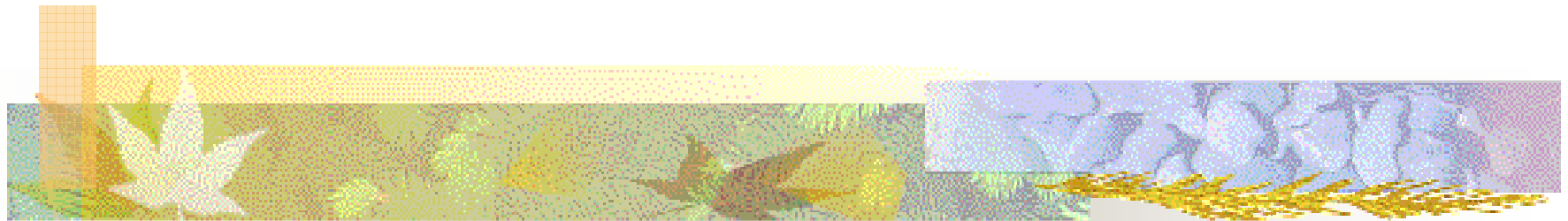# US and Developed Countries: Comparing Health Care Systems - 2009

Steven Miles, MD
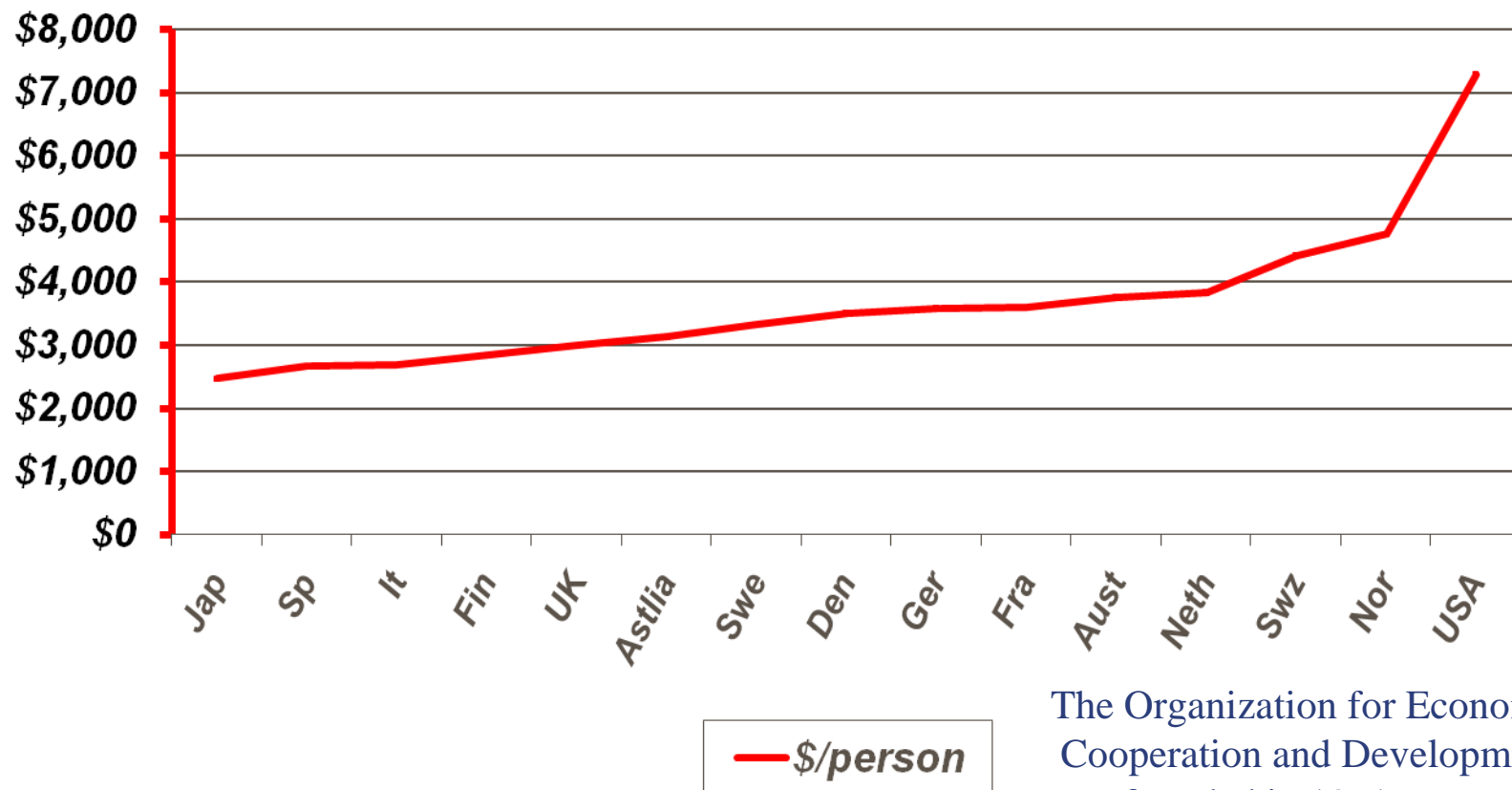
University of Minnesota

Efficiency: Outcomes for $

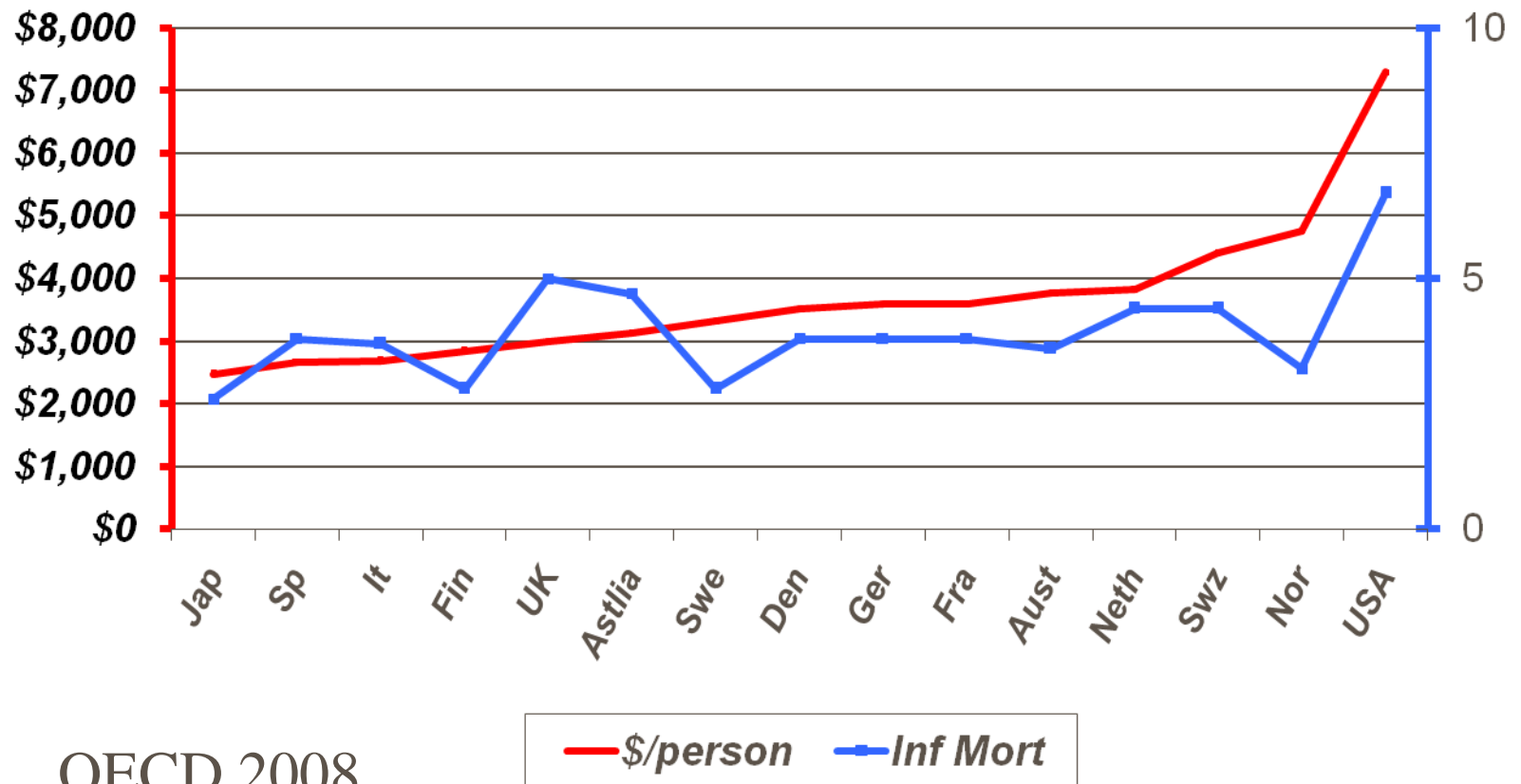## How does the US stack up?

