



# **Waste in the US Health Care System: Diagnosis and Management**

Dr. Abbie Miller MD MBA FABQUAURP

# Learning Objectives

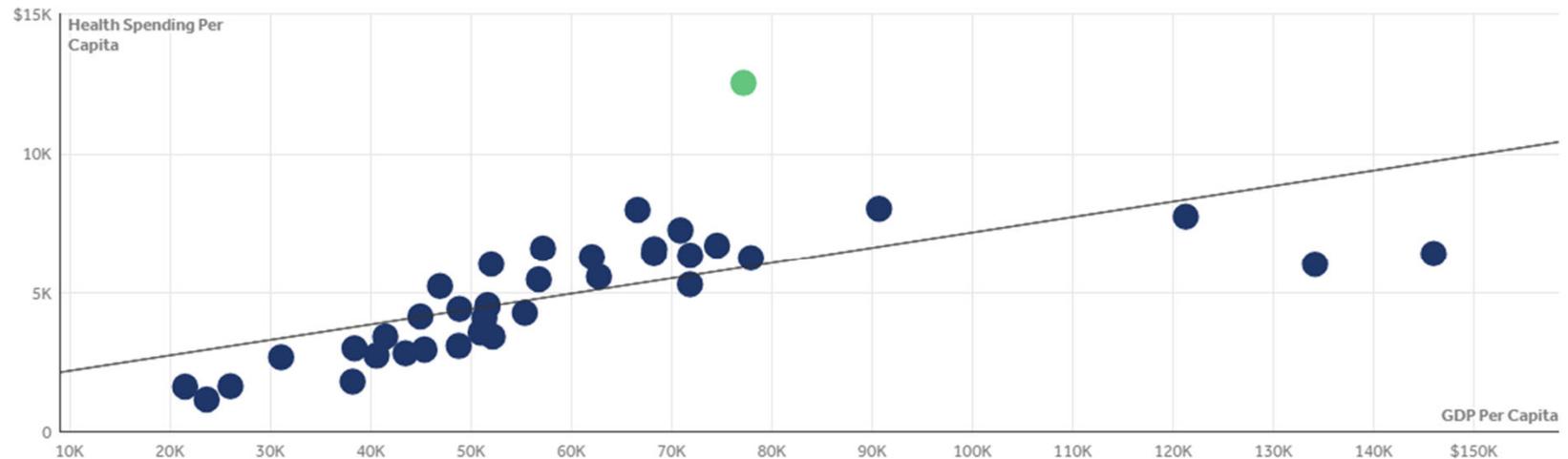
At the end of this educational activity, participants should be able to:

- Recognize the sources and approximate costs of waste in the current US healthcare system
- Differentiate between necessary and unnecessary sources of waste in health care
- Identify current recommendations to decrease waste



# US spends a greater amount on healthcare than other high-income nations

GDP per capita and health consumption spending per capita, U.S. dollars, 2022 (current prices and PPP adjusted)



Notes: Health spending per capita for Czech Republic, Denmark, France, and the Slovak Republic are estimated. For all other countries except the United States, health spending per capita is provisional. Health consumption does not include investments in structures, equipment, or research.

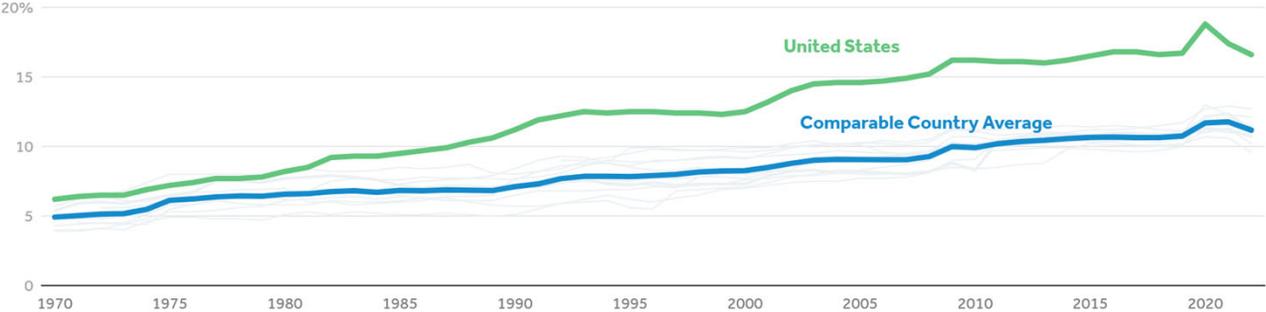
Source: [KFF analysis of OECD data](#) • [Get the data](#) • [PNG](#)

