How Does the US Health Care System Measure Up?
Insights from International Comparisons

Jose F. Figueroa, MD, MPH

Associate Professor of Health Policy & Management | Harvard T.H. Chan School of Public Health

Associate Physician | Brigham & Women's Hospital

Faculty Director | Healthcare Quality & Outcomes Lab at HSPH

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Disclosures: Funding from the NIA, NHLBI, NINR, AHRQ, The Commonwealth Fund, The Robert Wood Johnson Foundation, Arnold Ventures Foundation, SCAN Foundation, Department of Veterans Affairs, and Project Hope (Health Affairs)

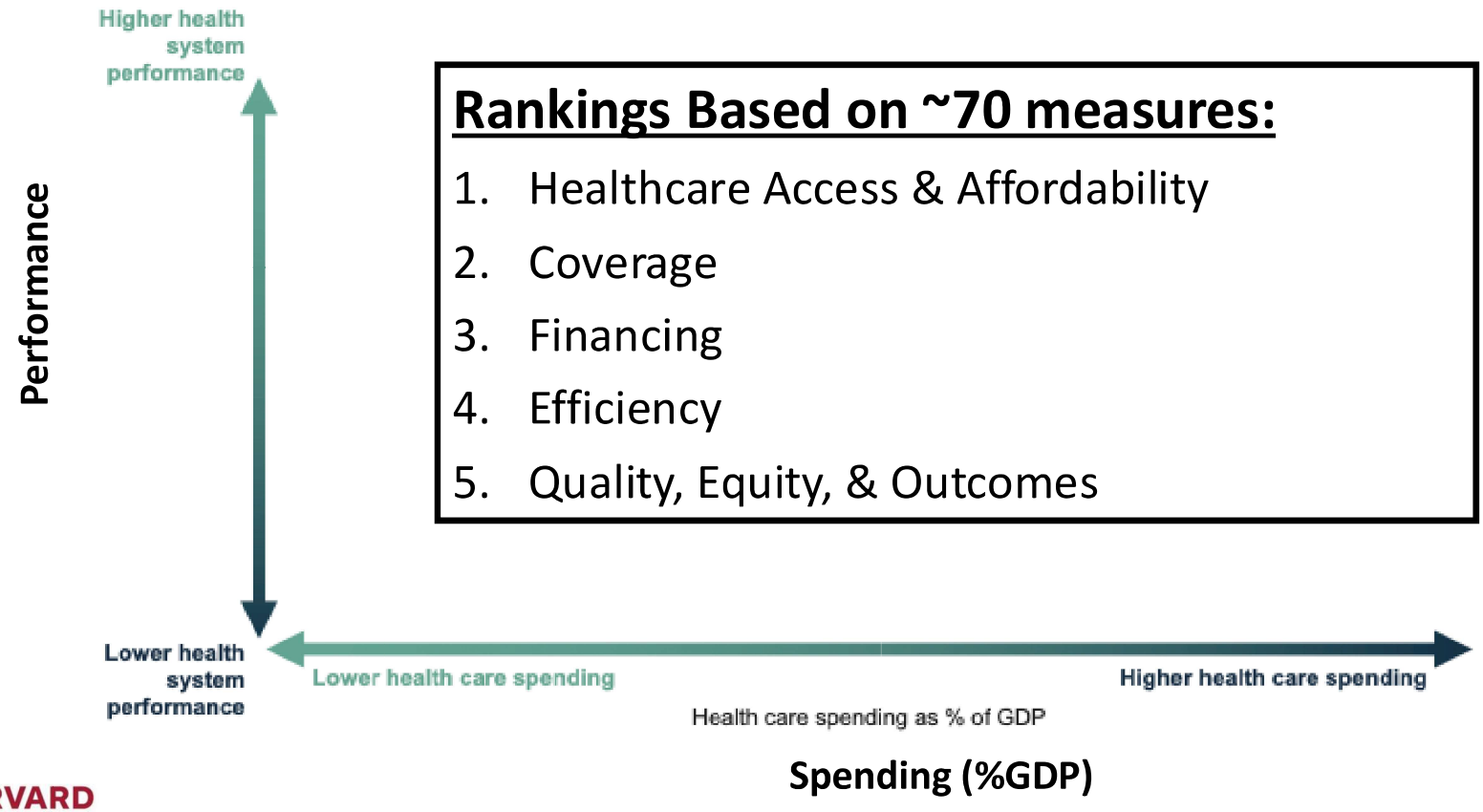
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Outline for Today's Talk

- Part 1: Compare Performance of US Health Care System vs. Other Countries
- Part 2: Review Key Efforts to Improve US Performance ("Value-Based Care")
- Part 3: Understand Why the US Health Care System May Be Underperforming

State of the US Healthcare System



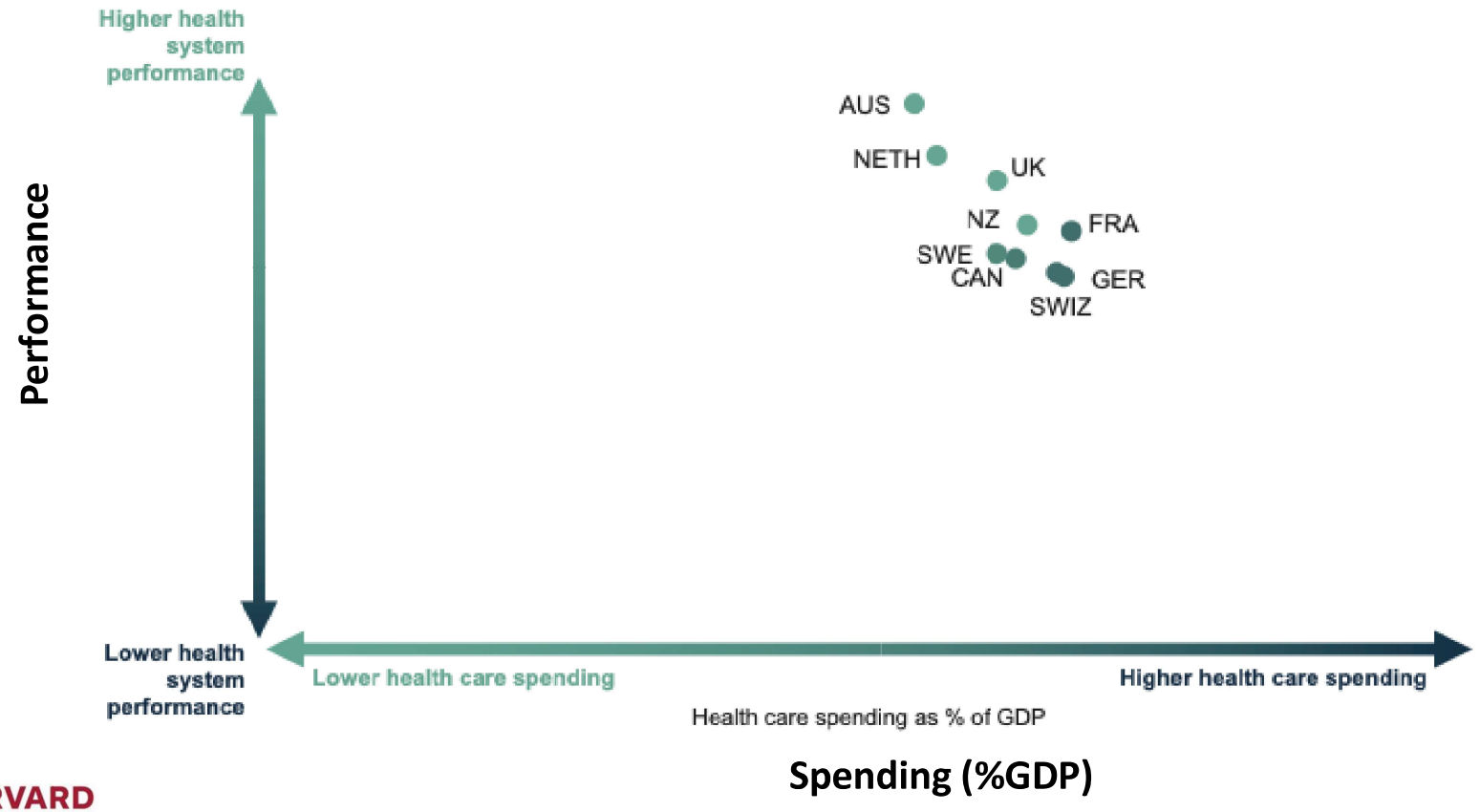
Rankings Based on ~70 measures:

1. Healthcare Access & Affordability
2. Coverage
3. Financing
4. Efficiency
5. Quality, Equity, & Outcomes

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Commonwealth Fund Report 2024.

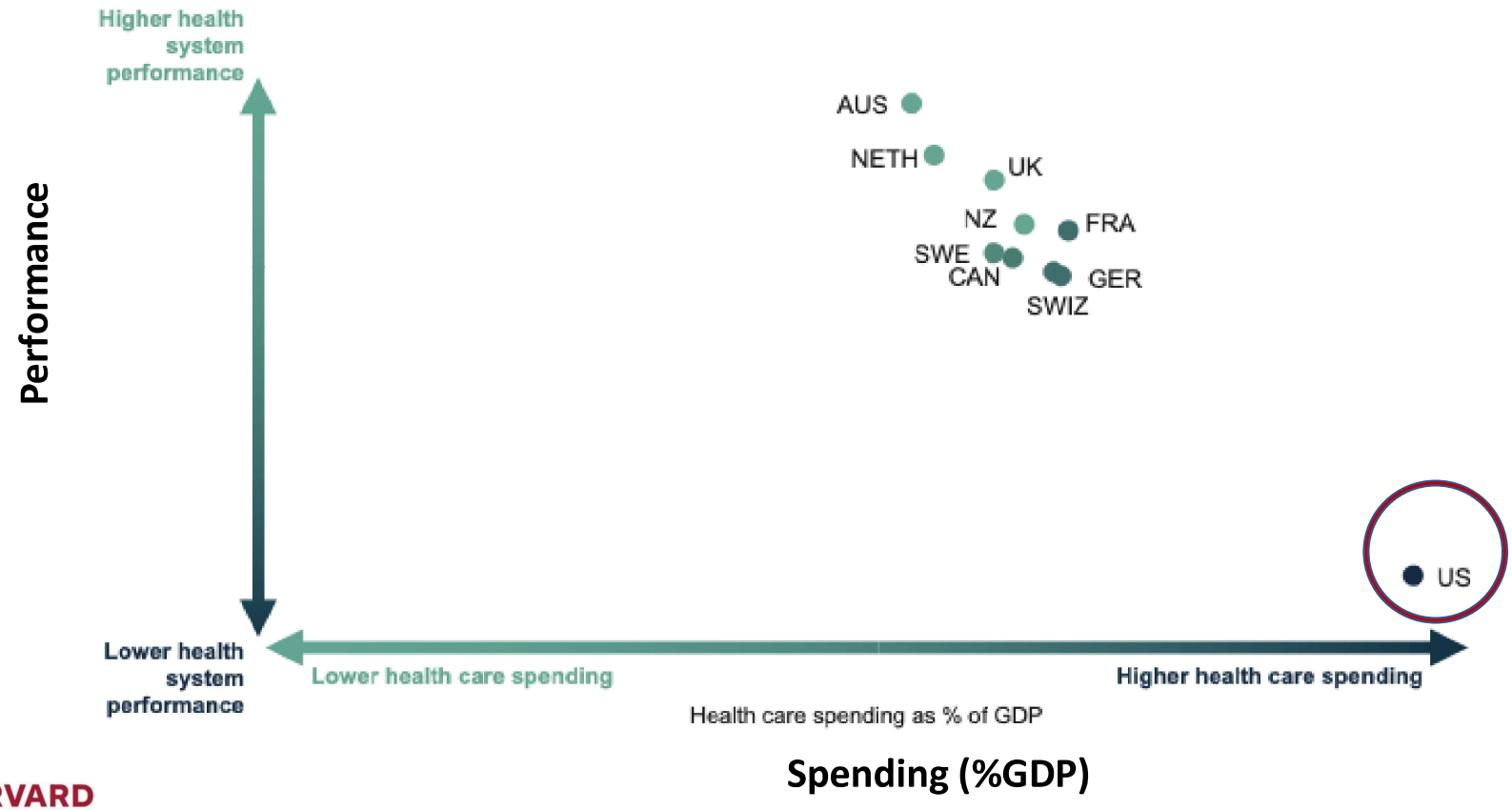
State of the US Healthcare System



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Commonwealth Fund Report 2024.

State of the US Healthcare System

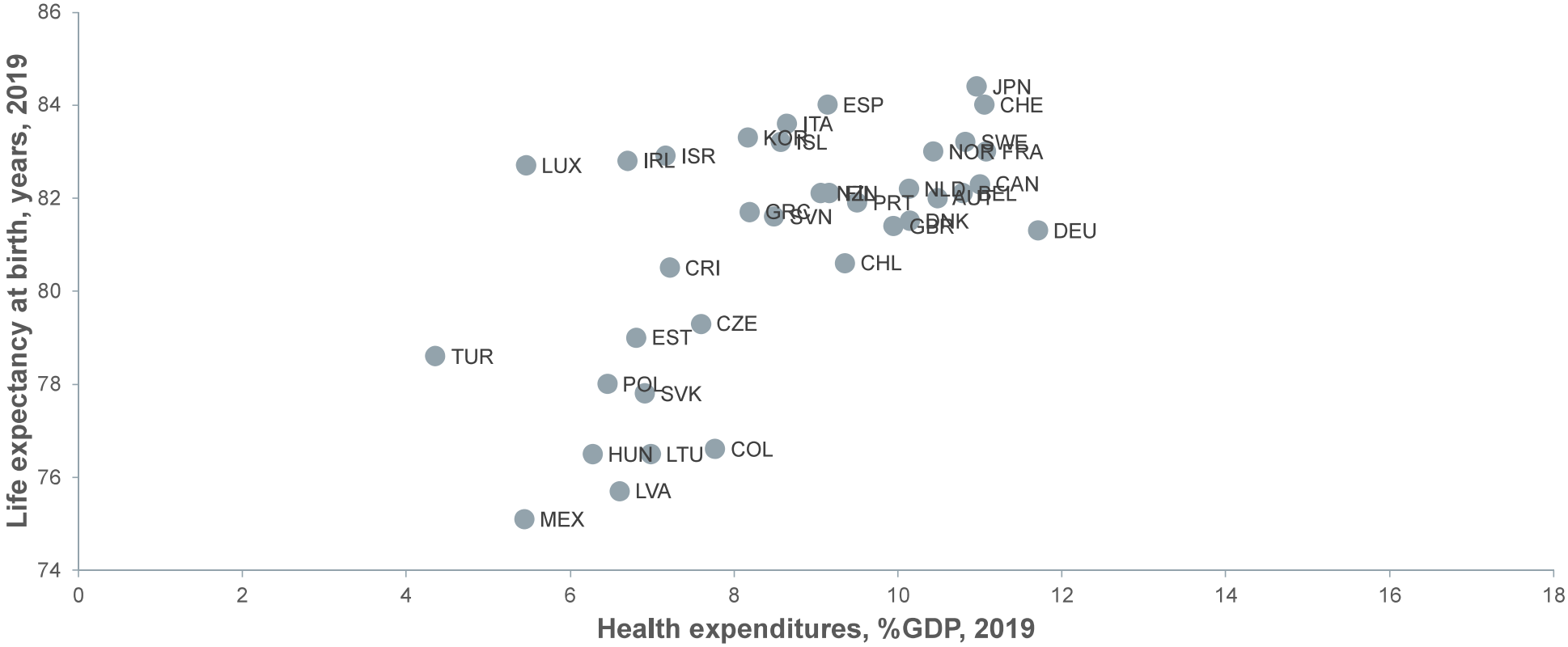


Spending (%GDP)

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Commonwealth Fund Report 2024.

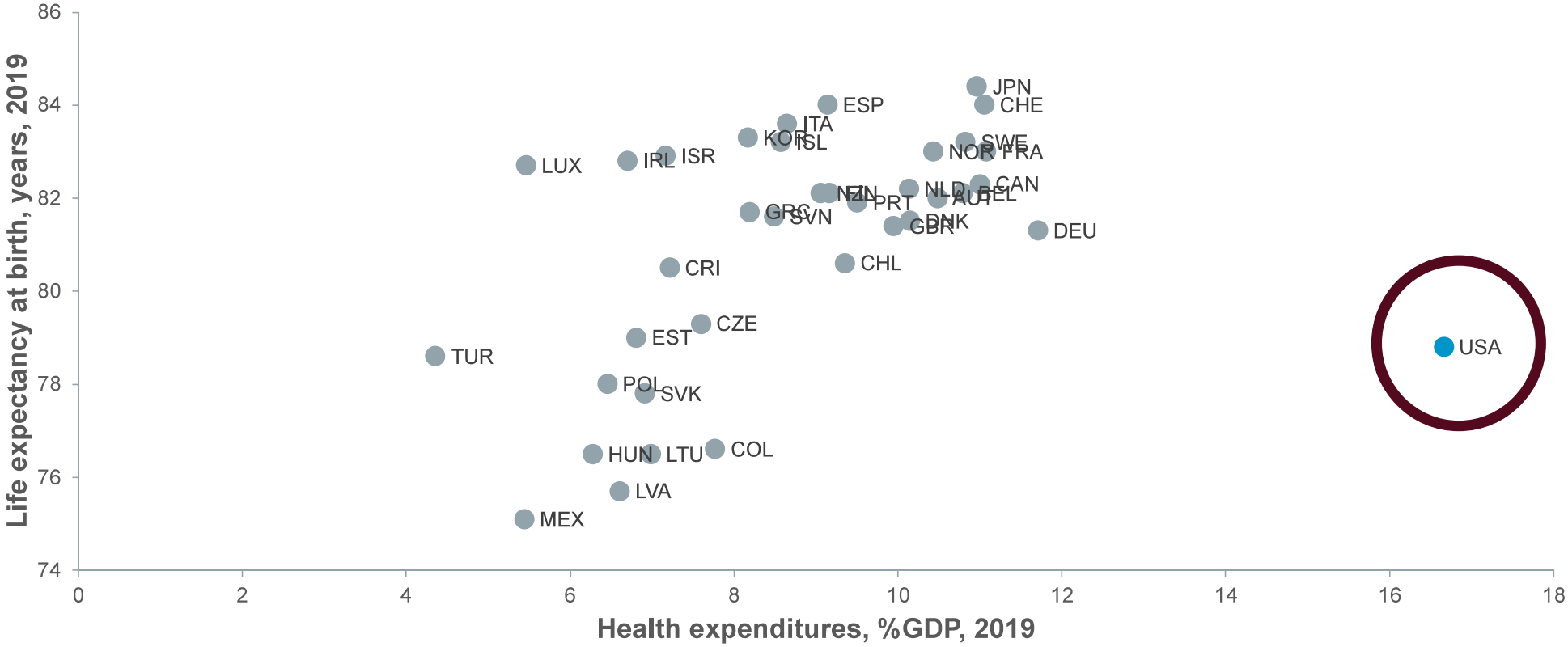
Life Expectancy in the US vs. Other Countries



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OECD, 2024.

Life Expectancy in the US vs. Other Countries



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OECD, 2024.

The US vs. Other Countries: A Fair Comparison?



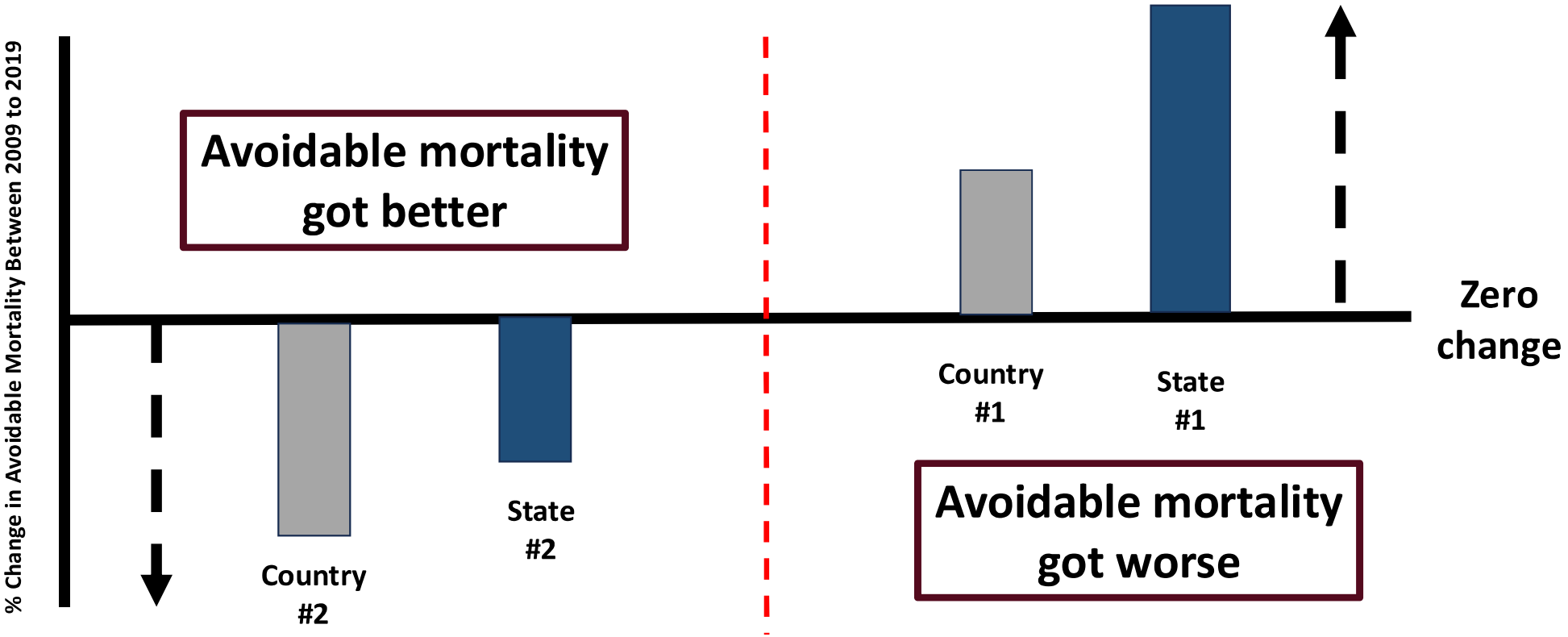
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Breaking Down the US Health Care System Performance vs. Other Countries: Avoidable Mortality

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Changes in Avoidable Mortality

(% Δ Age-sex standardized deaths between 2009 to 2019 per 100,000, aged 0-74y)

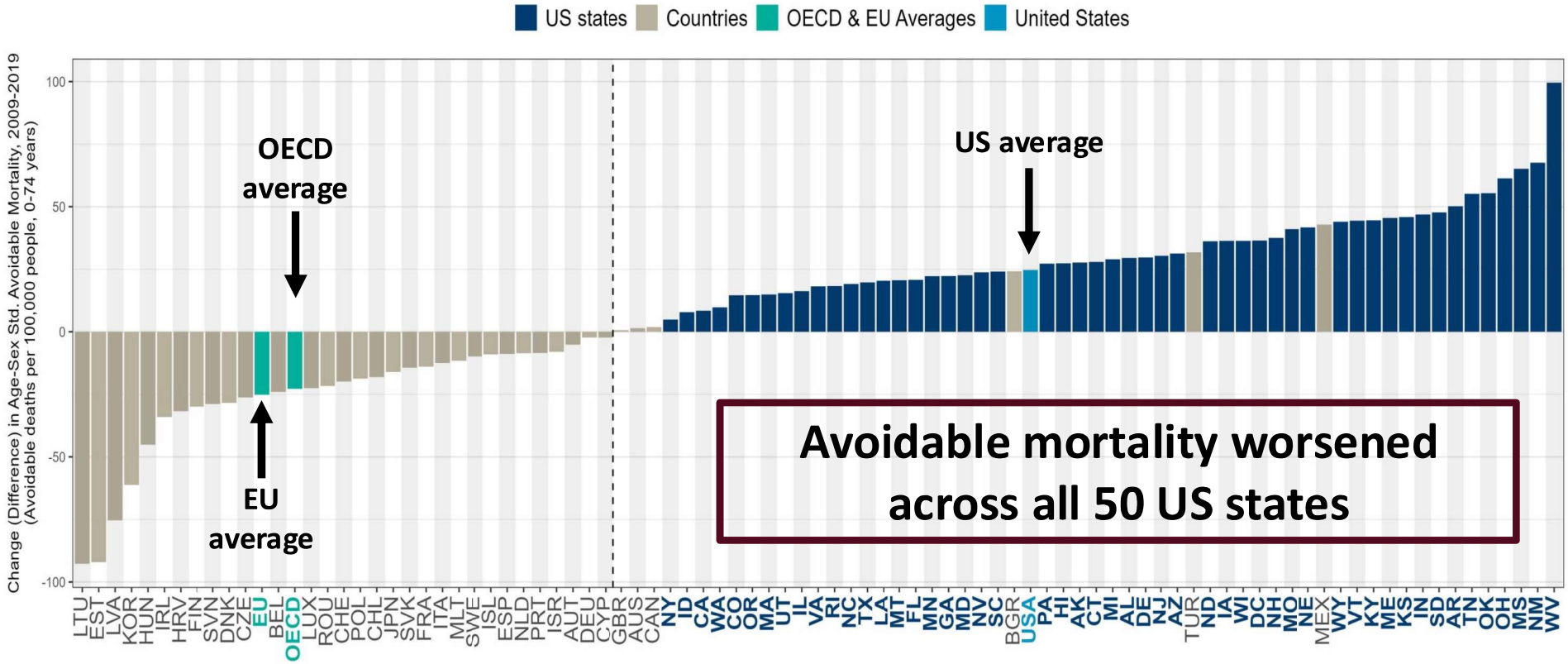


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Papanicolas I, Niksch M, Figueroa JF. JAMA Intern Med, 2025

Changes in Avoidable Mortality

(% Δ Age-sex standardized deaths between 2009 to 2019 per 100,000, aged 0-74y)



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Papanicolas I, Niksch M, Figueroa JF. JAMA Intern Med, 2025

Why is the United States an Outlier When it Comes to Health Care?

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Key Problems with the US Healthcare System

1. Failure of care delivery
2. Failure of care coordination
3. Overtreatment or low-value care
4. Pricing failure
5. Fraud and abuse
6. Administrative complexity

Wasteful spending of
~$935 billion
per year

~25% of total
US health spending

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Berwick and Hackbarth, JAMA 2012; Shrank et al., JAMA 2019. Figueroa et al, JAMA Cardio, 2019.

Key Problems with the US Healthcare System

1. Failure of care delivery — Worse for people of color
2. Failure of care coordination — Worse for people of color
3. Overtreatment or low-value care — Worse for people of color
4. Pricing failure — Worse for people of color
5. Fraud and abuse — Worse for people of color
6. Administrative complexity — Worse for people of color

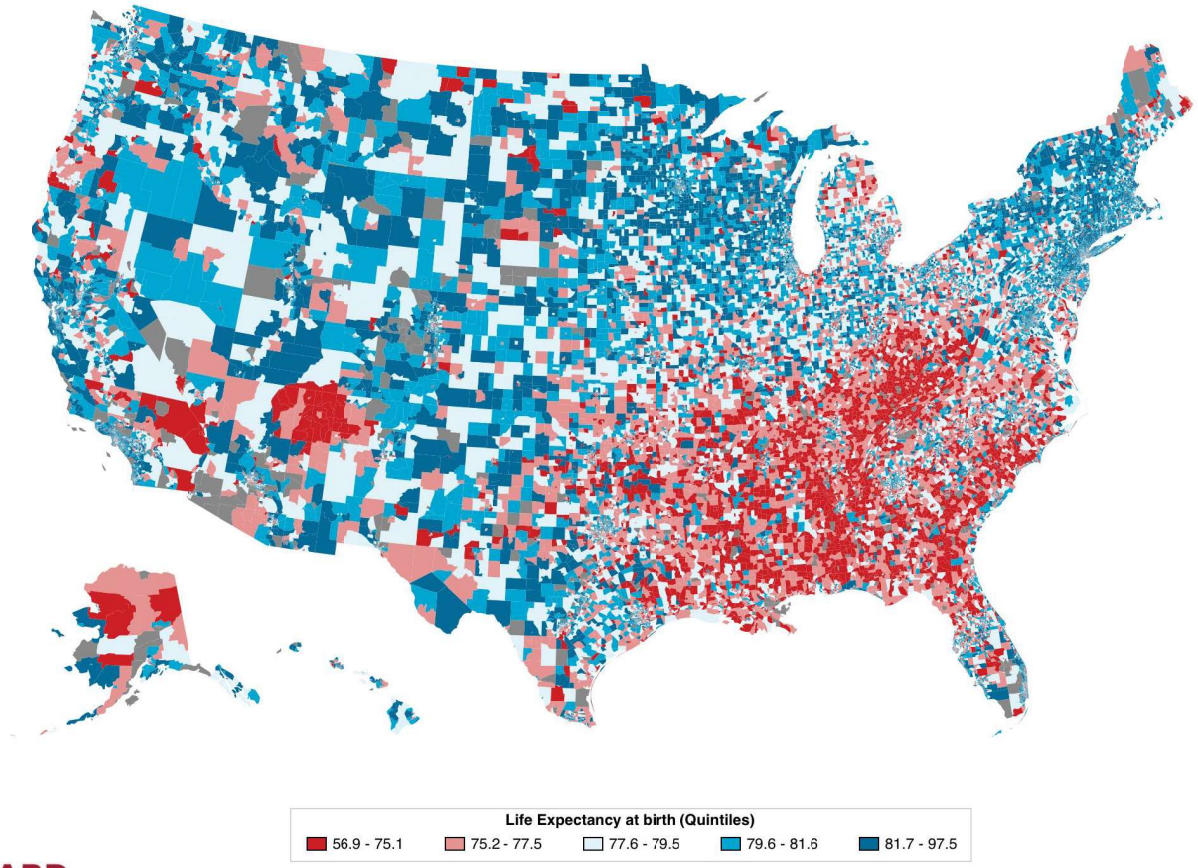
Wasteful spending of
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~25% of total
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Berwick and Hackbarth, JAMA 2012; Shrank et al., JAMA 2019. Figueroa et al, JAMA Cardio, 2019.