$/person-yr
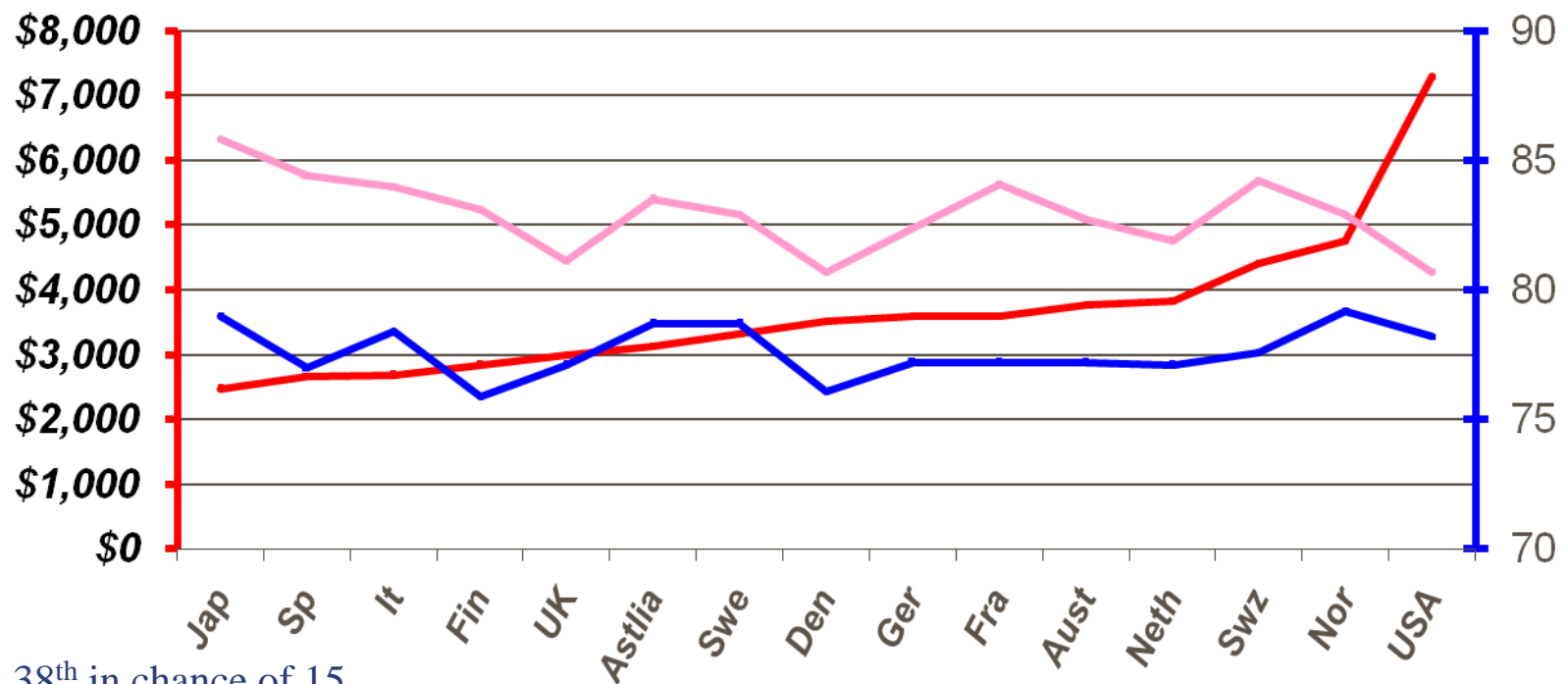## (adjusted for purchasing power parity)

OECD 2009: 2007

The Organization for Economic Cooperation and Development was founded in 1961 to compile statistics and policy reports to promote economic growth.

Efficiency as $/person-yr & Infant Mortality /1000

OECD 2008
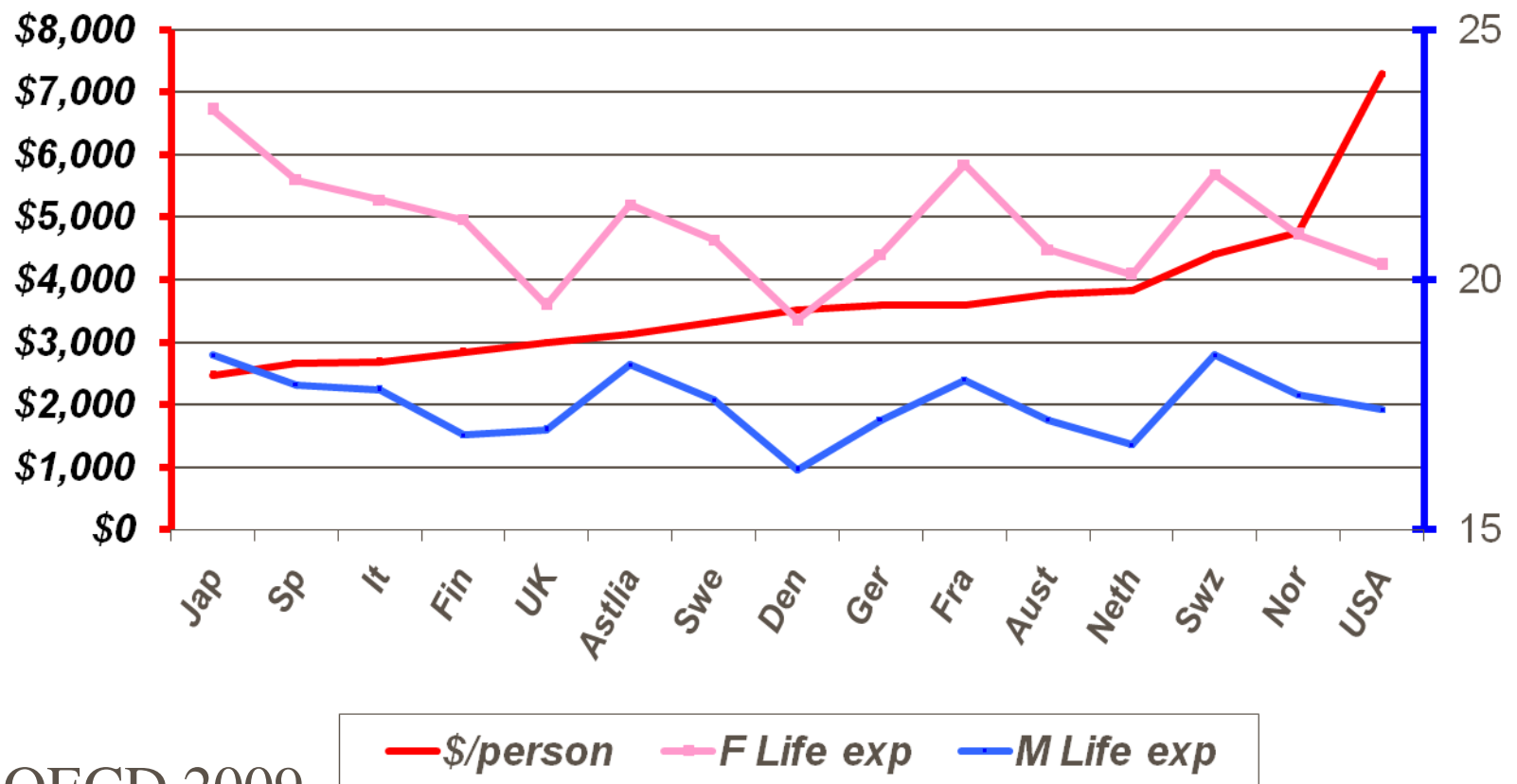
Efficiency as
$/person-yr & Life Expectancy at Birth

US is 38th in chance of 15 year old F reaching 60, about at Costa Rica or Slovakia. Int J Health Serv 2005;35:291.
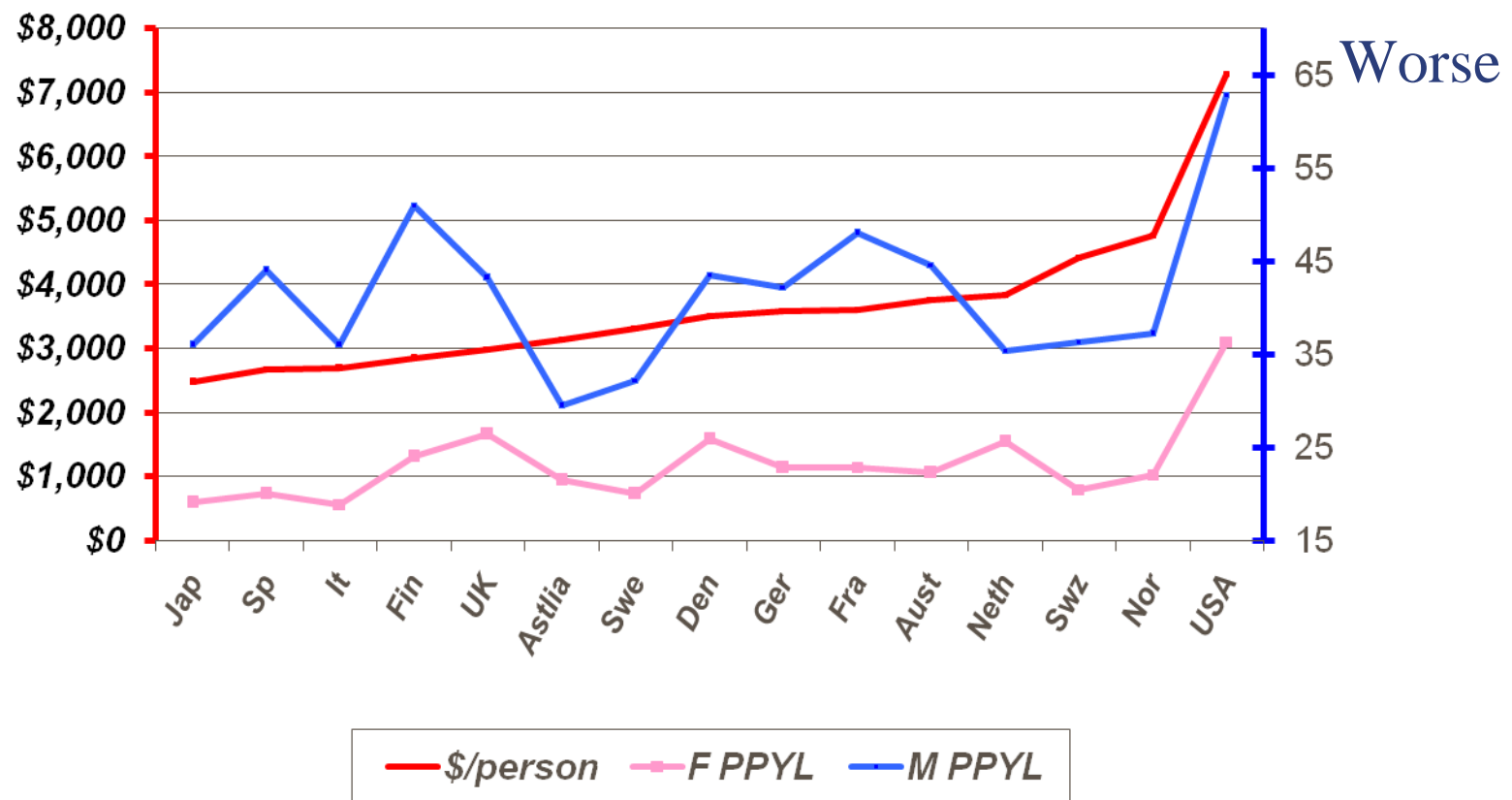
OECD 2009