Peterson-KFF  
**Health System Tracker**



# Is More Better?

Health expenditures as percent of GDP, 1970-2022



Notes: Data from 2022 for Australia, Belgium, France, Japan, Switzerland, and the U.S. are estimated. Data from 2022 for Austria, Canada, Germany, the Netherlands, Sweden and the United Kingdom are provisional. Data for Australia is unavailable in 1970. Data for France from before 1990 is not available. Data from Germany prior to 1992 refers to West Germany. Data for Germany is not available for 1991. Data for the Netherlands is unavailable in 1970 and 1971.

Source: KFF analysis of OECD data • Get the data • PNG

Peterson-KFF  
**Health System Tracker**

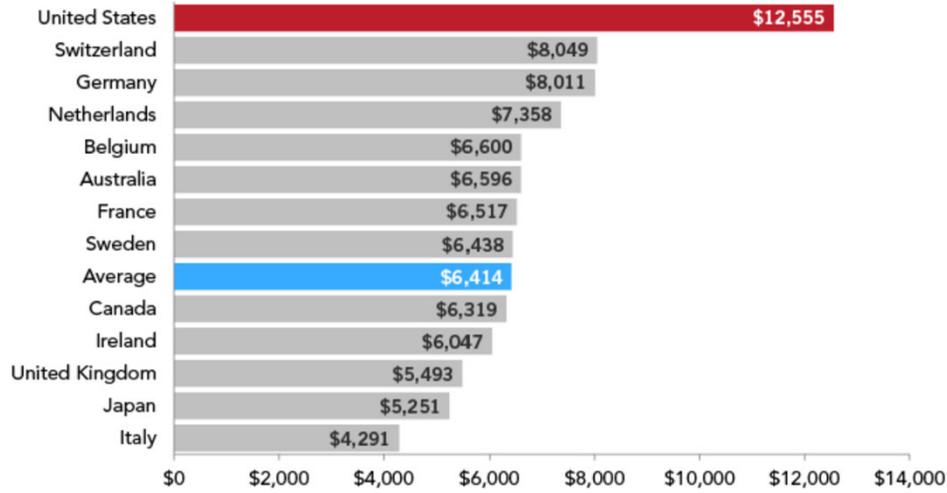
- Per CMS National Health Expenditures grew 7.5% to \$4.9 trillion in 2023, or \$14,570 per person, and accounted for 17.6% of Gross Domestic Product (GDP)
- CMS predicts healthcare spending will be at 19.7% GDP again by 2032

<https://www.healthaffairs.org/doi/full/10.1377/hlthaff.2024.00469>  
[Medical cost trend: Behind the numbers: PwC](#)

