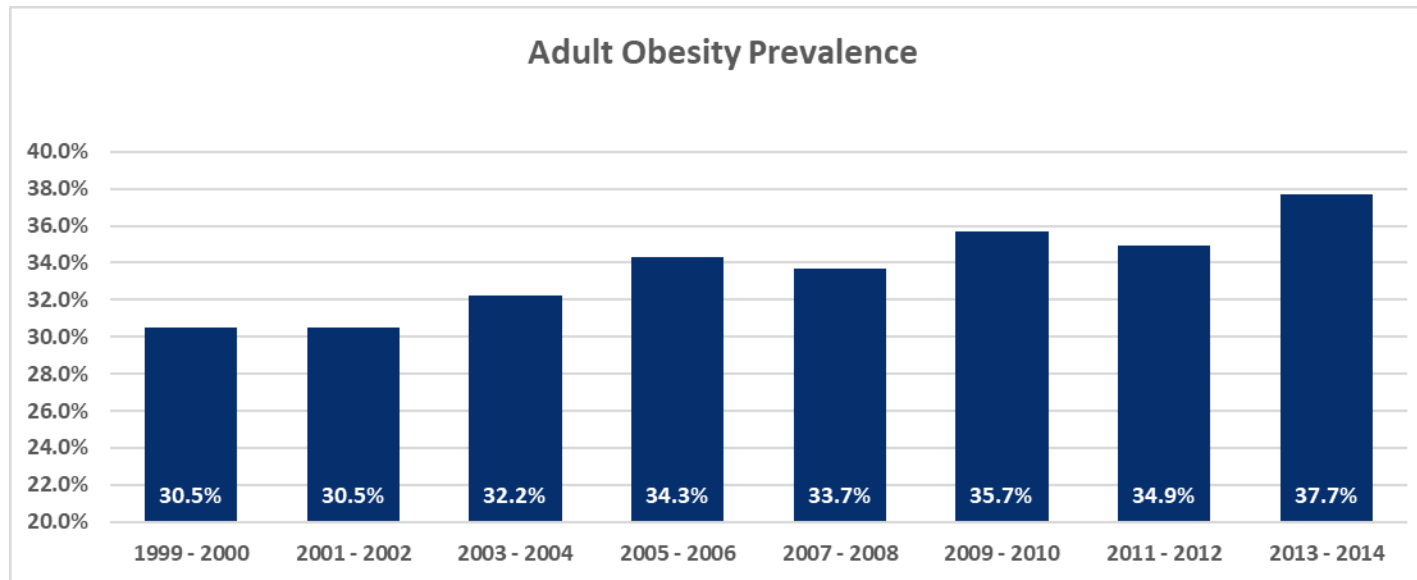
## Comments:

- Chronic diseases are those that are expected to last at least 3 months. For adults, the most prevalent conditions are uncontrolled hypertension (high blood pressure) and hyperlipidemia (high cholesterol and high triglycerides). For children the most common conditions are asthma and allergies.
- 86% of healthcare spending is for patients with one or more chronic conditions; 71% of spending is for patients with more than one chronic condition.
- Key risk factors include obesity, smoking, poor medication compliance

### Source

- <https://www.ahrq.gov/sites/default/files/wysiwyg/professionals/prevention-chronic-care/decision/mcc/mccchartbook.pdf>
- <https://www.cdc.gov/nchs/data/hus/hus16.pdf#053>