Efficiency as
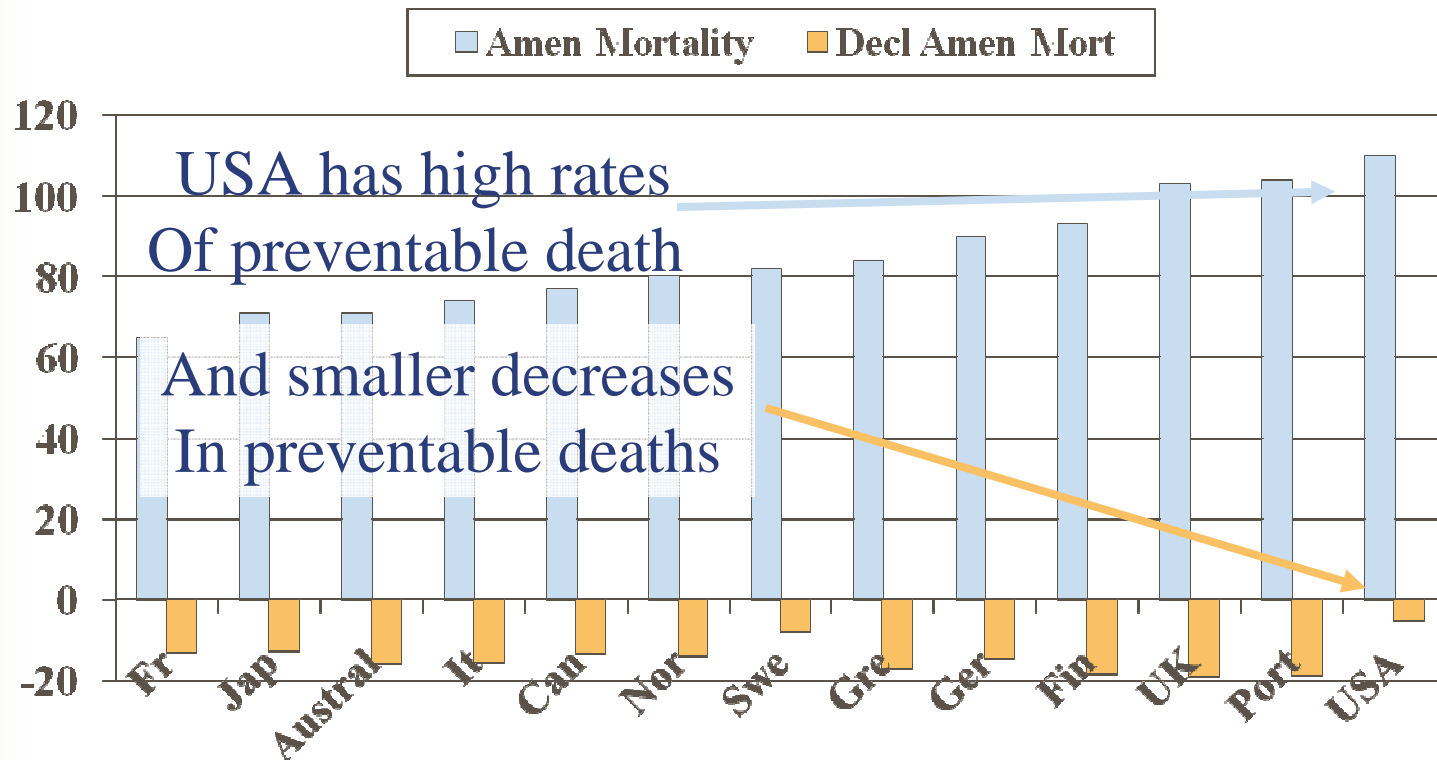# $/person-yr & Life Expectancy at 65

OECD 2009

Efficiency as
$/person-yr & Potential Years Lost from 0-69
(/1000 persons).

OECD 2009 data 2005

Amenable Mortality and
Decline in Amenable Mortality 1997-2003

■ Amen Mortality   ■ Decl Amen Mort

USA has high rates
Of preventable death

And smaller decreases
In preventable deaths

Fr Jap Austral It Can Nor Swe Gre Ger Fin UK Port USA
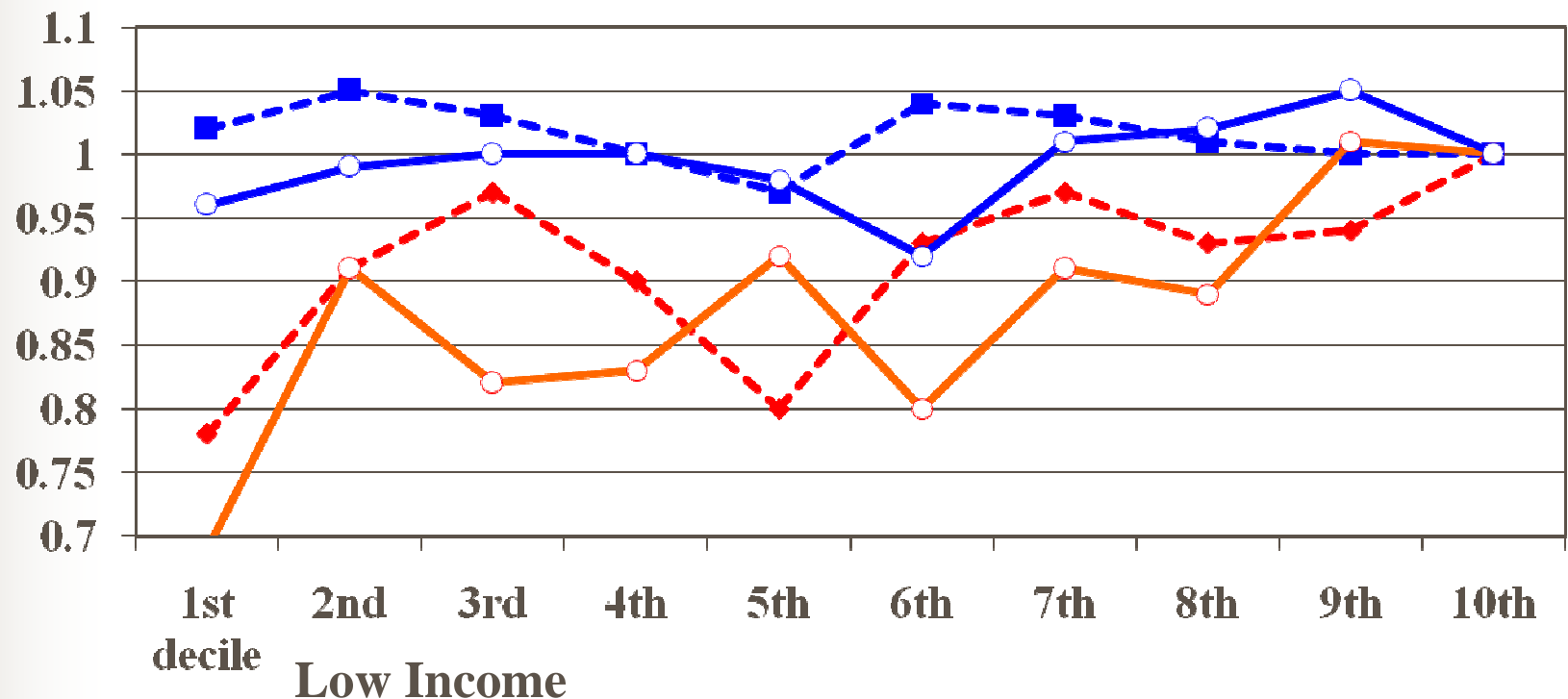
<75 yo. Amen Mort is deaths preventable by HC sys, e.g. CA, CVD, DM, inf, etc. Rates are /100,000

We are falling further behind!

Health Aff 2008;58-71

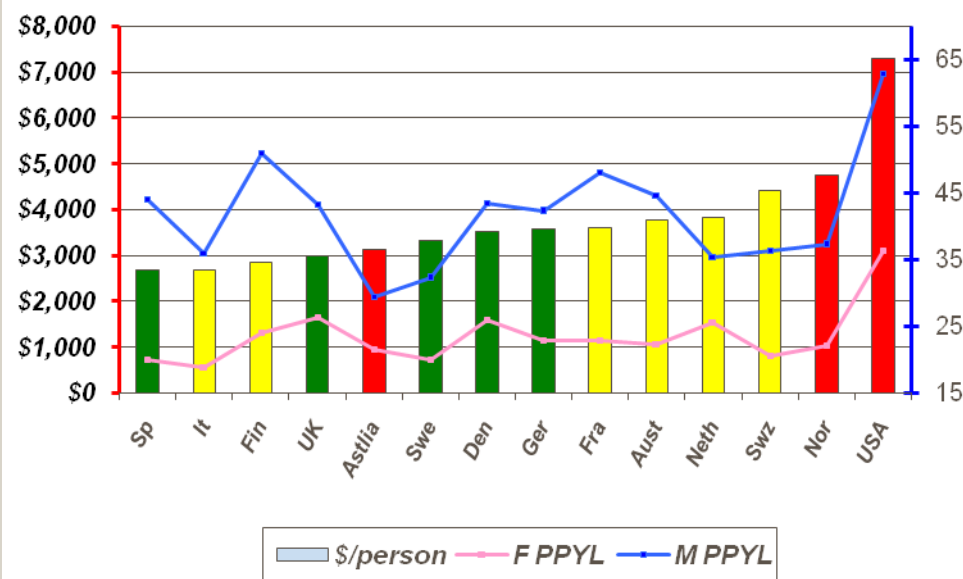# Class, 5 yr Cancer Survival: Access matters.