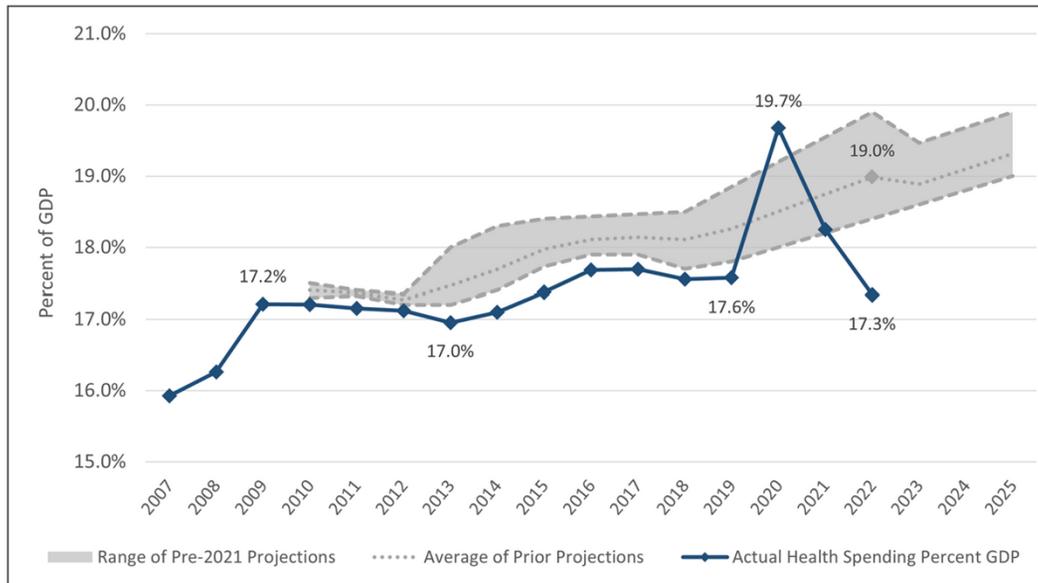


# Health Care Spend in US (2022)

Healthcare Costs per Capita (Dollars)



Source: Organization for Economic Co-Operation and Development, OECD Health Statistics 2023, July 2023.  
Data are from 2022. Average does not include the US. Amounts are converted into dollars using purchasing power parities. @Peter G. Peterson Foundation



Sources: 2007 to 2021 actual health spending from the [Centers for Medicare and Medicaid Services \(CMS\) 2021 National Health Expenditure Accounts release](#); 2022 health spending from the [Altarum Health Sector Economic Indicators spending data](#); projections from previous CMS annual health spending projection reports published in Health Affairs in the following months: March 2010, September 2010, October 2013, August 2016, March 2019, and April 2020



# Healthcare Spend

The U.S. spends twice as much as comparable countries do on health, driven mostly by higher payments to hospitals and physicians

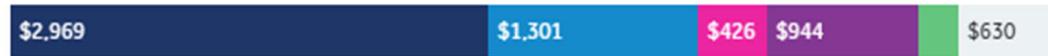
## Healthcare spending per capita, by spending category, 2021

■ Inpatient & outpatient care ■ Long-term care ■ Preventive care ■ Prescription drugs and medical goods ■ Administration ■ Other

United States (Total: \$12,197 per capita)



Comparable Country Average (Total: \$6,514 per capita)



Note: Comparable countries include Austria, Belgium, Canada, France, Germany, the Netherlands, Sweden, Switzerland, and the United Kingdom. Australia and Japan are excluded due to lack of 2021 data.

Source: [KFF analysis of OECD Health Statistics](#) • [Get the data](#) • [PNG](#)

Peterson-KFF

**Health System Tracker**



# Why do we spend almost twice as much as other countries?

- Higher costs are a result of higher prices for care
  - Introduction of new, innovative healthcare technology can lead to better, more expensive procedures and products
  - Emphasis on speed and access to broad range of care which leads to higher costs
  - Many other countries manage demand for care by regulating/limiting supply
- Aging population
  - Higher utilization of services as we age
- Complexity



# Cost of waste in the US Healthcare System

- Dr. William Shrank and colleagues performed literature search - 7 years of published and unpublished (gray literature) data on the 6 domains of healthcare waste, totaled the estimated cost and converted to 2019 dollars
- **Concluded that the cost of waste accounts for approximately 25% of total healthcare spending**

Clinical Review & Education

JAMA | Special Communication

## Waste in the US Health Care System Estimated Costs and Potential for Savings

William H. Shrank, MD, MSHS, Teresa L. Rogstad, MPH, Natasha Parikh, MD, MS

**IMPORTANCE** The United States spends more on health care than any other country, with costs approaching 18% of the gross domestic product (GDP). Prior studies estimated that approximately 30% of health care spending may be considered waste. Despite efforts to reduce overtreatment, improve care, and address overpayment, it is likely that substantial waste in US health care spending remains.

**OBJECTIVES** To estimate current levels of waste in the US health care system in 6 previously developed domains and to report estimates of potential savings for each domain.

