



The Good

The Bad

The Ugly

In the History of Medicine

OLLI Spring 2020 Semester

January 28 to March 17

Néstor A. Ramírez, MD, MPH, FAAP

OLLI at University of Illinois ©NAR

Session 7

March 10, 2020

The US Healthcare System

A Patchwork Quilt of
Alphabet Soup Entities

Néstor A. Ramírez, MD, MPH

Objectives for Session 7

- Show the multiple entities, both governmental and private which run healthcare in the US.
- Expose that our healthcare is the world's most expensive, but does not provide the highest quality outcomes.
- Explain the goals and failures of federal agencies that are supposed to protect the US healthcare consumer.

Federal Healthcare Patchwork



AGENCY FOR HEALTH CARE ADMINISTRATION

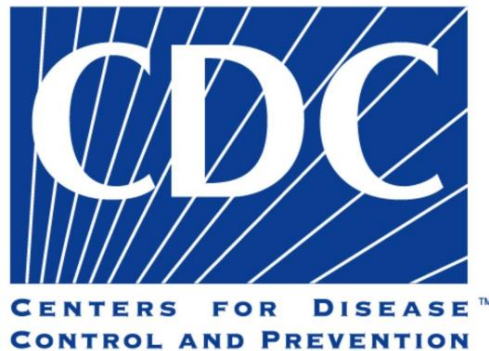


CENTERS FOR DISEASE CONTROL AND PREVENTION



The Patchwork Straightened Up

Medicare

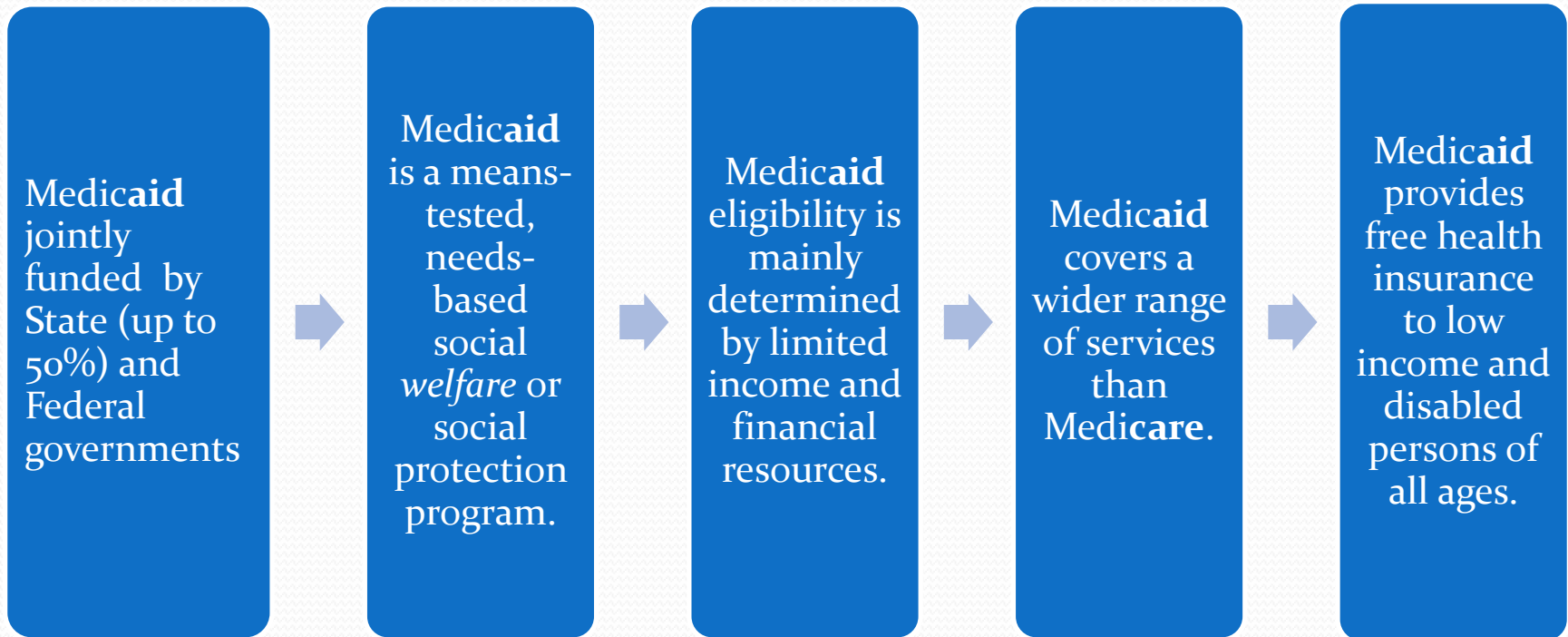


Governmental Healthcare

Alphabet Soup

- HHS
- NIH
- CDC
- FDA
- PHS
- IHS
- PHS
- NCCIH
- NICHD
- CMS
- SAMHSA
- AHRQ
- HRSA
- NCI
- NIA
- NHGRI
- NIAID
- NIMHD

Medicaid



MEDICARE

- Part A = Hospital Insurance
 - Part B = Medical Insurance
 - Part C = Medicare Advantage Plans (contractors)
 - Part D = Prescription Drug Coverage
- *****
- Medicare covers 80% of the cost of Parts A and B.
 - Part A is free, but Part B requires a monthly payment.
 - Part C is run by private insurance companies.
 - Supplements variably pay Part D costs.

Medicaid vs. Medicare

- **Medicare** is a federal social *health insurance* program for people age 65 or over, people <65 with certain disabilities, and any person with end-stage renal disease (ESRD).
- Non-US citizens can obtain **Medicaid** and CHIP benefits after 5 years of “qualified” immigration status (**Legal Permanent Resident**).
- Non-US citizens can obtain **Medicare** coverage if they get Social Security retirement benefits or Social Security Disability Insurance.

Multiple Players and Payers (1)

Private Healthcare

- Usually “*Pay-for-Play*”: money is exchanged for services or for engagement in certain activities.
- No accumulation or residual benefits.
- In “employer provided insurance”, the employer is an intermediary between the users and the providers.

Multiple Players and Payers (2)

Private Insurance has an infinite variety of :

- **Plans**
- **Premiums**
- **Payments**
- **Privileges**
- **Providers**
- **Prohibitions**
- **Penalties**
- **Perks.**

US Healthcare Ranking

OECD Data

Organization for Economic
Cooperation & Development.

Yearly comparison of health
care systems performance

Spending, hospitals, physicians,
pharmaceuticals, prevention,
mortality, quality, safety and prices.

11 countries: Australia, Canada, France,
Germany, the Netherlands, NZ, Norway,
Sweden, Switzerland, UK and US.

**The median is the value of all
36 members of the OECD.**

US Compared to 11 Industrialized Countries

Spends the highest percentage of GDP: 17.8% vs 11.5%.

Has lower rates of health insurance coverage: 90% vs 99%.

Less smokers but more obesity and infant mortality.

MRI's per 1,000 people: 111 vs 70.

OECD data

US Compared to 11 Industrialized Countries

CT scans per
1,000 people:
245 vs 151.

Spends \$1,443
vs \$749 per
person on
pharmaceuticals.

Spends 8.3% vs
3.2% of health
expenses on
administration.