The Harsh Reality of Life Expectancy in America



Life expectancy lower in low-income & minority communities

Life expectancy:
56 to 97 years

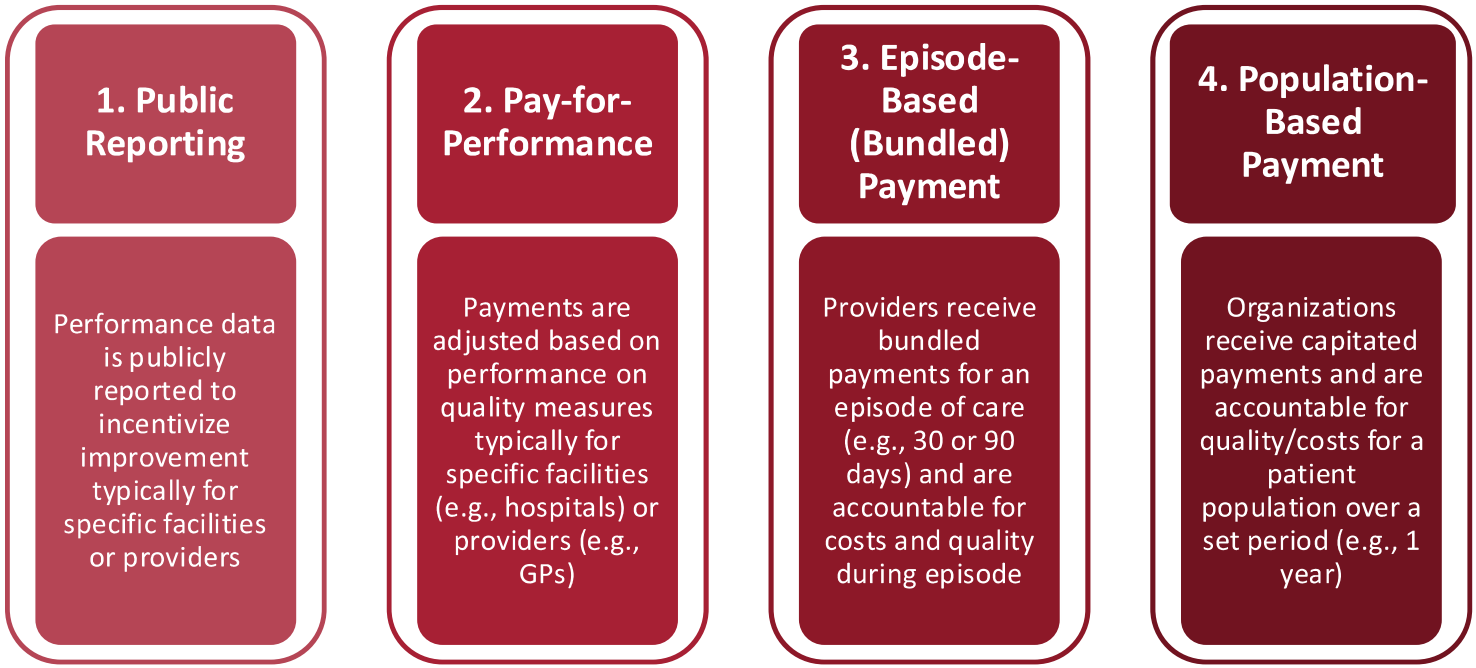
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Life Expectancy at Birth for U.S. Census Tracts, 2010 – 2015 via CDC

Over past 20 years, the US government has invested in improving "value of care" through health policy reform.

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Key Value-Based Payment (VBP) Models

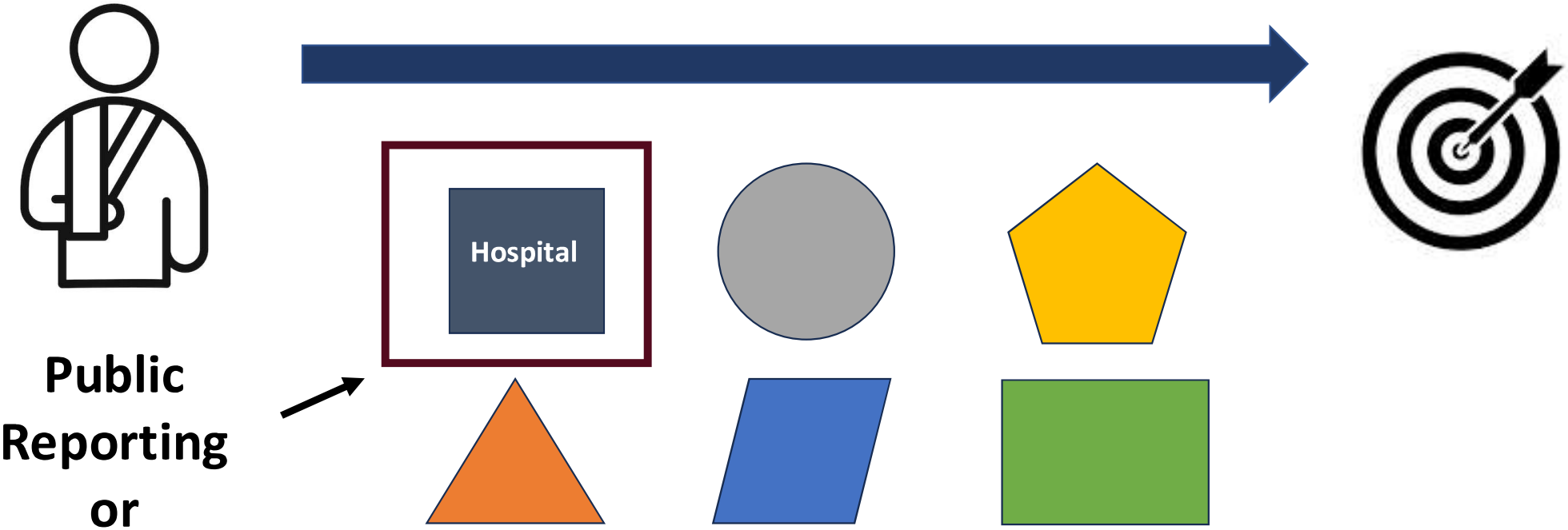


Primary Focus of National Quality Programs & Value-Based Payment Efforts (via ACA)

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Figueroa JF, Duggan C, Joynt Maddox KE. JHPPL. 2025

Incentivizing Unit vs. Units?

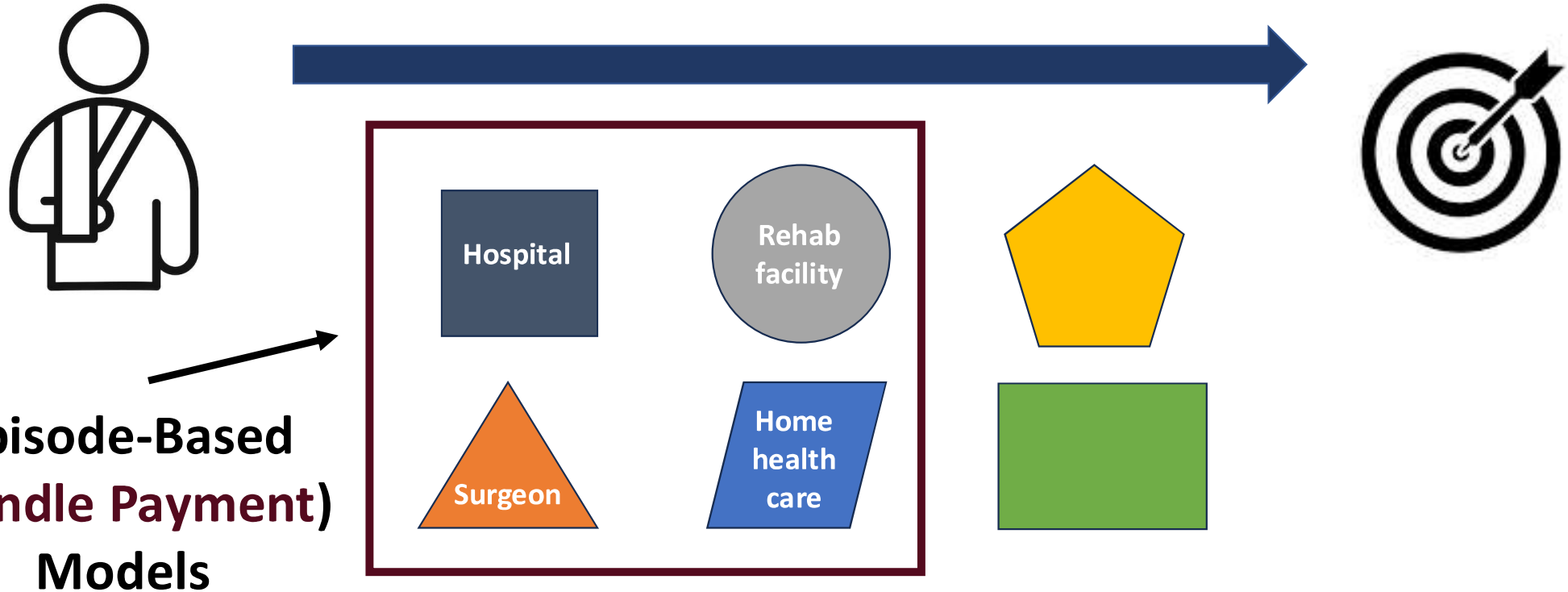


Public Reporting or P4P models

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Papanicolas I, Ryan A, Figueroa JF. BMJ 2024.

Incentivizing Unit vs. Units?

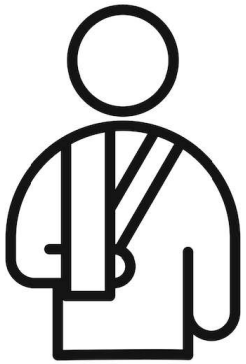


Episode-Based (Bundle Payment) Models

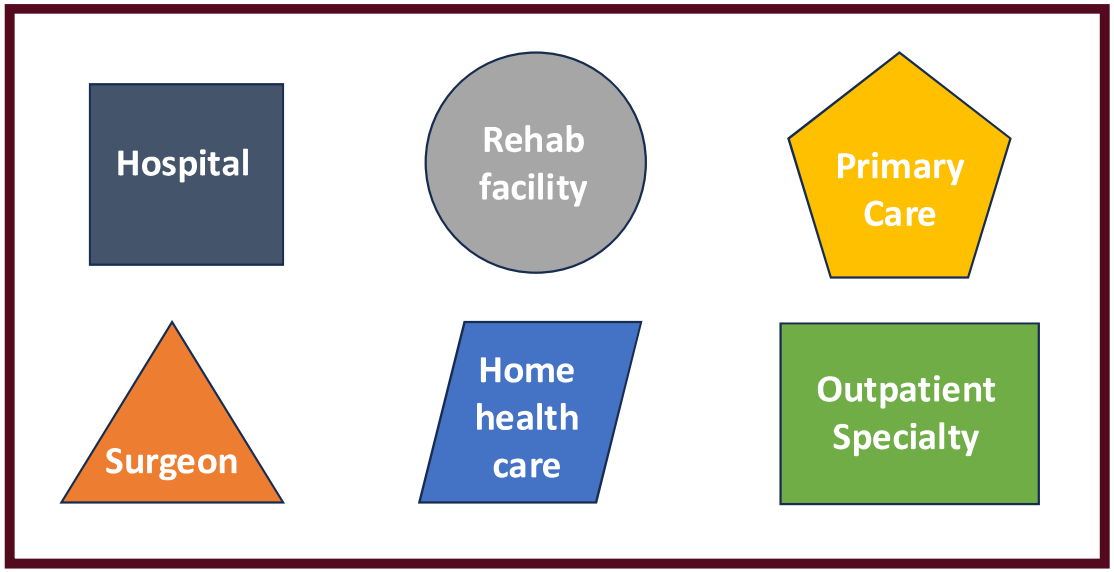
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Papanicolas I, Ryan A, Figueroa JF. BMJ 2024.

Incentivizing Unit vs. Units?



Population-Based Payment Models (ACOs)





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Papanicolas I, Ryan A, Figueroa JF. BMJ 2024.

Hospital Pay-For-Performance Programs

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ACA Created Hospital P4P Programs

Hospital Readmissions Reduction Program (HRRP)

- Penalizes on higher-than-expected hospital readmissions
- CHF, AMI, COPD, TKR/THR, CABG
- Up to 3% penalty

Hospital Value-Based Purchasing Program (HVBP)

- Bonus or Penalty
- Measures of patient experience, efficiency, effectiveness, safety, and processes
- Up to 2% penalty

Hospital Acquired Condition Reduction Program (HACR)

- Penalizes on rate of hospital-acquired conditions and infections
- CLABSIs, CAUTIs, DVTs, surgical site infections, etc.
- 1% penalty to bottom 25% of hospitals

Do Hospital Pay-For-Performance Programs Work?

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ACA Created Hospital P4P Programs

Hospital Readmissi… Reductio… …am

NOT WORKING

- Penali… …er-than-ex… …pital …ons
- …, AMI, COPD, TKR/THR, CABG
- Up to 3% penalty

Hospital Value-Based Purcha… Progr…

NOT WORKING

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- …f patient …nce, efficiency, …ctiveness, safety, and processes
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Hospital Acquired Condition… Reduction …m

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- …BSIs, CAUTIs, DVTs, surgical site infections, etc
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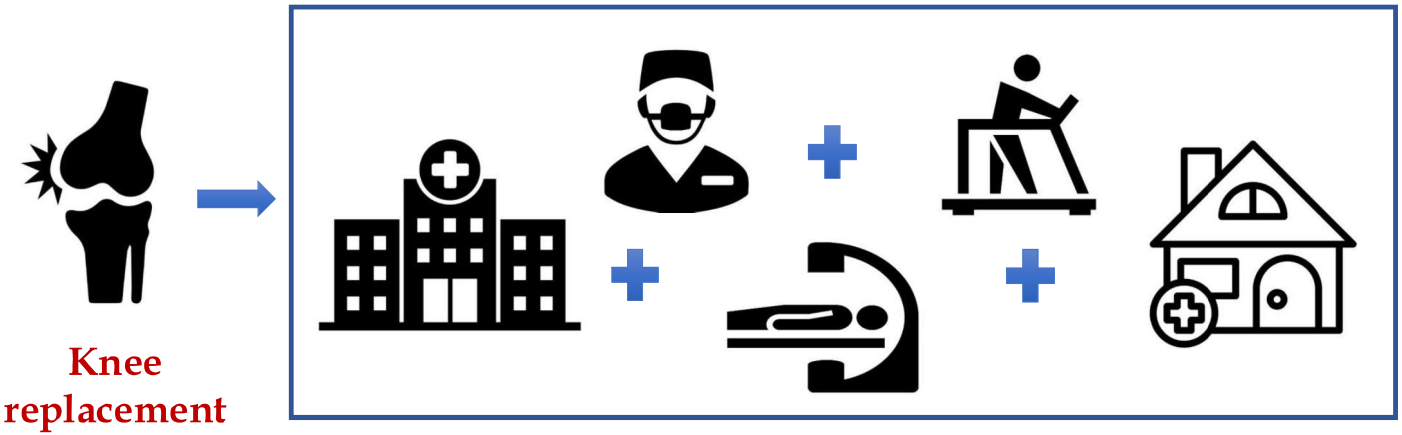
Figueroa JF et al., BMJ 2016; Ryan et al., NEJM 2018; Sankaran et al, BMJ 2019; Papanicolas I et al., Health Affairs 2017; Figueroa JF et al., JHHPL 2025.

Episode-Based Payment Models (Bundled Payments)

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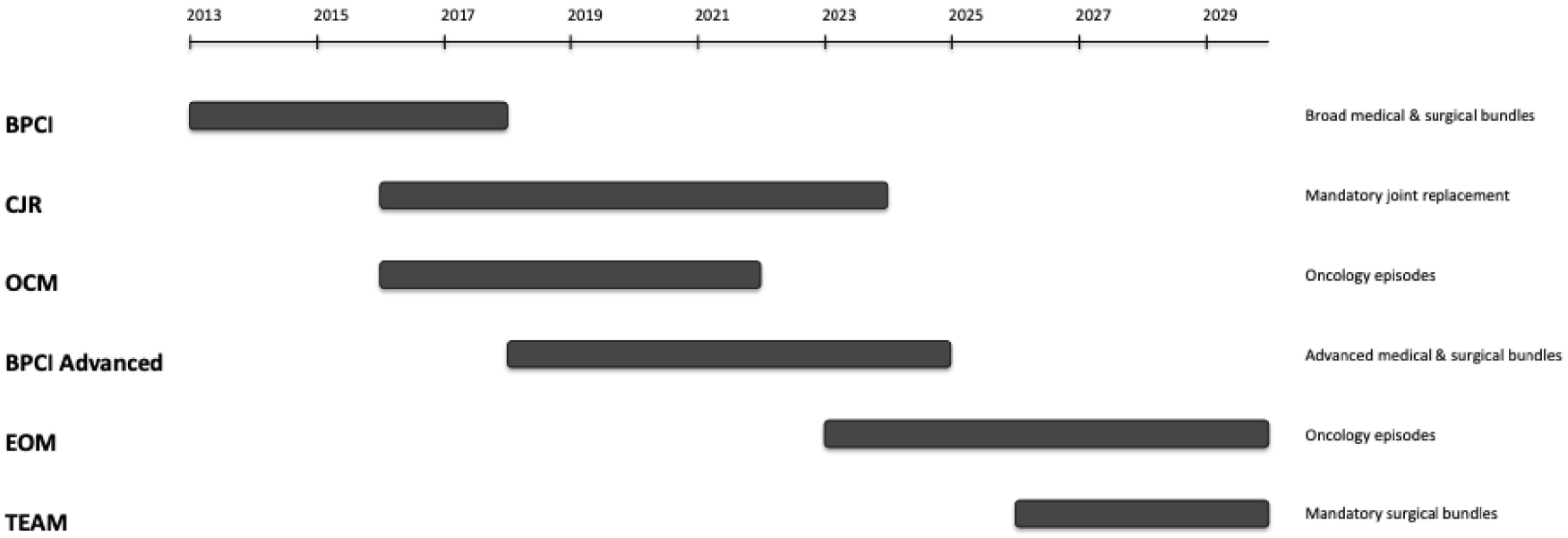
What are bundled payments?

"Single payment to providers or healthcare facilities for all services to treat a given condition or provide a given treatment."



Knee replacement

Different Types of Bundled Payment Models



Most BPCI/CJR/BPCI Advanced/TEAM episodes span hospitalization through 90 days post-discharge; OCM/EOM use 6-month oncology episodes.

Do Bundled Payments Work?

↓ Utilization

- Lower use of post-acute care, especially SNF use after surgery
- Increases discharges home
- Lower length of stay

↓ Spending

- Modest savings (generally)
- 1-4% in savings, through lower SNF & post-acute care spending
- Savings generally in elective surgical episodes and less likely in medical episodes

⊘ Quality

- Lower rate of readmissions
- No changes in ED visits
- No impact on complication rates
- No impact on mortality

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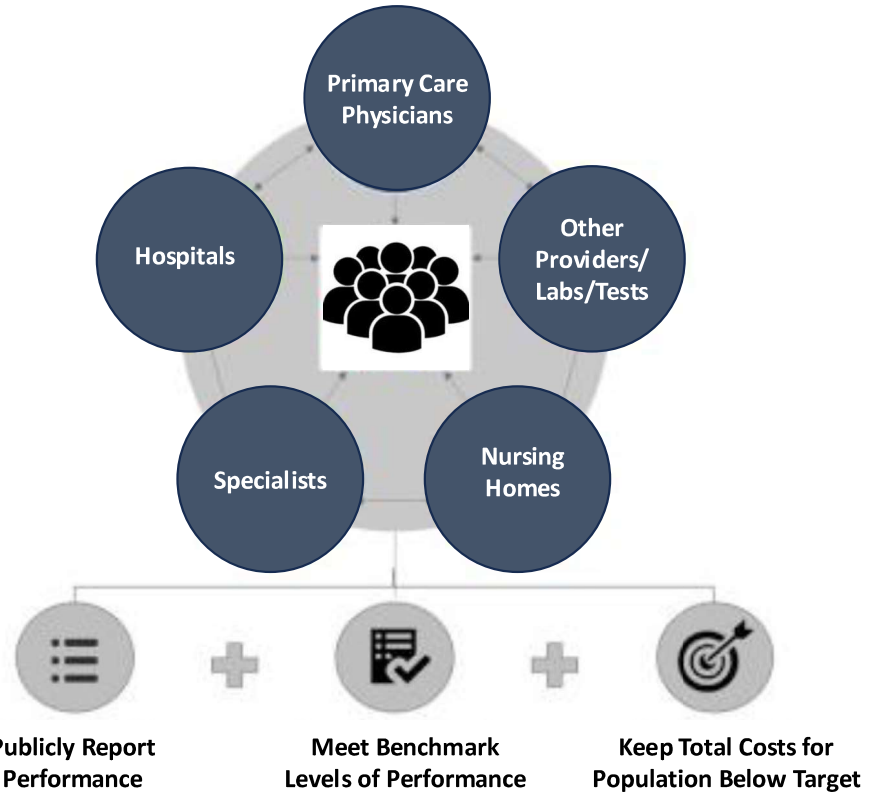
Agarwal et al., Health Affairs, 2019. Figueroa JF et al., JHHPL 2025.

Population-Based Payment Models (Accountable Care Organizations, ACOs)

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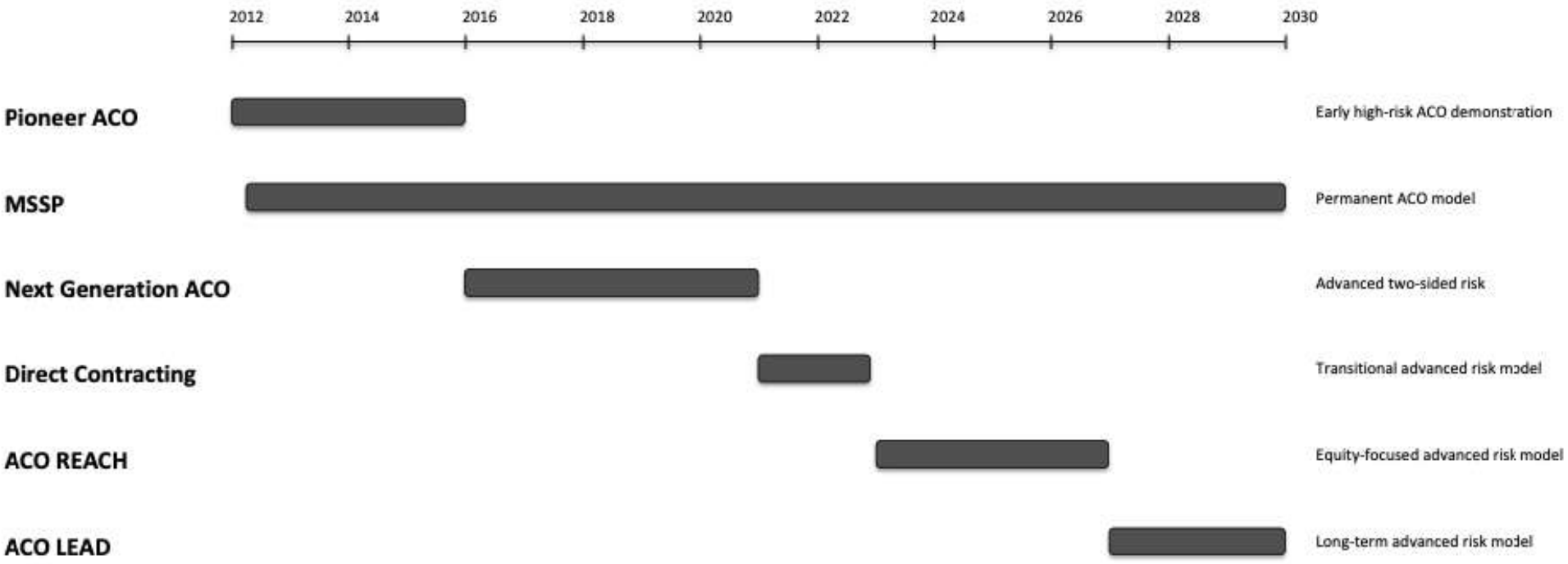
What are ACOs?

Group of **providers** that take **responsibility** for the **costs** and **outcomes** of a **population** over period of time



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Types of Medicare ACO Models



Note: Timeline truncated at 2030. ACO LEAD continues through December 31, 2036. Pioneer ACO began January 1, 2012; MSSP first cohort began April 1, 2012.

ACOs Must Meet Quality Standards

Patient/Caregiver Experience



Example:
Rating Doctors

Screening/Prevention



Example: % Patients Vaccinated
% Patients Colorectal Cancer Screening

Care Coordination/Patient Safety



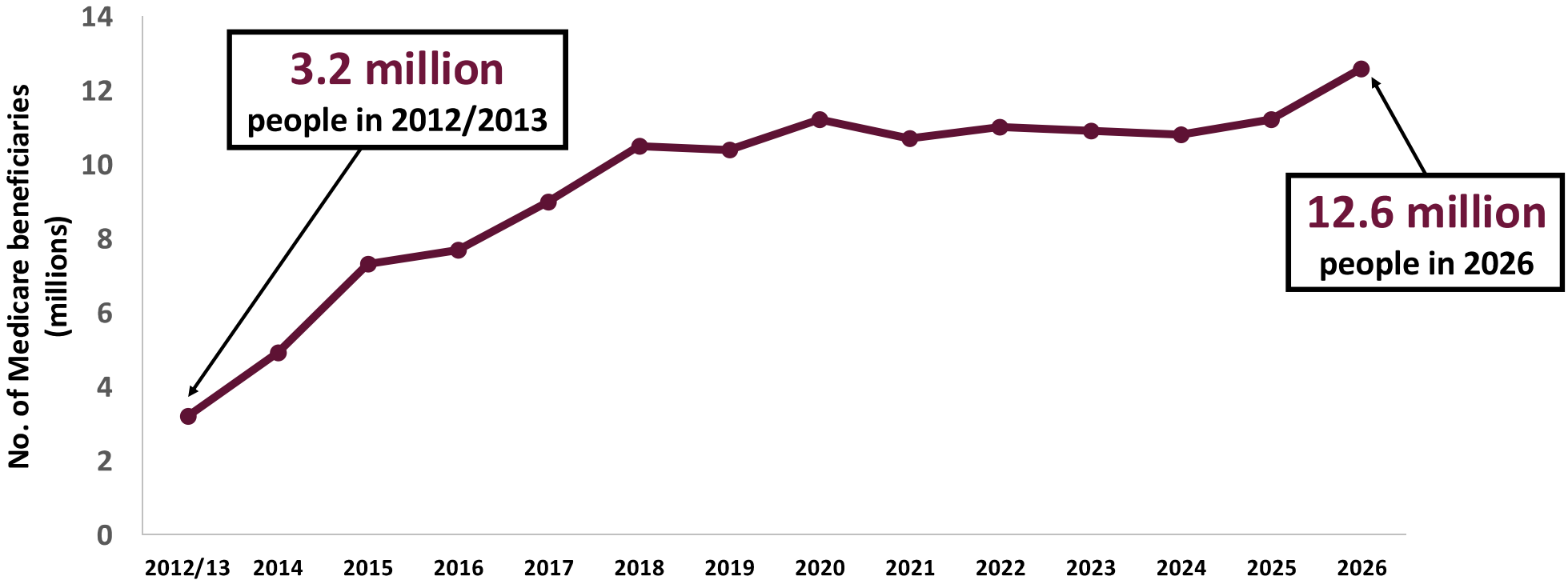
Example:
All cause-readmissions
% PCPs on EHRs

Chronic Disease Management
(DM, HTN, IHD, CHF)



Example:
% Patients with good diabetes control

Number of Medicare beneficiaries in ACOs



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Have ACOs Improved Costs & Use of Care?

- Systematic reviews (one of 59 studies and one of 42 studies) + scoping review of literature examining use & spending in ACOs vs. non-ACOs
- Medicare ACOs produced modest cost savings (1-3%)
- Lower utilization of inpatient stays, ED visits, and lower SNF spending

Primary Care-Led ACOs

Hospital-Led ACOs

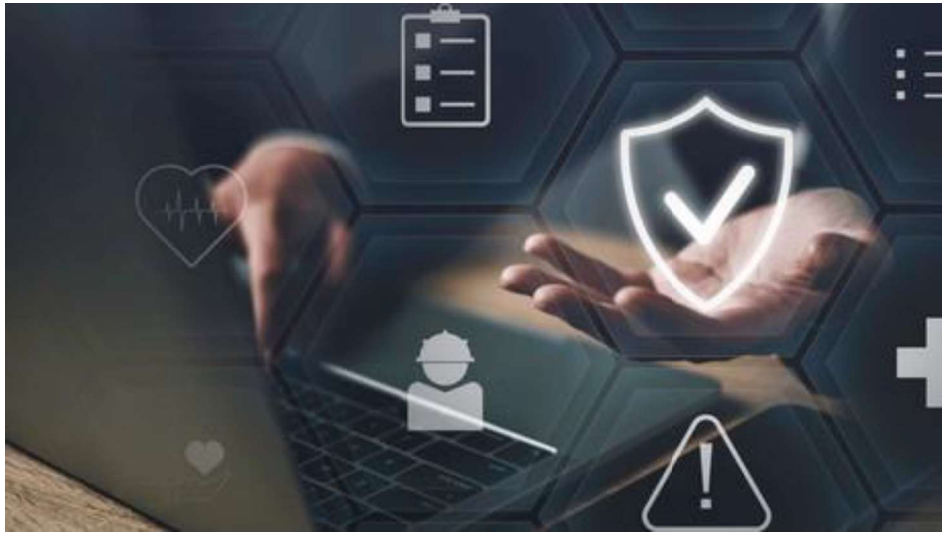
Greater savings generated by primary care-led ACOs

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Kaufman et al, JHPPL, 2017. Wilson et al, JHSRP, 2020; Figueroa JF et al., JHPPL 2025.

Have ACOs Improved Quality of Care?