**EVIDENCE** A search of peer-reviewed and "gray" literature from January 2012 to May 2019 focused on the 6 waste domains previously identified by the Institute of Medicine and Berwick and Hackbarth: failure of care delivery, failure of care coordination, overtreatment or low-value care, pricing failure, fraud and abuse, and administrative complexity. For each domain, available estimates of waste-related costs and data from interventions shown to reduce waste-related costs were recorded, converted to annual estimates in 2019 dollars for national populations when necessary, and combined into ranges or summed as appropriate.

**FINDINGS** The review yielded 71 estimates from 54 unique peer-reviewed publications, government-based reports, and reports from the gray literature. Computations yielded the following estimated ranges of total annual cost of waste: failure of care delivery, \$102.4 billion to \$165.7 billion; failure of care coordination, \$27.2 billion to \$78.2 billion; overtreatment or low-value care, \$75.7 billion to \$101.2 billion; pricing failure, \$230.7 billion to \$240.5 billion; fraud and abuse, \$38.5 billion to \$83.9 billion; and administrative complexity, \$265.6 billion. The estimated annual savings from measures to eliminate waste were as follows: failure of care delivery, \$44.4 billion to \$93.3 billion; failure of care coordination, \$29.6 billion to \$38.2 billion; overtreatment or low-value care, \$12.8 billion to \$28.6 billion; pricing failure, \$81.4 billion to \$91.2 billion; and fraud and abuse, \$22.8 billion to \$30.8 billion. No studies were identified that focused on interventions targeting administrative complexity. The estimated total annual costs of waste were \$760 billion to \$935 billion and savings from interventions that address waste were \$191 billion to \$282 billion.

**CONCLUSIONS AND RELEVANCE** In this review based on 6 previously identified domains of health care waste, the estimated cost of waste in the US health care system ranged from \$760 billion to \$935 billion, accounting for approximately 20% of total health care spending, and the projected potential savings from interventions that reduce waste, excluding savings from administrative complexity, ranged from \$191 billion to \$282 billion, representing a potential 25% reduction in the total cost of waste. Implementation of effective measures to eliminate waste represents an opportunity to reduce the continued increases in US health care expenditures.

**Author Affiliations:** Humana Inc, Louisville, Kentucky (Shrank, Rogstad); Division of General Internal Medicine, University of Pittsburgh School of Medicine, Pittsburgh, Pennsylvania (Parikh).  
**Corresponding Author:** William H. Shrank, MD, MSHS, Humana Inc, 500 W Main St, Louisville, KY 40202 (wshrank@humana.com).

JAMA. doi:10.1001/jama.2019.13978  
Published online October 7, 2019

© 2019 American Medical Association. All rights reserved.

JAMA. 2019;322(15):1501-1509. doi:10.1001/jama.2019.13978



# 2024 Waste Projections

---

Total US Health Care Expenditures in 2024 \$4.9 trillion

---

Assuming that 25% waste

---

2024 Waste is about \$1.2 trillion

---

In 2024, US population estimate was 340.1 million

---

About \$3,500 of waste for every person in the country



- Failure of Care Delivery
- Failure of Care Coordination
- Overtreatment/Low Value Care
- Pricing Failure
- Fraud and Abuse
- Administrative Complexity

- Eliminating Waste in US Healthcare Published in JAMA April 2012, Berwick & Hackbarth



# Failure of Care Delivery

## Doing the Wrong Thing

- Medication errors
  - Wrong drug, wrong patient, wrong dose, wrong time
- Diagnostic errors
  - Wrong diagnosis, delayed diagnosis
- Surgical errors
  - Wrong site, wrong patient, retained item
- Device and equipment malfunctions
- Hospital acquired conditions
  - Falls, sepsis, blood clots, infections, delirium