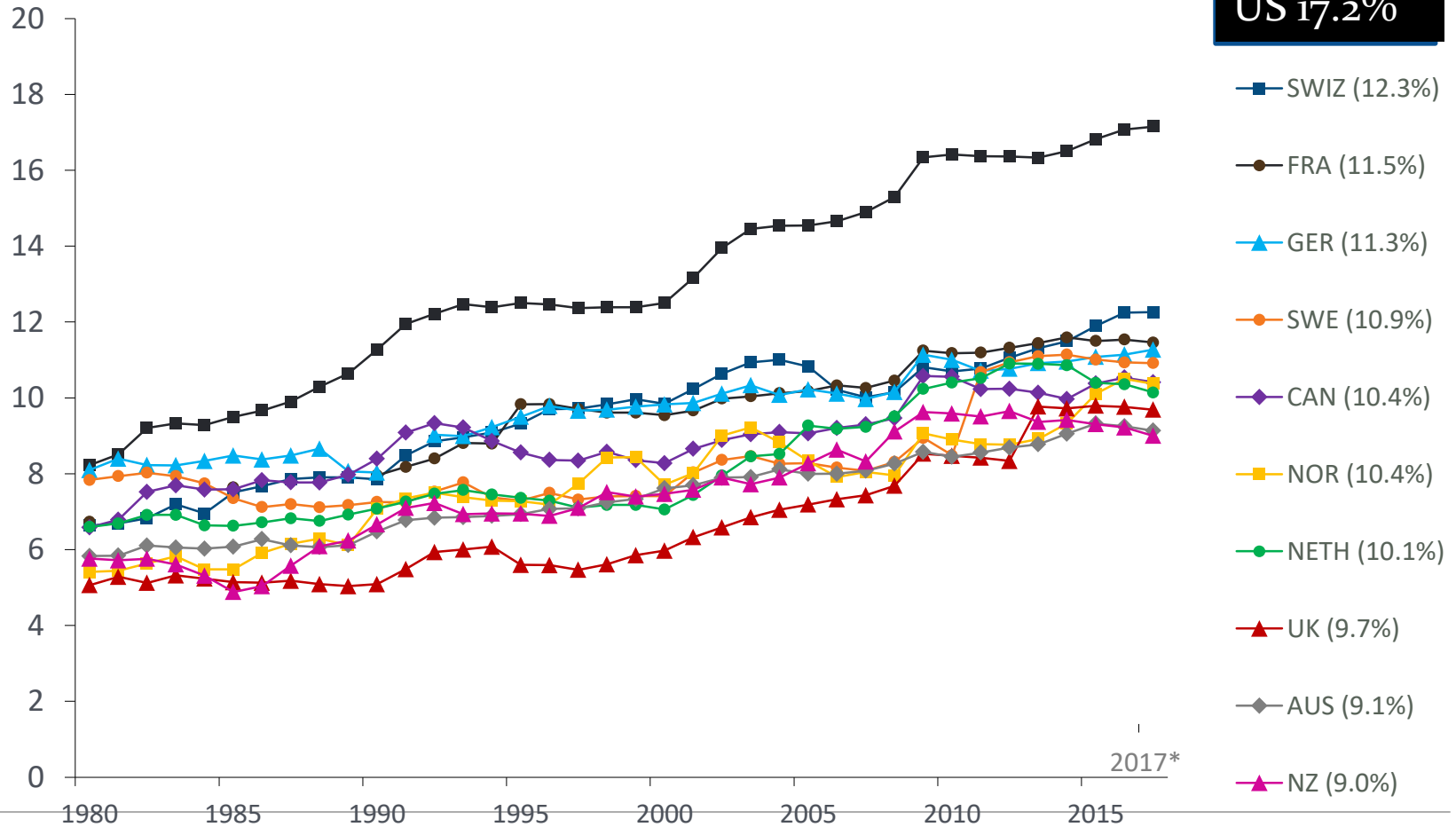
Pay for a GP is
\$218,173 vs
\$112,000.
Specialists &
nurses also much
higher.

Health Care Spending as % of GDP, 1980–2017

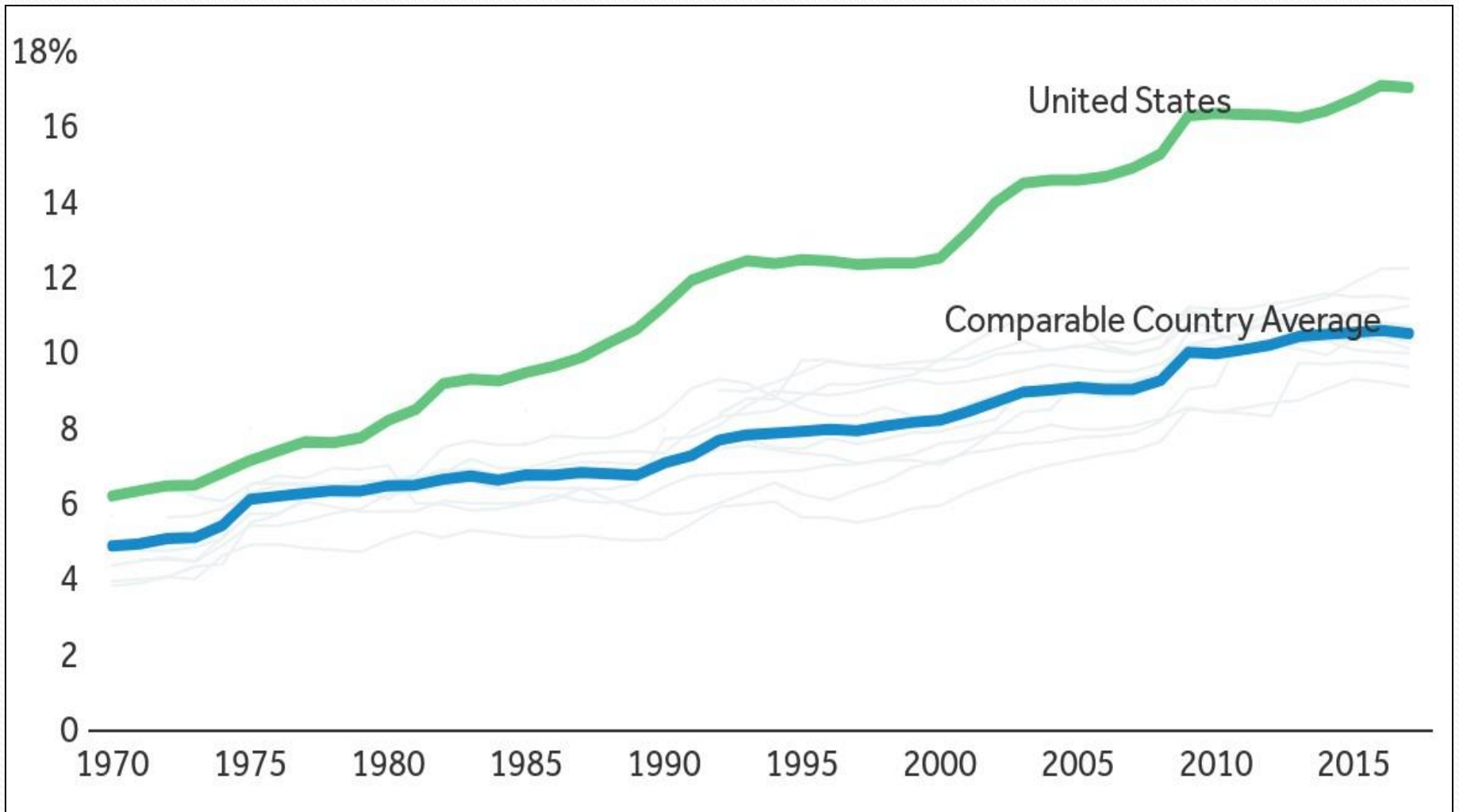
Adjusted for Differences in Cost of Living