- **Evidence suggests ACOs are associated:**
  - **Better on measures of preventative care** (e.g., vaccines, screenings)
  - **Modest improvements in chronic disease management**
- **Mixed data on patient experience**
- **Limited data on physician experience (e.g., clinician satisfaction, burnout)**
- **No changes in patient mortality**



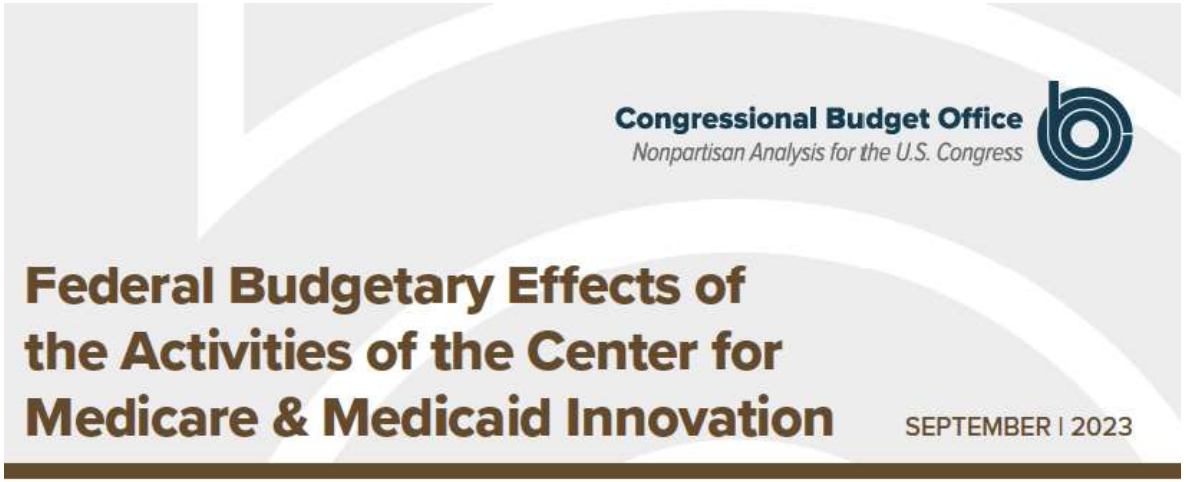
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Kaufman et al, JHPPL, 2017. Wilson et al, JHSRP, 2020; Figueroa JF et al., JHPPL 2025.

Hospital P4P Has Not Worked But ACOs and Bundled Payment Models Have Led to Modest Spending Reductions with Little to No Effect on Quality

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Is Value-Based Payment Reform Leading to Savings?



$7.9 billion
for CMMI Operations
(2011-2020)

$2.6 billion
in Estimated Savings
(2011-2020)

$5.3 billion
in Costs from CMMI
(2011-2020)

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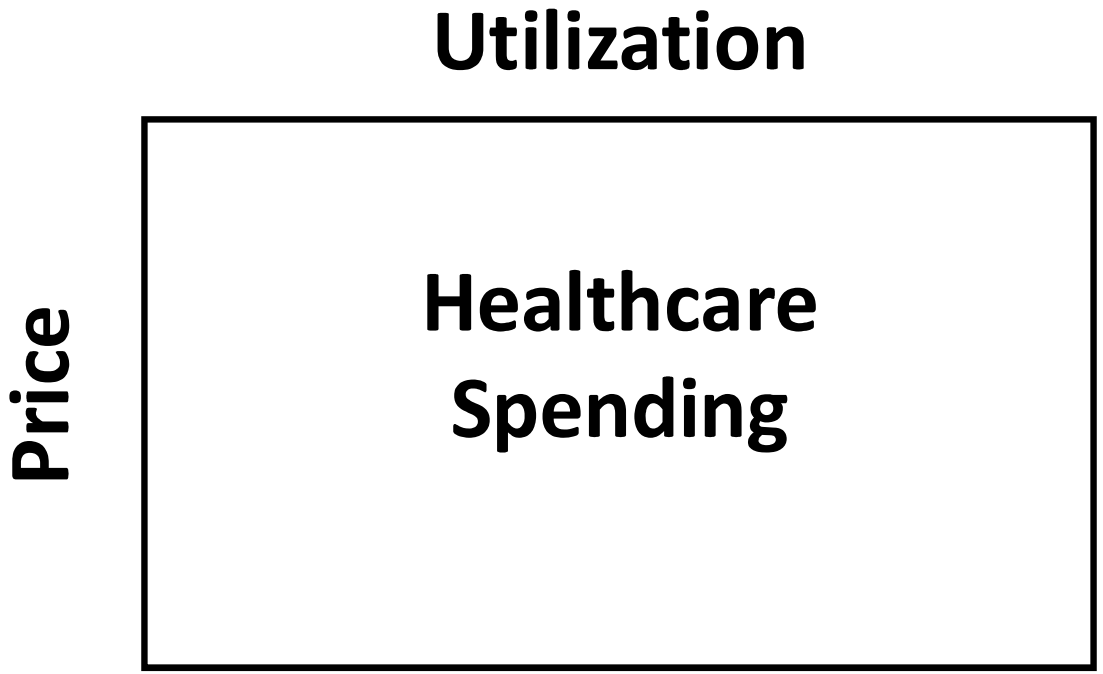
Key Questions:

1. Should the US reconsider value-based care as a strategy to improve health system performance?

2. Why did some programs (ACOs, BPMs) succeed in modest cost reduction but not quality?

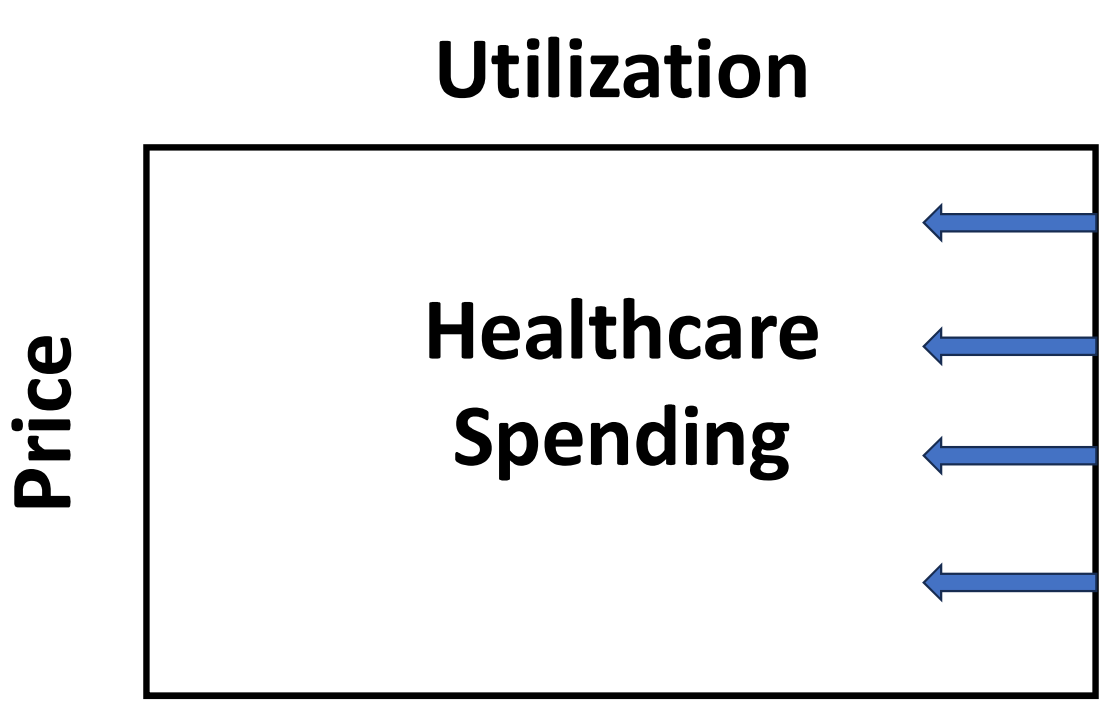
3. What can we learn from other countries?

Focus of Healthcare Reform in US



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Focus of US Healthcare Reform to Date



Value-Based Payment Efforts in US
(Over 40 models)

Hospital P4P

VBP in other sectors
(dialysis, home health agencies, SNFs, etc.)

Bundled Payments

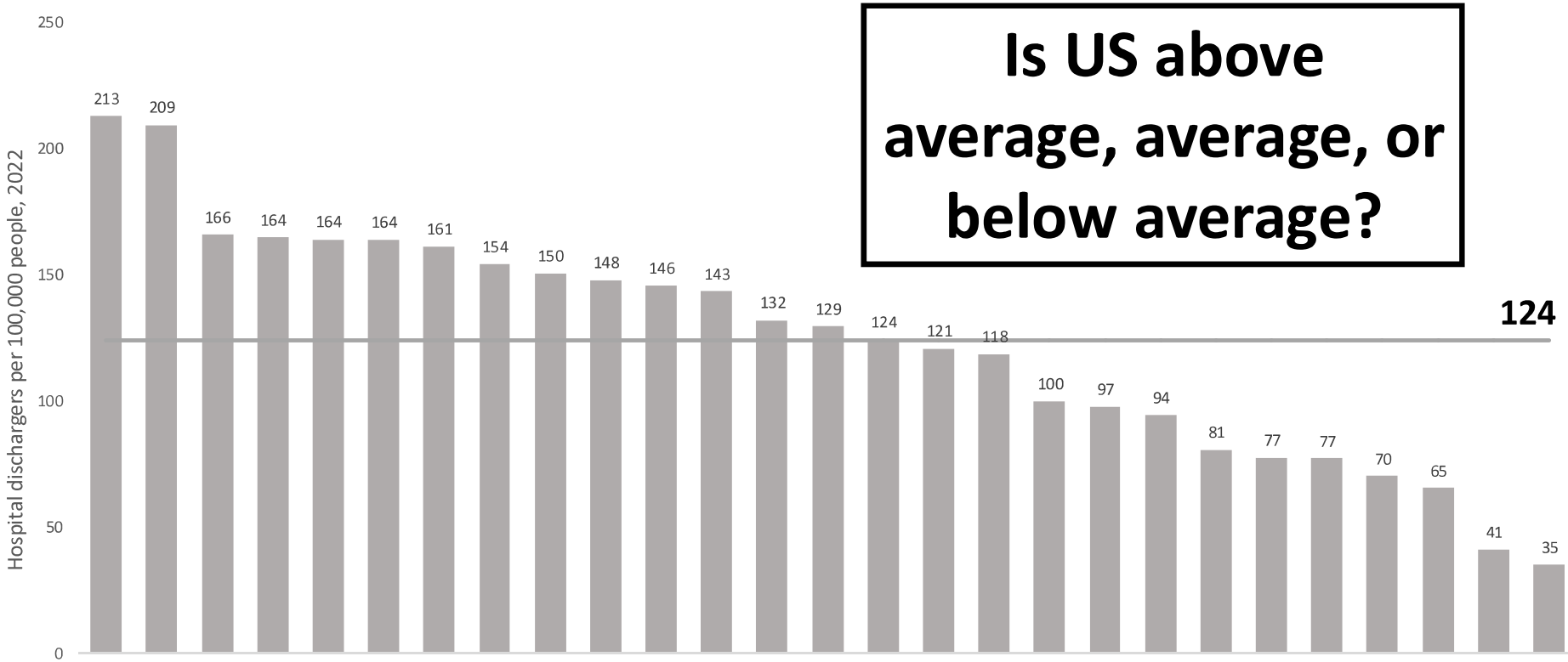
ACOs

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Do Americans Overutilize Health Care?

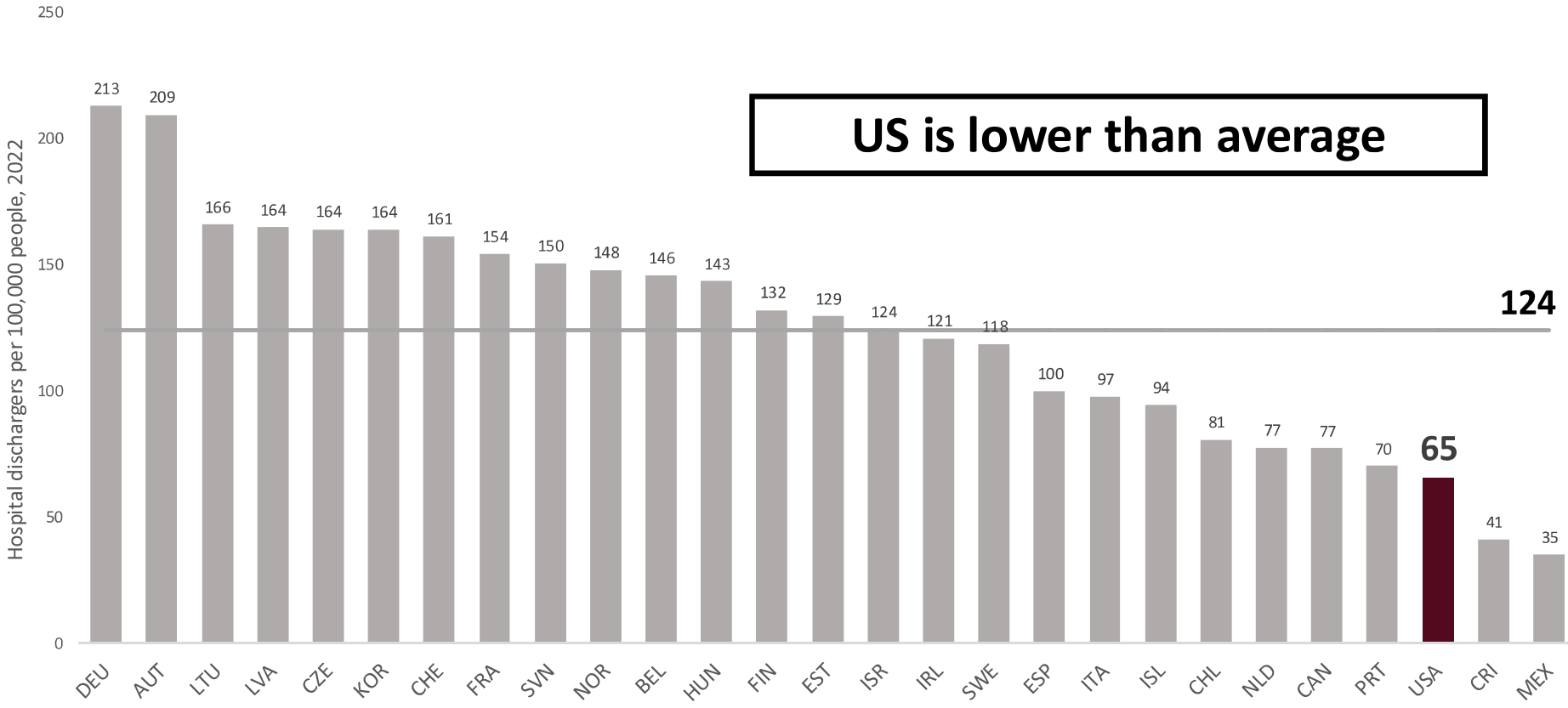
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Hospitalizations per 100,000 people



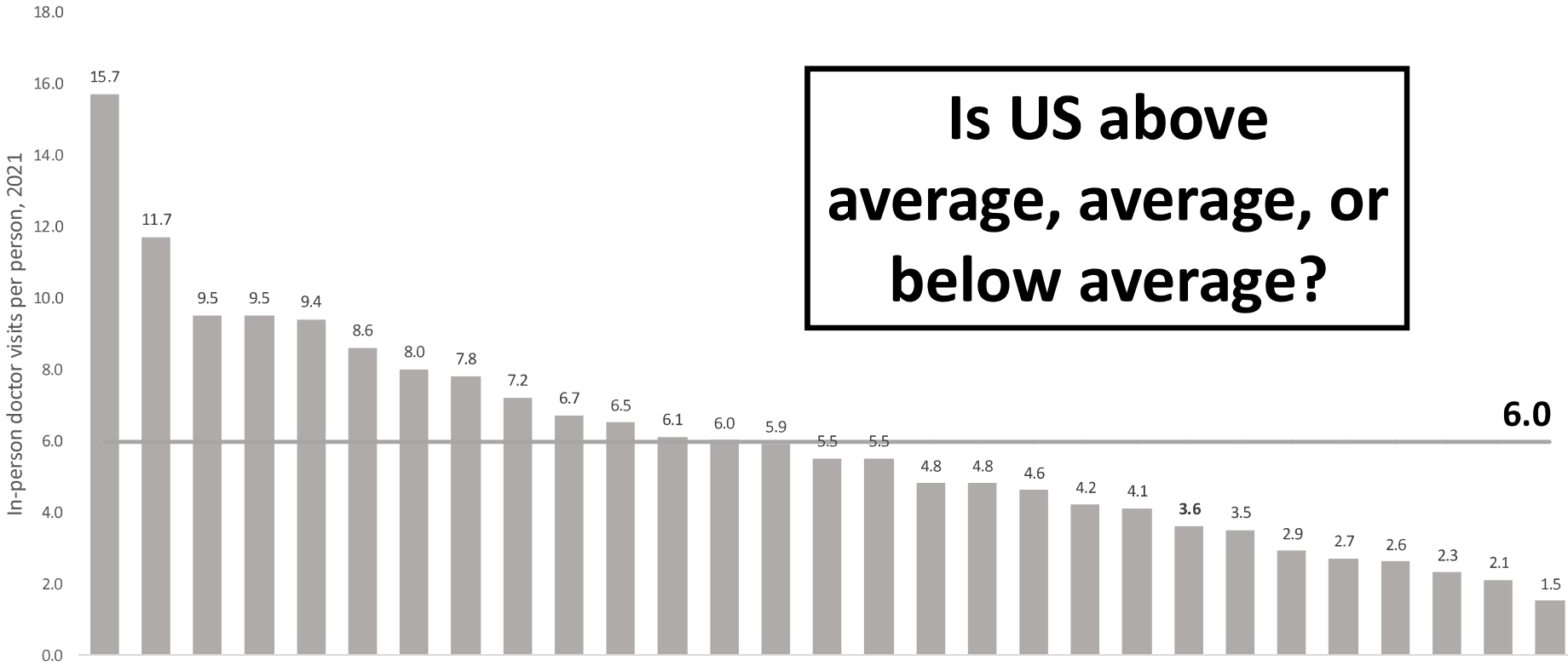
OECD Data Explorer, 2024.

Hospitalizations per 100,000 people



OECD Data Explorer, 2024.

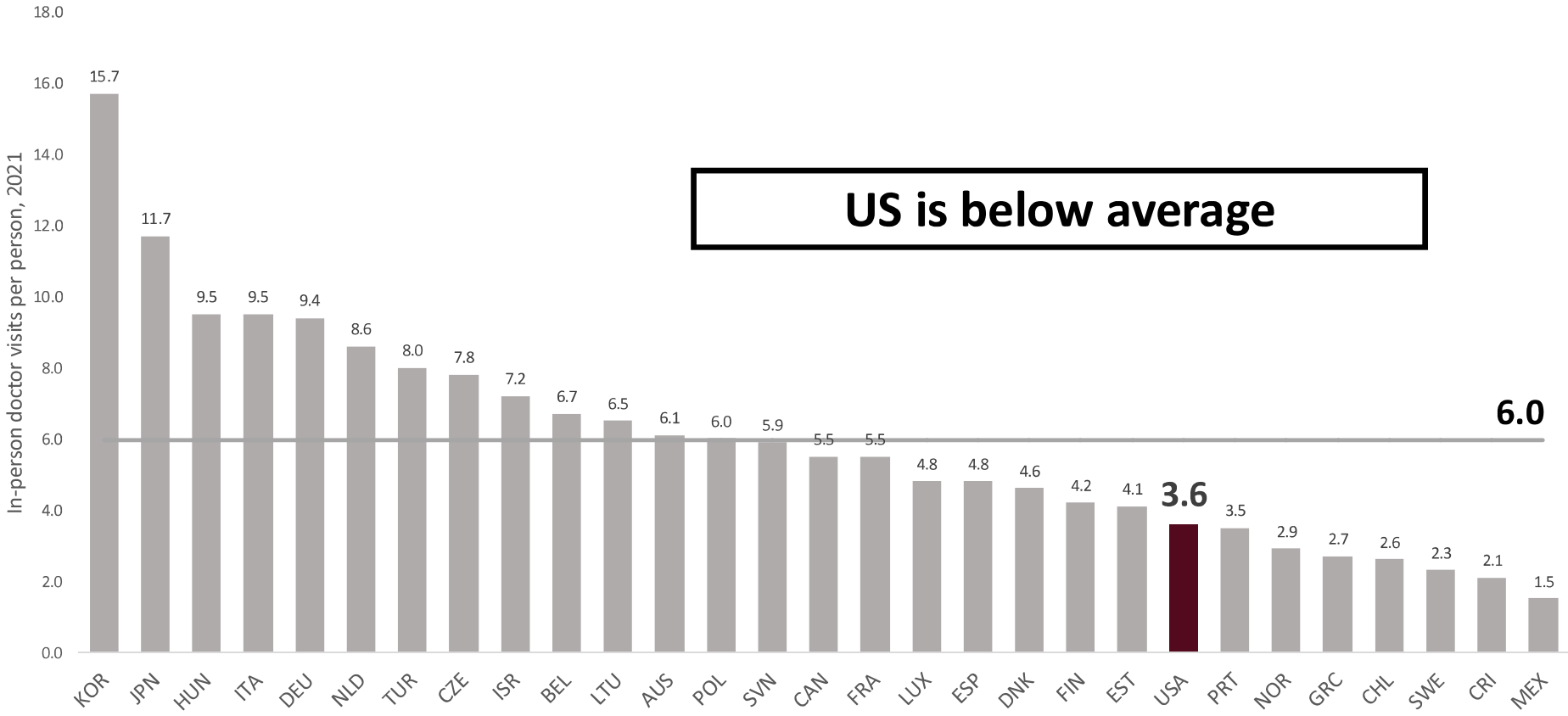
In-person doctor visits per capita



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OECD Data Explorer, 2024.

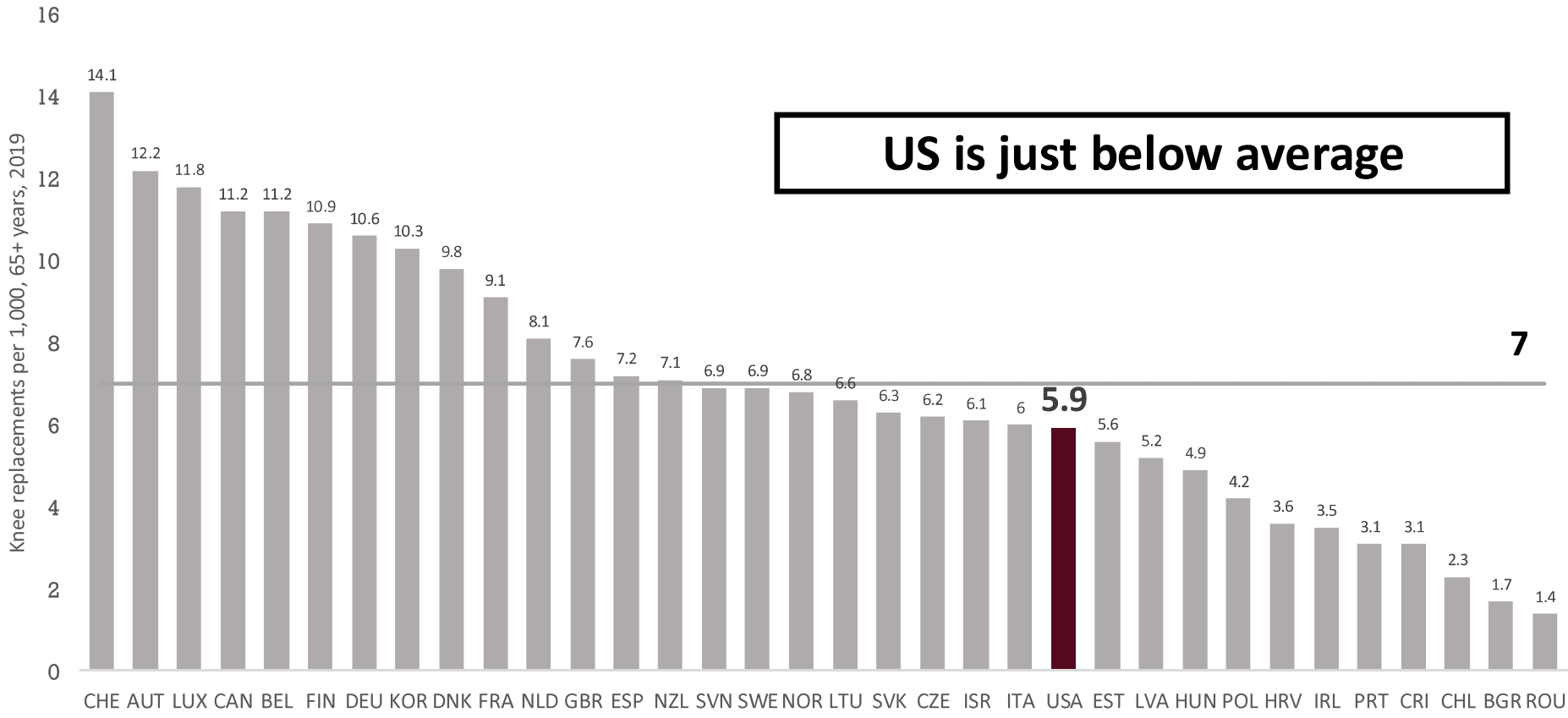
In-person doctor visits per capita



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OECD Data Explorer, 2024.

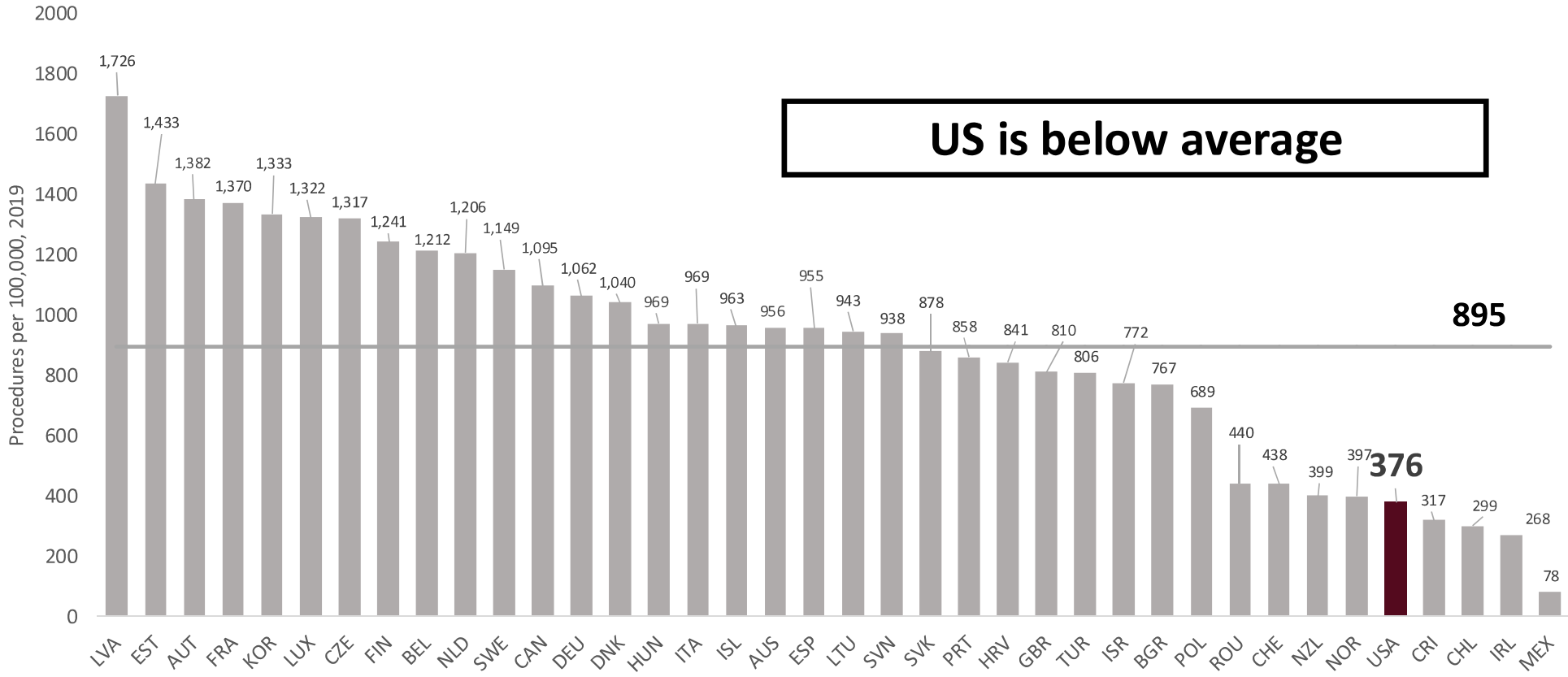
Knee replacements per 1,000 among adults 65+



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OECD Data Explorer, 2024.

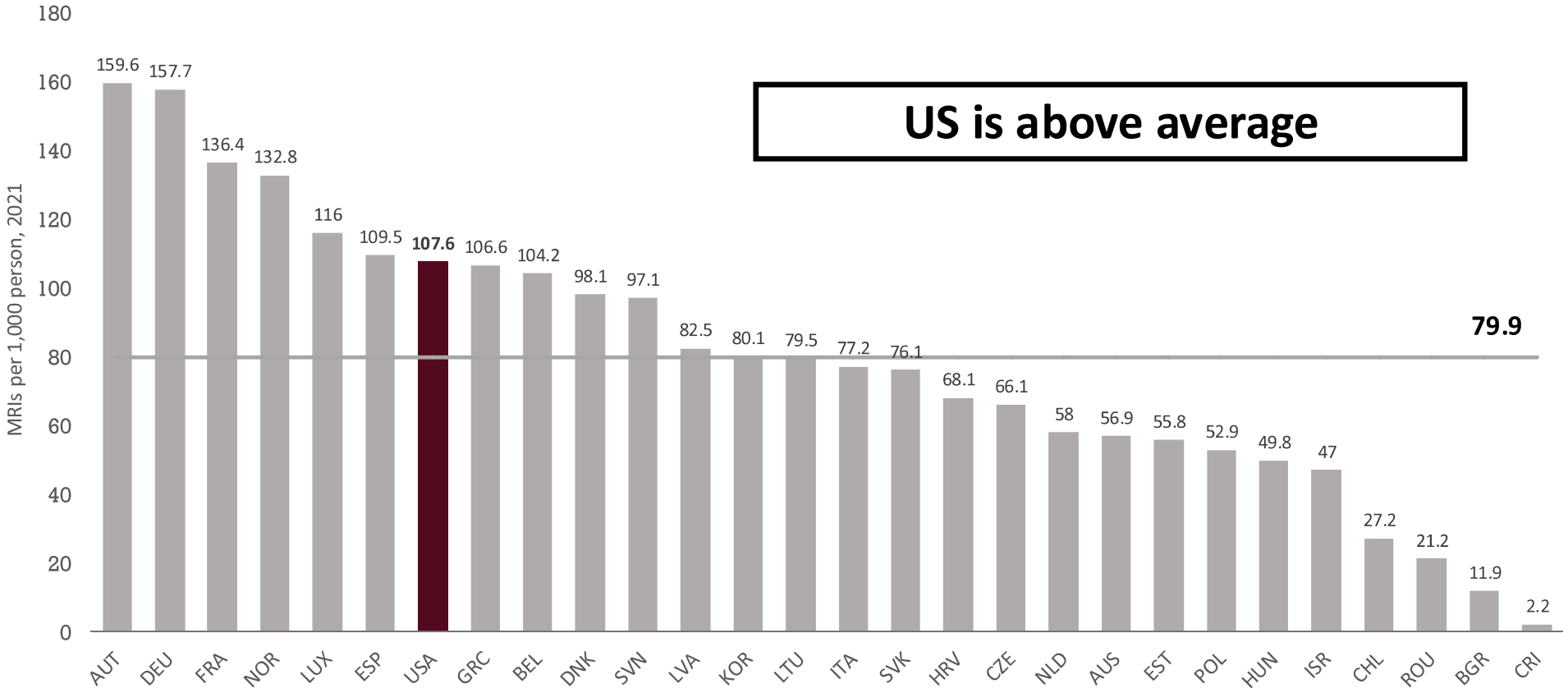
Cataract surgery per 100,000 people



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OECD Data Explorer, 2024.