# Obesity and Smoking



## Comments:

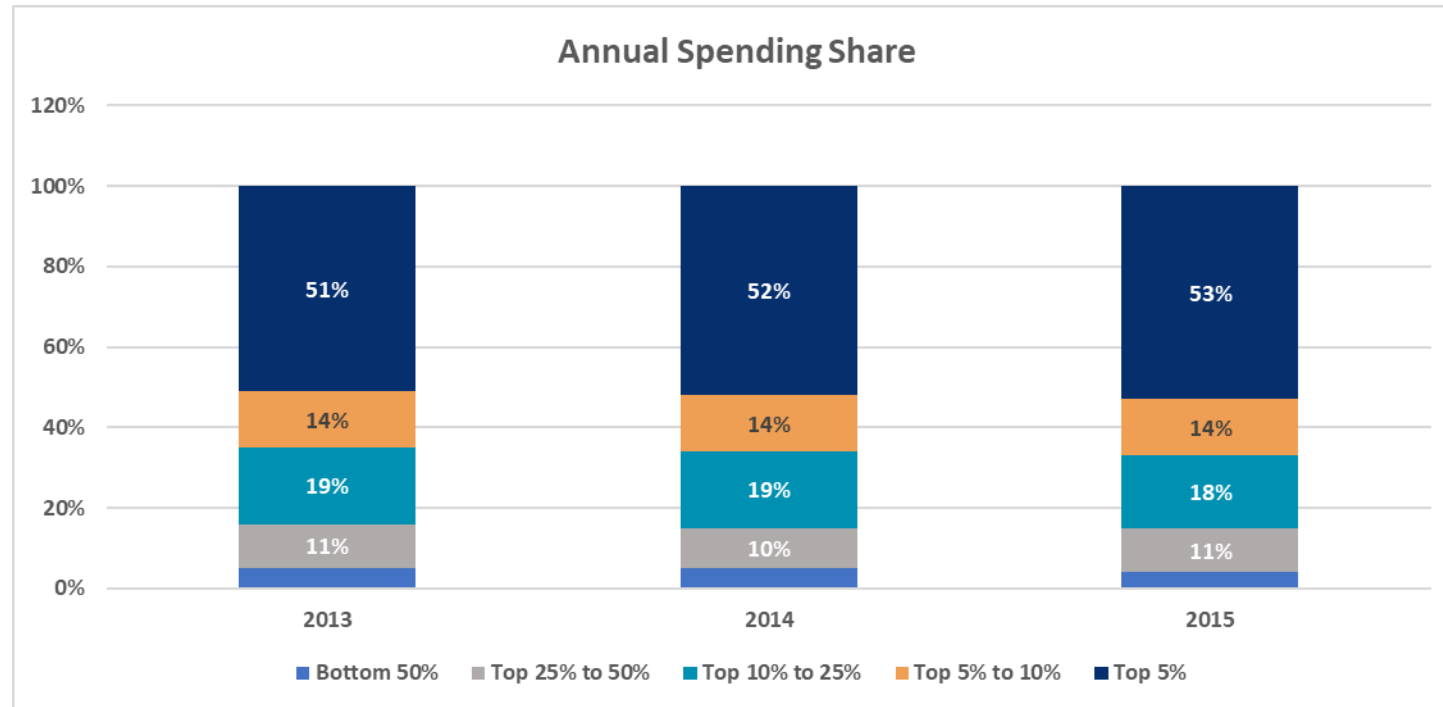
- Two major risk factors for chronic diseases are obesity and smoking.
- The adult obesity rate in the U.S. is 37.7%, a 24% increase since the 1999 – 2000 time period.
- Similarly, the youth obesity rate is 17.2%, also a 24% increase.
- Adult smoking rates have decreased from 42.4% in 1965 to 15.1% in 2015, a 64% drop.
- Apps, FitBits, programs will help, but how do we measure long-term effectiveness?

Sources:

<https://www.cdc.gov/nchs/data/databriefs/db219.pdf>

[https://www.cdc.gov/tobacco/data\\_statistics/tables/trends/cig\\_smoking/index.htm](https://www.cdc.gov/tobacco/data_statistics/tables/trends/cig_smoking/index.htm)

# Distribution of Patients



## Comments:

- The top 5% of all patients account for 50% of the costs.
- From 2013 to 2015, less than 40% of the top 5% spenders were in the top 5% in the previous years.
- About 25% of all traditional Medicare spending is for patients in the last year of life and this proportion has held for many years.