Percent (%) of GDP

2017* data:

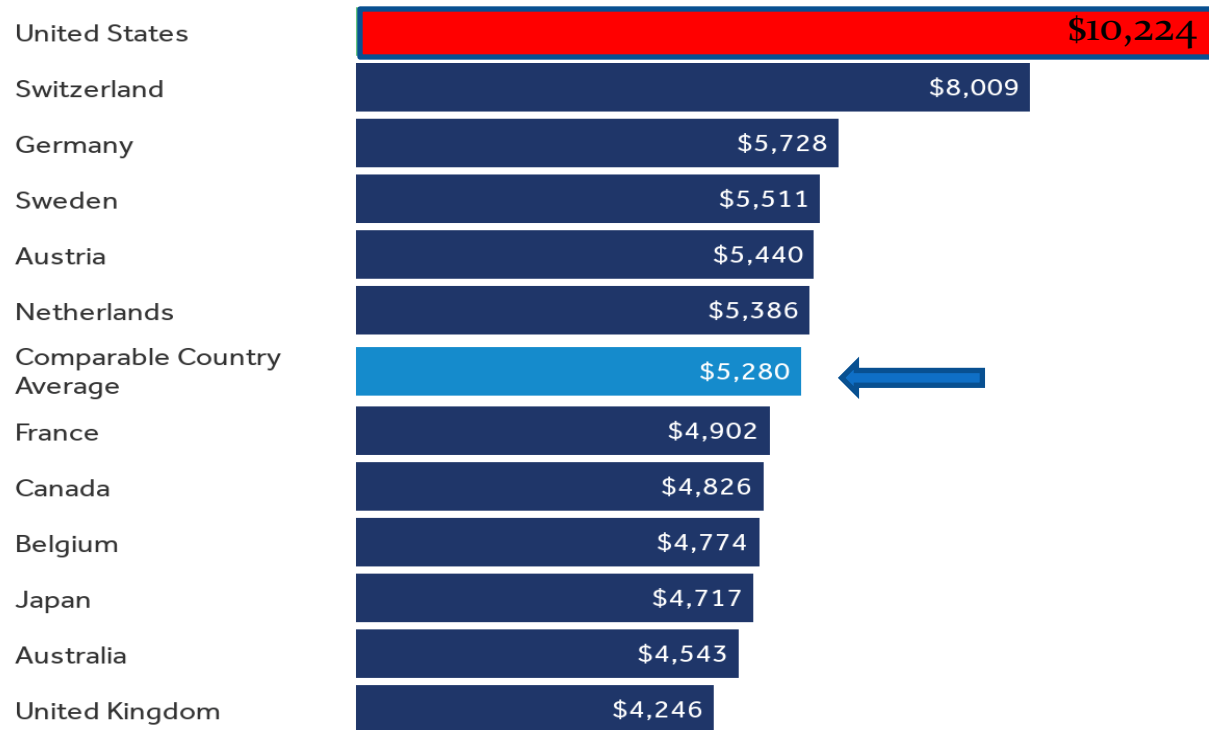


Healthcare Expenditures vs GDP



Health Care Expenses per Capita (OECD)

Health consumption expenditures per capita, U.S. dollars, PPP adjusted, 2017



Notes: U.S. value obtained from National Health Expenditure data. Health consumption does not include investments in structures, equipment, or research.

