Comparative Health Systems: What Can We Learn from Other Countries?

Andrew Moore, MD, MCR
Assistant Professor, Department of Emergency Medicine
Assistant Professor, Department Health Systems and Implementation Sciences
October 23, 2023
Disclosures & COI

• The views expressed today are mine and do not reflect the views of my employer (Carilion Clinic) or Virginia Tech Carilion School of Medicine

• I have research funded by Philips/Biotel
Special Thanks

• Dr. Lea Learman, Dean VTCSOM
• Dr. Kelly Whitmer, Department of Radiology
• Dr. Natalie Karp, Department of Obstetrics and Gynecology
• Dr. Cynthia Morrow, VTCSOM & VDH
• VTCSOM Clinical Champions Cohort
• TEACH
Patient family and community

Health care structure and process
Health system improvement
Value in health care
Population, public, and social determinants of health
Clinical informatics and health technology
Health care policy and economics
Change agency, management and advocacy
Ethics and Legal
Leadership
Teaming
Systems Thinking
Systems Thinking
Systems Thinking
Systems Thinking
Systems Thinking
Systems Thinking
Systems Thinking
Systems Thinking
Objectives

1. Describe drivers of cost in the United States healthcare delivery system

2. Review other Organisation for Economic Co-operation and Development (OECD) countries’ approaches to healthcare delivery

3. Devise solutions to control costs and increase health outcomes in the United States
State of US Healthcare
Benchmarking US Healthcare

Comparative Health Care System Performance Scores

EXHIBIT 2

Higher performing

NOR  NETH  AUS

UK  GER  NZ

SWE  FRA  SWIZ

Top-3 average

10-country average

Lower performing

CAN

US
# Health Care System Performance Rankings

<table>
<thead>
<tr>
<th>Category</th>
<th>AUS</th>
<th>CAN</th>
<th>FRA</th>
<th>GER</th>
<th>NETH</th>
<th>NZ</th>
<th>NOR</th>
<th>SWE</th>
<th>SWIZ</th>
<th>UK</th>
<th>US</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Ranking</td>
<td>3</td>
<td>10</td>
<td>8</td>
<td>5</td>
<td>2</td>
<td>6</td>
<td>1</td>
<td>7</td>
<td>9</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>Access to Care</td>
<td>8</td>
<td>9</td>
<td>7</td>
<td>3</td>
<td>1</td>
<td>5</td>
<td>2</td>
<td>6</td>
<td>10</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>Care Process</td>
<td>6</td>
<td>4</td>
<td>10</td>
<td>9</td>
<td>3</td>
<td>1</td>
<td>8</td>
<td>11</td>
<td>7</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Administrative Efficiency</td>
<td>2</td>
<td>7</td>
<td>6</td>
<td>9</td>
<td>8</td>
<td>3</td>
<td>1</td>
<td>5</td>
<td>10</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>Equity</td>
<td>1</td>
<td>10</td>
<td>7</td>
<td>2</td>
<td>5</td>
<td>9</td>
<td>8</td>
<td>6</td>
<td>3</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>Health Care Outcomes</td>
<td>1</td>
<td>10</td>
<td>6</td>
<td>7</td>
<td>4</td>
<td>8</td>
<td>2</td>
<td>5</td>
<td>3</td>
<td>9</td>
<td>11</td>
</tr>
</tbody>
</table>

Data: Commonwealth Fund analysis.


https://doi.org/10.26099/01DV-H208
U.S. per capita healthcare spending is over twice the average of other wealthy countries