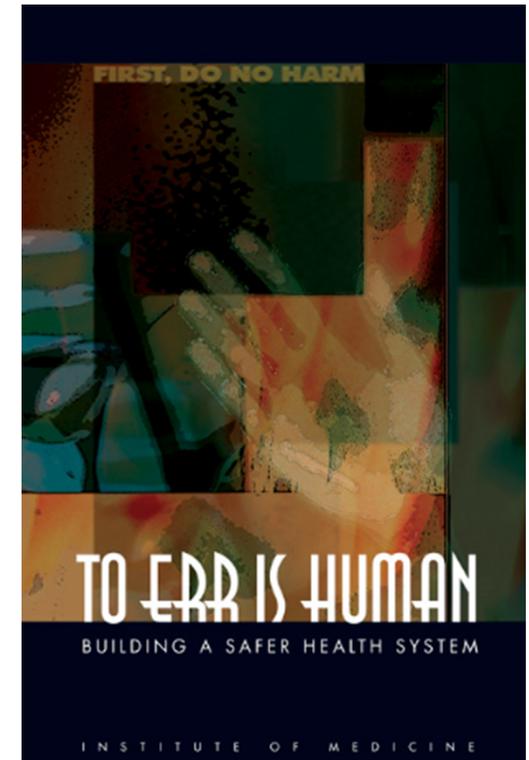
# Failure of Care Delivery

## To Err is Human?

- World Health Organization estimates that as many as 1 in 10 patients is harmed in health care and over half of this is preventable
- Institute of Medicine Report in 1999 found that 98,000 people die each year from errors in hospitals
- \$17 to 29 billion annually in additional cost
- Third leading cause of death?

[Medical Error Reduction and Prevention - StatPearls - NCBI Bookshelf](#)

Institute of Medicine (US) Committee on Quality of Health Care in America; Editors: Linda T. Kohn, Janet M. Corrigan, and Molla S. Donaldson. Washington (DC): [National Academies Press \(US\)](#); 2000.



# First Do No Harm

- Patient Safety Culture

- Significant Changes:

- Universal Protocol for Procedures
- Multi-point Patient Identification
- Infection Control Standards
- Safe/Blameless Reporting Cultures
  - Near-Miss Events
  - Continuous Improvement



# Failure of Care Delivery

## Failing to do the Right Thing

### Failure to Provide Care to Prevent Disease

- 129 million (40%) Americans have at least one potentially preventable chronic disease
  - Heart disease and stroke costs our health care system \$254 billion per year and causing \$168 billion in lost productivity on the job. Costs from cardiovascular diseases are projected to hit roughly \$2 trillion by 2050
  - The cost of cancer care continues to rise and is expected to reach more than \$240 billion by 2030
  - In 2022, the total estimated cost of diagnosed diabetes was \$413 billion in medical costs and lost productivity
  - Obesity costs the U.S. health care system nearly \$173 billion a year
- 90% of US Healthcare Expenditures are for treatment of people with chronic disease

[Fast Facts: Health and Economic Costs of Chronic Conditions | Chronic Disease | CDC](#)



# Failure of Care Delivery

## Failing to do the Right Thing

Providing Low Value Care defined as the use of a health service for which the harms or costs outweigh the benefits

- Overprescribing
- Overscreening
- Unnecessary procedures
- Up to 40% of Medicare beneficiaries receive a low-value service each year, while 15% of Medicaid patients and 11% of commercially insured patients receive a low-value service every year
- Contributes to disparities as certain groups are more likely to receive low value care
- \$100-700 billion annually in costs



# Evidence-Based Medicine

- Evidence based medicine is the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients. The practice of evidence-based medicine means integrating individual clinical expertise with the best available external clinical evidence from systematic research
- [Choosing Wisely Campaign \(2012-2023\)](#)
- [Lown Institute](#)
- [Healthy People 2030](#)

It's very difficult to get providers to STOP doing something with low value especially in fee for service world

- Value Based Care and Value Based Insurance Design
  - Payments based on quality, Shared savings
  - Decrease reimbursement for low value services