Source: KFF analysis of OECD and National Health Expenditure (NHE) data

Peterson-KFF

Health System Tracker

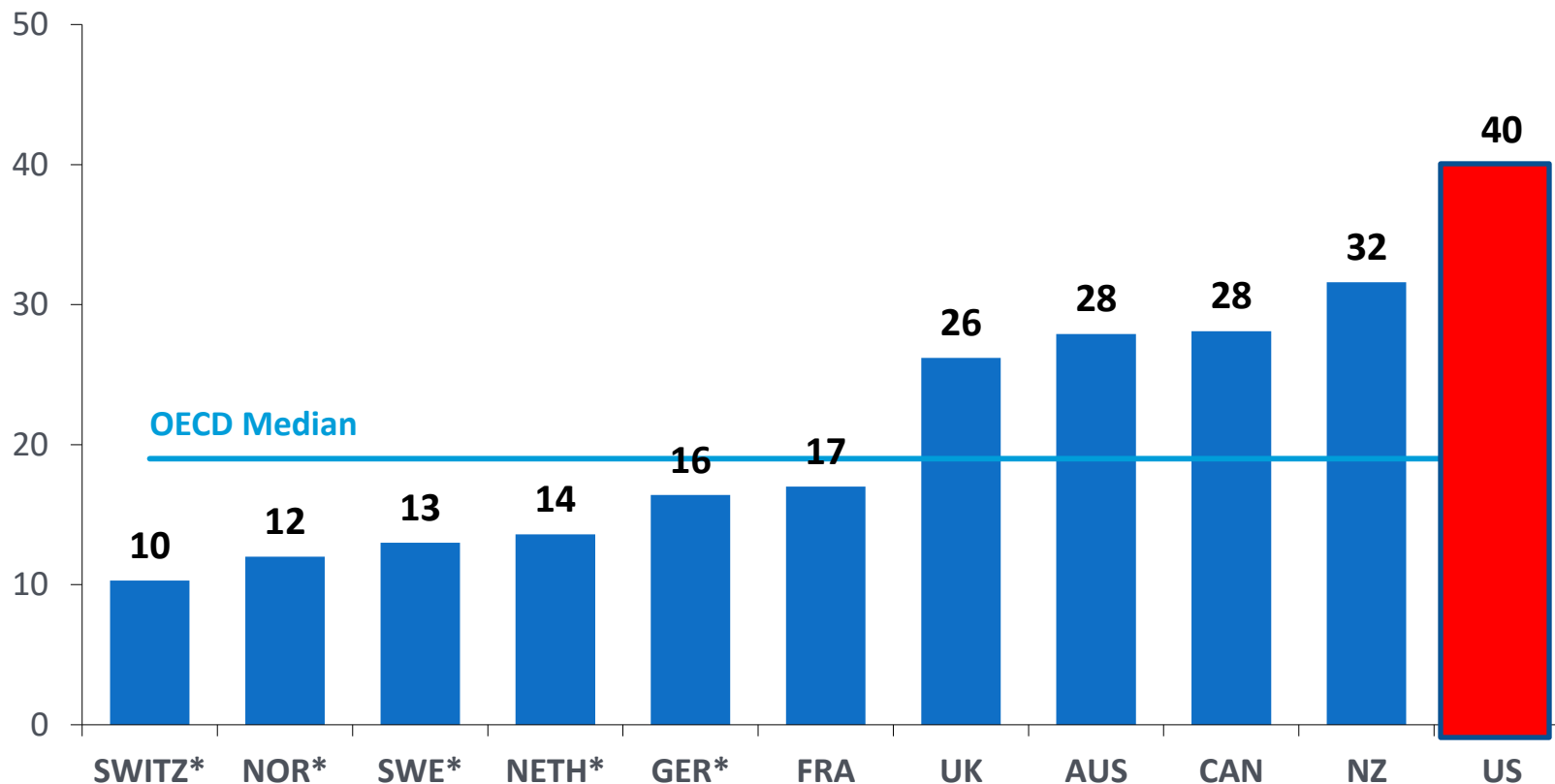
Comparisons 2017

	AUS	CAN	FRA	GER	NETH	NZ	NOR	SWE	SWIZ	UK	USA
Overall Ranking	2	9	10	8	3	4	4	6	6	1	11
Care Process	2	6	9	8	4	3	10	11	7	1	5
Access to Care	4	10	9	2	1	7	5	6	8	3	11
Admin. Efficiency	1	6	11	6	9	2	4	5	8	3	10
Equity/ No Disparities	7	9	10	6	2	8	5	3	4	1	11
Health Outcomes	1	9	5	8	6	7	3	2	4	10	11

OECD and Commonwealth Fund data

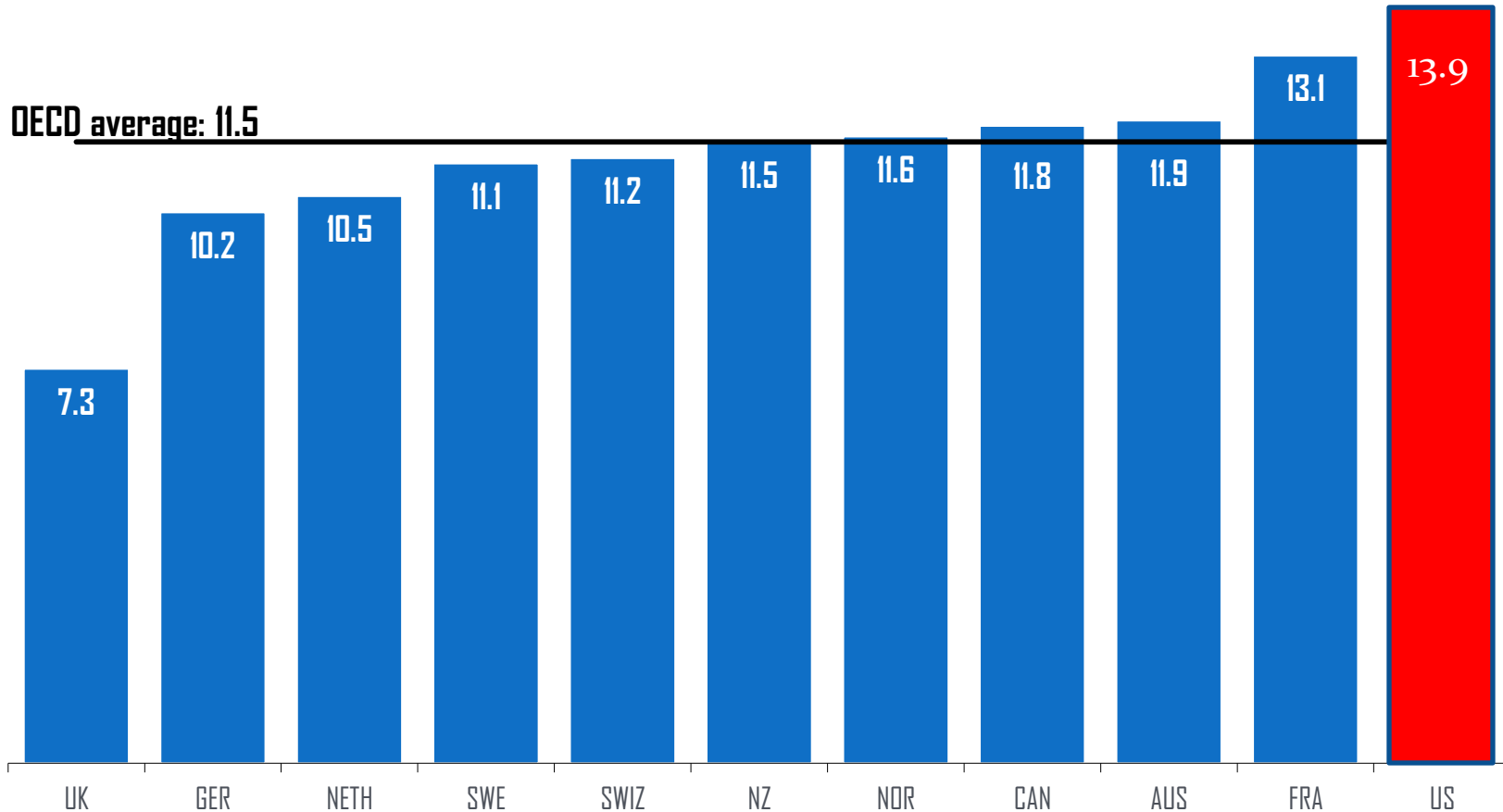
Obesity Rate, 2016

Percent (%)



Suicides, 2016

Deaths per 100,000 population (standardized rates)



Notes: Rates reflect age- and sex-standardized rates for 2016 or latest available year: 2015 for CAN, FRA; 2014 for NZ. OECD average reflects the average of 36 OECD member countries, including ones not shown here.