AJPH 2000;
90:1866-72

The previous slide does not take account of the wide gap between rich and poor in US relative to Canada.

Lower Inequality associated with:

⬆ Education,
⬇ Obesity,
⬇ Heart disease,
⬇ Stroke,
⬇ Unhealthy behaviors

🟥 High Inequality

🟨 Med Inequality

🟩 Low Inequality

Soc Sci & Med 2008;66:1719-32.

WHO: Health System Rating

- Good health 50%
  - Average age cohort survival, disability 25% (24)
  - Disparities 25% (32)

- Responsiveness (cleanliness, promptness, confidentiality, respect) 25%
  - Average 12.5% (1)
  - Disparities 12.5% (21)

- Fairness in financing 25% (54)   (37)

who.int/whr/2000/en/report.htm   () US rank

How do other countries succeed?
Is rationing their secret?
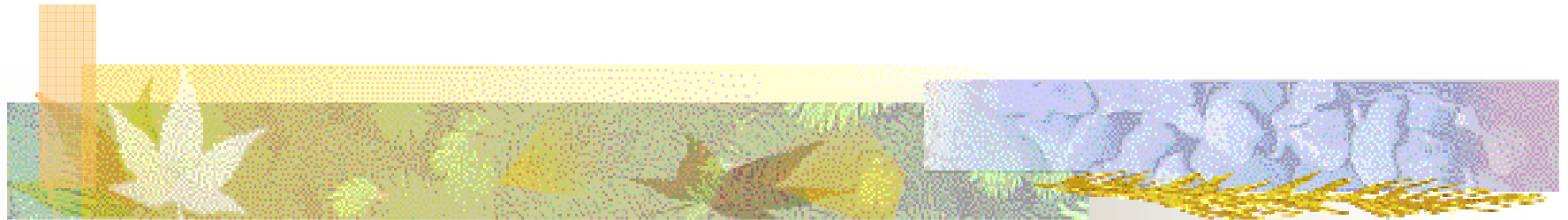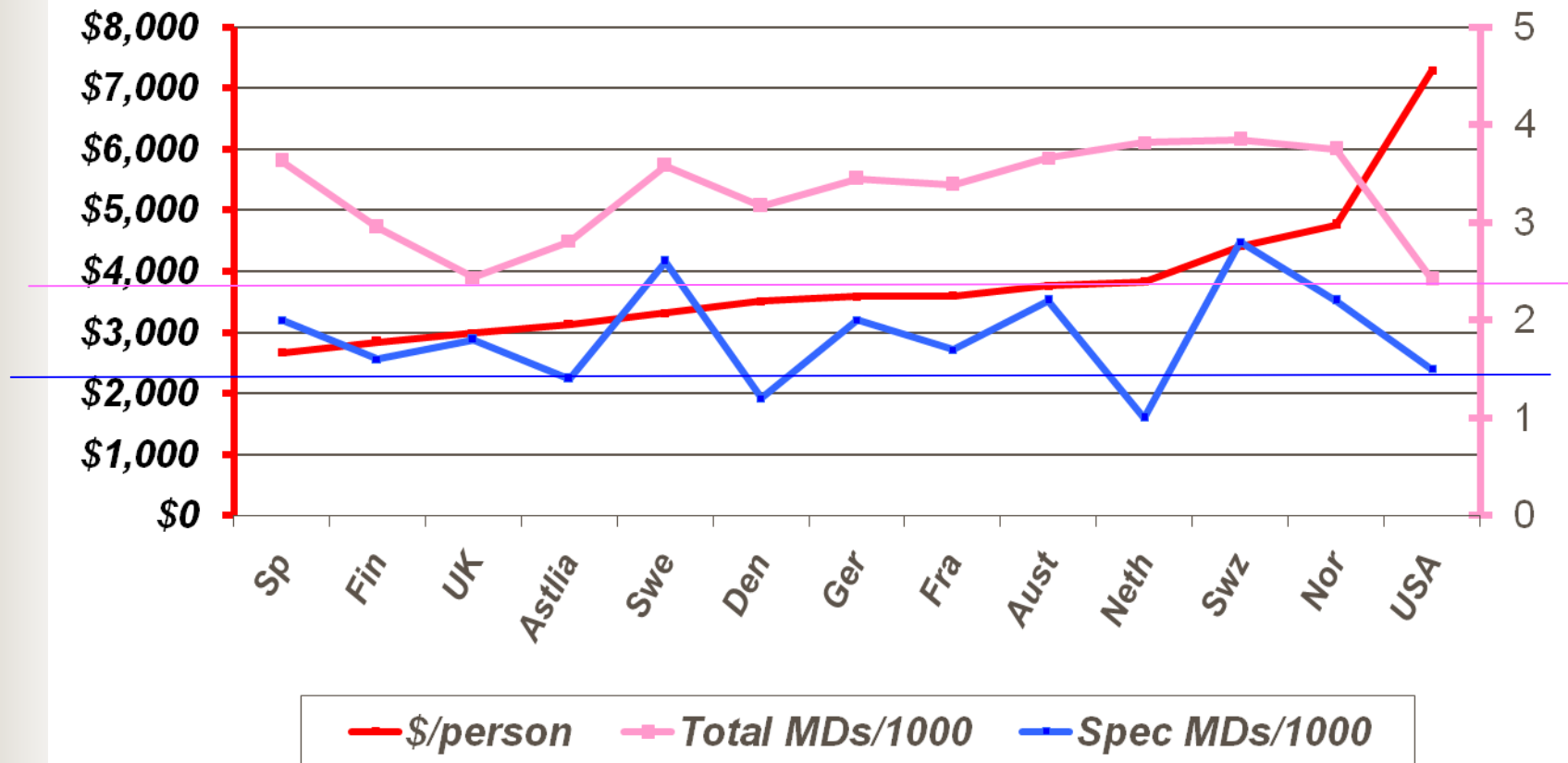
Rationing
for *your* Healthcare

If rationing *Improves* outcomes,
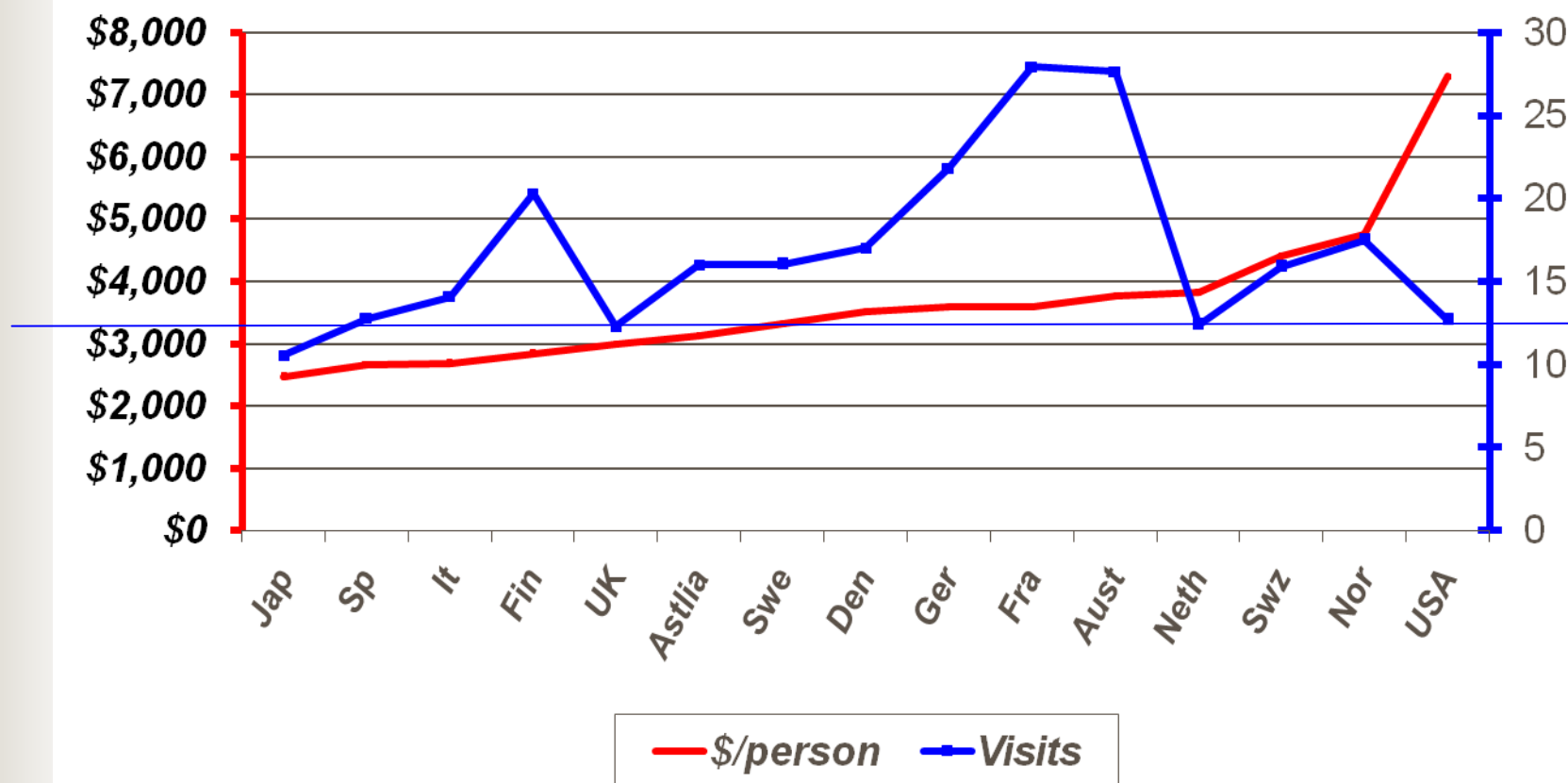is health care toxic?