Use of MRIs per 1,000 people

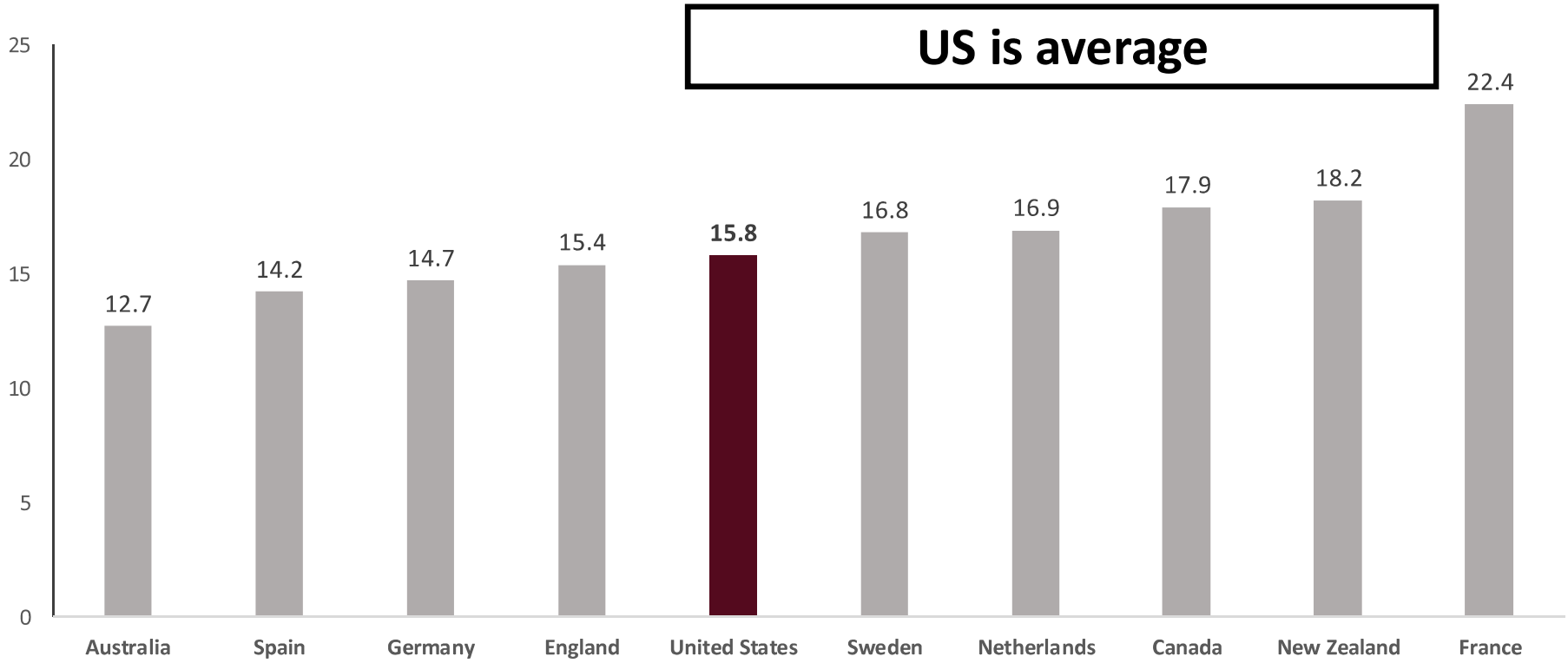


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OECD Data Explorer, 2024.

Drug use among patients with HF and Diabetes

No. of unique drugs filled per year among patients 65+ with HF and diabetes



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Figueroa JF et al., Health Serv Res. 2022.

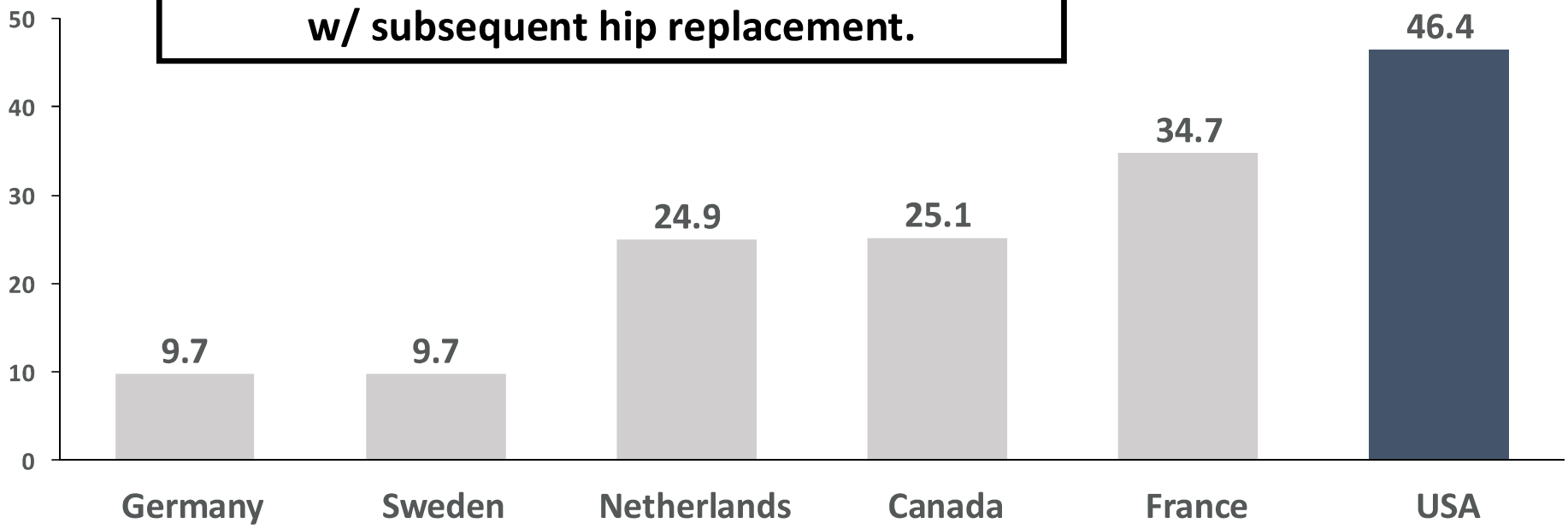
What About Post-Acute Care (Skilled Nursing Facility Use)

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Days in acute care rehab facilities after hip replacement

Among a standardized patient cohort 65+ who underwent hip replacement after hip fracture (ICCONIC network)

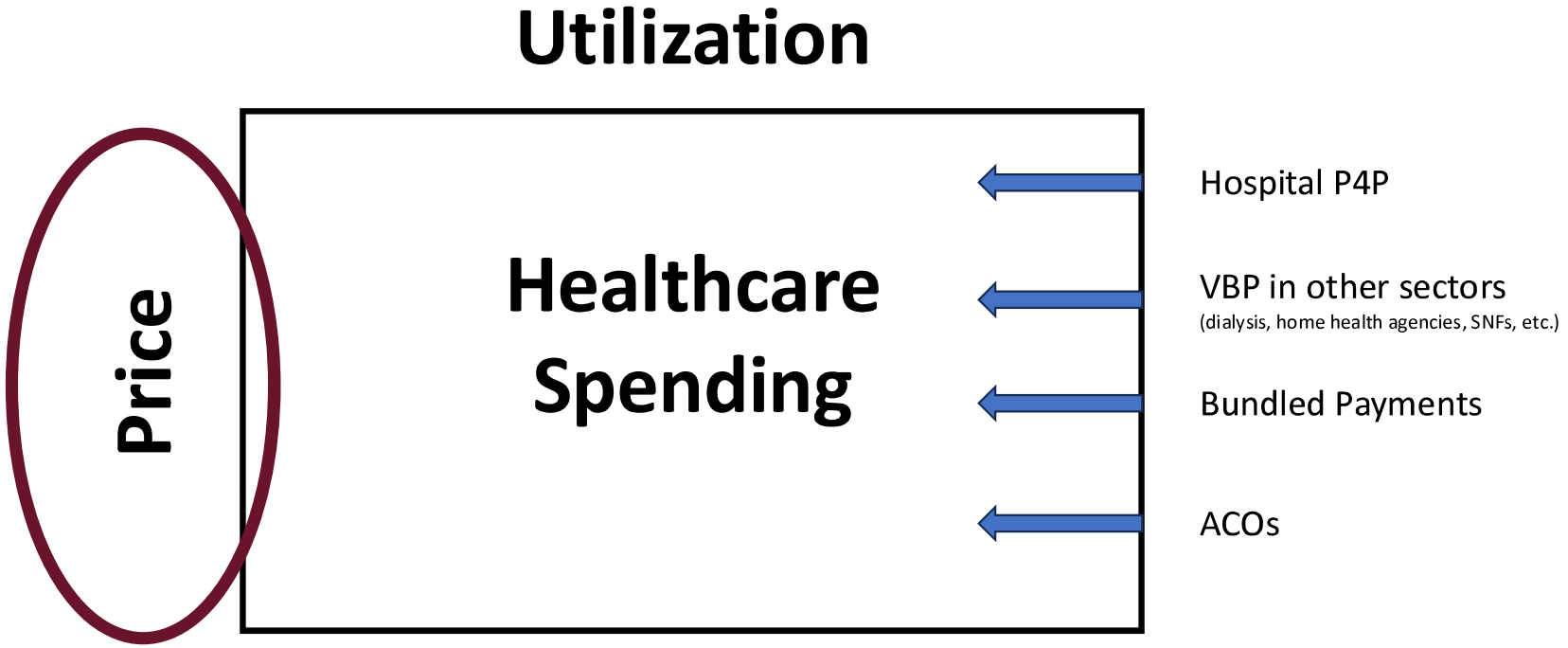
Patients in the US spend <u>significantly more days</u> in acute rehab facilities following a hip fx w/ subsequent hip replacement.



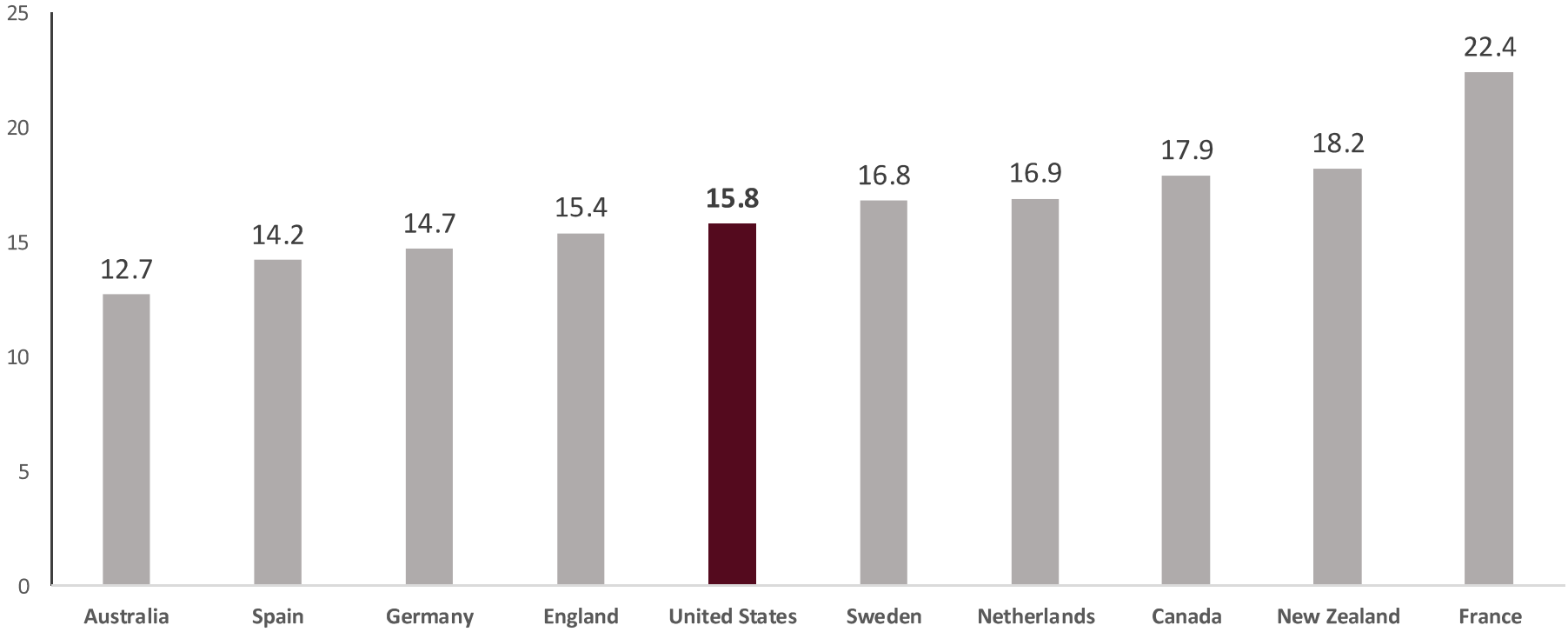
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Papanicolas I, Figueroa JF, et al., Health Serv Res. 2021.

Focus of US Healthcare Reform



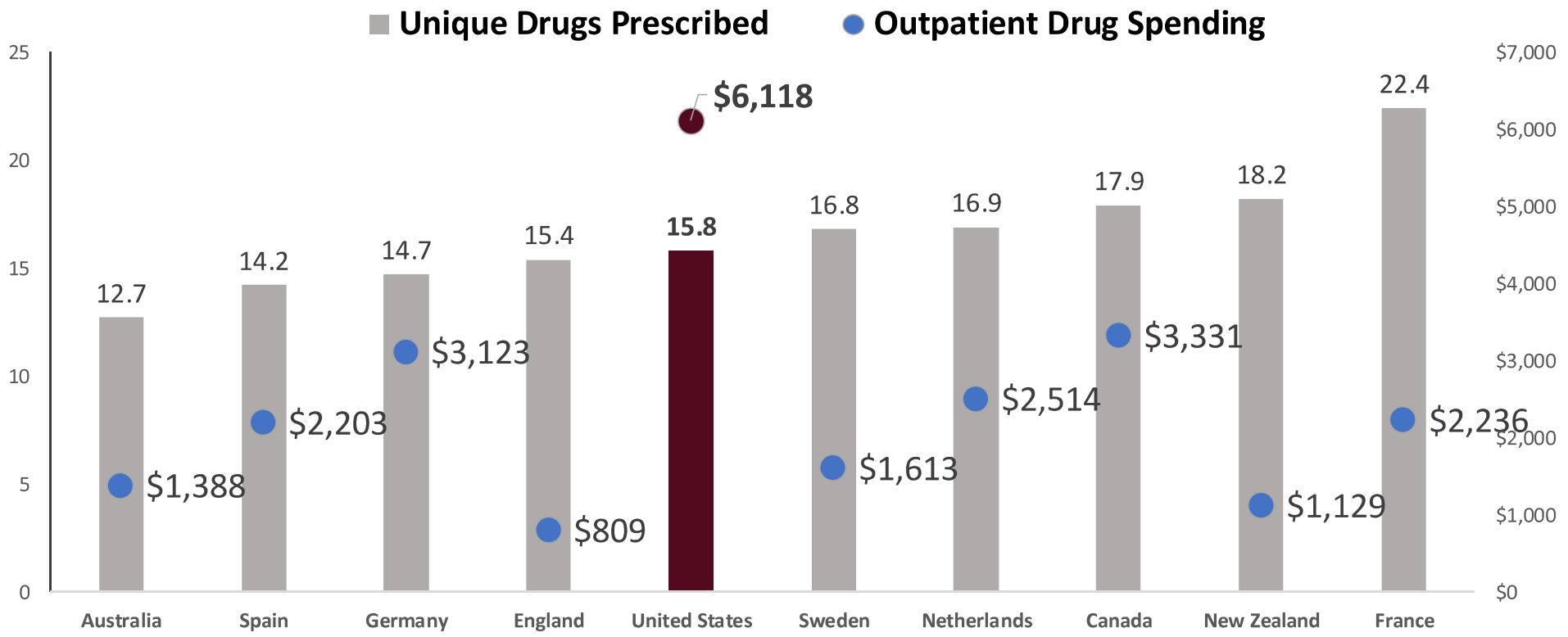
Drug Use & Spending for Patients with HF & Diabetes



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Figueroa JF et al., Health Serv Res. 2022.

Drug Use & Spending for Patients with HF & Diabetes

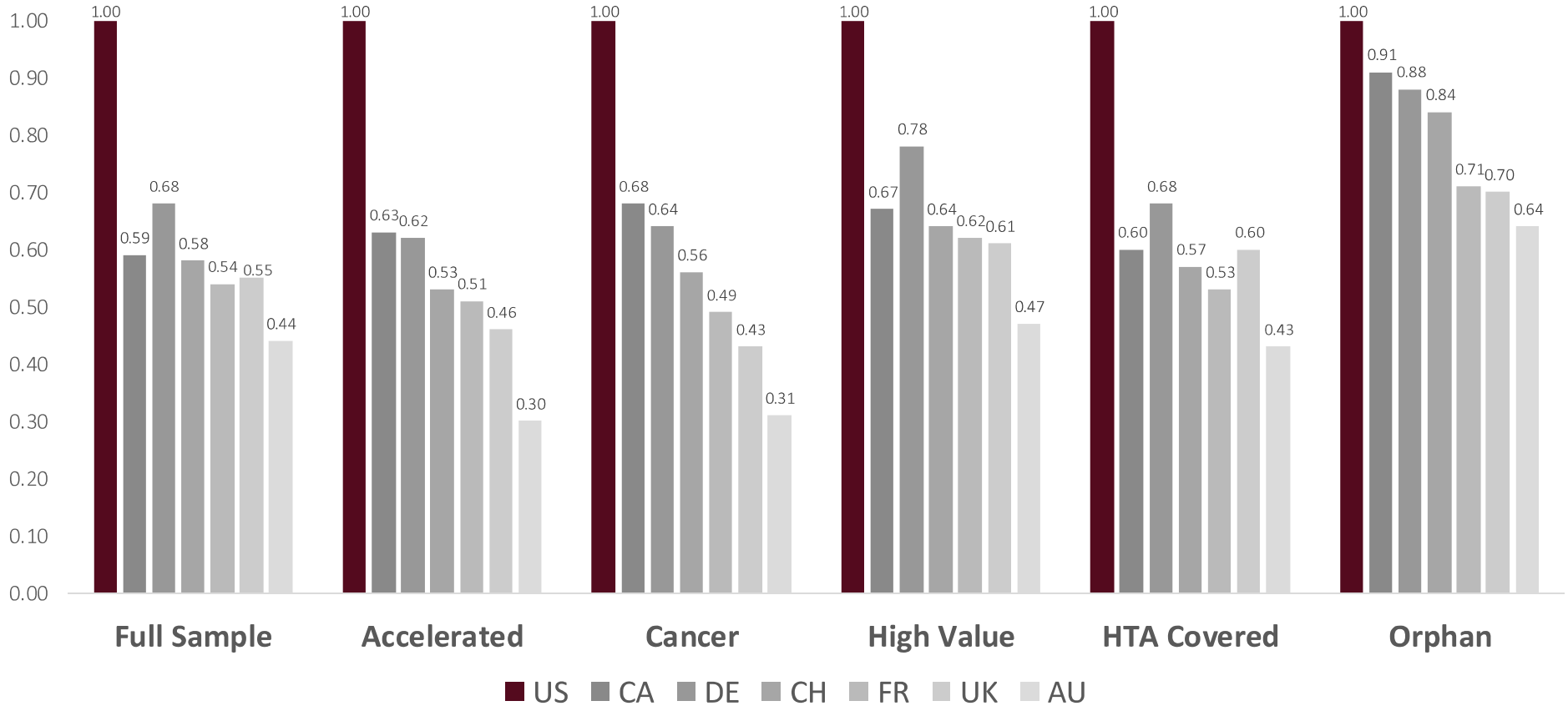


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Figueroa JF et al., Health Serv Res. 2022.

Comparative prices for new brand name drugs

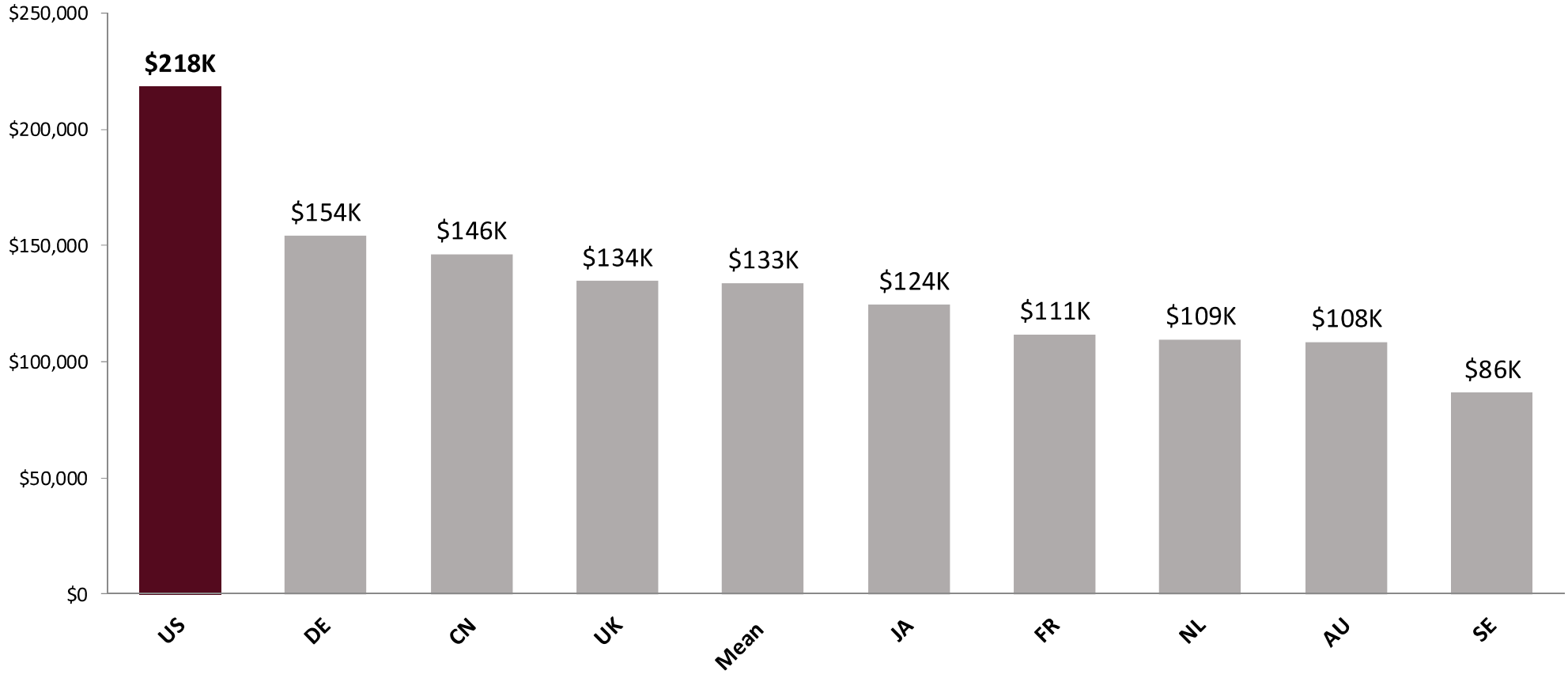
(FDA approvals between 2014-2018)



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IQVIA Data, 2024.

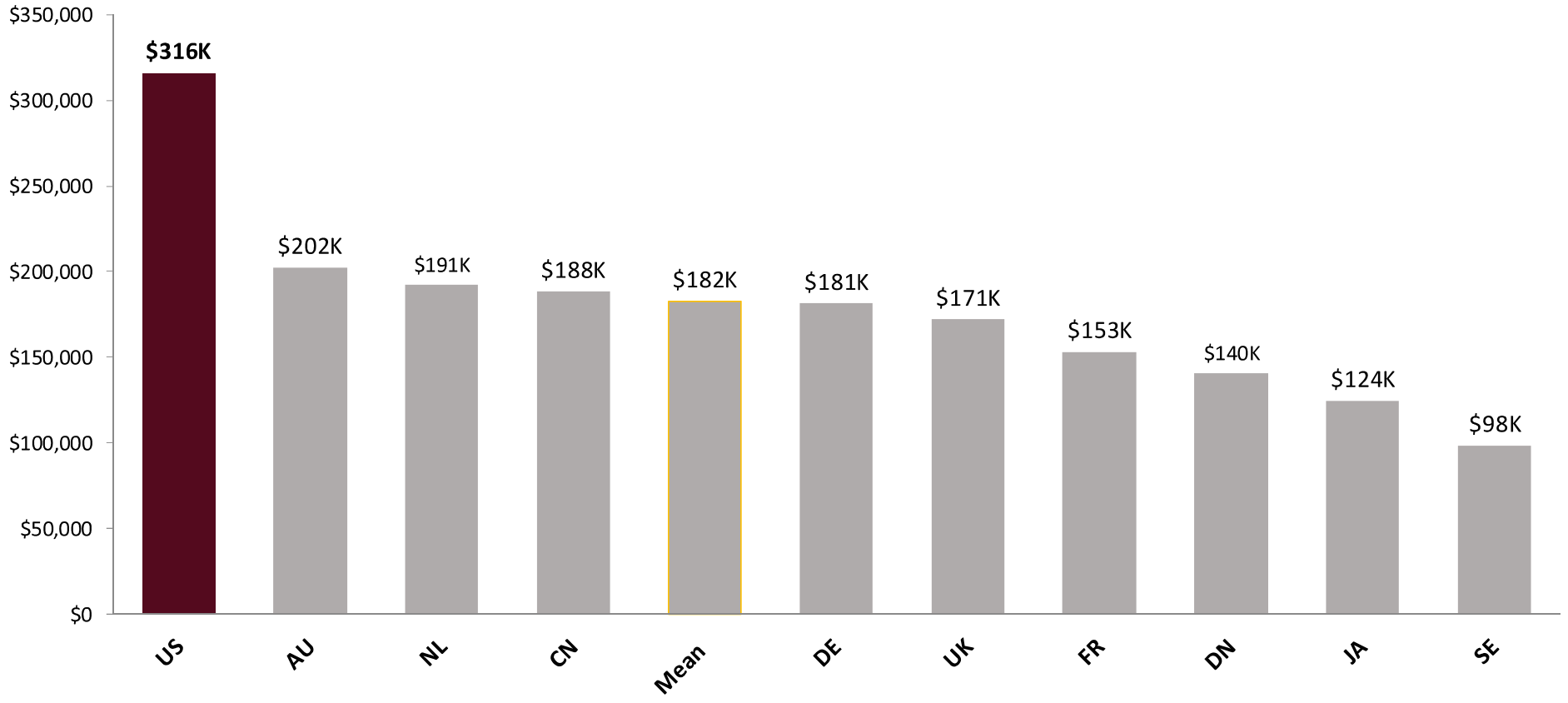
Generalist physician salaries



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Papanciolas I., 2024.

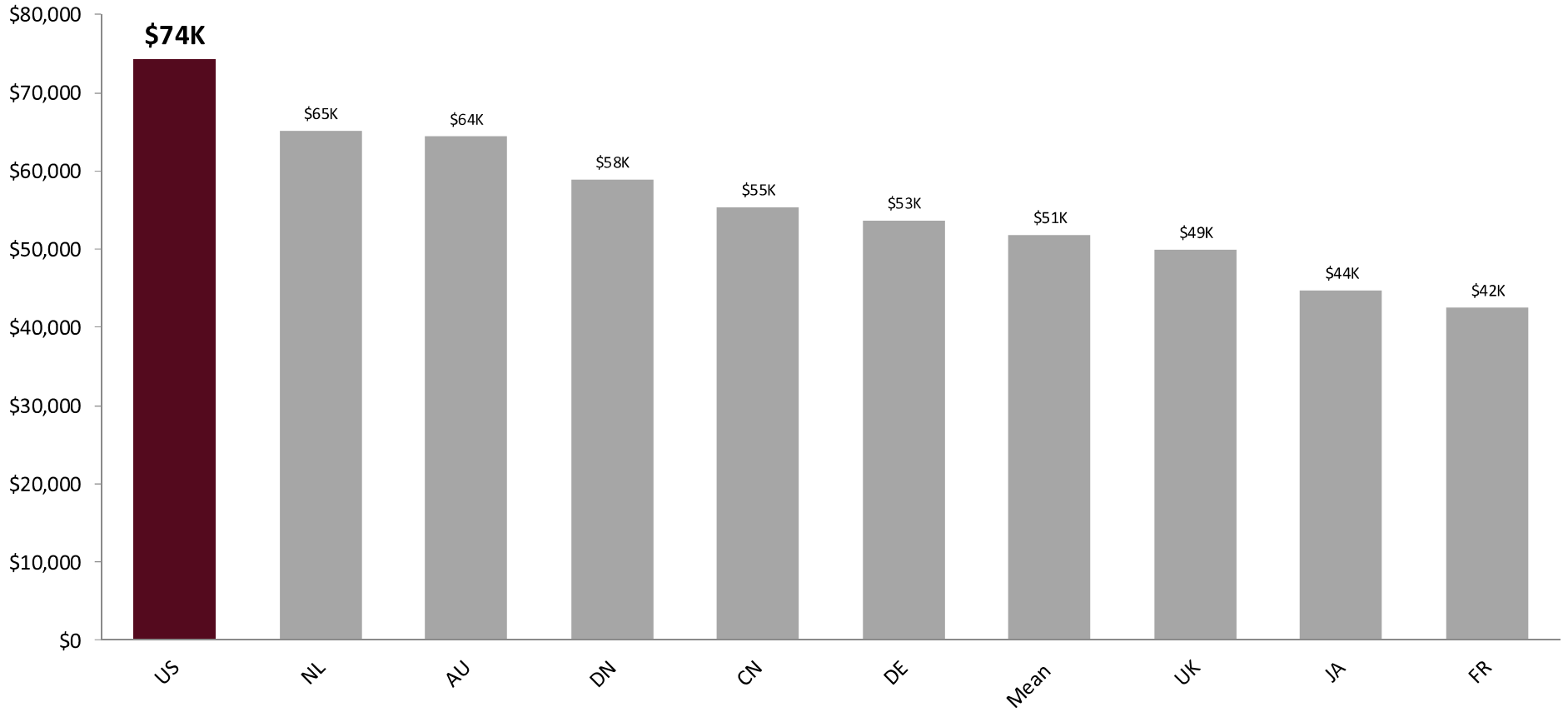
Specialist physician salaries



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Papanciolas I., 2024.