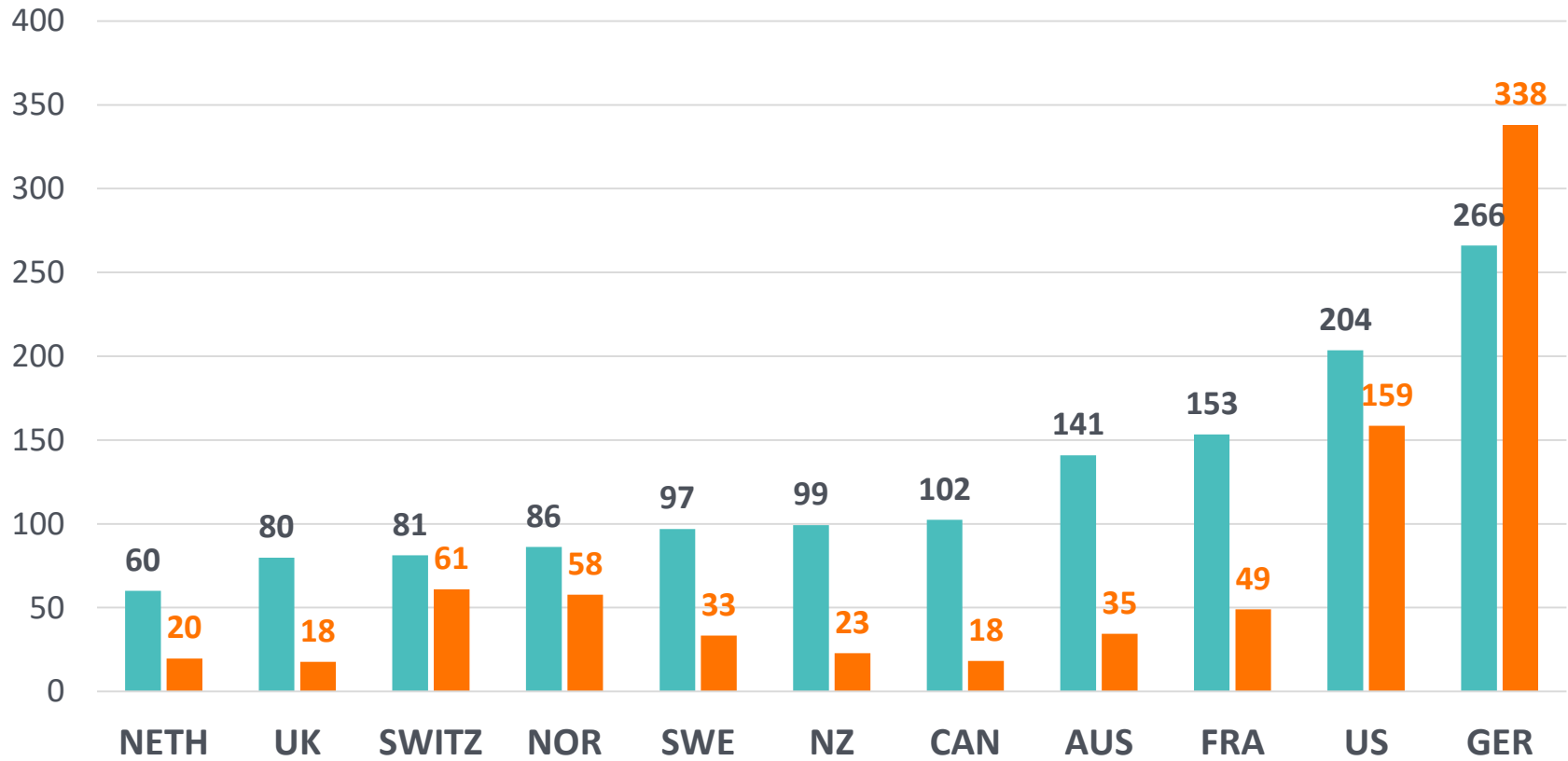
Data: OECD Health Statistics 2019.

Diabetes & Hypertension Hospital Discharges, 2016

Discharges 100,000 population

■ Diabetes

■ Hypertension



Life Expectancy by Country for Women and Men in 2020

RANK	Country	Average Age	Women	Men
1	Hong Kong	84.7	87.6	81.8
2	Japan	84.5	87.5	81.3
3	Switzerland	81.6	85.5	81.7
4	Singapore	83.7	85.7	81.4
5	Italy	83.4	85.4	81.1
6	Spain	83.4	86.1	80.7
7	Australia	83.3	85.3	81.3
8	Iceland	82.9	84.4	81.1
9	Israel	82.8	84.4	81.1
9	South Korea	82.8	85.8	79.7
////	////	////	////	////
35	United States	78.9	81.4	76.3
	WORLD	72.6	74.9	70.4

United Nations Human Development Report 2019

High Cost Of US Healthcare



Do Users Share Part of the Blame? (1)



Do Users Share Part of the Blame? (2)



US Department of Health And Human Services



- **US Department of Health & Human Services (HHS)** is a cabinet-level department of the U.S. federal government with the goal of protecting the health of all Americans and providing essential human services.
- Until 1979 called Department of Health, Education, and Welfare (HEW).
- Administered by the Secretary of Health and Human Services, who is appointed by the President with the advice and consent of the Senate.

Familiar Names

- Caspar Weinberger, 1972-1975
- Joseph A. Califano Jr., 1977-1979
- Louis Wade Sullivan, 1989-1993
- Donna Shalala, 1993-2001
- Tommy G. Thompson, 2001-2005
- Kathleen Sebelius, 2009-2014
- Tom Price, 2017-2017
- Eric Hargan, 2017-2018
- Alex Azar, 2018-

Donna Shalala

- Vigorous antidrug policies.
- Nation's longest-serving HHS secretary.
- In 1996, Shalala was the *designated survivor* during Clinton's State of the Union address.
- CEO of Clinton Foundation 2015-2017.
- Currently oldest (78) freshman Representative.

Joseph Califano

- Created the Health Care Financing Administration (HCFA) to run Medicare and Medicaid and instituted computerized techniques to police welfare programs.
- Mounted major health promotion and disease prevention programs:
 - Childhood immunization.
 - First national anti-smoking campaign.
 - Alcoholism initiative.
 - Issuance of Healthy People, the first Surgeon General's Report on Health Promotion and Disease Prevention which set health goals for the American people.
 - Began the collection of hundreds of millions of dollars of defaulted student loans.
 - Worked with the Congress to maintain the financial integrity of the Social Security system, and contain health care costs.
 - Restructured Federal aid to elementary, secondary and higher education.
 - Issued the first regulations to provide equal athletic opportunity to women under Title IX.
- Initially refused to sign meaningful regulations for Section 504 of the Rehabilitation Act of 1973.

Tommy Thompson

- Efforts to strengthen U.S. preparedness for a bioterrorism attack.
- Increased funding for the National Institutes of Health
- Expanded health insurance coverage to lower-income Americans.
- Focused attention on health problems such as obesity and diabetes.
- He also was elected chairman of the Global Fund to Fight AIDS, Tuberculosis and Malaria in 2003.

Tom Price

- In September, 2017, he resigned as head of HHS following criticism of his use of private charters and military aircraft for travel.
- In July 2018, the HHS inspector general urged the HHS to recoup at least \$341,000 from Price for wasteful expenditures.

Secretary of Health & Human Services

- Duties include advising the president on matters of health, welfare, and income security programs.
- He administers the Department to carry out approved programs and make the public aware of its objectives.
- Oversees 11 agencies including the Food and Drug Administration (FDA), Centers for Disease Control (CDC), National Institutes of Health (NIH), Centers for Medicare & Medicaid Services (CMS), and Administration for Children and Families (ACF).



Alex Azar, current Secretary of HHS.

Operating Divisions

- Public Health Service (PHS)
- Agency for Healthcare Research and Quality (AHRQ).
- Centers for Disease Control and Prevention (CDC).
- Centers for Medicaid and Medicare Services (CMS).
- Food and Drug Administration (FDA).
- Indian Health Service (IHS).
- National Institutes of Health (NIH).
- Substance Abuse and Mental Health Services Administration (SAMHSA)

The FDA

Food and Drug Administration



Food & Drug Administration (FDA)

- Agency of the Department Health & Human Services.
- Protects and promotes public health by control and supervision of:
 - Food safety.
 - Tobacco products.
 - Dietary supplements.
 - Prescription and over-the-counter (OTC) medications.
 - Vaccines and biopharmaceuticals.
 - Blood transfusions.
 - Medical devices.
 - ERED's: lasers, cell phones, baggage screening, TV's, microwaves, tanning
 - Cosmetics.
 - Animal foods & feed, and veterinary products.

What the FDA DOES:

Approves color additives in FDA-regulated products.

Approves animal drugs and additives for animal foods.

Approves food additives in food for people.

Approves new drugs and biologics.