Do they ration Doctors or Specialists? No.

PS: There is no rationing of nurses either.
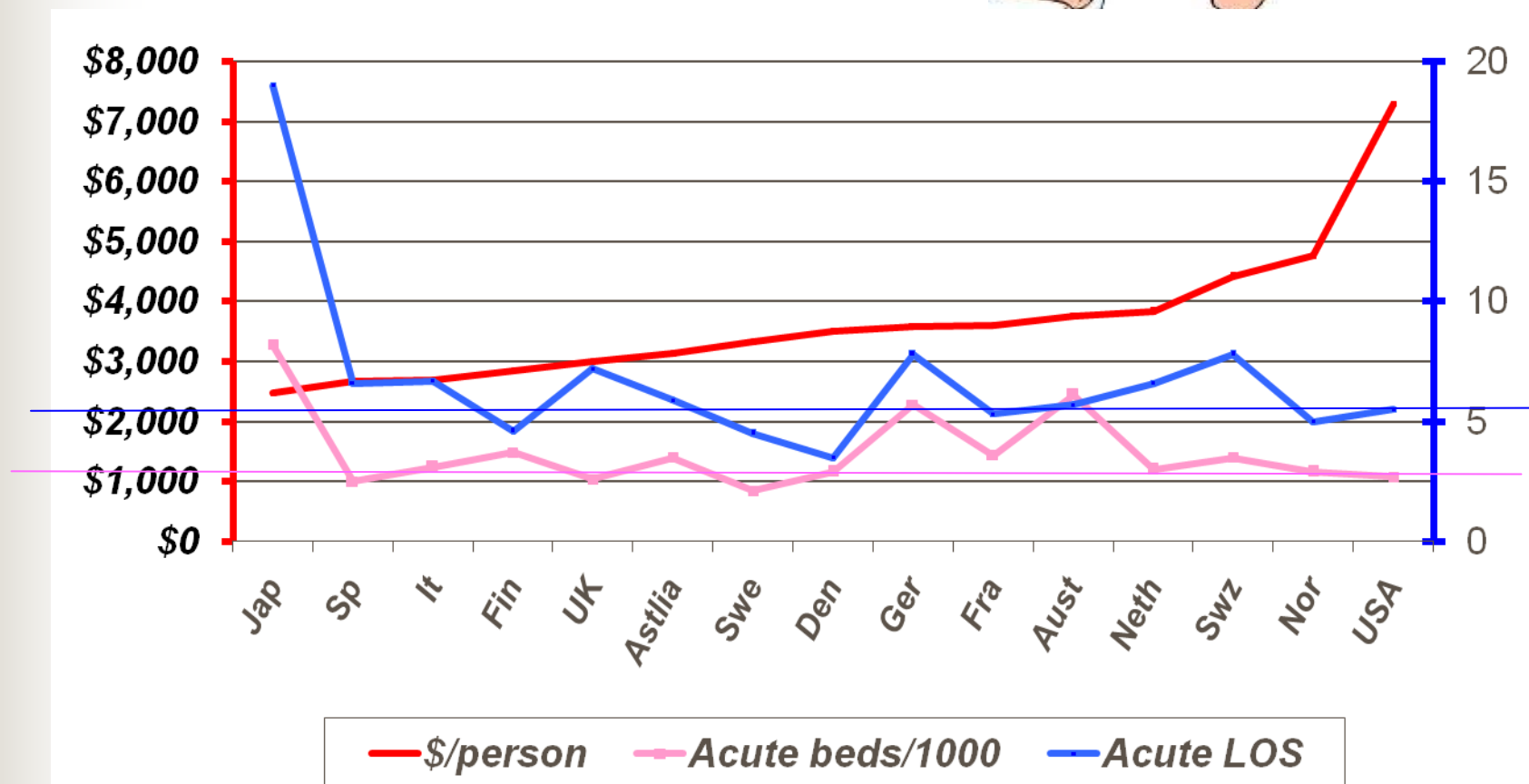

OECD 2009

Do they ration doctor visits? No.
(all causes/100 person-yr)

OECD 2009
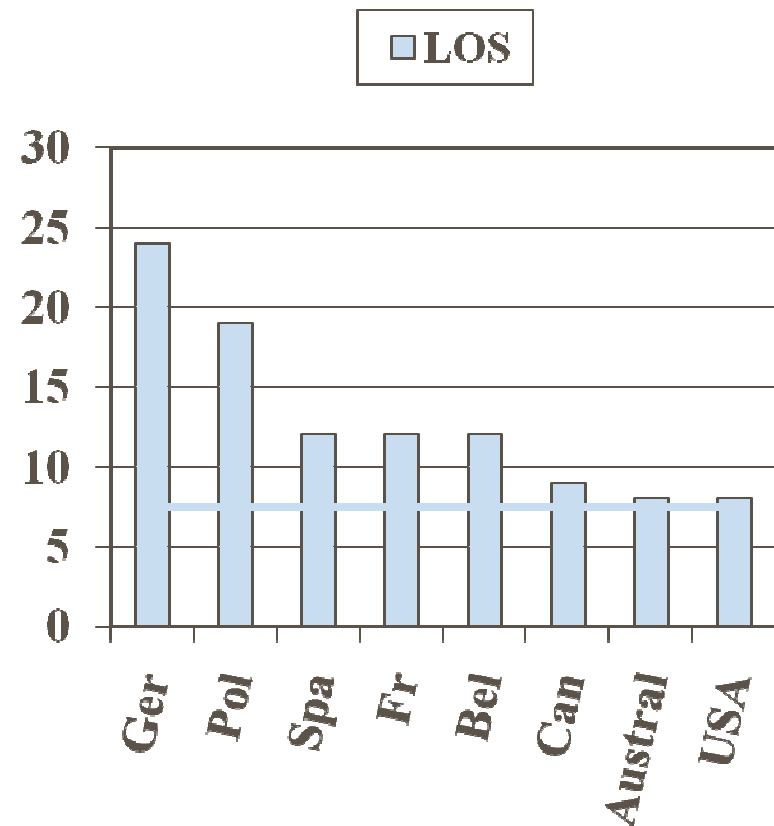
Do they rationing hospital admission or stays?

Not here!

OECD 2009

Do they ration length of hospital stay after uncomplicated heart attack? No.

- 54,000 persons, 9 countries, GUSTO 1,2 & Assent
- Eligible for early discharge
  - Lancet 2004;363:511-17
- Same trend for normal delivery (e.g. US 1.9, France 4.4)
  - OECD 2005

Do they ration coronary bypass grafts, angioplasty to accept more heart attack deaths? No.
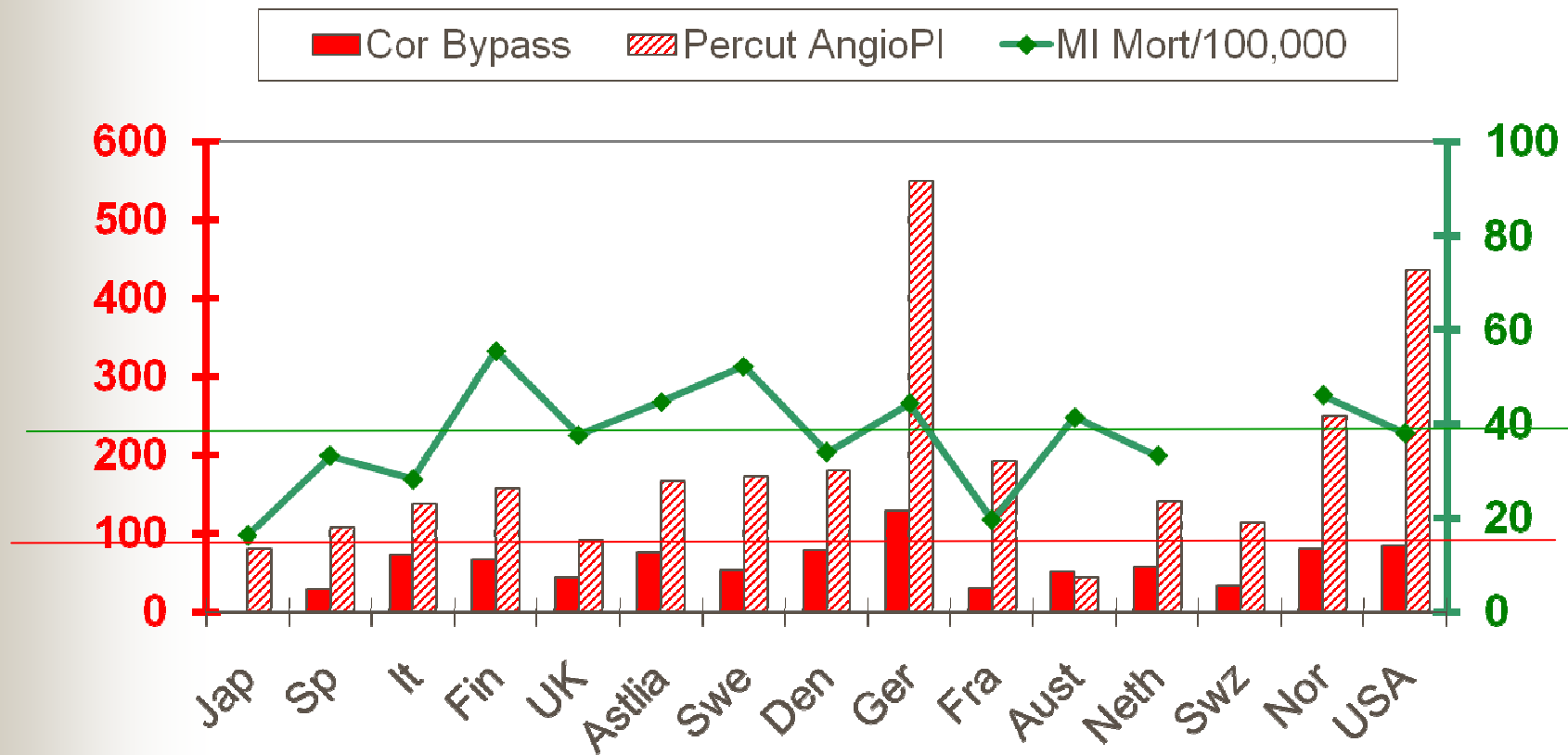
OECD 2009

We do more but we do not have lower heart attack mortality.