Sources:

<http://www.healthcostinstitute.org/wp-content/uploads/2018/02/HCCI-Issue-Brief-Top-Spenders.pdf>

<https://www.kff.org/medicare/fact-sheet/10-faqs-medicares-role-in-end-of-life-care/>

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What Can We Do About It?

# What Can We Do About It?

- **On-going Efforts**

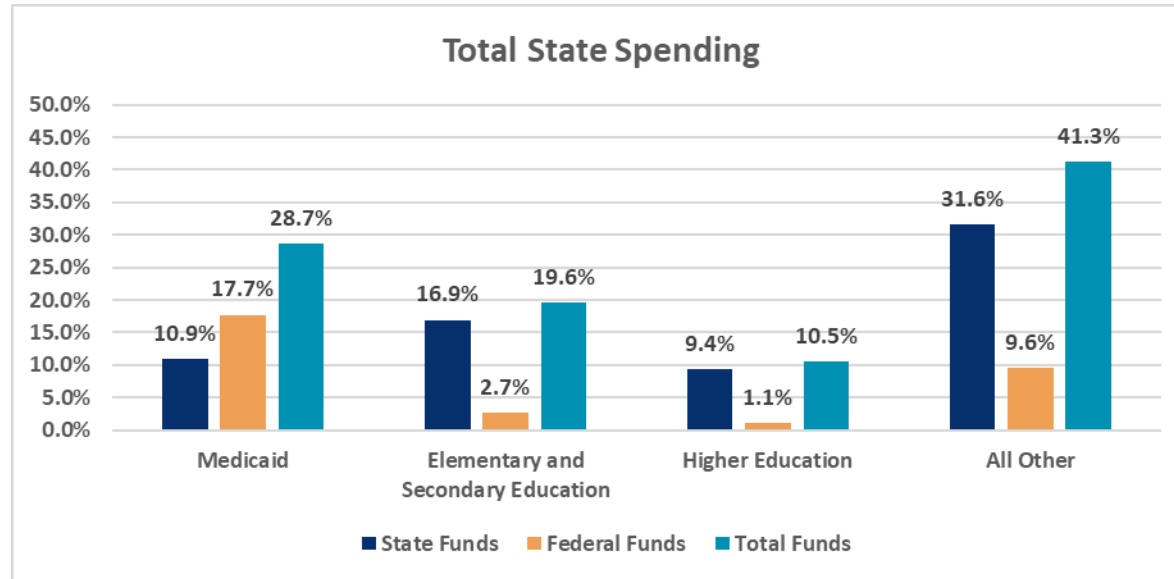
- State and local solutions
- Value-Based reimbursement methodologies (VBR)
- Consumerism
- Technology in patient care
- Data and data systems
- Clinical Research

- **Disruptors**

- Public policy at the Federal level
- Block-chain

- **What are we missing?**

# State Budget Implications



- Key tools for a state
  - Waivers for Medicaid and the Individual market
  - State Innovation Models
  - Legislative options