FDA uses a risk-based, tiered approach for regulating medical devices

Uses a risk-based approach for human cells and tissues.

What Do The Terms Mean?



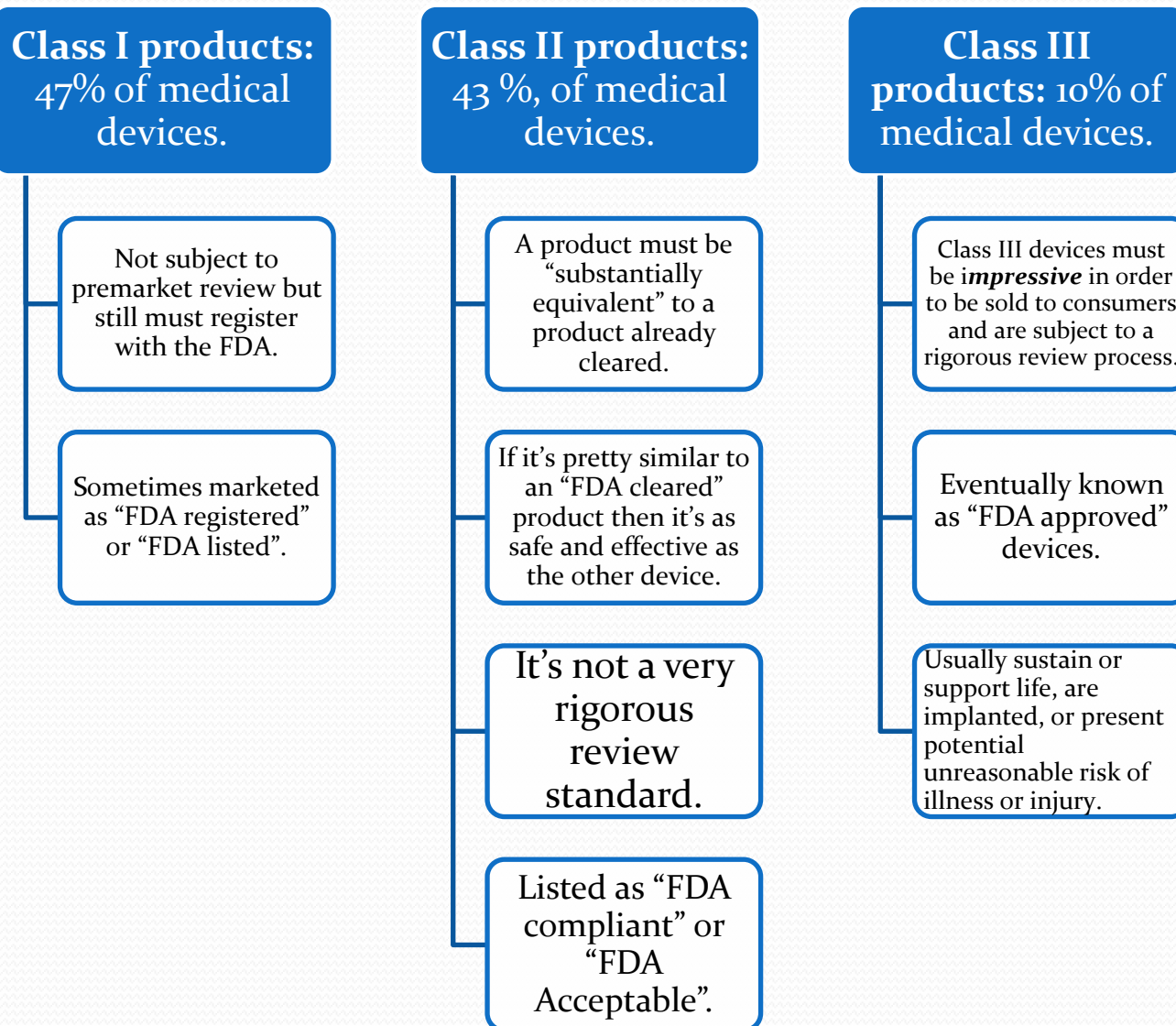
Listed?

Cleared?

Registered?

Approved?

Products Reviewed by the FDA



The FDA Does NOT:

- **Approve cosmetics**
- **Approve dietary supplements.**
- **Approve medical foods.**
- **Approve infant formula.**
- **Approve food labels or the Nutrition info panel.**
- **Approve structure-function claims supplements.**
- **Approve tobacco products.**
- **Approve compounded drugs.**
- **Develop or test products before approving them.**

The Vioxx Case (1)

- **Rofecoxib** is a COX-2 selective nonsteroidal anti-inflammatory drug (NSAID).
- Marketed by Merck for osteoarthritis, RA, Juvenile RA, acute pain conditions, migraine, and dysmenorrhea.
- FDA Approved it in May 1999, by prescription in tablets and as oral suspension.
- Over 80 million people used rofecoxib at some time.
- In September 2004, Merck voluntarily withdrew Vioxx from the market.

The Vioxx Case (2)

- In 2001, the VIGOR (Vioxx GI Outcomes Research) study, compared Vioxx (Merck) with Naprosyn (Pfizer) and discovered a 4X risk of myocardial infarction.
- Merck had withheld risk information from doctors and patients for >5 years.
- Allegedly resulted in between 88,000 and 140,000 cases of serious heart disease, with 30-40% fatality.
- FDA added new “safety information” from this study to the labeling in April 2002.

The Vioxx Case (3)

- APPROVe (Adenomatous Polyp Prevention on VIOXX] also showed increased cardiac risks in 2002.
- In 2005, the FDA concluded that data from large long-term controlled clinical trials **do not** clearly show that COX-2 selective agents have a greater risk of serious CV events.
- In 2006, the Martin Report stated that Merck senior management had “acted in good faith.
- FDA in 2015, stated that available data support a *dose and duration-dependent* effect of an increased risk of serious adverse cardiovascular events for all NSAIDs.

The Vioxx Case (4)

- All 3 studies/reports were financed by Merck.
- Merck has the door open to market Vioxx in US and Canada, but has not done so.
- In 2003, Merck had sales revenue of US\$2.5 *billion* from Vioxx.

The FDA Problems

- User fees.
- Food safety.
- Fraudulent labeling.
- Salt content of foods.
- Not testing implanted products or devices.
- Cannabis.