Treatment of Acute Myocardial Infarction

|	Minneapolis,US	Goteberg,Sweden
Angiography	**62**	33
PTCA/CABG	**58**	34
Exercise test	51	**59**
B blockers	62	**87**
Short Nitrates	54	**66**
1,36 m'nth survl	Identical	

American Heart Journal 2003;146:1023-9.

They do have fewer CT machines but they have more radiation therapy centers.

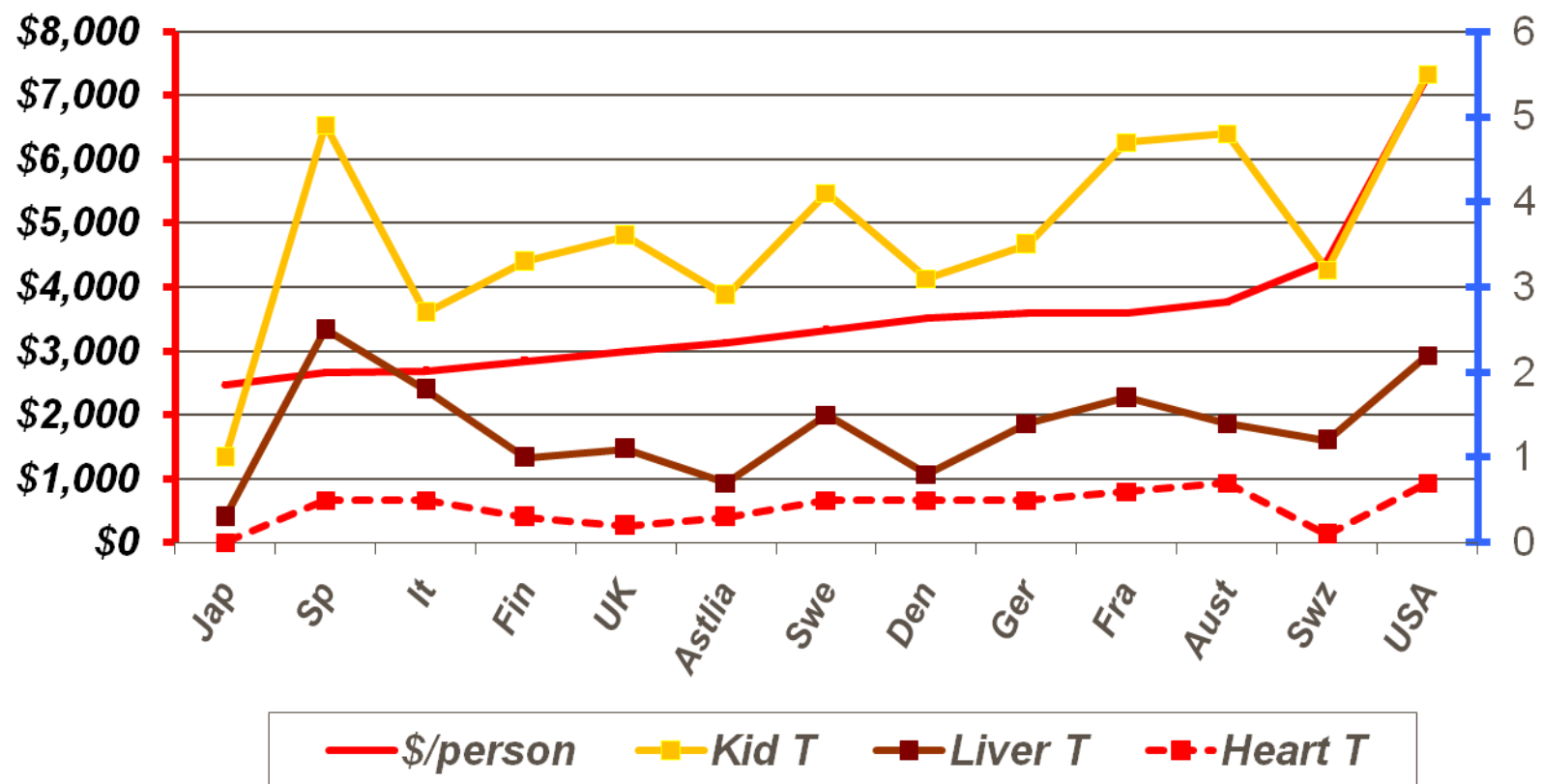Legend: CT ctrs/mil | Rad tx ctrs/mil | $/person
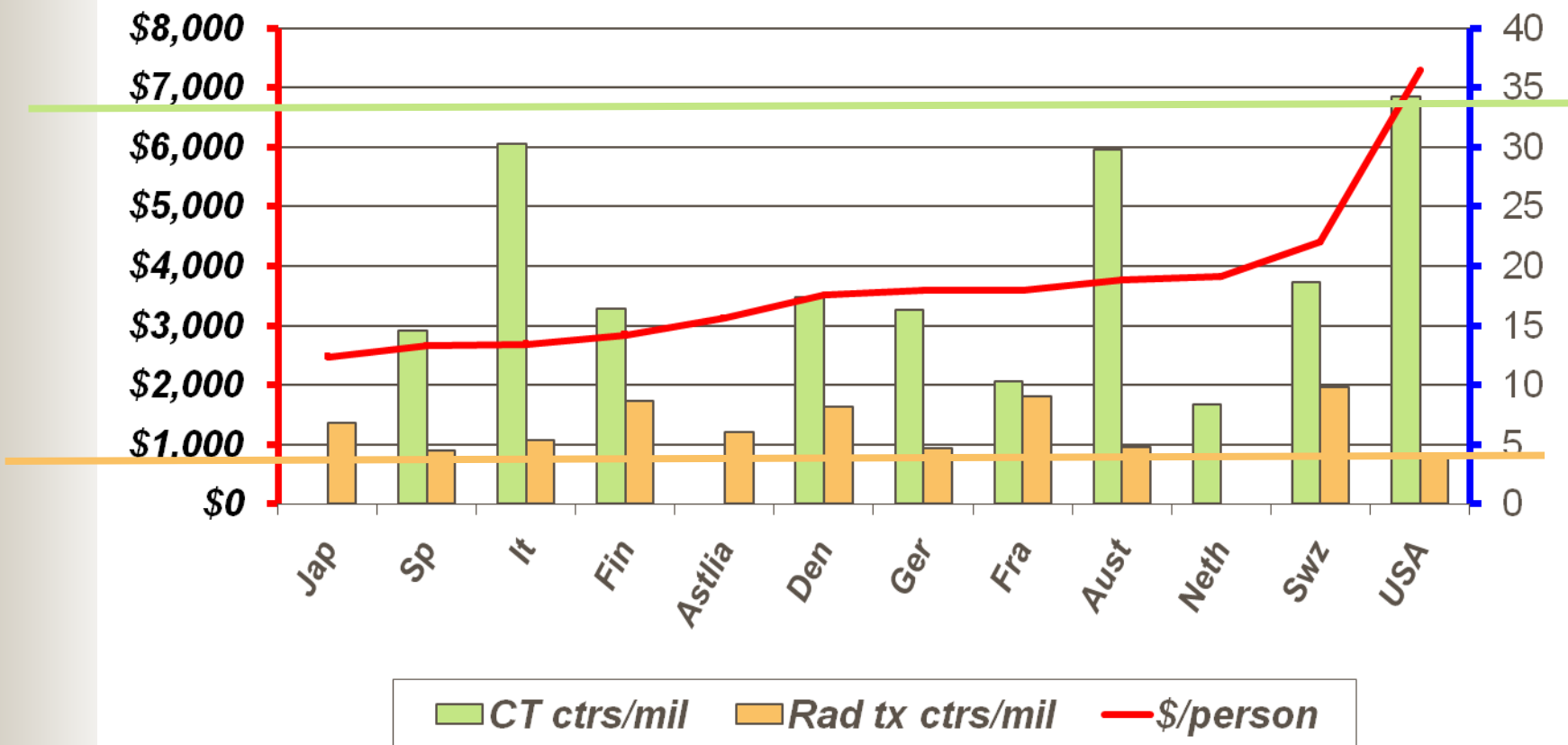
OR Times are Shorter
([Aus, Can, Fin, Fra, Jap, Swi] v US)