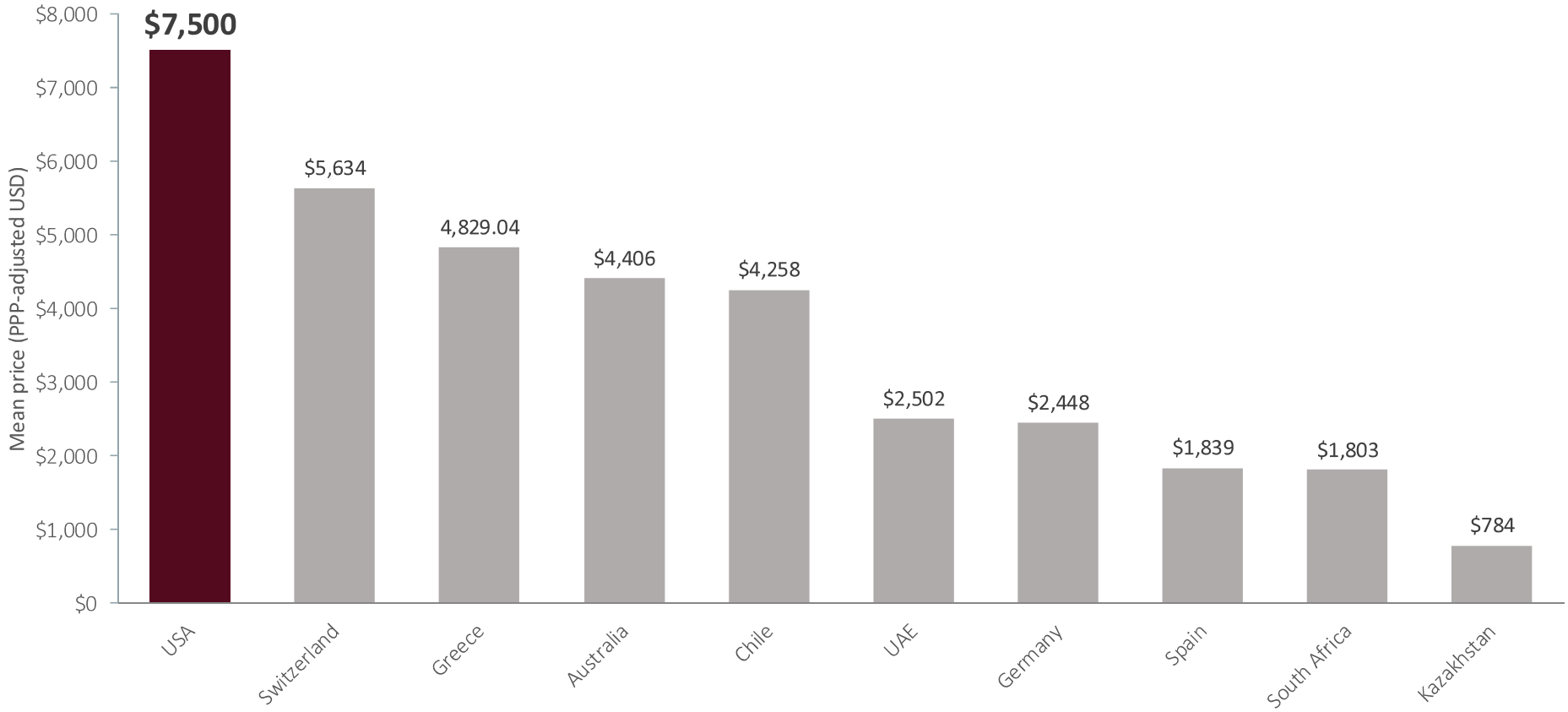
Nurse salaries



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Papanciolas I., 2024.

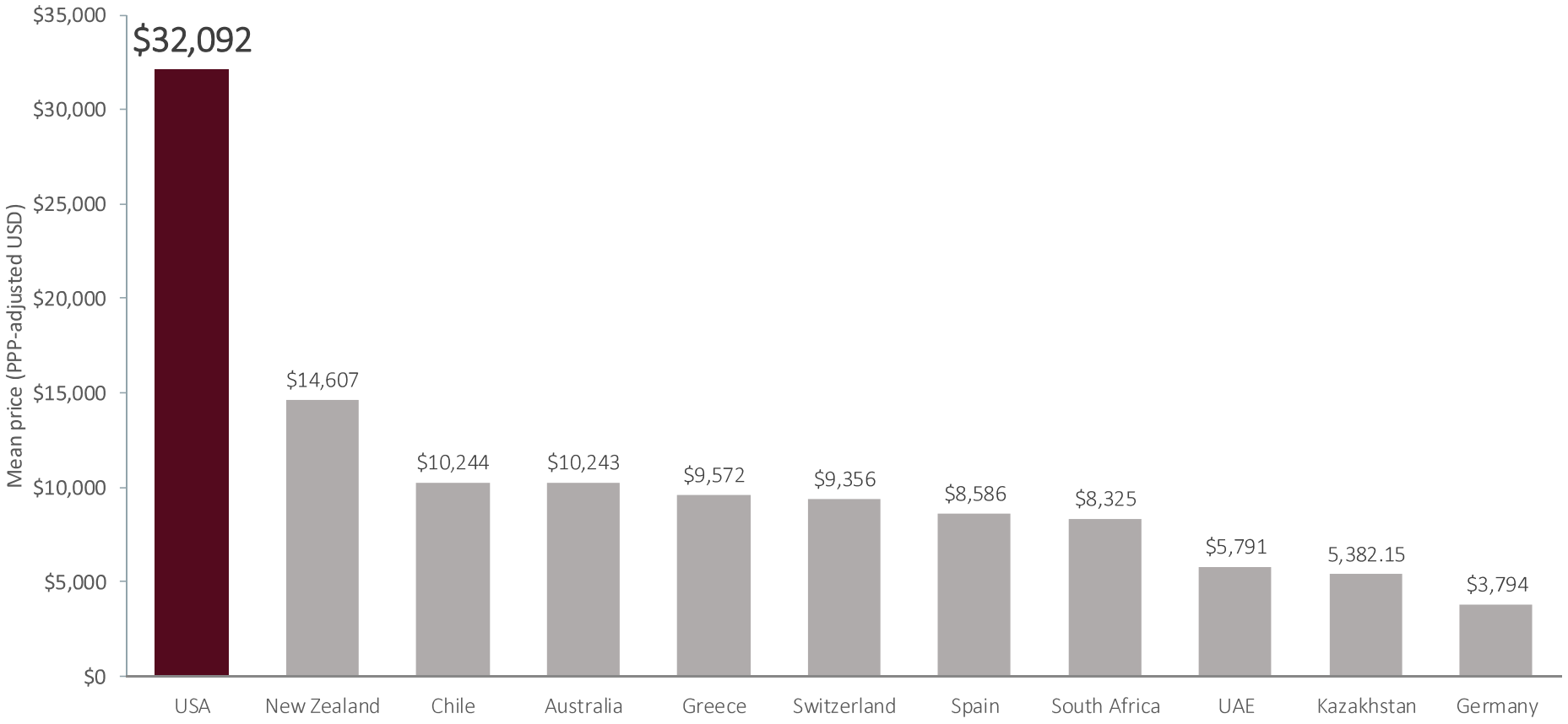
Costs of Vaginal Delivery



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Papanciolas I., 2024.

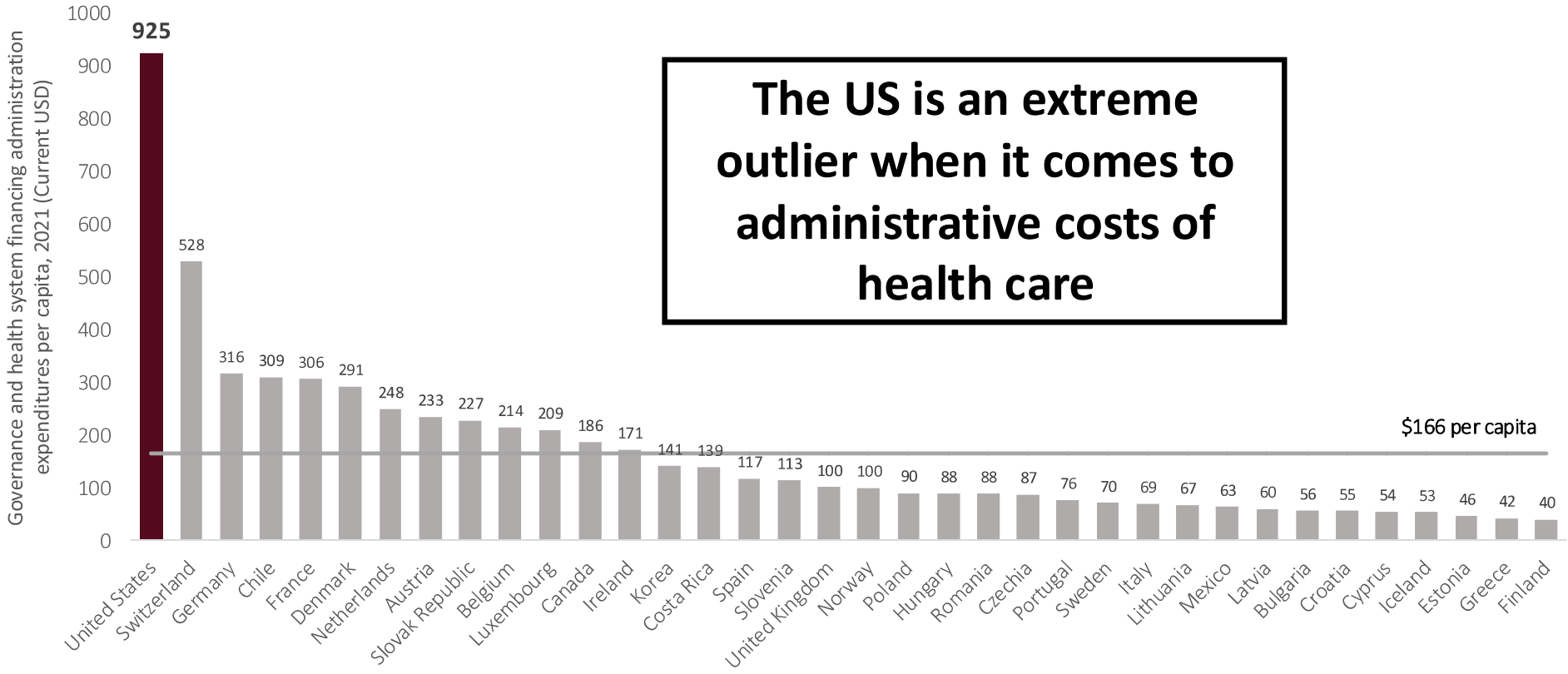
Costs of Angioplasty



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Papanciolas I., 2024.

Administrative costs of healthcare system per capita



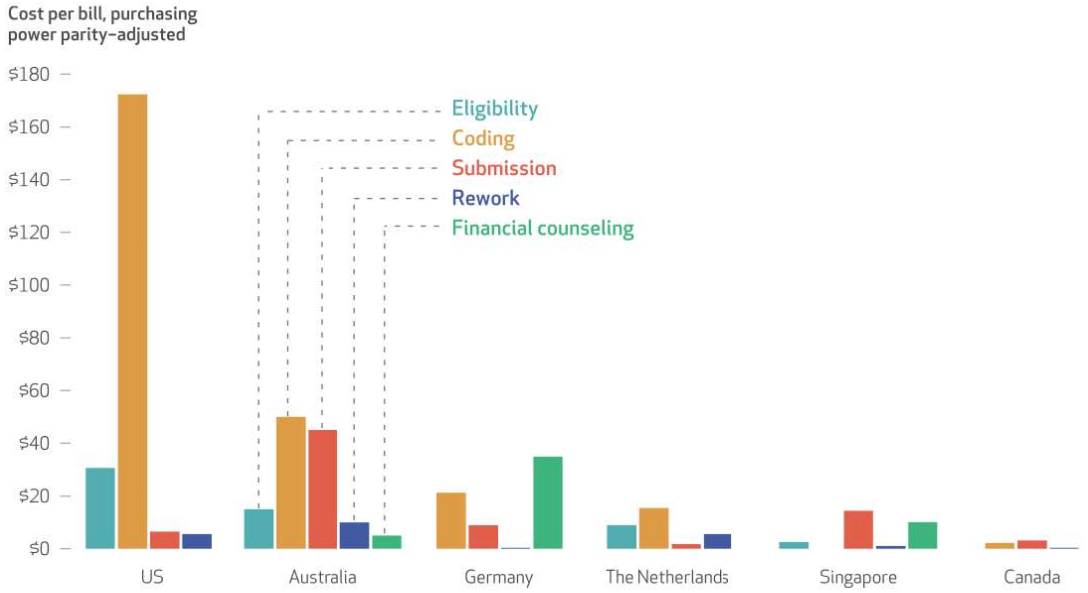
The US is an extreme outlier when it comes to administrative costs of health care

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OECD Data Explorer, 2024.

Estimated hospital administrative costs

Billing and insurance-related costs in six countries, by activity category, derived from a time-driven activity-based costing study, 2018–20



SOURCE Authors' calculations based on data collected for the study from Australia, Canada, Germany, the Netherlands, and Singapore. US data (for 2017) are from Tseng P, et al. Administrative costs associated with physician billing and insurance-related activities at an academic health care system (see note 5 in text). **NOTES** Values are 2020 purchasing power parity–adjusted US dollars. Bills from Australia, Germany, and the US represent inpatient surgical bills; those from Singapore represent combined surgical and nonsurgical inpatient bills; those from Canada represent nonsurgical inpatient bills; and those from the Netherlands do not distinguish processes among surgical and nonsurgical billing. Coding in the Netherlands is done by physicians; procedure codes also serve as billing codes, so there is no need for a separate team of coders.

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Richman et al., Health Affairs 2022.

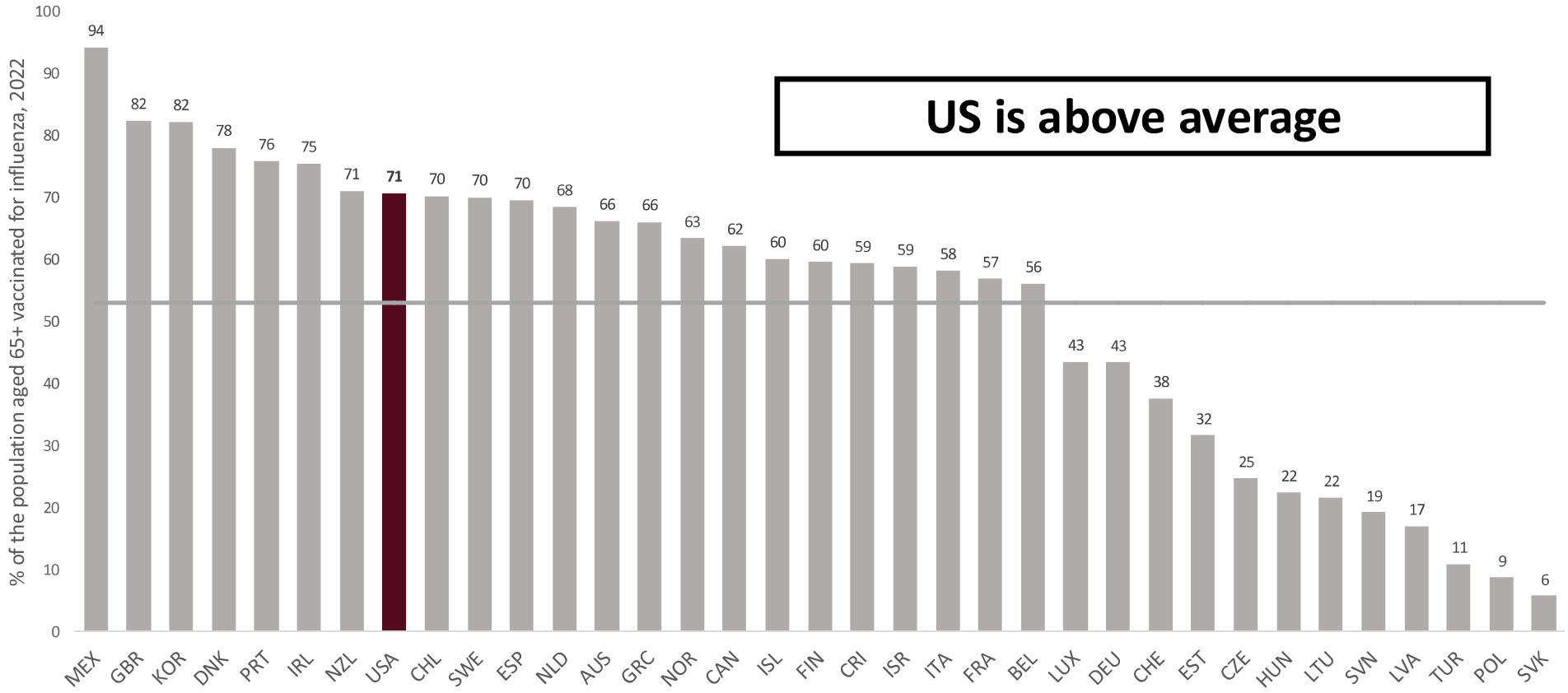
Why did the VBP models have little to no effect on quality of care?

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Does the US underperform on common measures of quality incentivized under VBP efforts?

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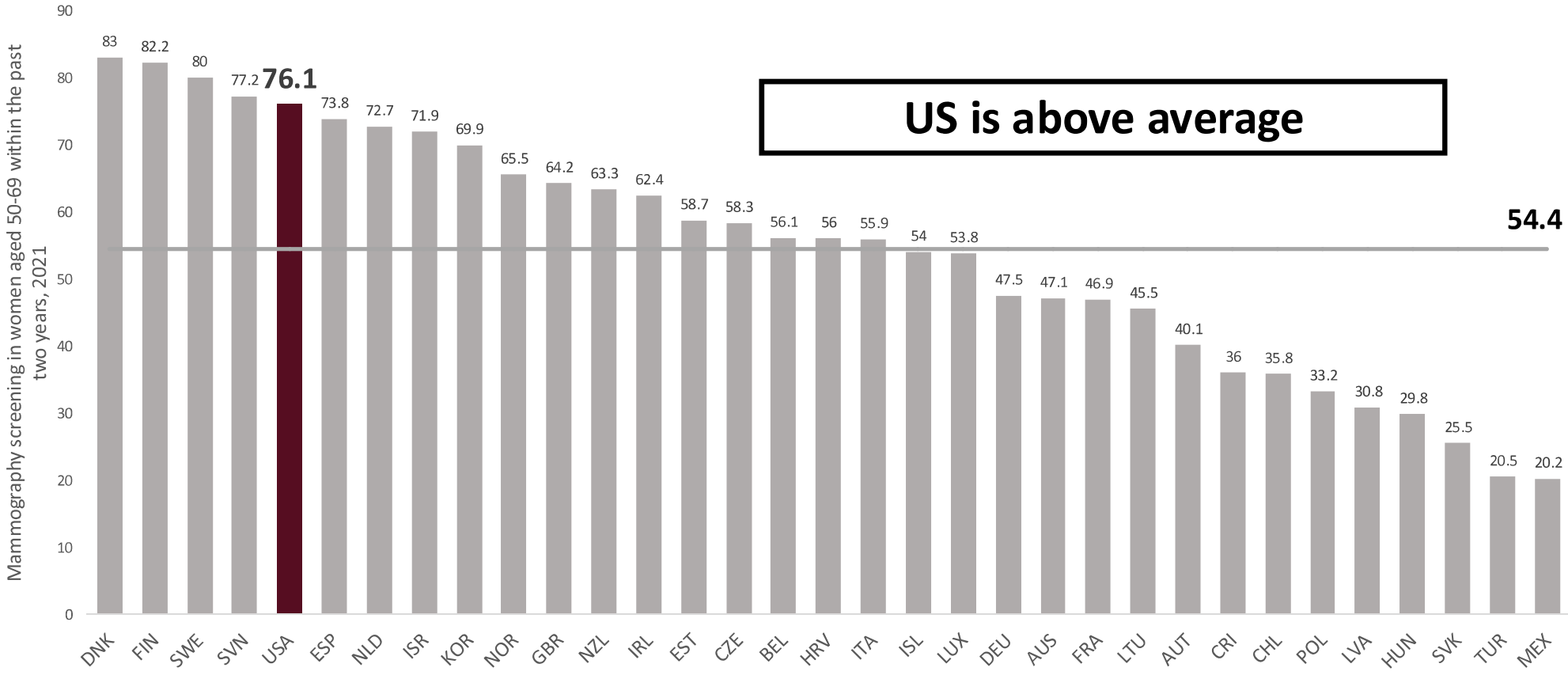
Influenza vaccination rates



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Papanicolas I,…Figueroa JF. Lancet PH. 2025

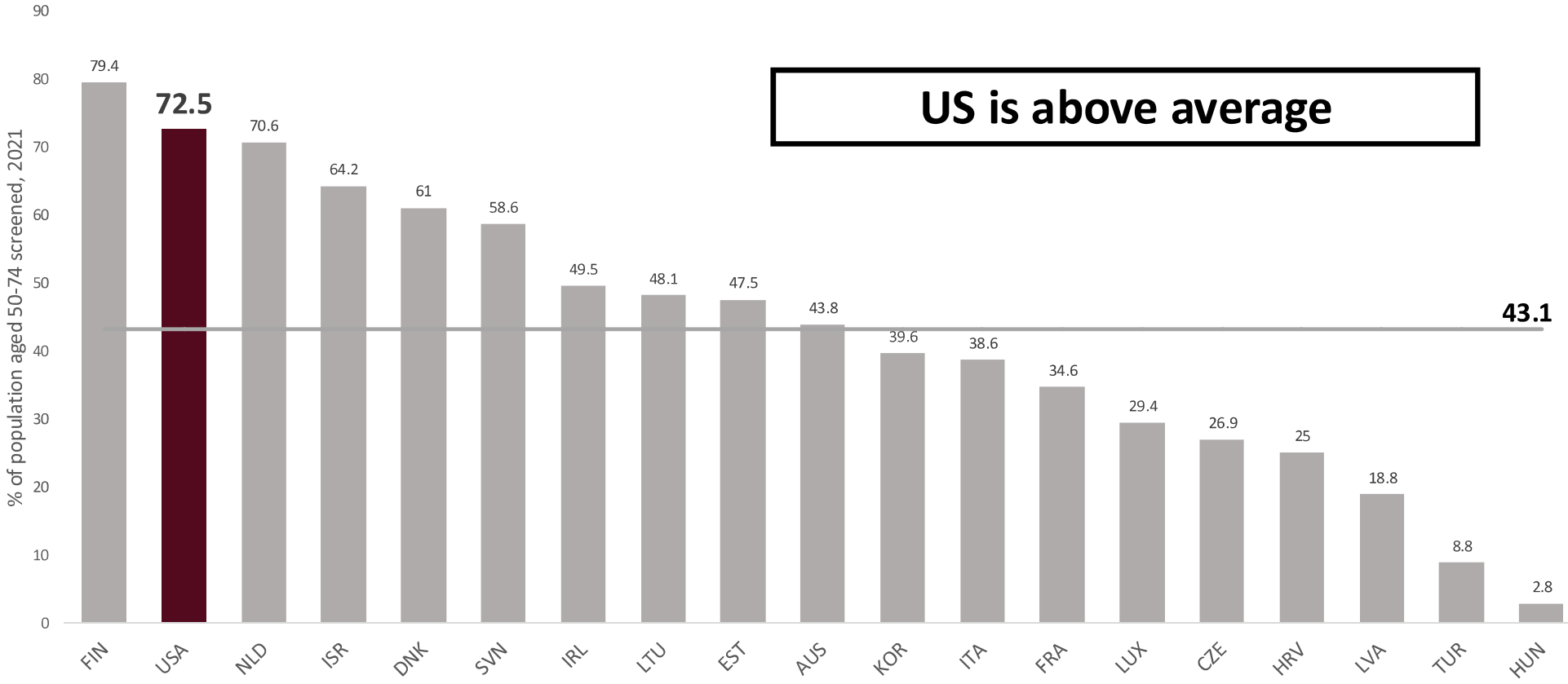
Breast cancer screening rates



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Papanicolas I,…Figueroa JF. Lancet PH. 2025

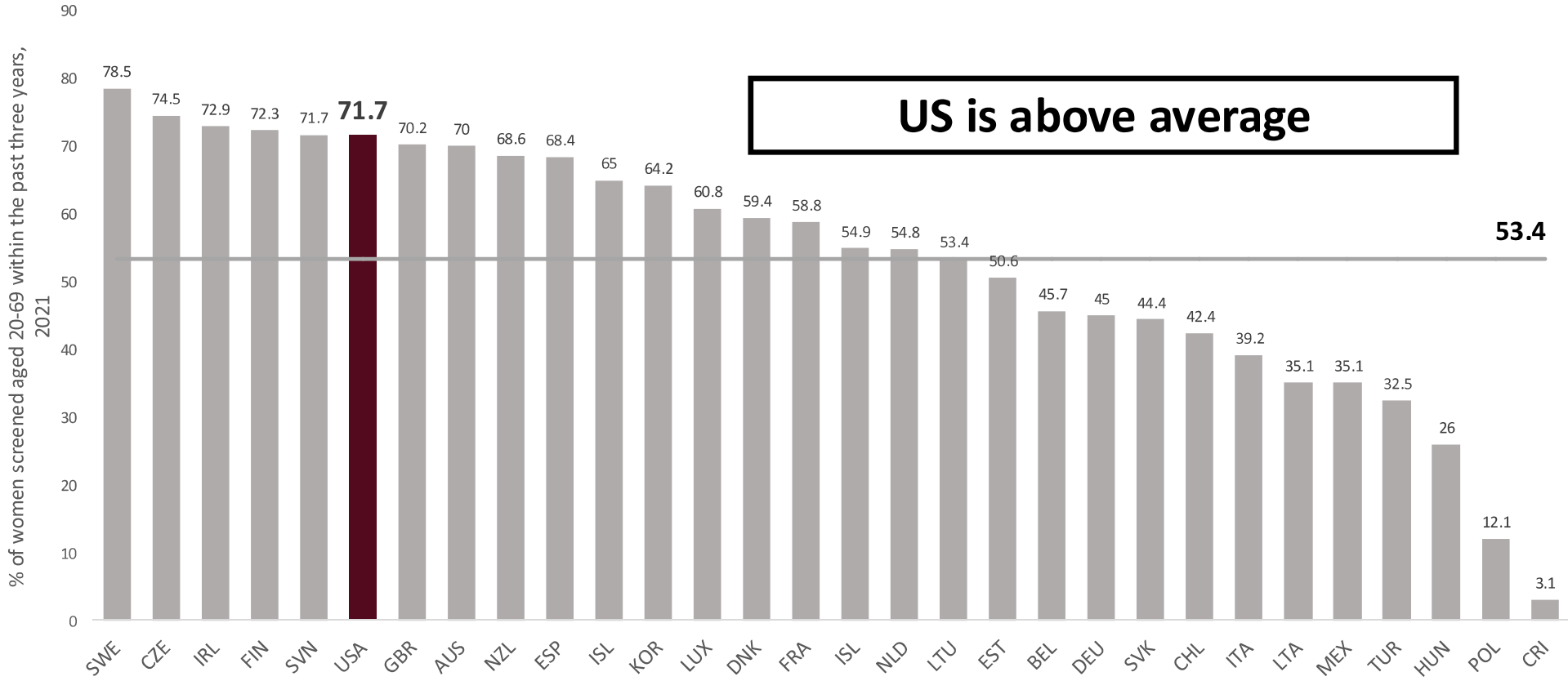
Colorectal cancer screening rates



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Papanicolas I,…Figueroa JF. Lancet PH. 2025