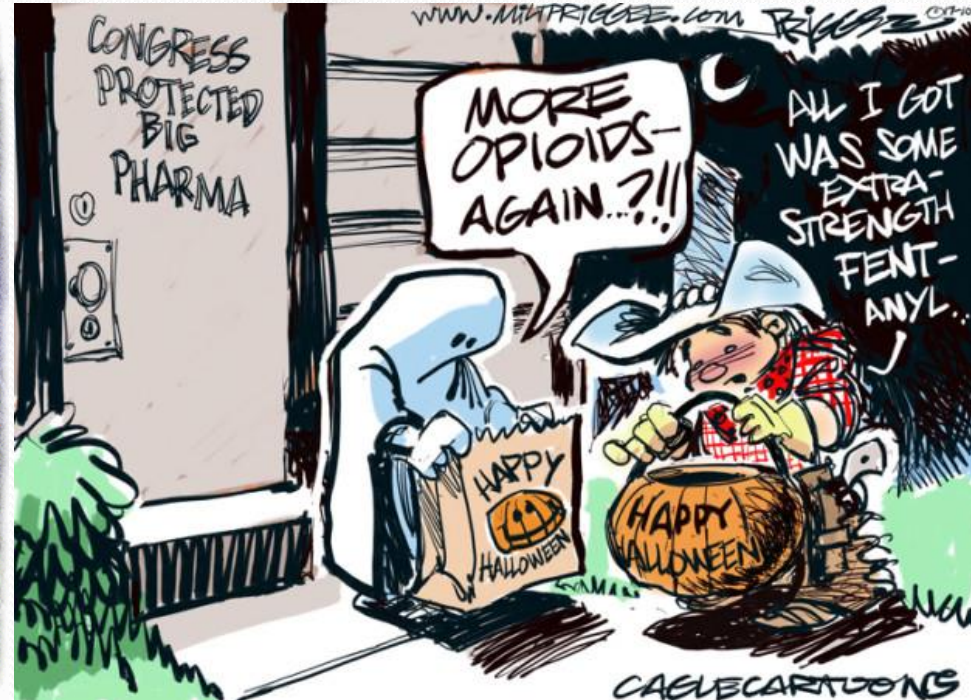
Effect of Government Intervention (NOT) !



EFFECT OF GOVERNMENT INTERVENTION (NOT) !

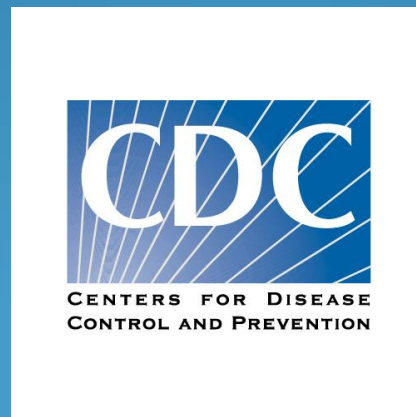


Effect of Government Intervention (NOT)!



The CDC

Centers for Disease Control and Prevention



Surgeon General of the US



Surgeon General of the US ⁽¹⁾

- By law holds the rank of Vice Admiral.
- Reports to the Assistant Secretary of Health (ASH).
- Is the overall head of the Commissioned Corps:
 - 6,500 *uniformed* health professionals.
 - Are on call 24 hours a day.
 - Can be dispatched by the secretary of HHS or the ASH in the event of a public health emergency.
 - Are noncombatants, but can be designated as a military force by the President.

Surgeon General of the US (2)

Leading spokesperson on matters of public health in the federal government of the United States.

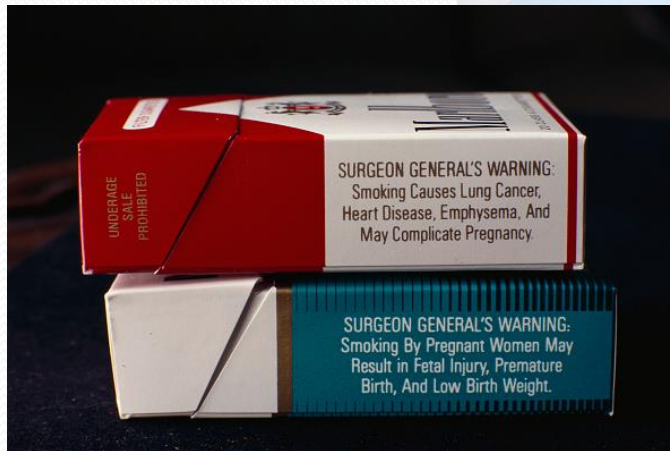
Educates the American public about health issues and advocates healthy lifestyle choices (when authorized by the ASH).

Periodically issues health warnings:

Since 1966, the surgeon general's warning has been present on all packages of American tobacco cigarettes since 1966.

Since 1988, a similar health warning has appeared on alcoholic beverages labels.

Alcohol & Cigarette Warning Labels



Cigarette Health Warnings

SURGEON GENERAL'S WARNING: Smoking Causes Lung Cancer, Heart Disease, Emphysema, And May Complicate Pregnancy.

SURGEON GENERAL'S WARNING: Quitting Smoking Now Greatly Reduces Serious Risks to Your Health.

SURGEON GENERAL'S WARNING: Smoking By Pregnant Women May Result in Fetal Injury, Premature Birth, And Low Birth Weight.

SURGEON GENERAL'S WARNING: Cigarette Smoke Contains Carbon Monoxide.

Famous Surgeon General Statements

RA Luther Terry, MD

In 1964, published a report saying that smoking may be hazardous to health.

Terry and his committee defined cigarette smoking of nicotine as NOT an addiction.

The committee consisted mainly of physicians who themselves smoked.

This report went uncorrected for 24 years.

Famous Surgeon General Statements

VA C.Everett Koop, MD

In 1986, called for AIDS education in elementary school, and fully supported using condoms for disease prevention.

Resisted pressure from the Reagan administration to report that abortion was psychologically harmful to women.

He believed it was a moral issue rather than one concerning the public health.

Famous Surgeon General Statements

VA Jocelyn Elders, MD

- In 1994, at a UN AIDS conference, she was asked if it would be appropriate to promote masturbation to young people as a means of preventing them from engaging in riskier forms of sexual activity.
- She replied, "I think that it is part of human sexuality, and perhaps it should be taught."
- She also spoke in favor of considering drug legalization.
- Referring to the abortion issue, she said, "We really need to get over this love affair with the fetus and start worrying about children."
- She was fired by President Bill Clinton in December 1994!

RA Antonia Novello, MD

- Was appointed to the temporary rank of vice admiral while Surgeon General, the first woman and the first Hispanic to hold the position.
- Worked to discourage illegal tobacco use by youngsters.
- Criticized the tobacco industry for appealing to the youth market through the use of cartoon characters such as Joe Camel.
- Supported a policy prohibiting family planning program workers who received federal financing from discussing abortion with their patients.

The USPHS

United States Public Health Service



US Public Health Service (PHS)

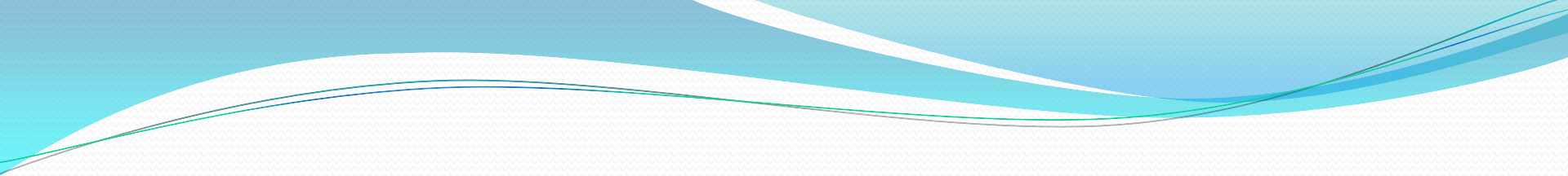
- Started in 1798 as the Marine Hospital Service to care for merchant marine seamen.
- In 1889, the Surgeon General position was created.
- Renamed Public Health Service in 1912.
- US Public Health Service (PHS) is the main division of the HHS and is led by the Asst. Secretary for Health.
- USPHS Commissioned Corps, the uniformed service of the PHS, is led by the *Surgeon General*.