Mean Time "Wheels in-out"
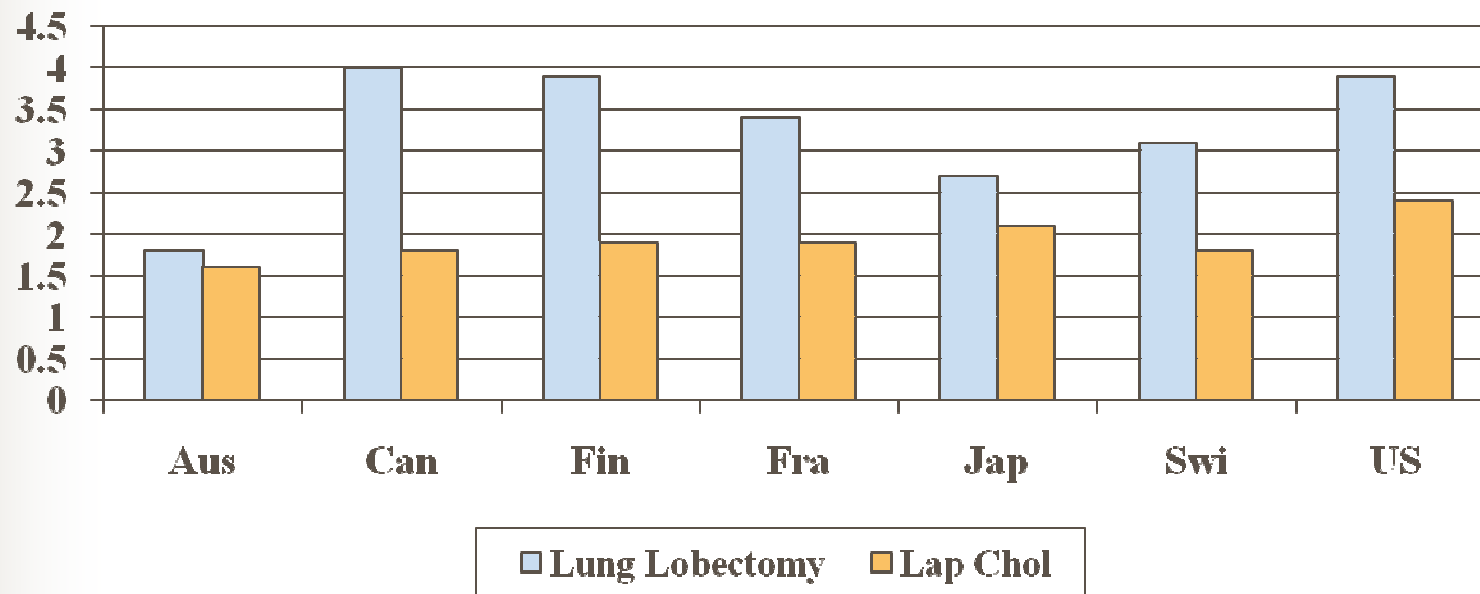
J Anesth 2006;20:319-22.

Do they ration transplants? By 2/100,000 persons.
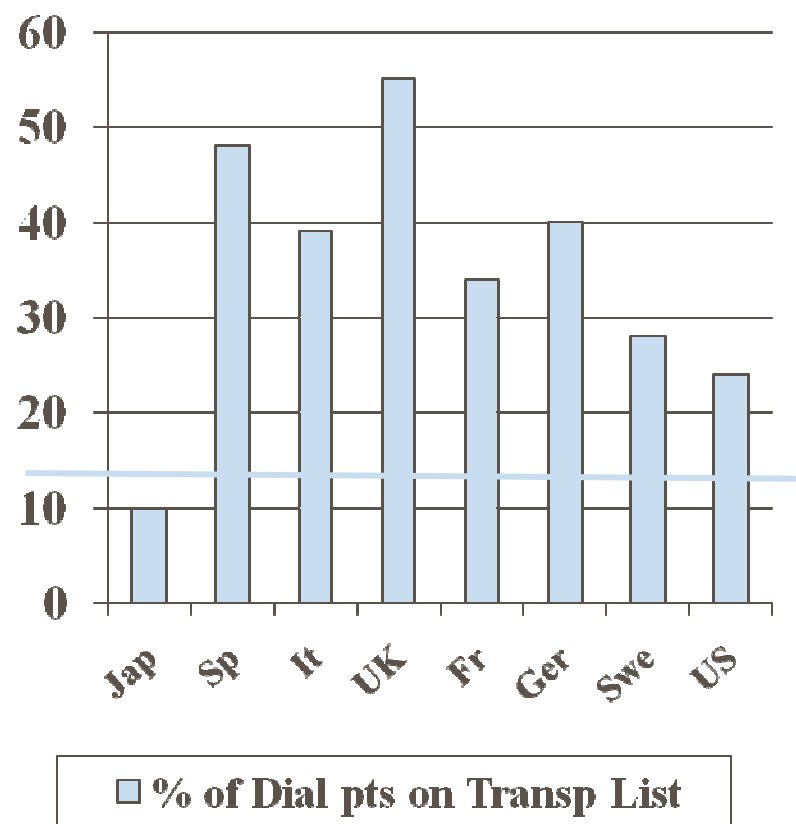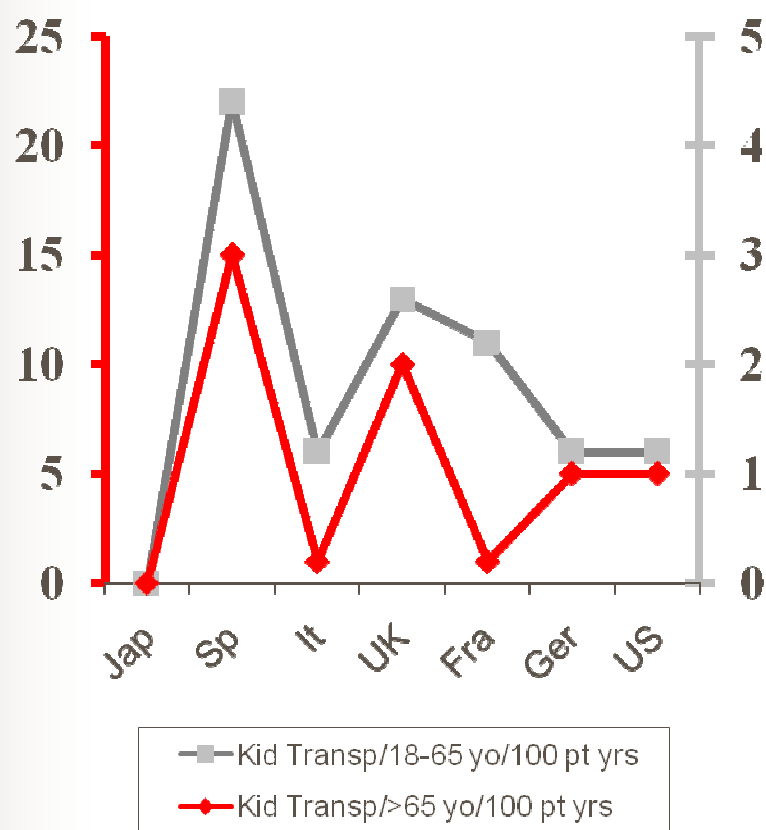

Per 100,000 persons

OECD 2009, data 2007

How good are their liver transplants?
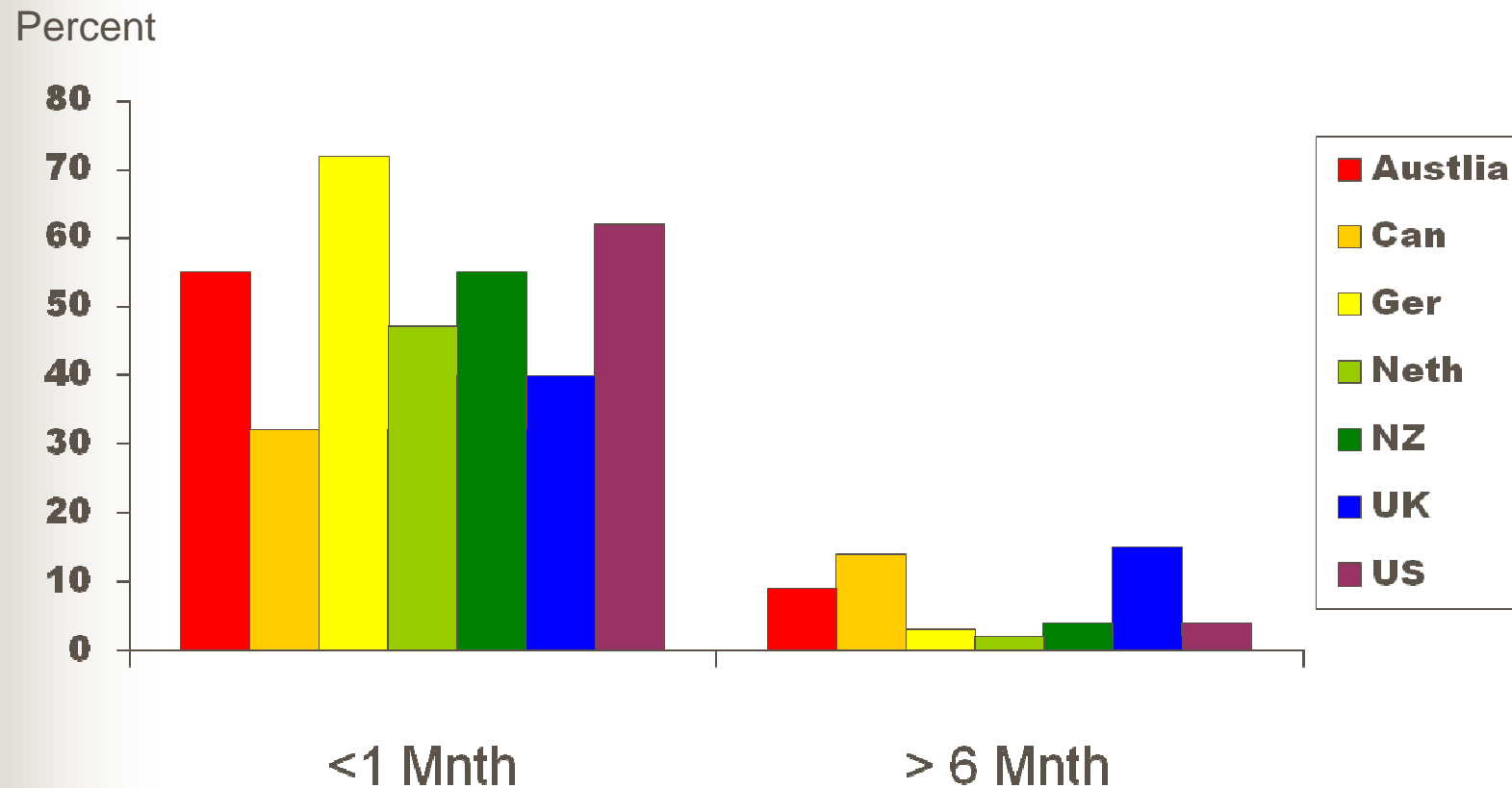## US v (Jap, Ger, Neth, It, US, Fr, Swz, Can)

- Transplants done on comparably ill persons.