# Failure of Care Coordination

## The waste that occurs when patients fall through the gaps of fragmented care (Berwick and Hackbarth)

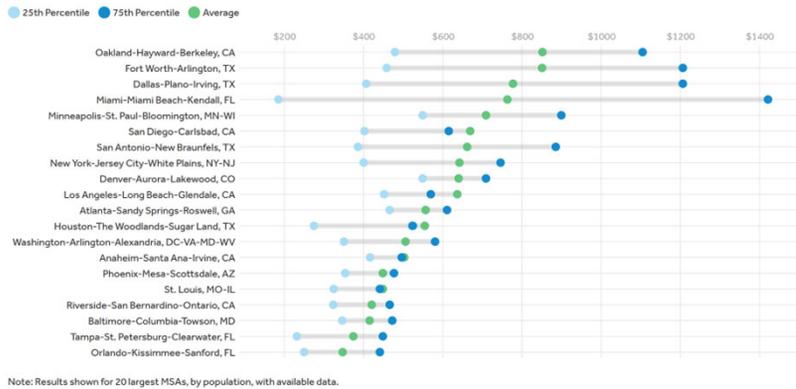
- \$15-20 billion annually in unplanned admissions
- Additional unaccounted costs in loss of trust, loss of productivity
- Care coordination is easier to describe when its missing
  - Duplication of services
  - Lack of appropriate follow-up
  - Inappropriate ER usage
- The Council of Accountable Physician Practices [describes coordinated care](#) in terms of communication among one's physicians, presence of complete electronic health records (EHRs), collaboration between inpatient and outpatient providers, and not having to "repeat yourself or keep track of your own medications, test results, or X-rays."



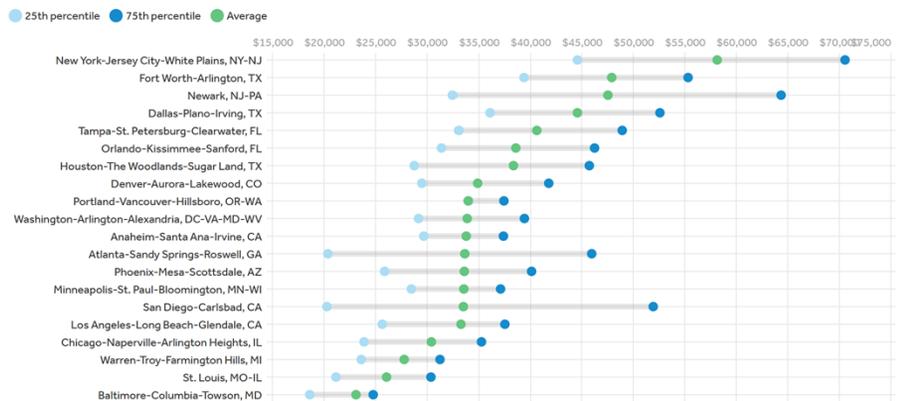
# Pricing Failure

**Inconsistent pricing of care due to different entities paying a range of prices.**  
 Examples: facility setting, (e.g., inpatient versus outpatient), location (e.g., rural versus metropolitan), and type of insurance.

Avg Allowed amount of office-based lumbar spine MRI, 2018



Avg allowed amount in network total knee and hip replacement



Peterson-KFF  
**Health System Tracker**  
<https://www.healthsystemtracker.org>



# Price Transparency

- Educate people on availability of price transparency tools
  - Many still do not seek information
  - Moral Hazard: when insured individuals bear a smaller share of their medical care costs, they are likely to consume more care
- Design plans to facilitate comparison that include BOTH cost and quality real-time information
  - High deductible plans
  - Variable co-pay
- Highly dependent on patient engagement



# Fraud and Abuse

- **What is the difference between *healthcare fraud* and *healthcare abuse*?**
- The difference between fraud and abuse is the intent behind the action.
- Fraud is intentional deception or misrepresentation with knowledge that the information is false.
- Abuse involves actions that are inconsistent with sound fiscal, business or accepted behavioral healthcare practices and result in an unnecessary cost or in reimbursement for services that are not medically necessary or that fail to meet professionally recognized standards for healthcare. Abuse can result in the same process impediments and unnecessary cost of care as fraud.