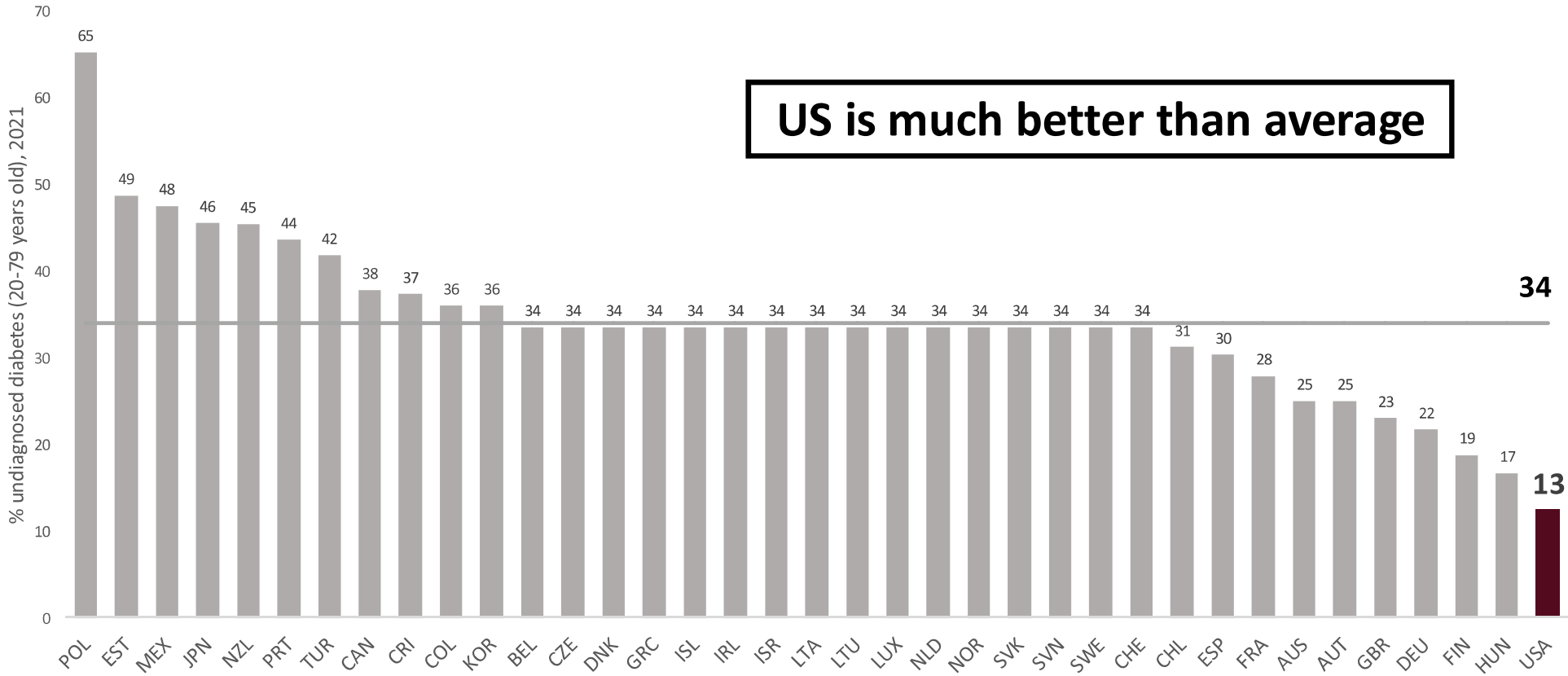
Cervical cancer screening rates



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Papanicolas I,…Figueroa JF. Lancet PH. 2025

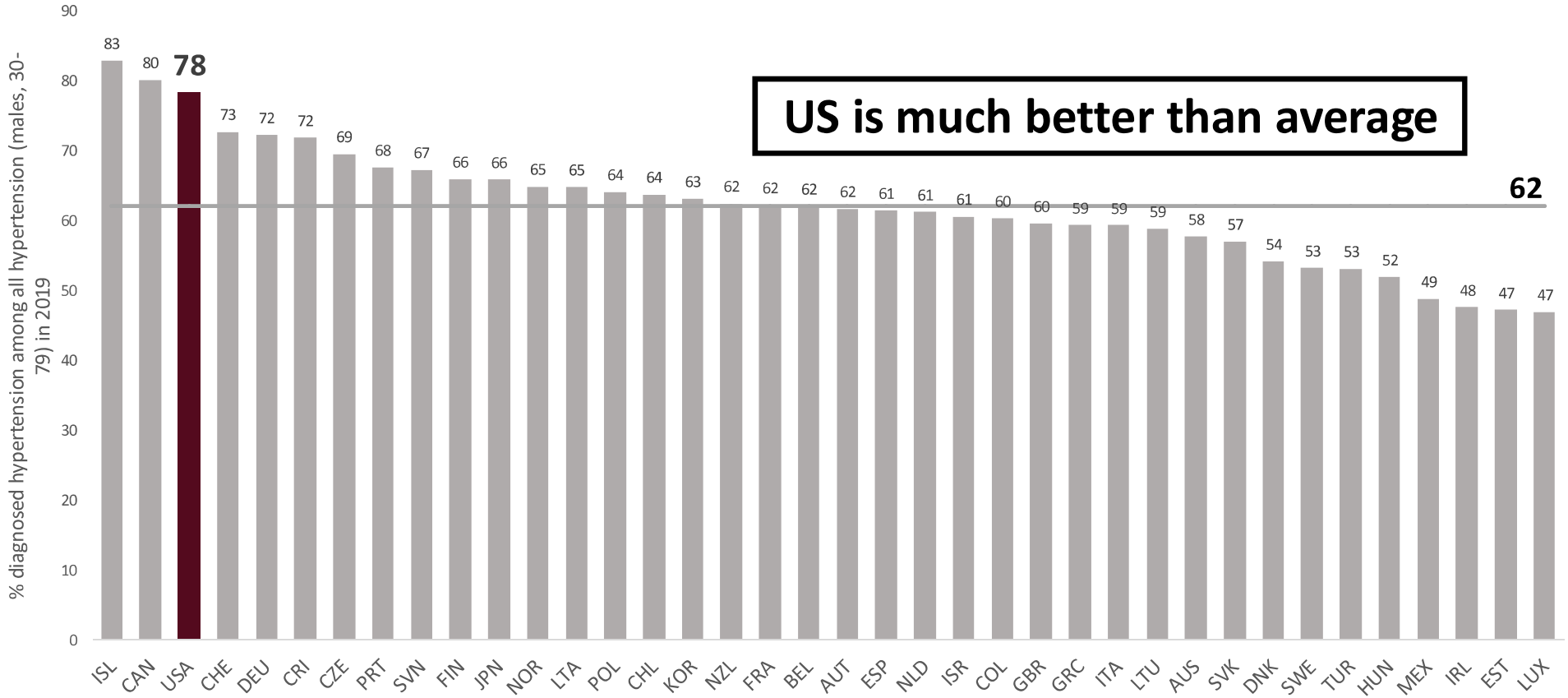
Undiagnosed diabetes (the lower, the better!)



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Papanicolas I,…Figueroa JF. Lancet PH. 2025

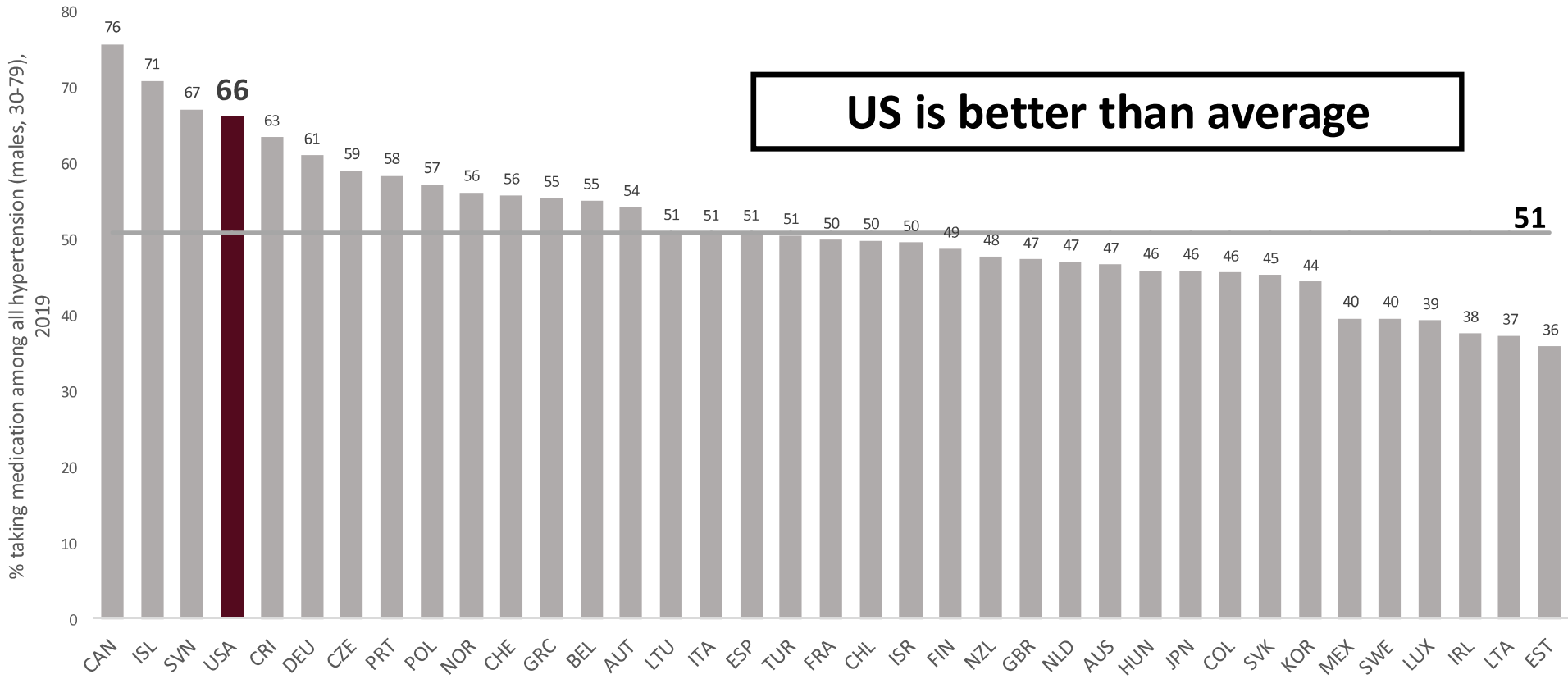
Diagnosed hypertension (higher is better!)



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Papanicolas I,…Figueroa JF. Lancet PH. 2025

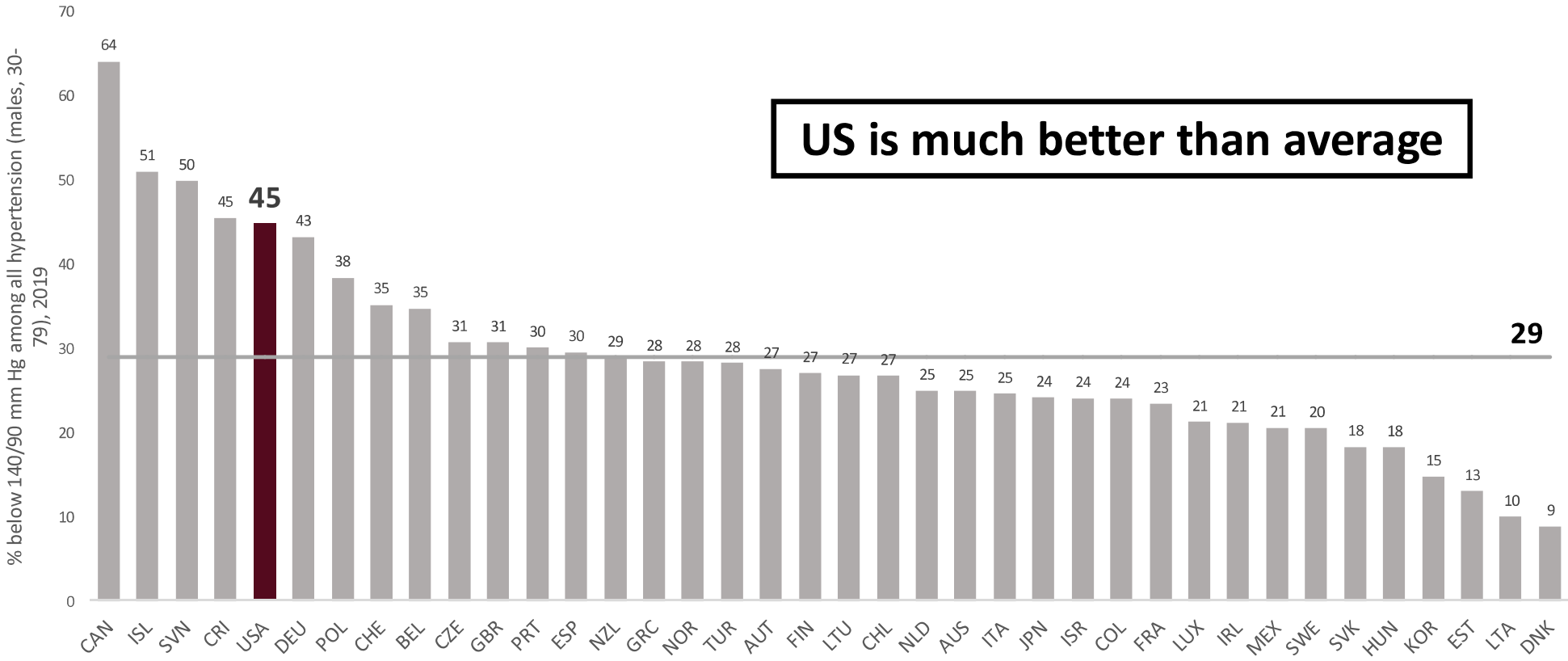
Treated hypertension among those with a diagnosis



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Papanicolas I,…Figueroa JF. Lancet PH. 2025

Controlled hypertension



US is much better than average

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Papanicolas I,…Figueroa JF. Lancet PH. 2025

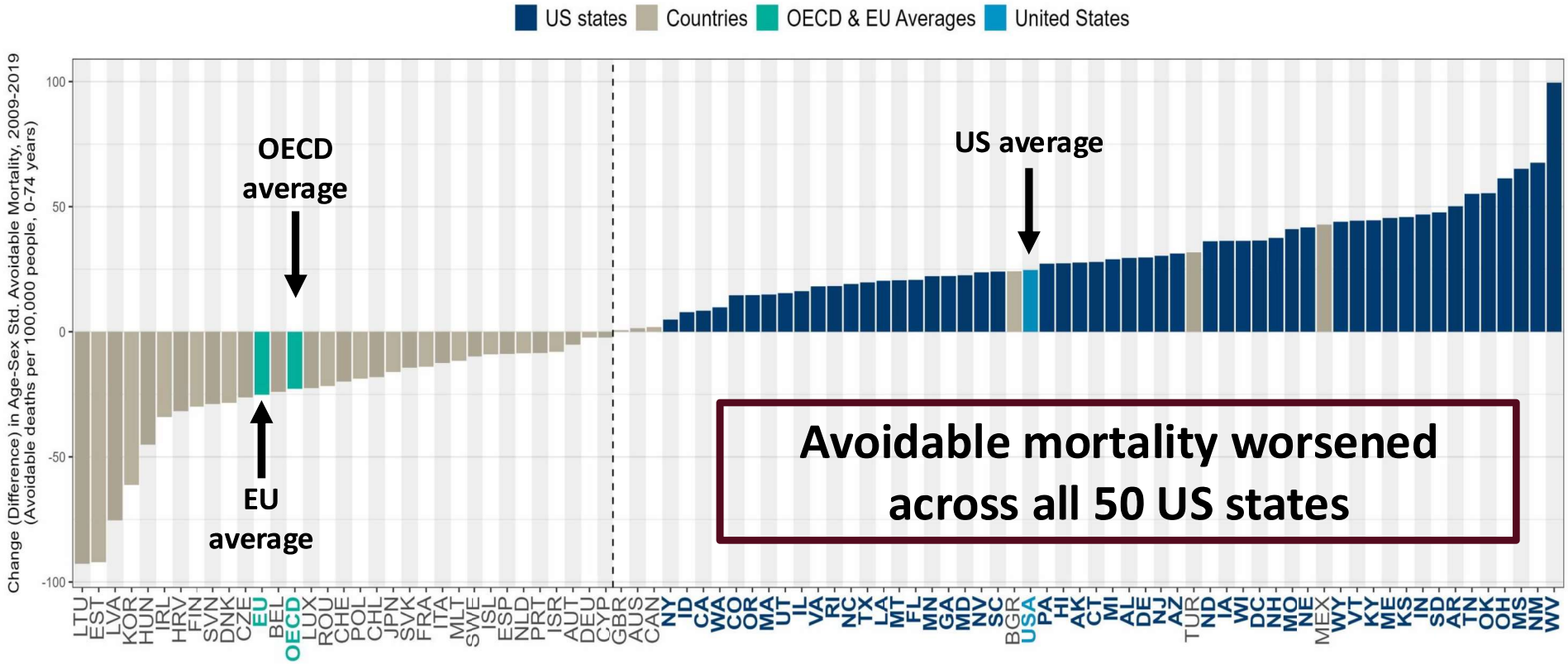
Prevention efforts largely by healthcare system

Prevention efforts largely by public health/govt

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Changes in avoidable mortality

(% Δ Age-sex standardized deaths between 2009 to 2019 per 100,000, aged 0-74y)

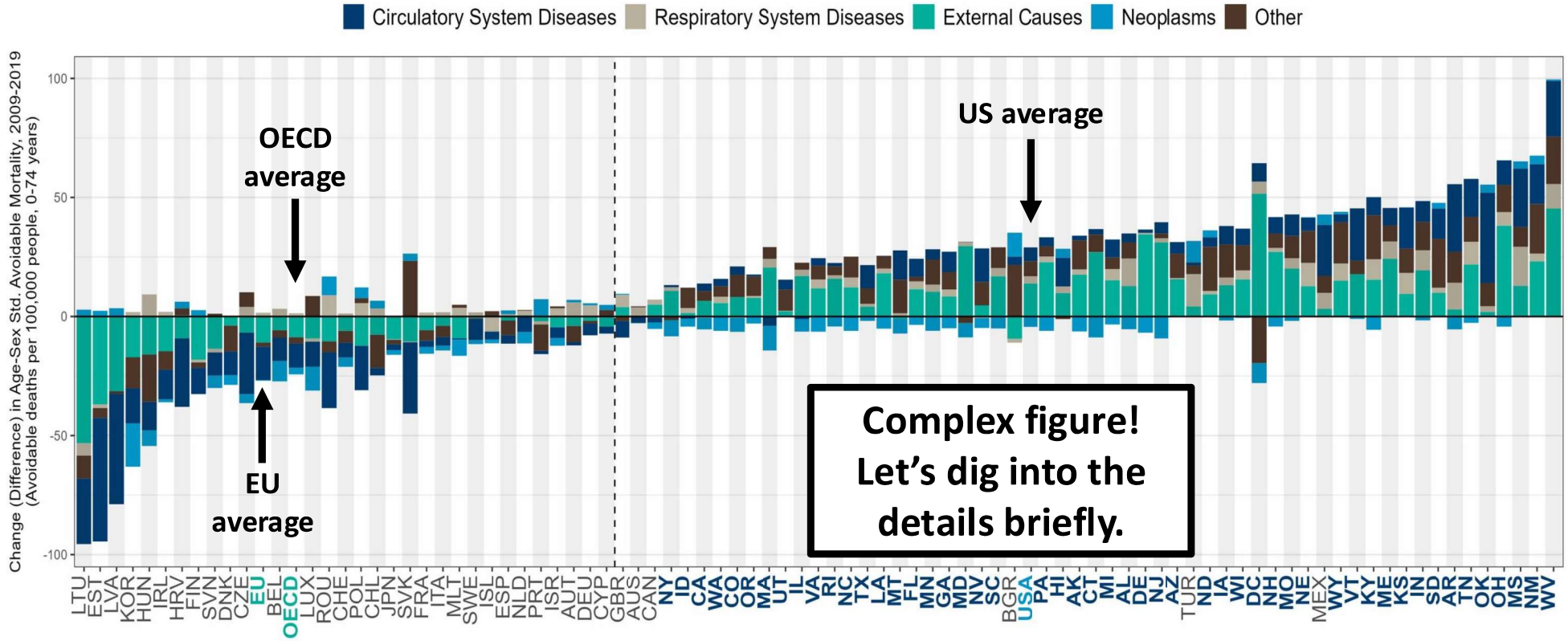


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Papanicolas I, Niksch M, Figueroa JF. JAMA Intern Med, 2025

Changes in avoidable mortality by cause of death

(% Δ Age-sex standardized deaths between 2009 to 2019 per 100,000, aged 0-74y)

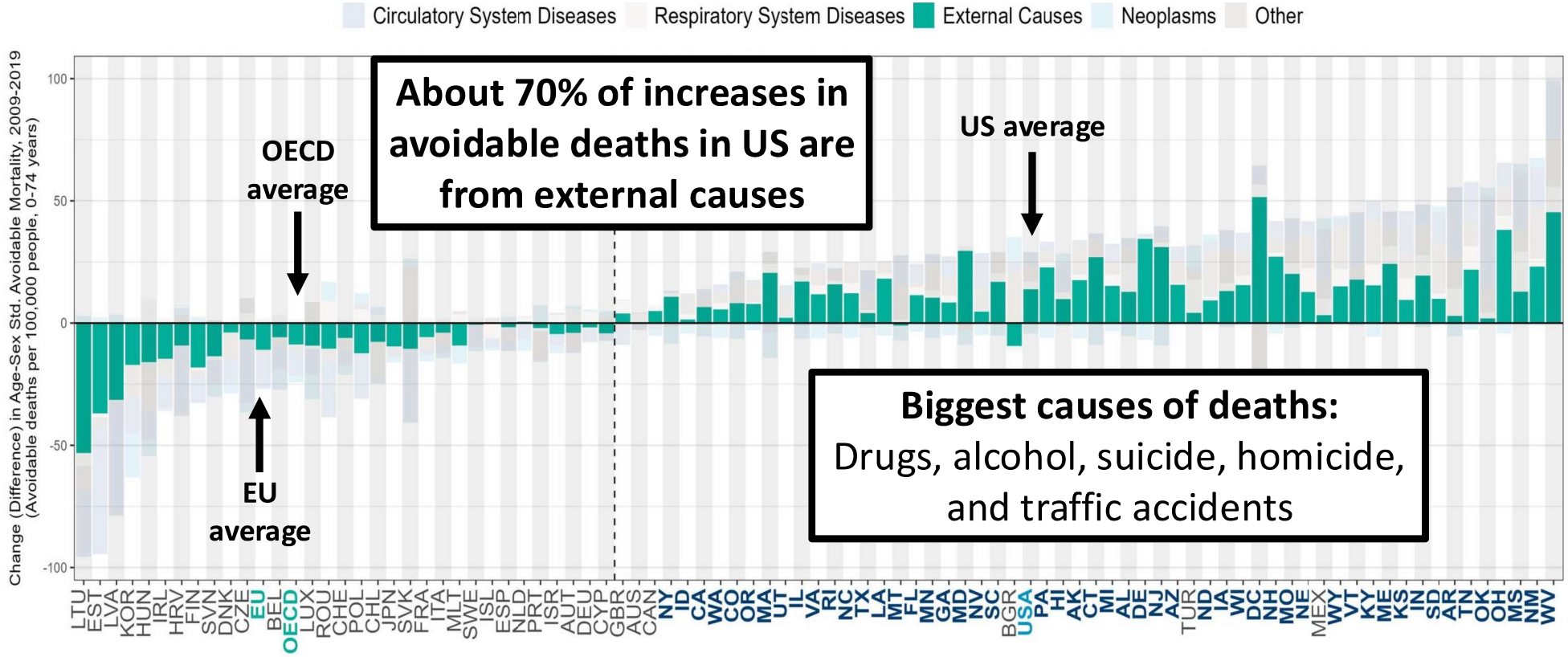


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Papanicolas I, Niksch M, Figueroa JF. JAMA Intern Med, 2025

Avoidable mortality from external causes of death

(% Δ Age-sex standardized deaths between 2009 to 2019 per 100,000, aged 0-74y)

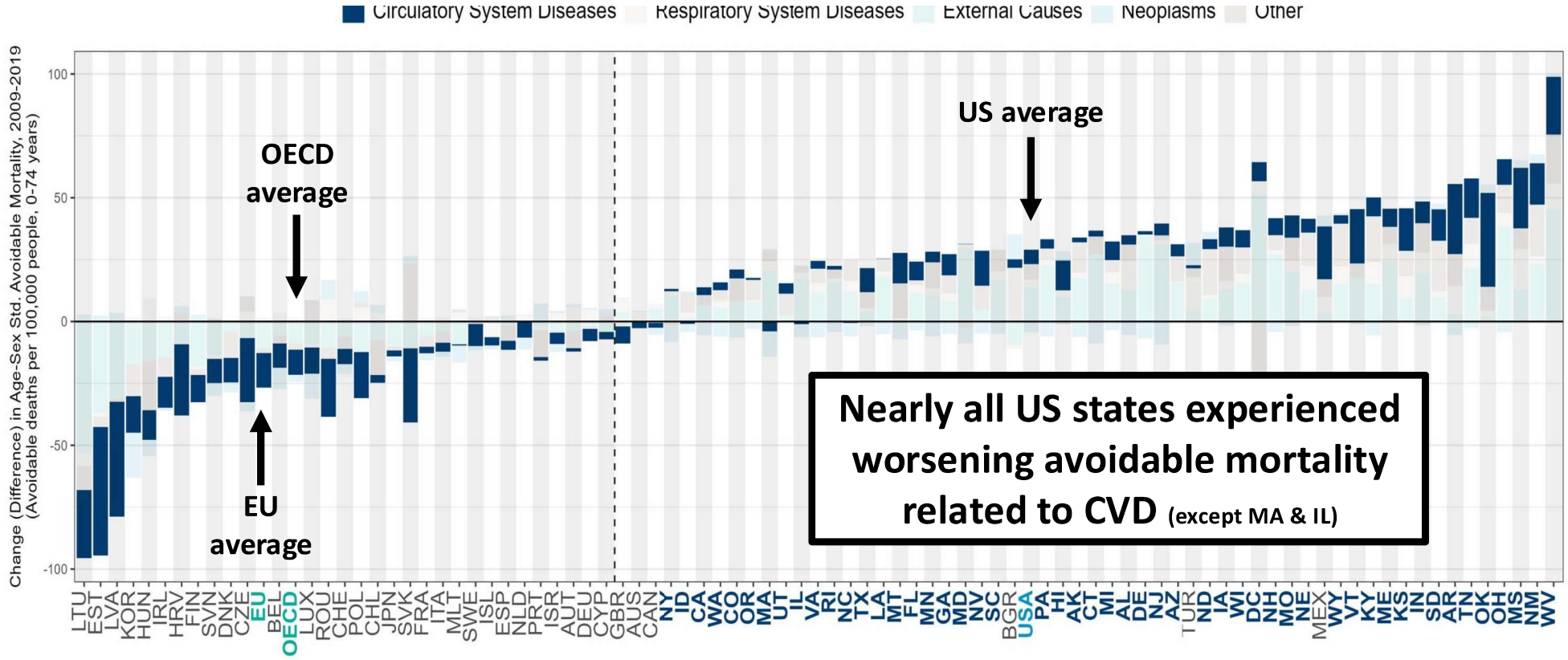


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Papanicolas I, Niksch M, Figueroa JF. JAMA Intern Med, 2025

Avoidable mortality from cardiovascular disease

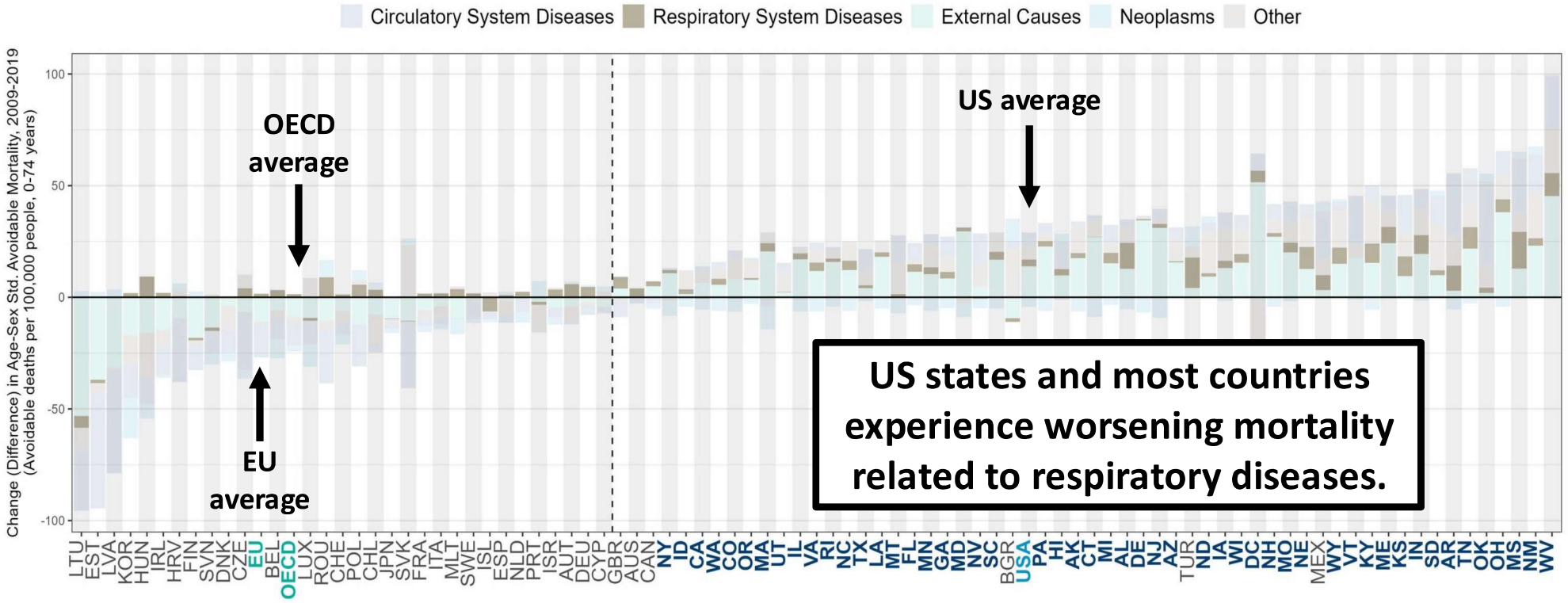
(% Δ Age-sex standardized deaths between 2009 to 2019 per 100,000, aged 0-74y)



Papanicolas I, Niksch M, Figueroa JF. JAMA Intern Med, 2025

Avoidable mortality from respiratory system diseases

(% Δ Age-sex standardized deaths between 2009 to 2019 per 100,000, aged 0-74y)