**Healthcare Costs Per Capita (Dollars)**

<table>
<thead>
<tr>
<th>Country</th>
<th>Cost Per Capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>$12,318</td>
</tr>
<tr>
<td>Germany</td>
<td>$7,383</td>
</tr>
<tr>
<td>Switzerland</td>
<td>$7,179</td>
</tr>
<tr>
<td>Austria</td>
<td>$6,693</td>
</tr>
<tr>
<td>Sweden</td>
<td>$6,262</td>
</tr>
<tr>
<td>Netherlands</td>
<td>$6,190</td>
</tr>
<tr>
<td>Canada</td>
<td>$5,905</td>
</tr>
<tr>
<td>Average</td>
<td>$5,829</td>
</tr>
<tr>
<td>Australia</td>
<td>$5,627</td>
</tr>
<tr>
<td>France</td>
<td>$5,468</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>$5,387</td>
</tr>
<tr>
<td>Belgium</td>
<td>$5,274</td>
</tr>
<tr>
<td>Japan</td>
<td>$4,666</td>
</tr>
<tr>
<td>South Korea</td>
<td>$3,914</td>
</tr>
</tbody>
</table>


*Notes: Data are latest available, which was 2019, 2020, or 2021. Average does not include the United States. The five countries with the largest economies and those with both an above median GDP and GDP per capita, relative to all OECD countries, were included. Chart uses purchasing power parities to convert data into U.S. dollars.*

© 2022 Peter G. Peterson Foundation
GDP per capita and health consumption spending per capita, 2021 (U.S. dollars, PPP adjusted)

Notes: U.S. value obtained from National Health Expenditure data. For all other countries except the United States, health spending per capita is provisional. GDP per capita data for France, Germany, Korea, Netherlands, and Portugal are all provisional. Data from Canada represents a difference in methodology from the prior year. Health consumption does not include investments in structures, equipment, or research.

Source: KFF analysis of National Health Expenditure (NHE) and OECD data
UnitedHealth Group Reports Third Quarter 2023 Results

- Revenues of $92.4 Billion Grew 14% Year-Over-Year
- Earnings from Operations Grew 14%
- Cash Flows from Operations were $6.9 Billion
- Earnings were $6.24 Per Share, Adjusted Earnings $6.56 Per Share
Areas for Improvement in US Healthcare Delivery

- Administrative Costs
- Lack of uniform Electronic Health Records (EHR)
- Pharmaceutical costs
- Access to Care
- Medicine as Business
What Can We Learn from Other Countries?
Medicare & Medicaid

• Medicare and Medicaid passed into law in 1965
• Modeled after the Canadian Medicare System
• Single Payer (Government) paying primarily private, non-profit hospitals
• Low overhead ~ 2-3%
The United Kingdom
The Veterans Health Administration

• The Veterans Health Administration
  • Provides lifelong medical services for honorably discharged service members
  • Devised a national formulary for medications to keep costs down
  • Mid-2000’s was exceeding outcomes of private sector care delivery
• Modeled on the UK National Health System
• CRPS- Uniform EHR for all VAMC visits
That feeling when you can’t and can see the medical chart from your patient’s most recent engagement with the healthcare system.
Taiwan
Taiwan

• Leaders in National EHR field

• Each patient carries a card with demographics and insurance billing number
  • Log interventions, file for reimbursements, and access online medical records

• MediCloud- diagnoses, allergies, vaccinations, and 6 most recent visits

• PharmaCloud- prescription information

• My Health Bank- patients have cloud-based access to their medical records
US Solution - 21st Century Cures Act

• Defined electronic health record (HER) interoperability, addressed health information technology certification requirements, and prohibited information blocking
Pharmaceuticals
Pharmaceuticals in the United States

• $500 billion per year on pharmaceuticals ~ 17% of US healthcare spending.

• Per capita we spend $1,400 on medications – twice the average of European nations.

• Spend is due to high cost, not high use.

• 90% of RXs written in US are for generic drugs, but only account for 26% of drug costs.

• Fragmented Pharmacy Benefit Managers- less negotiation power than a national formulary.
Norway
Pharmaceuticals and Drug Pricing

- $2.2 billion per year or ~$400 per capita
- Insurance pays 75%/consumers pay 25% of cost
- Norwegian Medicine Agency (NoMA)
  - Authorizes marketing, monitors adverse events, and sets maximum prices following EU regulations
  - Cost effectiveness is considered as part of the price
  - Manufacturers must apply for a maximum pharmacy purchase price
  - Valid for 5 years
- Health Technologies Assessment (HTA) 2016
  - Evaluated based on (1) overall benefit, (2) resource use, (3) severity of the condition.
- Informal Cap of $31,500 per QALY (Similar to NICE (UK) and PBS (Australia))
- Medication Cost caps $275 annually and $200 annually depending on level of medication.
Germany
Pharmaceuticals and Drug Pricing