- Was assigned duties and powers of quarantine.
- Responsibility to perform medical inspection of arriving immigrants (Ellis Island).
- Authority to enforce Clean Air Act and monitor pollution of waters across state lines.
- Participated in the Tuskegee study.
- Participated in the Guatemala Siphyllis study.

US Public Health Service

8 of the 11 operating divisions of the DHHS are part of the Public Health Service:

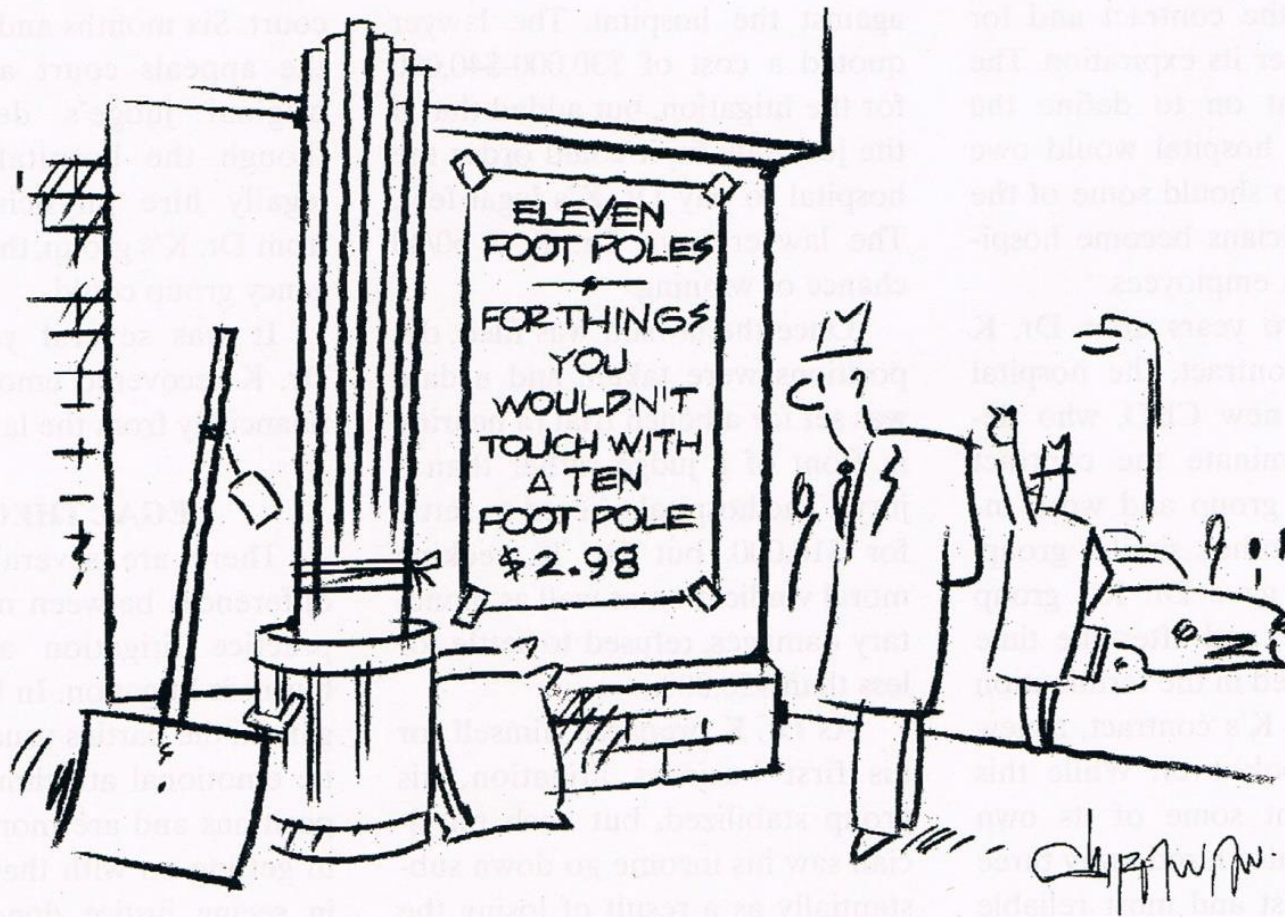
- National Institutes of Health
- Centers for Disease Control and Prevention
- Indian Health Service
- Food and Drug Administration
- Agency for Toxic Substances and Disease Registry
- Health Resources & Services Administration
- Agency for Healthcare Research and Quality
- Substance Abuse & Mental Health Services Administration



In the US system, healthcare, business, politics and profit are so intertwined, that deciders often don't want to touch some issues even with a ten-foot pole.

Well I've got a solution for that:

Eleven-Foot Poles !!!

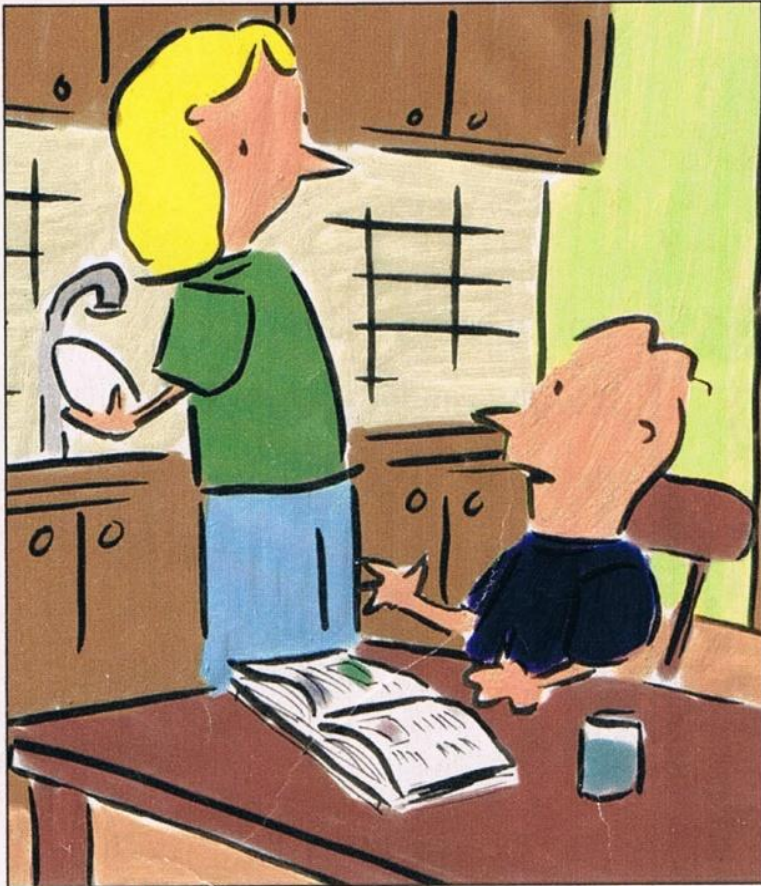


Positives and Negatives

In mathematics, two negatives make a positive:

$$(-1) \times (-1) = (+1)$$

Rights and Wrongs



"If two negatives make a positive,
how come two wrongs don't make a right?"

**However, in
real life,
Two Wrongs
don't make a
Right.**

But in Danville, Illinois Three Rights Make a Left !!!