Source: <https://www.macpac.gov/subtopic/medicaids-share-of-state-budgets>



# Other State and Local Solutions

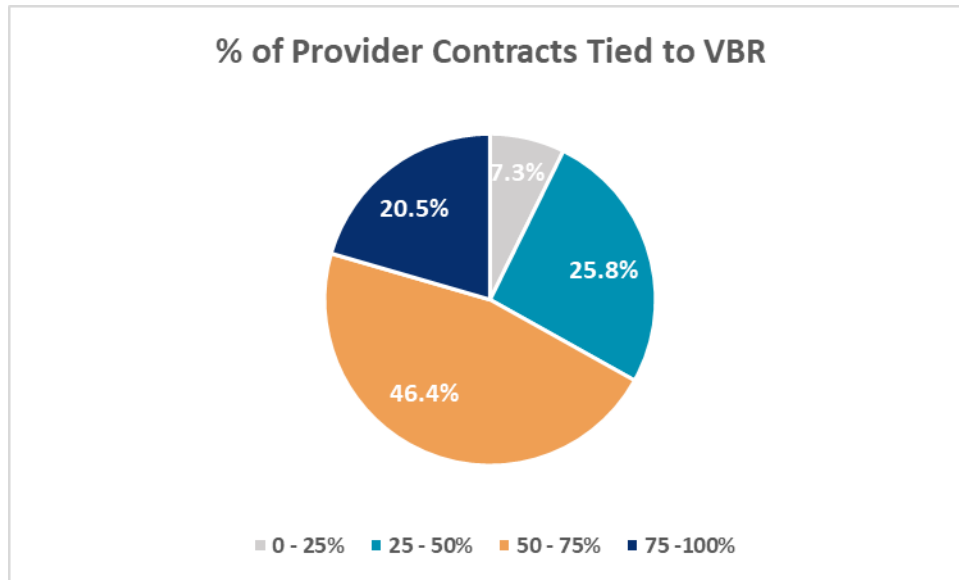
- **Players**

- Public health organizations
- Hospital-community collaborations
- Local governments (city, county)
- Disease-centric programs
- Community health centers and rural health centers
- Health plans
- Employers

- **Emphasis**

- Services (vaccines, screenings, etc.)
- Identifying gaps in care
- Managing chronic disease
- Delivery of emergency services

# Value-Based Reimbursement (VBR)

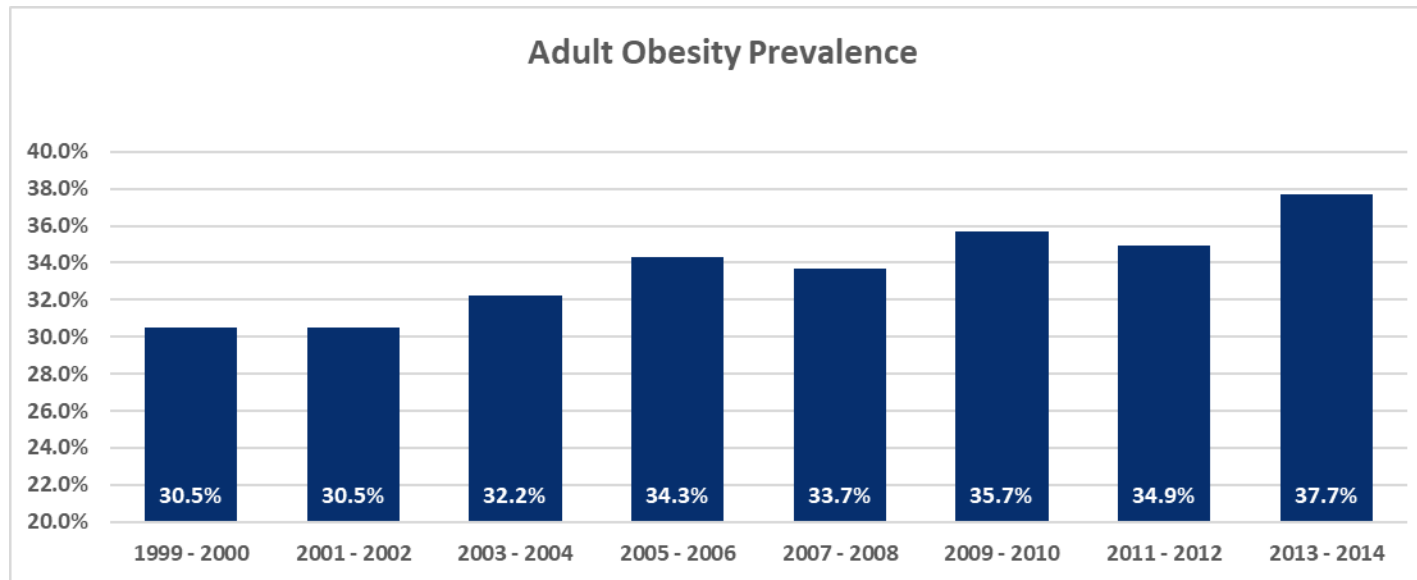


## Comments:

- Cultural change – too early to really measure success
- Quality measures often based on activity, not outcomes
- In general, providers are concerned about time spent on paperwork
- Hospital-physician consolidations may be a factor
- 23% of all active physicians are over age 65