# Fraud and Abuse

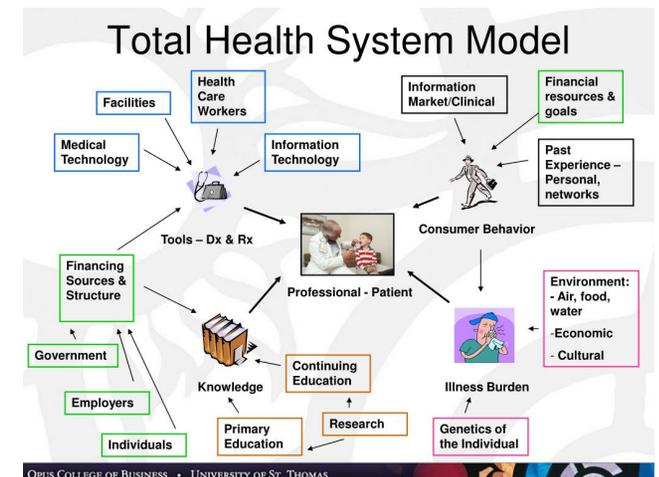
- In fiscal year 2023, civil health care fraud settlements and judgments under the False Claims Act exceeded \$1.8 billion
  - [2023 HHS Annual report](#)
- The National Health Care Anti-Fraud Association (NHCAA) estimates that the financial losses due to health care fraud are in the tens of billions of dollars each year. A conservative estimate is 3% of total health care expenditures, while some government and law enforcement agencies place the loss as high as 10% of our annual health outlay, which could mean more than \$300 billion



# Administrative Complexity

## Necessary vs Unnecessary Waste

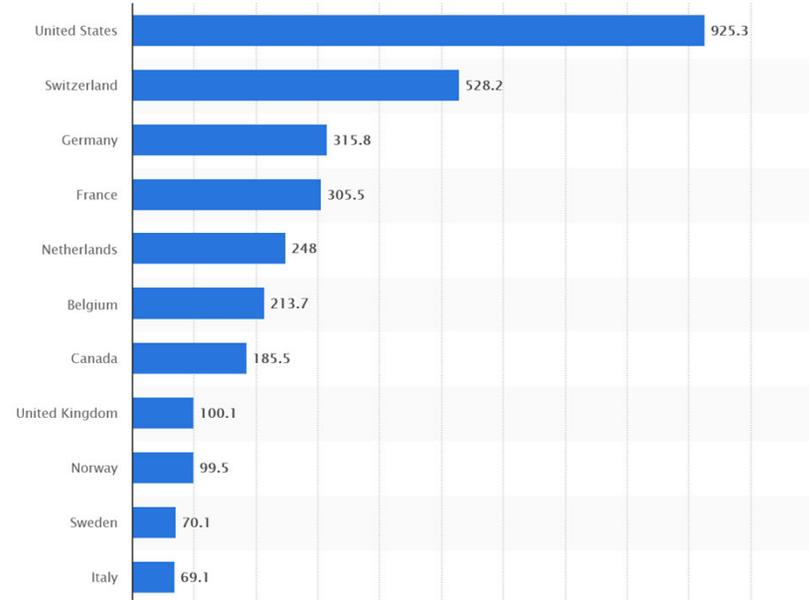
- Purists would define anything that doesn't specifically provide patient care as waste
- Some "waste" is necessary, examples:
  - Quality and safety reporting
  - Research
  - Credentialing/Provider database
  - Medical documentation
  - Billing



# Administrative Complexity

- Administrative spending is the non-clinical costs associated with providing care
  - Billing and insurance related costs
  - Quality assurance, taxes, profits, credentialing
- US spends more (\$925) on administrative costs than any other developed nation

Per capita expenditure on governance and health system and financing administration in select high-income countries in 2021 (in U.S. dollars)



# Administrative Streamlining

- Health Affairs Council on Healthcare Spending and Value
- [Road Map for Action](#) in 2023
  - Standardize 4 Key Processes
    - Collection of Data for Provider Directories and Credentialing
    - Claims Processing
    - Collection of Data to Support Prior Authorization



# Additional Resources

- [Health System Tracker - Prices of Common Services](#)
- [Health Affairs - Council on Health Care Spending and Value](#)
- [Peterson-Kaiser Health System Tracker](#)
  - Dashboard
- [Health Affairs - Health Spending](#)
- [Vital Points](#)