• $58.6 billion ~ $780 per capita

• Price regulation
  • for first 12 months, pharmaceutical companies can sell a new medication for any price
  • Institute for Quality and Efficiency in Health Care determines if medication is comparable to other drugs on market
    • If yes- an internal price is set
    • If additional benefit there is a pharmaceutical company and Federal Association of Sickness Funds negotiate to determine price.
    • Sickness funds get 3 different types rebates on medication prices→lower costs

• Physician regulation- Federal Joint Commission provides guidelines for appropriate treatment and can impose fines on physicians who do not comply.
US Solution- The Inflation Reduction Act (2022)

• Provided Medicare the ability to negotiate with pharmaceutical companies to lower costs for Medicare Part D.

• Ten Medications chosen (August 2023):
  • Eliquis
  • Jardiance
  • Xarelto
  • Januvia
  • Farxiga
  • Entresto
  • Enbrel
  • Imbruvica
  • Stelara
  • Fiasp; Fiasp FlexTouch; Fiasp PenFill; NovoLog; NovoLog FlexPen; NovoLog PenFill
Statutory, Compulsory, and Mandatory Health Insurance
Healthcare as Big Business
The Air-Ambulance Vultures A search for why my flight cost $86,184 led to a hidden culprit: private equity.

By Chris Stanton
Figure 1. Standardized Average Charge for Helicopter Air Ambulance Transport by Provider, 2017

Note: To calculate a standardized average charge for each air ambulance provider, we multiply a provider’s annual mean charge-to-Medicare ratio by the average Medicare allowed amount across all providers in a given year for an average distance transport (62 miles for helicopters). Source: Authors’ analysis of Medicare Provider Utilization and Payment Data
Figure 5. Medicare Market Shares of Three Largest Companies

Source: Authors' analysis of Medicare Provider Utilization and Payment Data

USC Schaeffer

BROOKINGS
US Solution - No Surprises Act of 2022

• The new law addresses surprise medical bills in three circumstances:

1. When an enrollee receives emergency care either at an out-of-network facility or from an out-of-network provider
2. When an enrollee uses air ambulance emergency transport services (but not ground ambulance services)
3. When an enrollee receives nonemergency care at an in-network facility but is treated by an out-of-network health care provider without knowingly electing that provider or giving consent to be billed.
American Physician Partners files for bankruptcy protection

Molly Gamble (Twitter) - Tuesday, September 19th, 2023

American Physician Partners, a medical staffing company based in Brentwood, Tenn., has filed for Chapter 11 bankruptcy protection as it winds down its business.

Envision files for bankruptcy: 6 details

Alan Condon - Updated Wednesday, May 17th, 2023

Nashville, Tenn.-based Envision Healthcare has filed for Chapter 11 bankruptcy five years after New York City-based KKR & Co. acquired Envision in a $9.8 billion deal.
US Solution – Prohibit Corporations from the Practice of Medicine

• American Academy of Emergency Medicine- Physicians Group has filed a lawsuit in California against Envision Physician Services
• Lawsuit is set to begin in January 2024
Objectives

1. Describe drivers of cost in the United States healthcare delivery system

2. Review other Organisation for Economic Co-operation and Development (OECD) countries’ approaches to healthcare delivery

3. Devise solutions to control costs and increase health outcomes in the United States
Further Reading

Which Country Has the World’s Best Health Care?
EZEKIEL J. EMANUEL

YOUR MONEY OR YOUR LIFE
Strong Medicine for America’s Healthcare System
DAVID M. CUTLER

AN AMERICAN SICKNESS
HOW HEALTHCARE BECAME BIG BUSINESS AND HOW YOU CAN TAKE IT BACK
ELISABETH ROSENTHAL

“Your book will serve as the definitive guide to the past and future of healthcare in America.” —SIDHARTHA MUKHERJEE