Source: <https://www.healthedge.com/sites/default/files/insights/2019-HE-VoM-SR-VBR.pdf>

# Consumerism



## Comments:

- Two major risk factors for chronic diseases are obesity and smoking.
- The adult obesity rate in the U.S. is 37.7%, a 24% increase since the 1999 – 2000 time period.
- Similarly, the youth obesity rate is 17.2%, also a 24% increase.
- Adult smoking rates have decreased from 42.4% in 1965 to 15.1% in 2015, a 64% drop.
- Apps, FitBits, programs will help, but how do we measure long-term effectiveness?

Sources:

<https://www.cdc.gov/nchs/data/databriefs/db219.pdf>

[https://www.cdc.gov/tobacco/data\\_statistics/tables/trends/cig\\_smoking/index.htm](https://www.cdc.gov/tobacco/data_statistics/tables/trends/cig_smoking/index.htm)

# Technology in Direct Patient Care

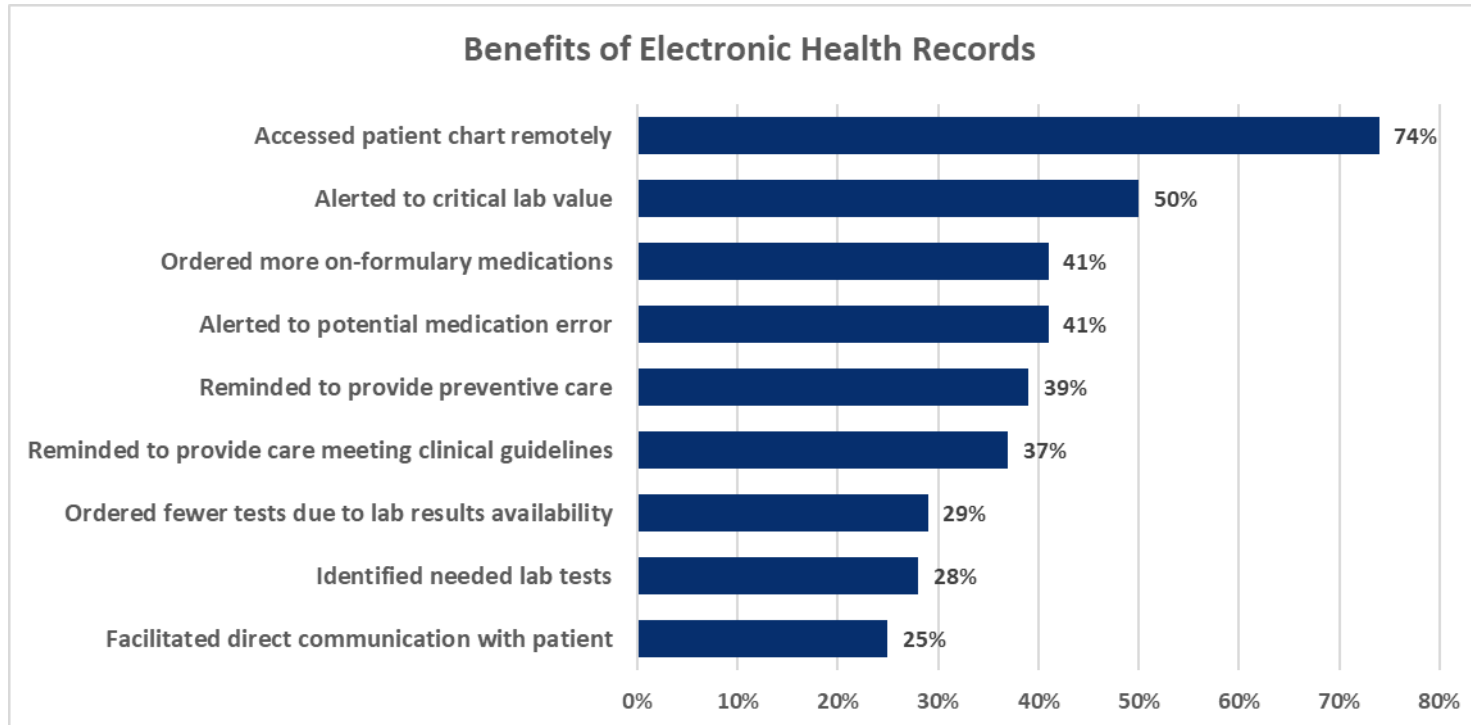
- **Examples**

- Computer-assisted imaging
- Robotic surgery
- Targeted gene therapy
- Telemedicine /Telehealth

- **The role of the physician**

- Treatment recommendations
- Validating results
- Coordination of care
- Communications with patients

# Electronic Health Records



## Comments:

- By 2017, electronic health record adoption rate was 67%.
- Providers are still dissatisfied with their systems.
- Results available on-line to consumers
- Interoperability Road Map, Block Chain Technology coming soon

Source:

<https://www.healthit.gov/providers-professionals/benefits-electronic-health-records-ehrs>

<https://www.practicefusion.com/blog/ehr-adoption-rates/>

# Clinical Research

- **Unsupervised learning/Artificial intelligence**
  - Recognizes patterns
  - Examples
    - Predicting large claims/hospitalizations
    - Candidate drugs to treat a condition
- **Limitations**
  - No audit trail to monitor experience, measure risk and opportunity
  - Clinical trials/other tests still required to validate results

# Lowering Rx Drug Costs is the Public's Top Health Policy Priority for Congress

Percent who say each of the following is **extremely important** for Congress to work on now:

<u>RANK</u>	<u>TOTAL</u>	<u>DEMOCRATS</u>	<u>INDEPENDENTS</u>	<u>REPUBLICANS</u>