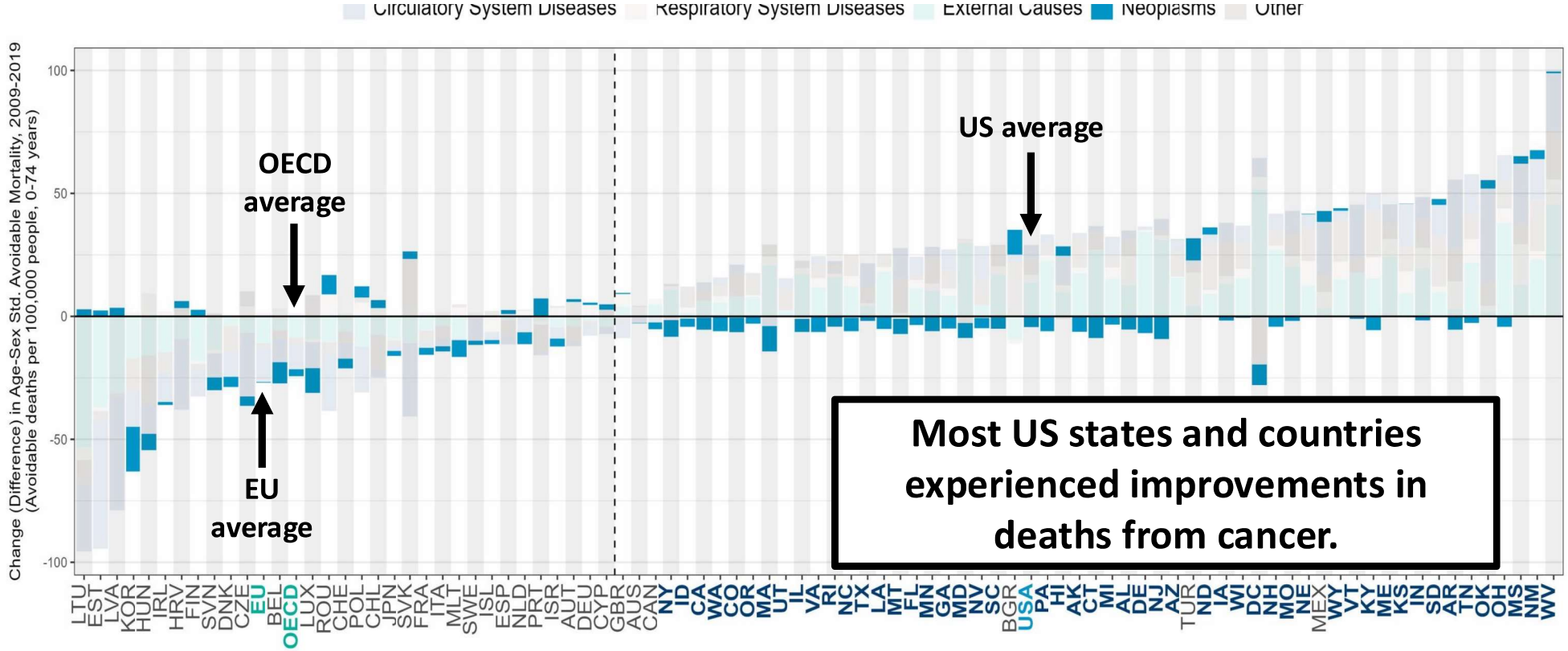


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Papanicolas I, Niksch M, Figueroa JF. JAMA Intern Med, 2025

Avoidable mortality from cancer

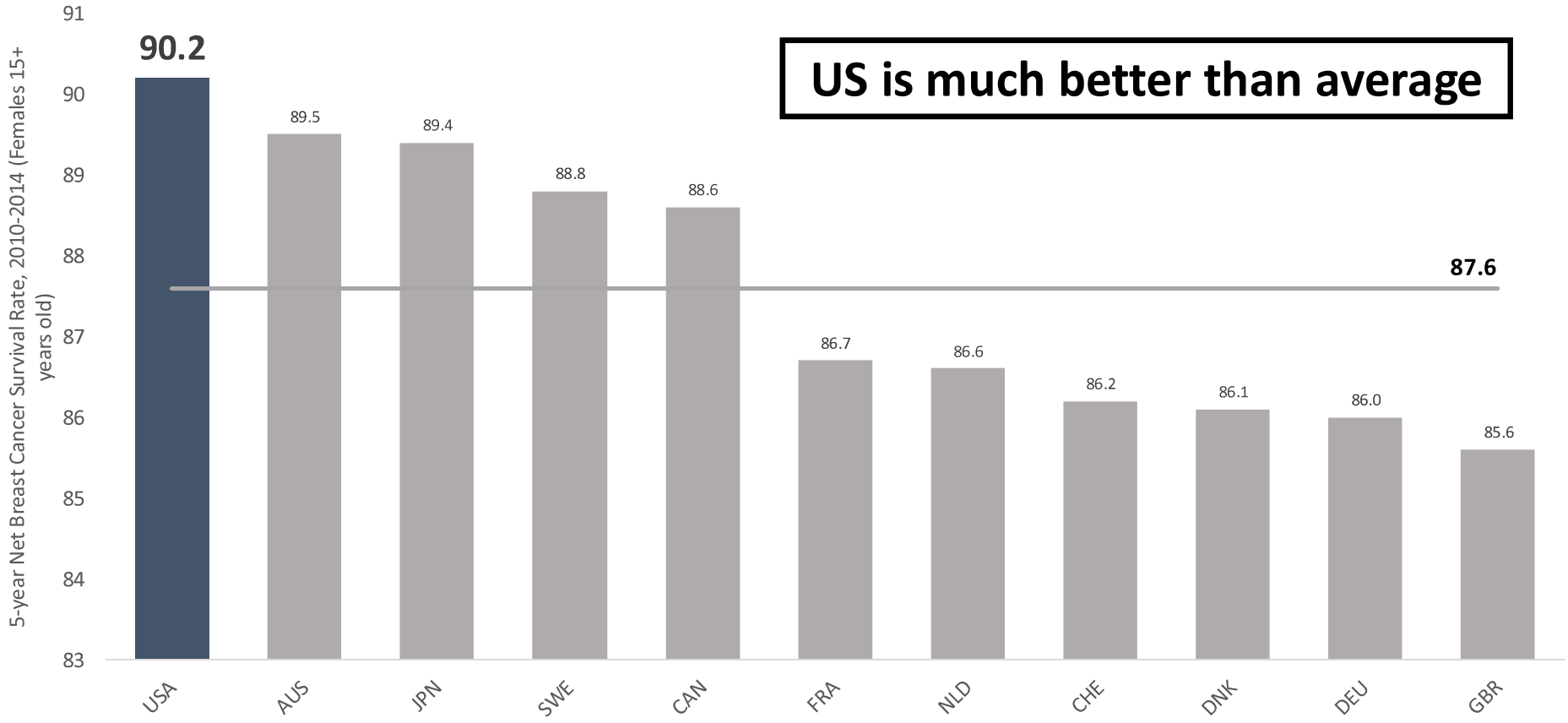
(% Δ Age-sex standardized deaths between 2009 to 2019 per 100,000, aged 0-74y)



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Papanicolas I, Niksch M, Figueroa JF. JAMA Intern Med, 2025

Breast cancer survival at 5-years



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OECD, 2019 based on data from 2010-2014.

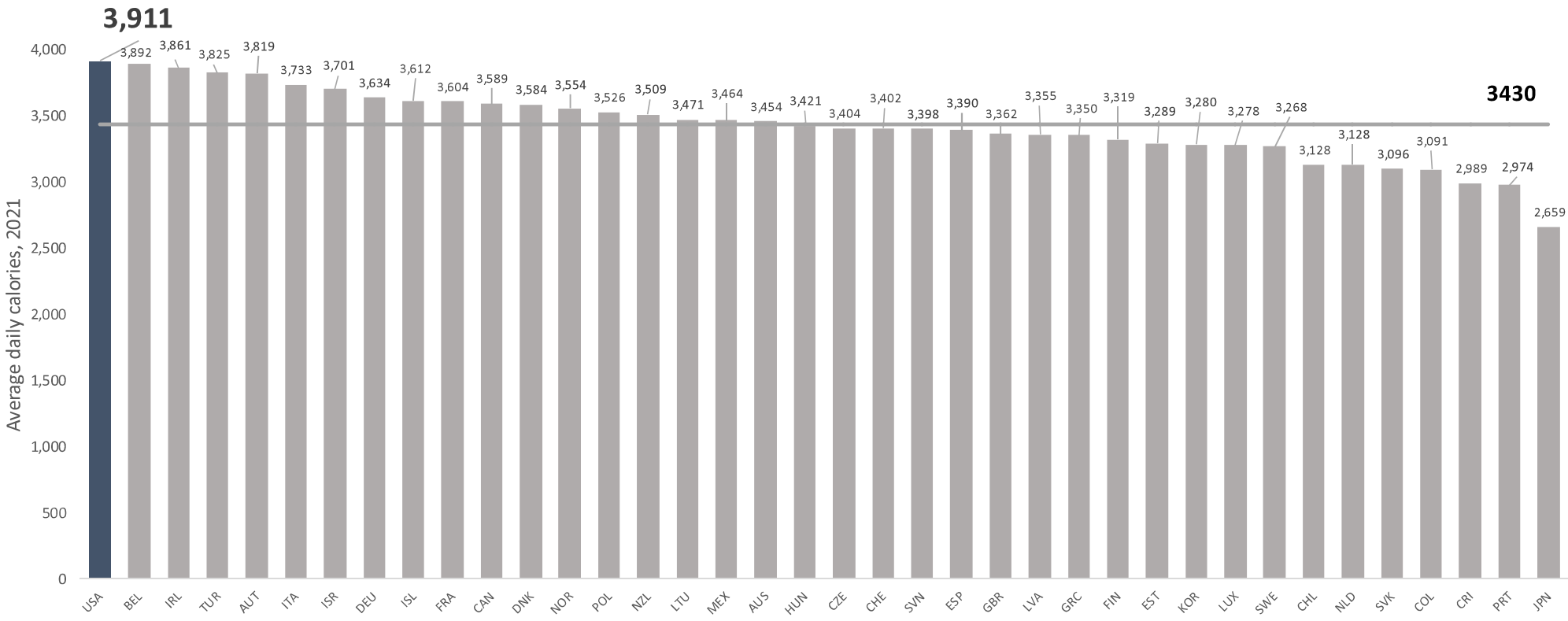
So why is US still lagging on population-level health outcomes?

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Examination of Risk Factors for Premature Mortality

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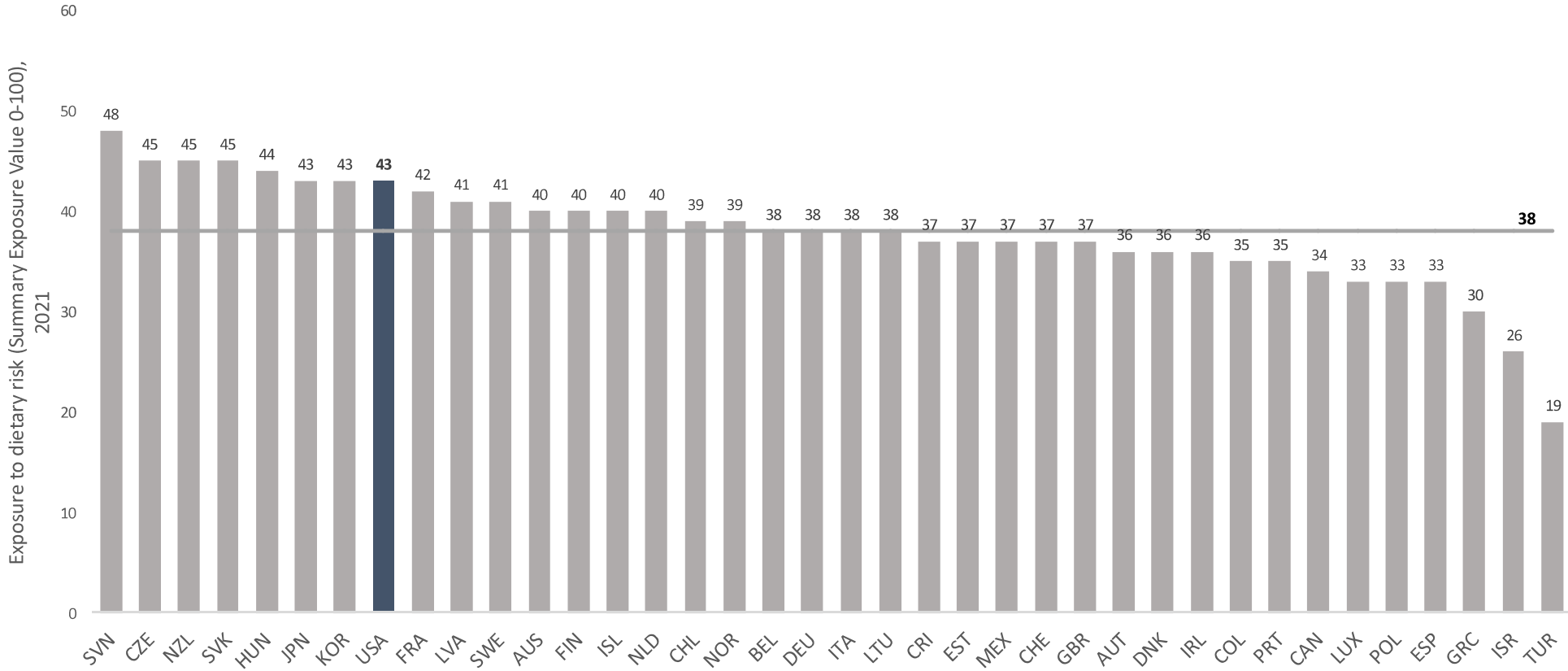
Americans eat more calories per day



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Papanicolas I, Figueroa JF. Lancet PH. 2025

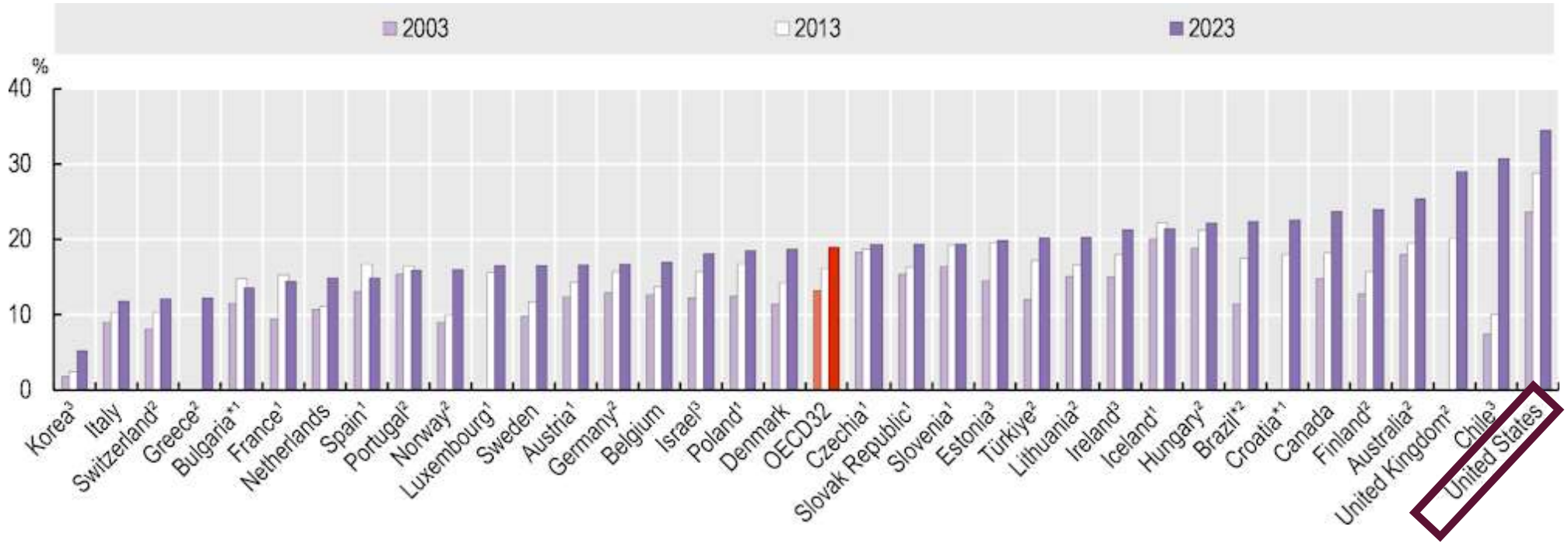
Exposure to dietary risk is above average in US



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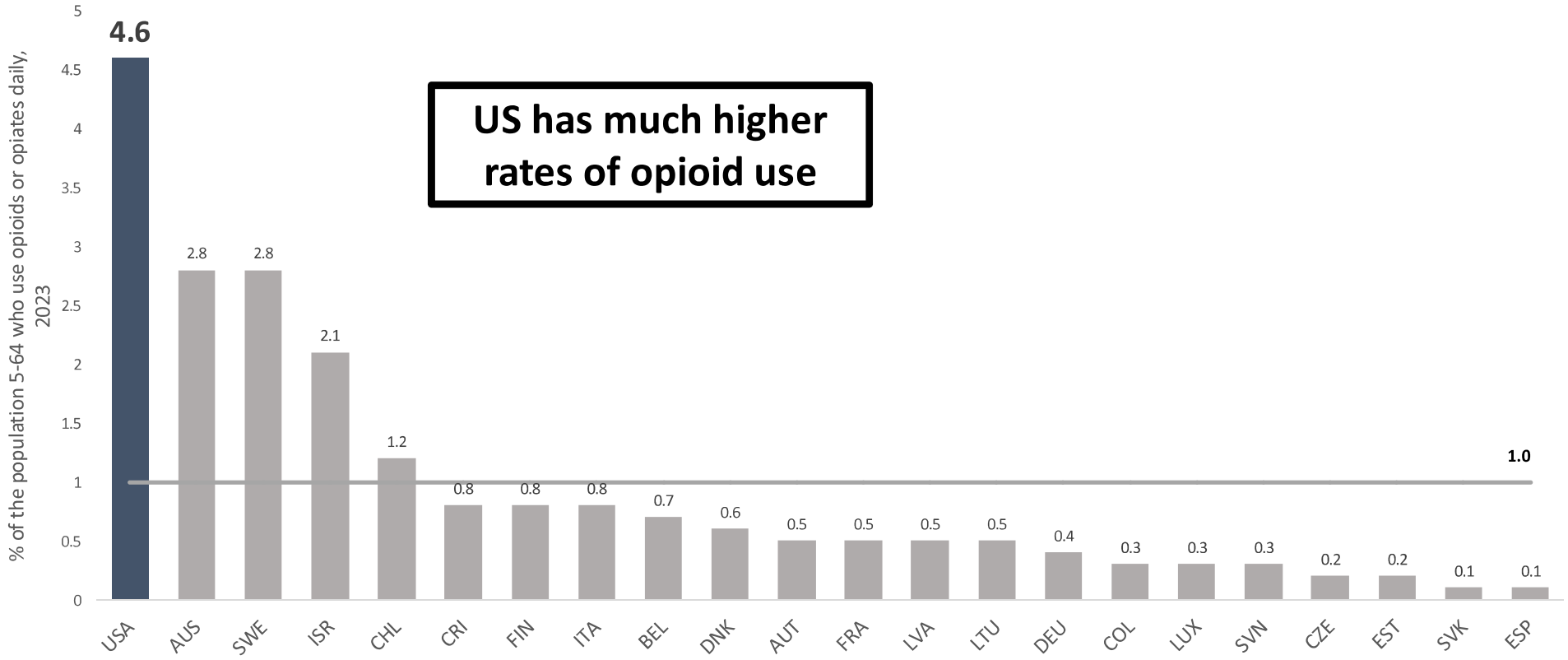
Papanicolas I, Figueroa JF. Lancet PH. 2025

Overweight and obesity rates highest in US



OECD Health Statistics 2025.

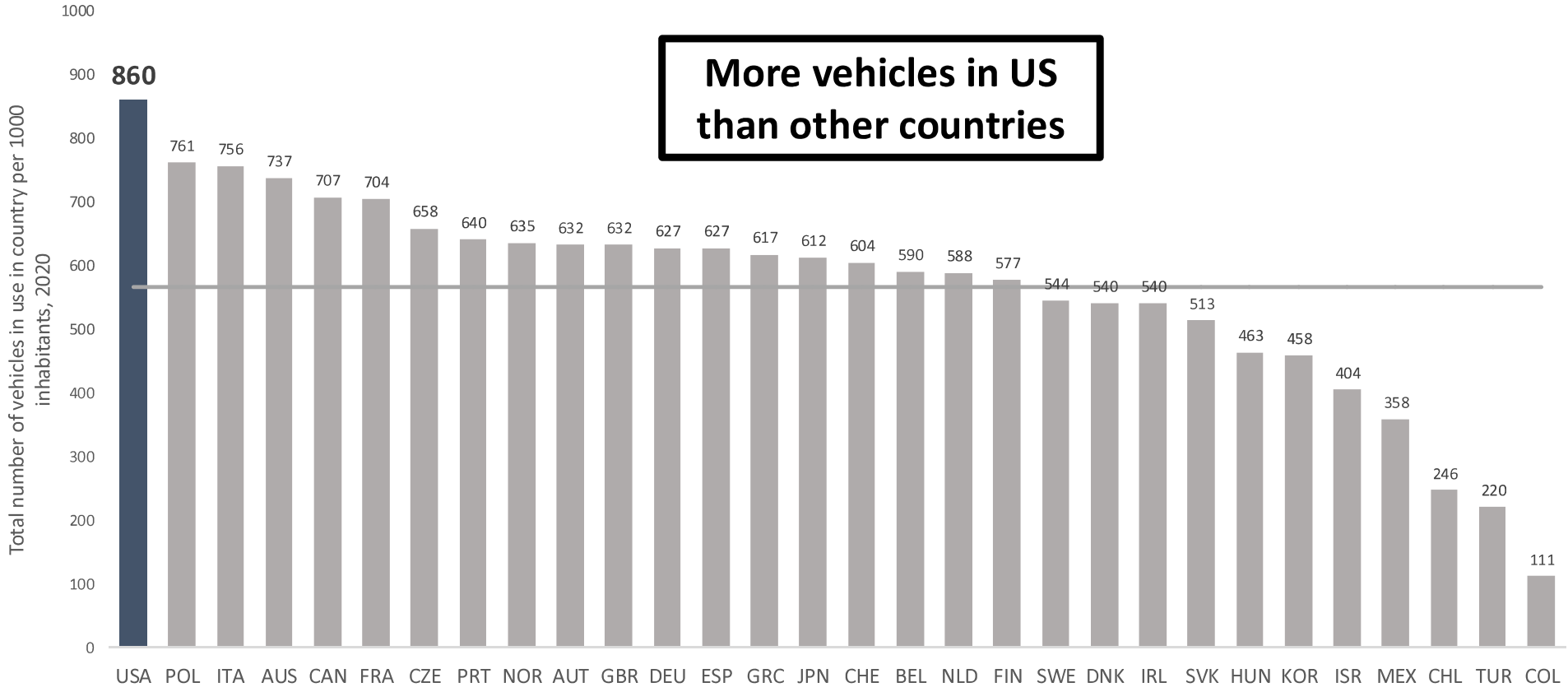
Opioid use (% of population 5y-64 who use opioids daily)



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Papanicolas I, Figueroa JF. Lancet PH. 2025

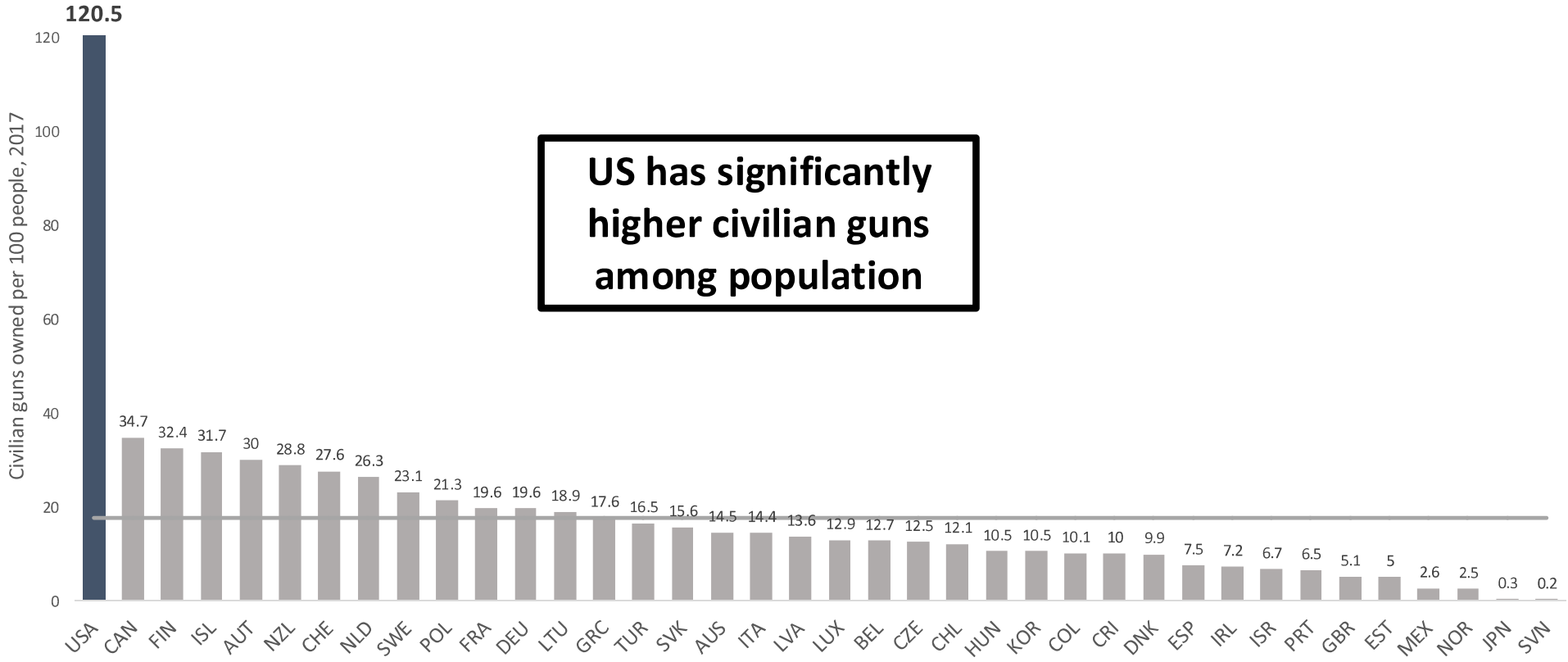
Vehicle use (total no. of vehicles in use per 1,000 people)



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Papanicolas I, Figueroa JF. Lancet PH. 2025

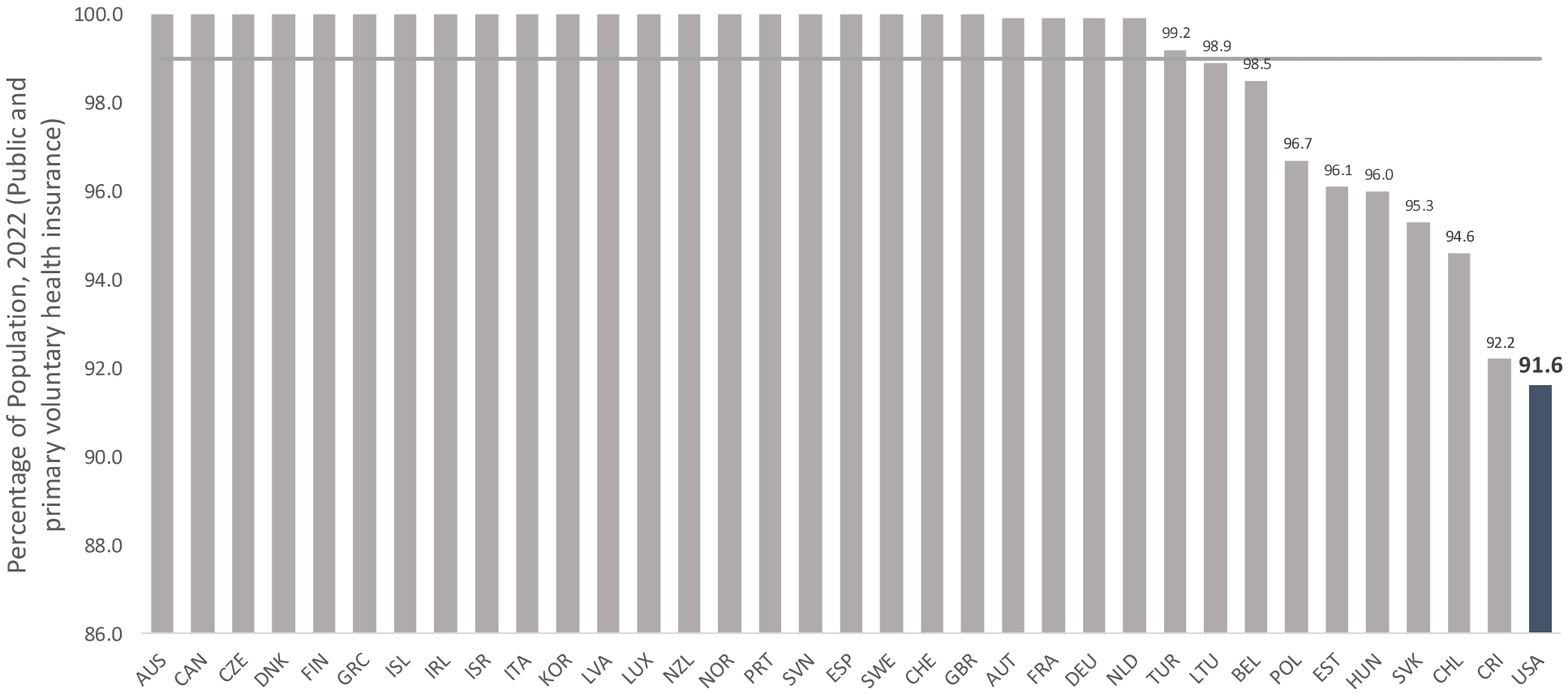
Gun ownership (civilian guns owned per 1,000 people in 2017)



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Papanicolas I, Figueroa JF. Lancet PH. 2025