1	Lowering Rx drug costs (54%)	Lowering Rx drug costs (64%)	Lowering Rx drug costs (53%)	Lowering Rx drug costs (48%)
2	Continuing ACA protections for pre-existing conditions (46%)	Continuing ACA protections for pre-existing conditions (63%)	Continuing ACA protections for pre-existing conditions (46%)	Repealing and replacing the ACA (40%)
3	Protecting people from surprise out-of-network bills (43%)	Protecting people from surprise out-of-network bills (51%)	Protecting people from surprise out-of-network bills (45%)	Protecting people from surprise out-of-network bills (34%)
4	Repealing and replacing the ACA (23%)	Implementing a national Medicare-for-all plan (32%)	Repealing and replacing the ACA (21%)	Continuing ACA protections for pre-existing conditions (27%)

SOURCE: KFF Health Tracking Poll (conducted January 9-14, 2019). See topline for full question wording and response options.

# What Are We Missing?

- Cost-effectiveness measurement techniques
  - Long-term impact
  - Relative impact
- Risk and opportunity measurement
- Techniques to monitor experience
- Transferability of findings



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What's Next for the Profession?

# Key Challenges to the Profession

- What skills do we need to build or enhance?
- What can we do to build our knowledge base?
- How can we make sure the voice of the actuary is heard?

# Our Toolkit

- **The SOA**

- Funded Research
- Health Section Council strategic initiatives
- Open Health Section Council sub-groups
- Continuing/basic education
- Golin

- **The Academy**

- Issue briefs
- Hill visits
- Letters to policymakers

- **Initiative 18/11**

- Joint sponsorships with other organizations: Research, webinars, etc.

# Initiative 18|11: Phase 2

- **Managed Care 3.0 Strategic Initiative**

- What does the future of managed care look like?
- What do we need to do to be ready for this?
- Sarah Osborne, Chair

- **Pharmacy Strategic Initiative**

- Emphasis on transparency on the pharmacy process
- Greg Warren, Chair

- **5/50 Research Project**

- Predicting and analyzing the 5% of the population that accounts for 50% of the total costs
- Joan Barrett, Chair

# Initiative 18|11: Phase 3

- Your thoughts?