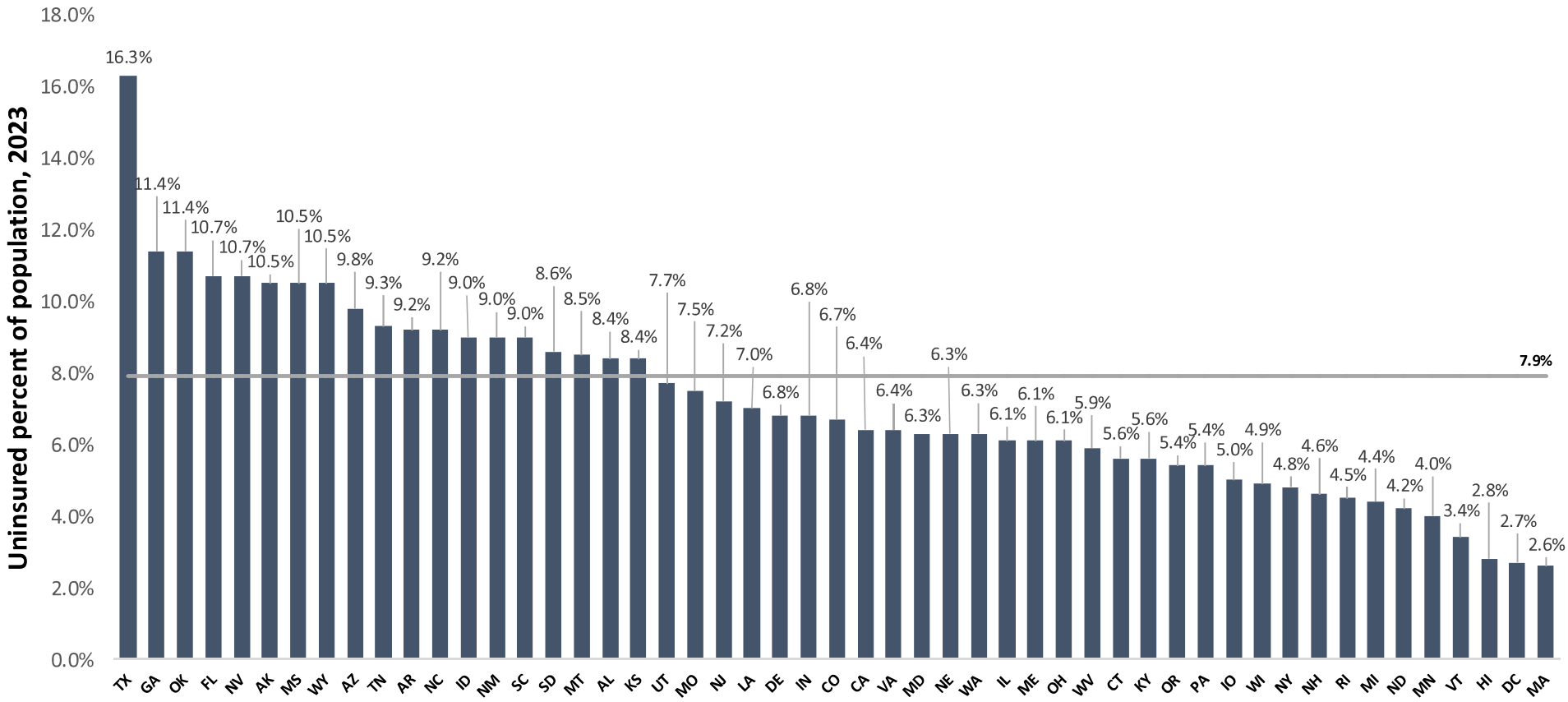
Uninsurance in the US vs. Other Countries



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WHO 2023

Wide variation of uninsurance across US states



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KFF, 2024

Key Takeaway:

US has a higher burden of risk factors that contribute to high rates of premature mortality

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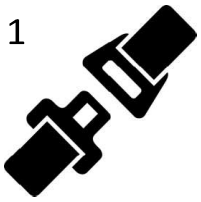
Prevention efforts largely by healthcare system

Prevention efforts largely by public health/govt

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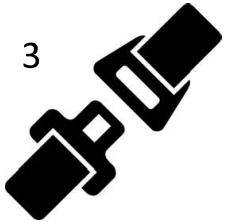
Introduction of seatbelt laws across countries

1



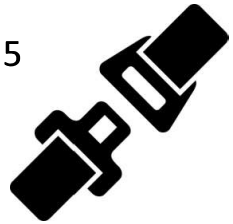
France - 1973

3



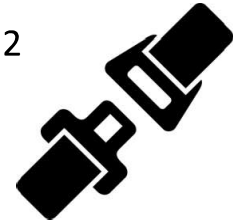
Germany - 1976

5



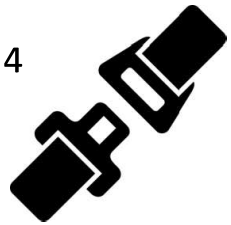
UK - 1984

2



Sweden - 1975

4



Canada - 1976

6



US - 1984

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Papanicolas I...,Figueroa JF. Lancet PH. 2025

US does not have national full-front seat requirements



France



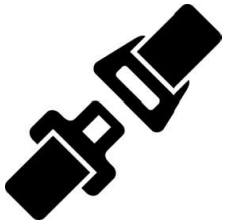
Germany



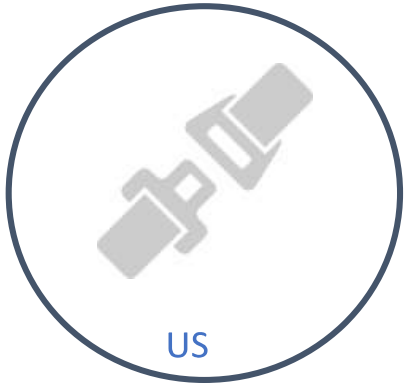
UK



Sweden



Canada



US

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Papanicolas I, Figueroa JF. Lancet PH. 2025

Jurisdictions with comprehensive smoke-free laws





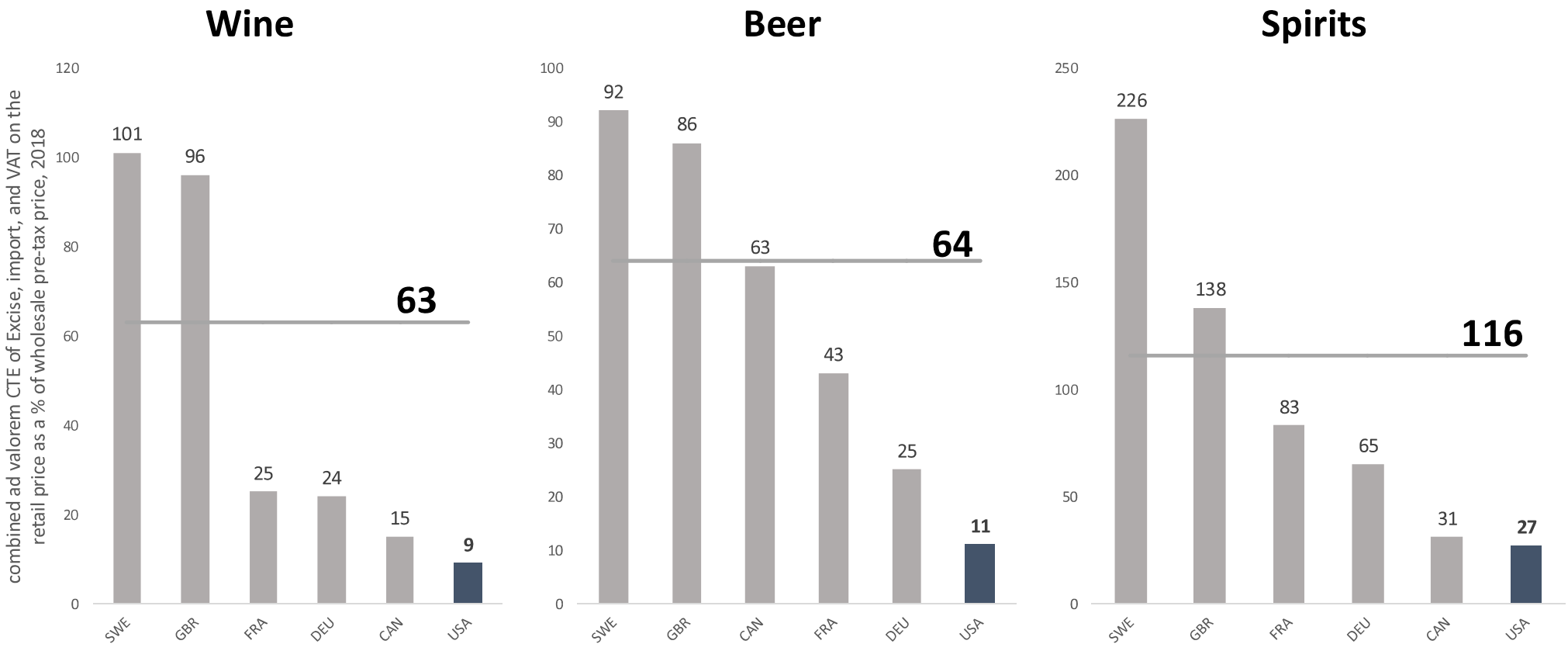
3 out of 16 states (40% of pop)



29 out of 50 states

Papanicolas I…,Figueroa JF. Lancet PH. 2025

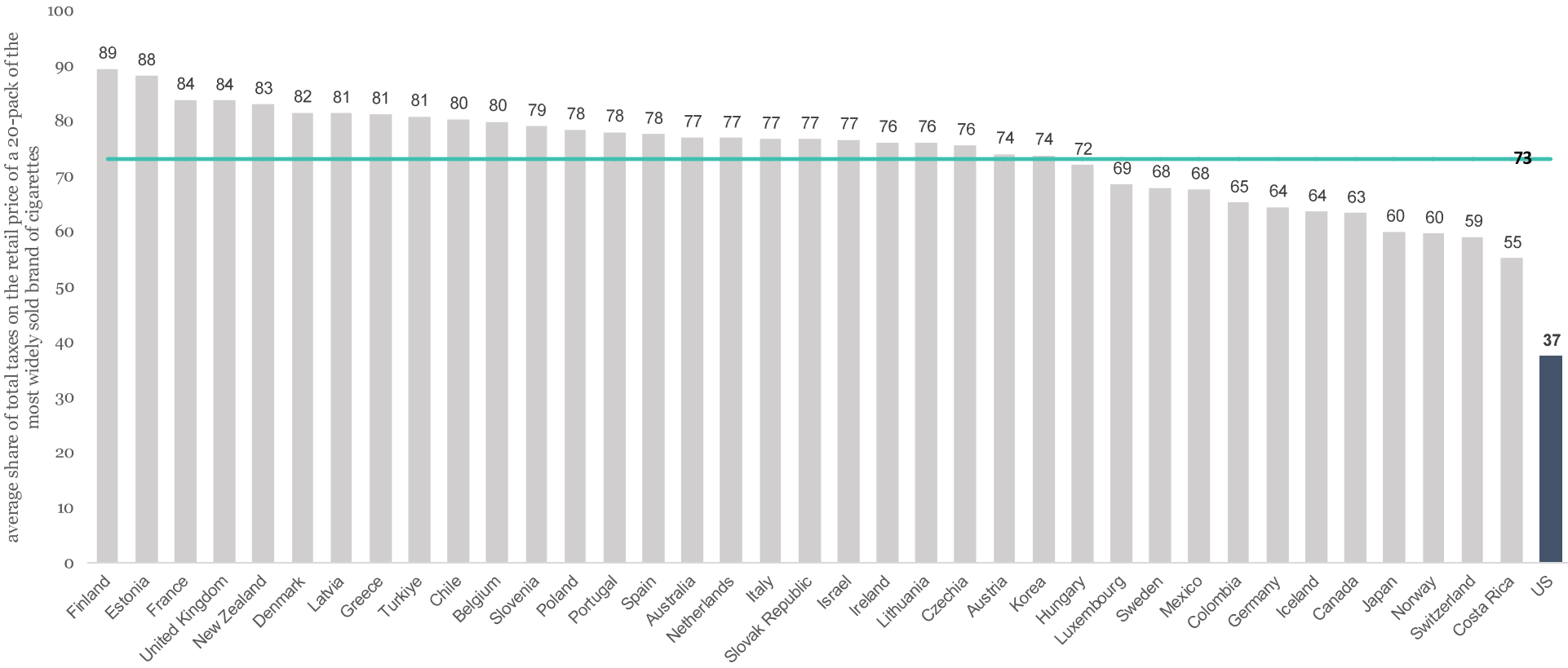
Alcohol taxes in the US much lower than others



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Papanicolas I, Figueroa JF. Lancet PH. 2025

Cigarette taxes in US also much lower than other countries



Papanicolas I, Figueroa JF. Lancet PH. 2025

Firearm Regulations at the National Level

	Handgun Licensing	Handgun Registration
• Australia	Yes	Yes
• Canada	Yes	Yes*
• Finland	Yes	Yes
• France	Yes	Yes
• Germany	Yes	Yes
• New Zealand	Yes	Yes*
• Norway	Yes	Yes
• Switzerland	Yes	Yes
• United Kingdom	Yes	Yes

Credit: David Hemenway, HSPH, 2026.

Firearm Regulations at the National Level

	Handgun Licensing	Handgun Registration
• Australia	Yes	Yes
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• France	Yes	Yes
• Germany	Yes	Yes
• New Zealand	Yes	Yes*
• Norway	Yes	Yes
• Switzerland	Yes	Yes
• United Kingdom	Yes	Yes
• **United States**	**No**	**No**

Credit: David Hemenway, HSPH, 2026.

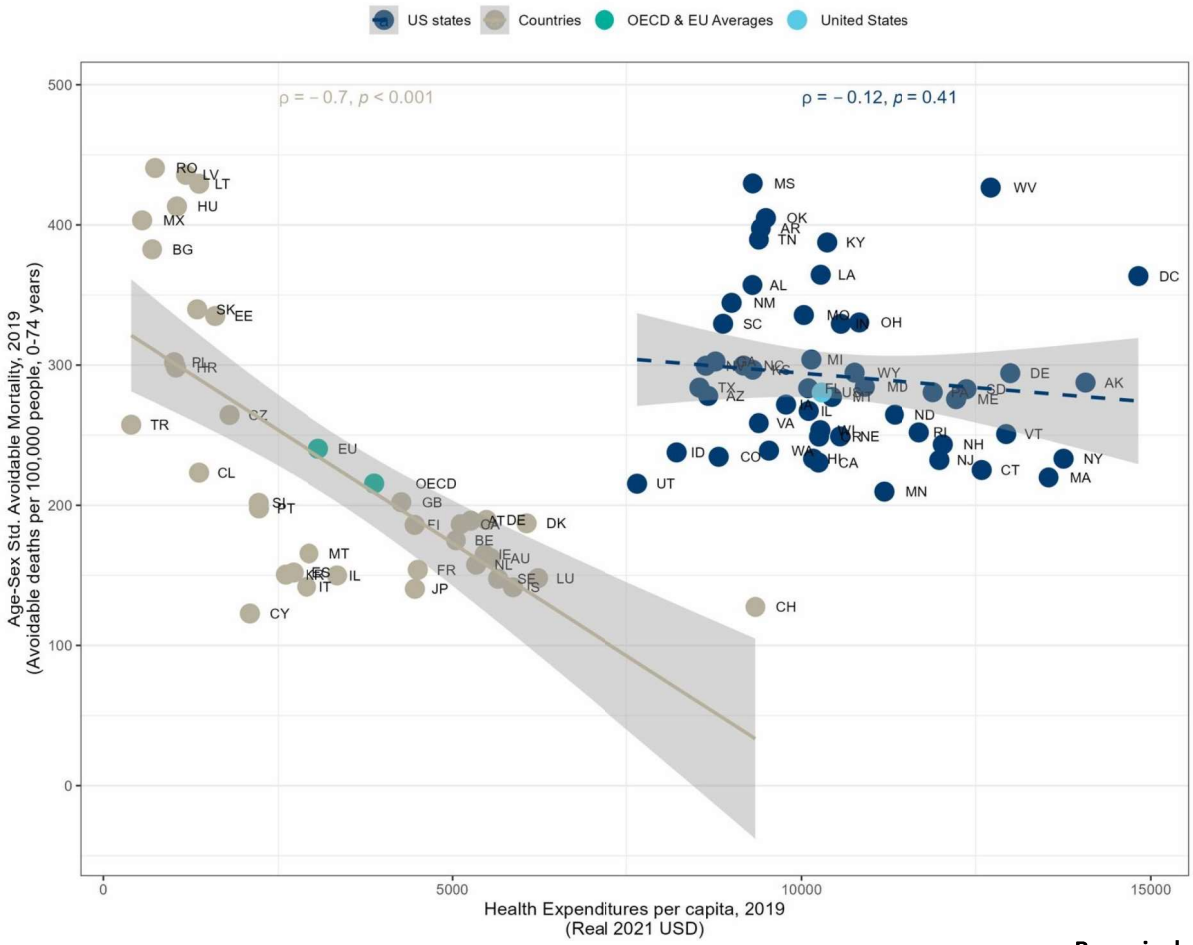
Key Takeaway:

Strong performance *within* US healthcare system is not enough to protect its people if US prevention *outside* it remains weak.

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Relationship between health spending & avoidable mortality

Other countries:
More spending on health associated with lower avoidable mortality.



US States + DC:
No significant relationship between health spending & avoidable mortality.

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Papanicolas, Figueroa JF. JAMA Intern Med, 2025

"Public health is what we, as a society, do collectively to assure the conditions in which people can be healthy."

Institute of Medicine (IOM), 1988

"Governments have a responsibility for the health of their peoples which can be fulfilled only by the provision of adequate health and social measures."

World Health Organisation (WHO) Consitution, 1946

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Thank you!

Questions?

jfigueroa@hsph.harvard.edu

Rethinking US Approach to Healthcare System Performance

How do we reduce health care costs?

- Major efforts in the US (value-based payment) in their current form are unlikely to work
- Focus should be on addressing prices & administrative complexity

How do we improve health outcomes?

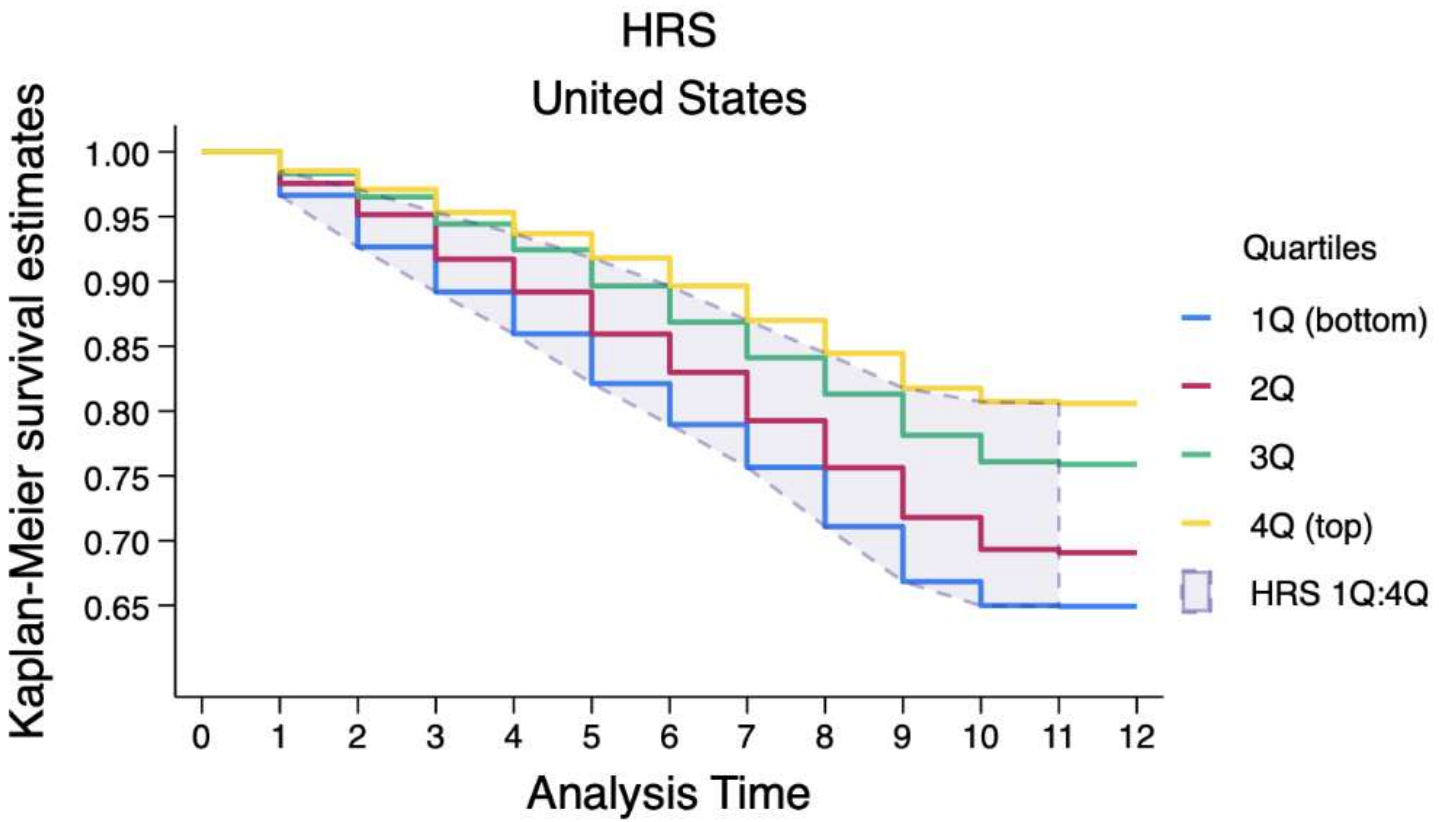
- On average, US performs better than most countries on common measures incentivized under VBP
- Focus should be on improving public health interventions
- Healthcare affordability & access also major issue in US

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Figueroa JF, Duggan C, Joynt Maddox KE. JHPPL. 2025.

Wealth & Mortality in US

(Survival rates among older adults between 2010 to 2021 → followed through study period)

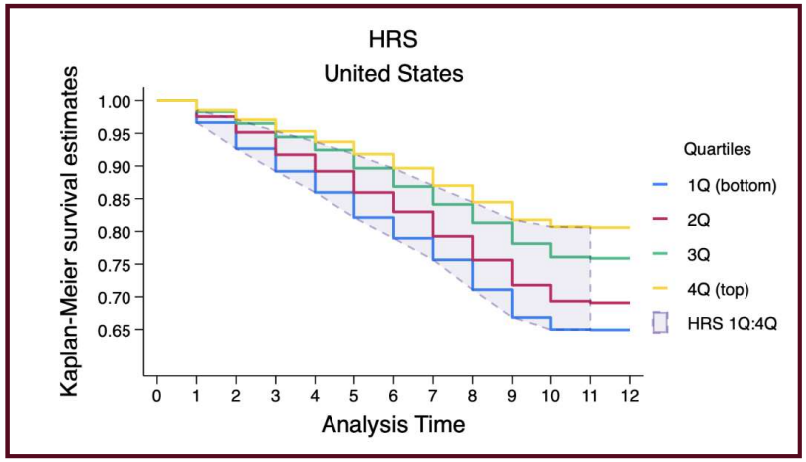


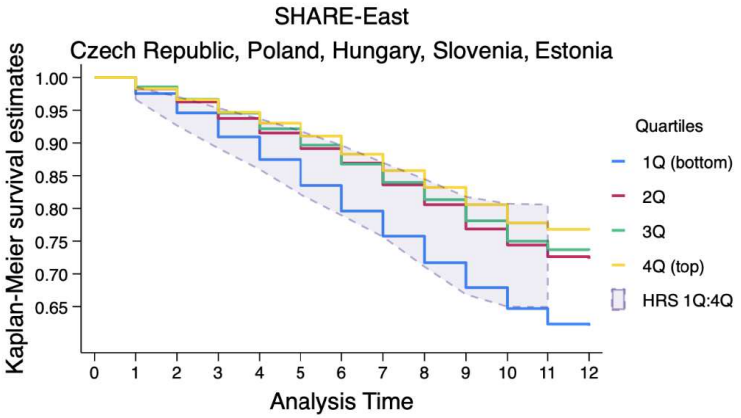
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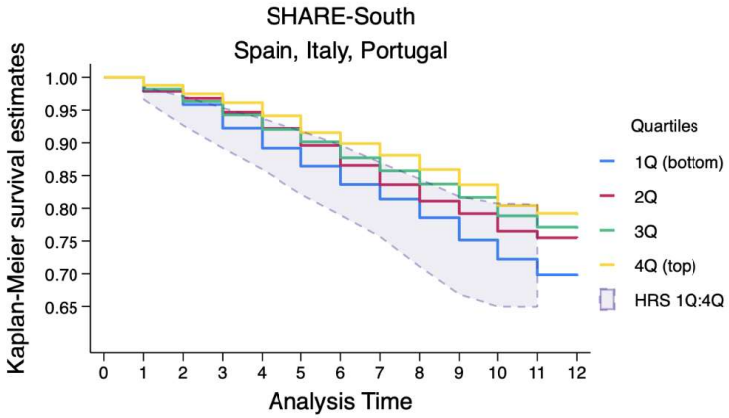
Machado S et al., NEJM 2025.

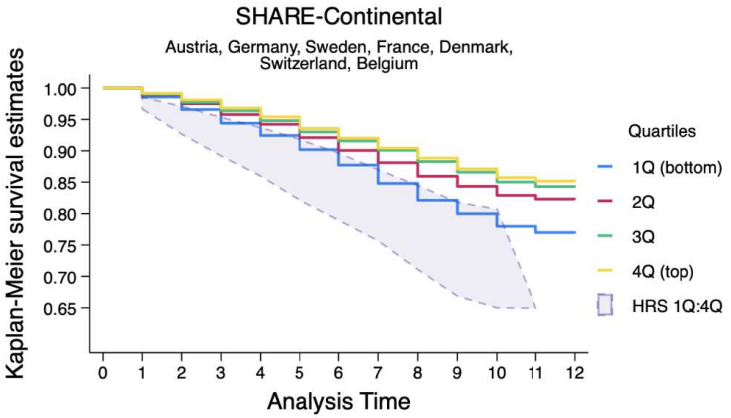
Wealth & Mortality in US vs. Europe

(Among older adults between 2010 to 2021)







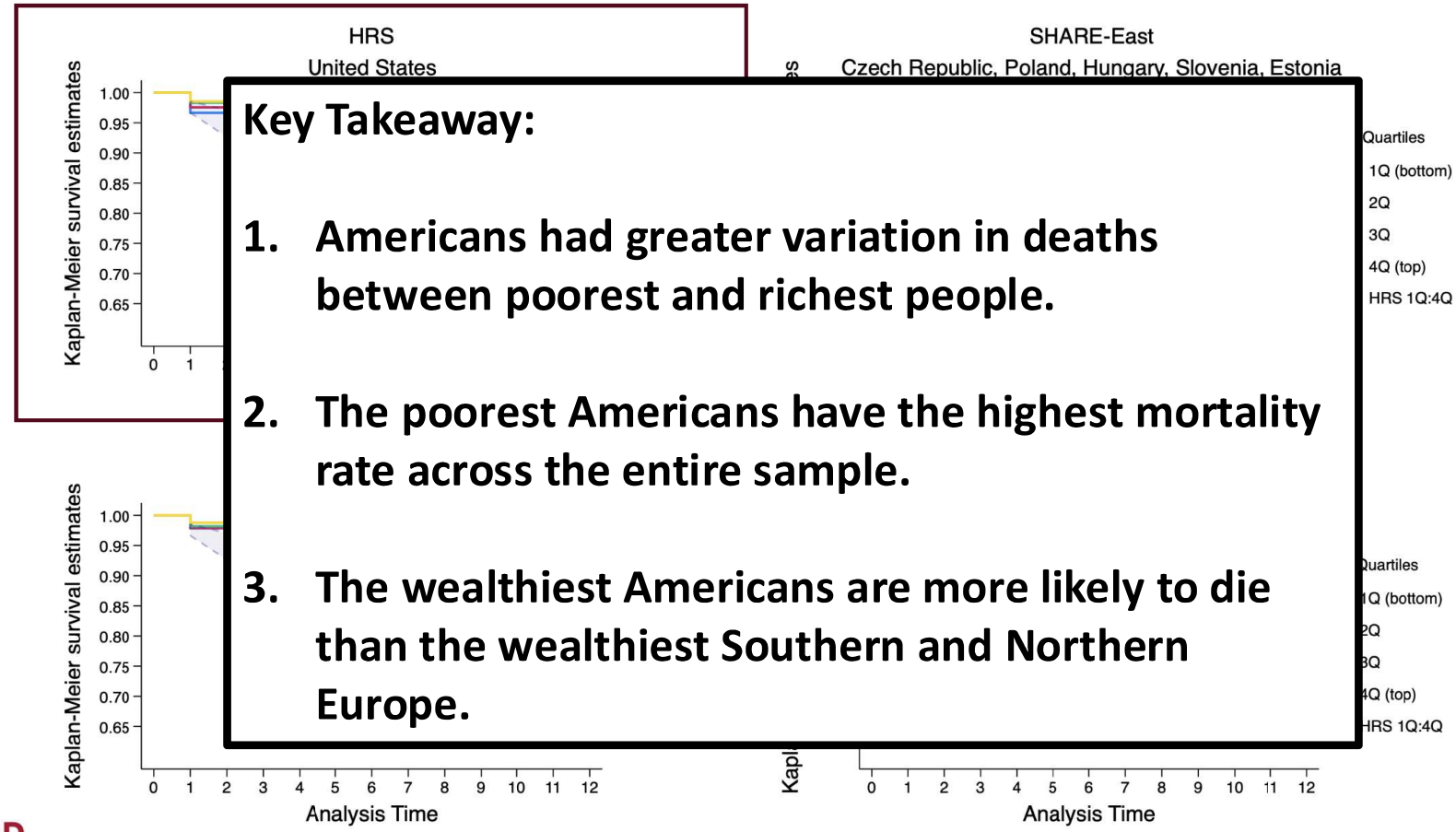


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Machado S et al., NEJM 2025.

Wealth & Mortality in US vs. Europe

(Among older adults between 2010 to 2021)



Key Takeaway:

1. **Americans had greater variation in deaths between poorest and richest people.**
2. **The poorest Americans have the highest mortality rate across the entire sample.**
3. **The wealthiest Americans are more likely to die than the wealthiest Southern and Northern Europe.**

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Machado S et al., NEJM 2025.