- One year survival is identical.

- US costs 26% more.
    - Med Care Res & Rev 2009;66:3-22.

Rationing Dialysis or Kidney Transplants?

Kid Intl 2005;68:330-7.

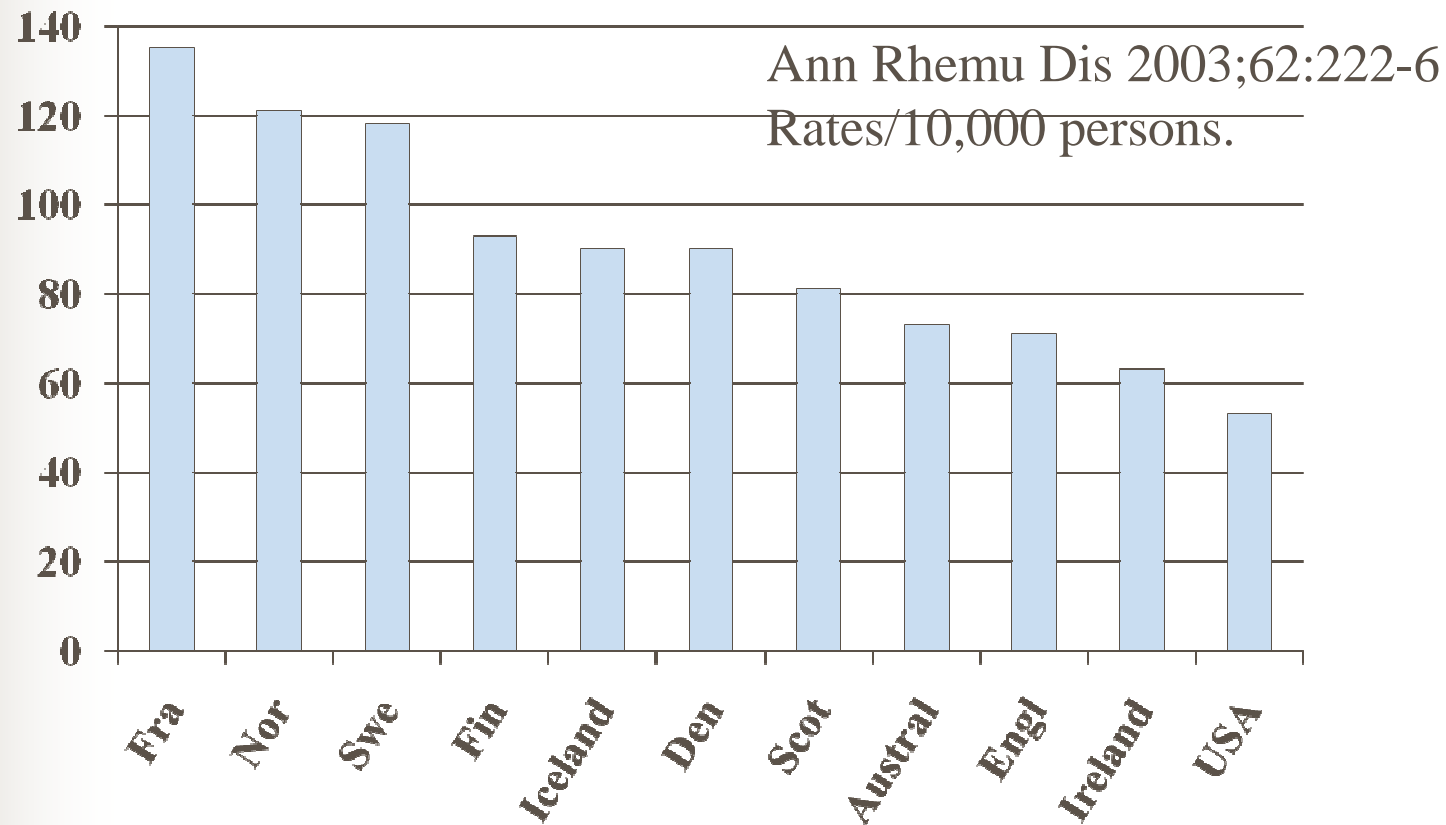# Do Adults Wait Longer for Elective Surgery?

Percent

2007 Commonwealth Fund International Health Policy Survey.
Harris Interactive, Inc.

Hip replacement is elective and US does them faster for fewer people.

(People who wait forever do not get counted.)

Ann Rhemu Dis 2003;62:222-6
Rates/10,000 persons.

Hip Replacement /10^5 persons
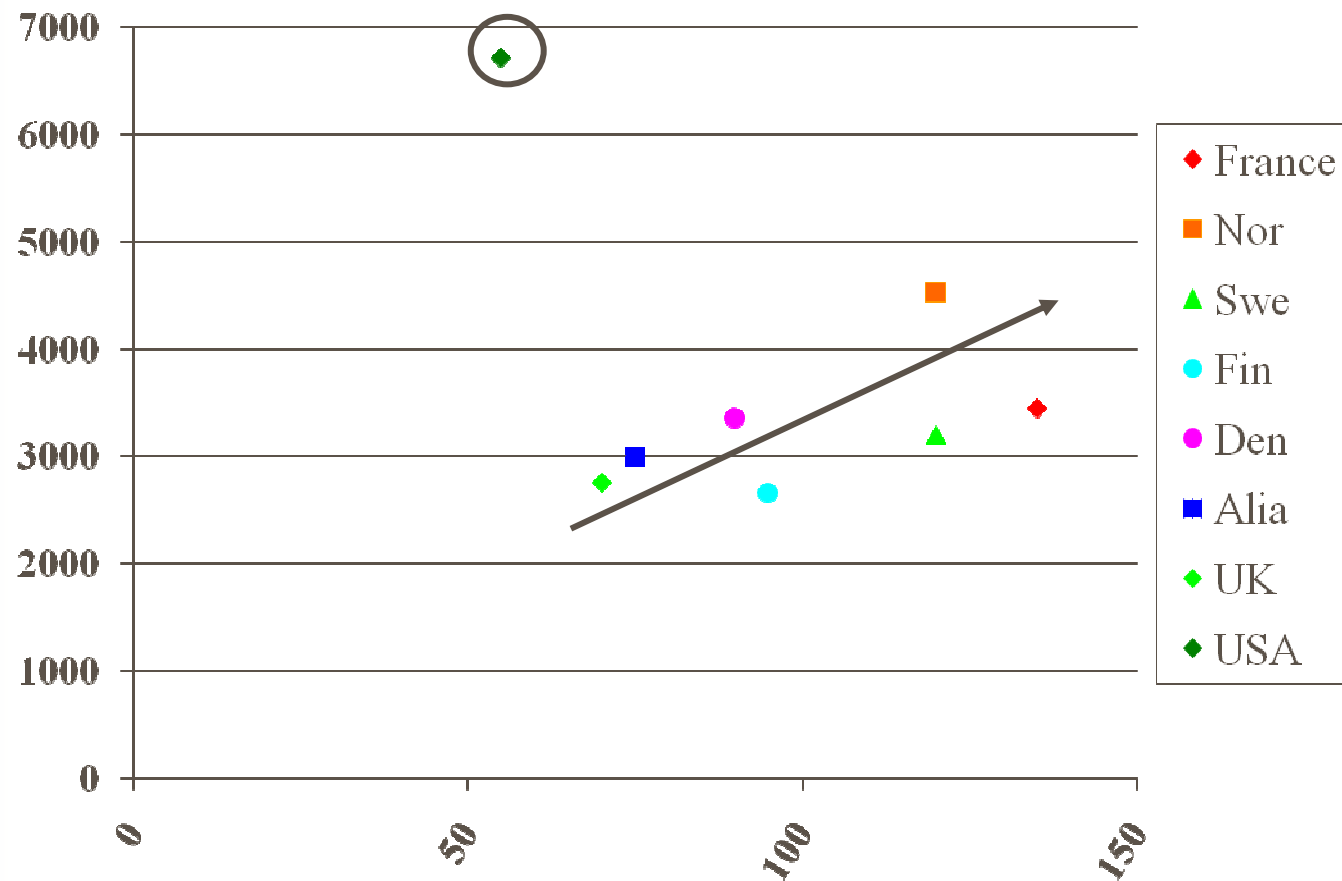
Data from Ann Rhemu Dis 2003;62:222-6 and OECD

Mammograms US/UK:
More aggressive bx,
more false +, no improved dx.

- *JAMA* 2003;290:2129-2137. F 50+, 3.9 million UK mammograms UK, 1.5 in US, 1996-9.

50-54 yo

Abn   Surg Bx   Perc bx   Ca+

US
UK
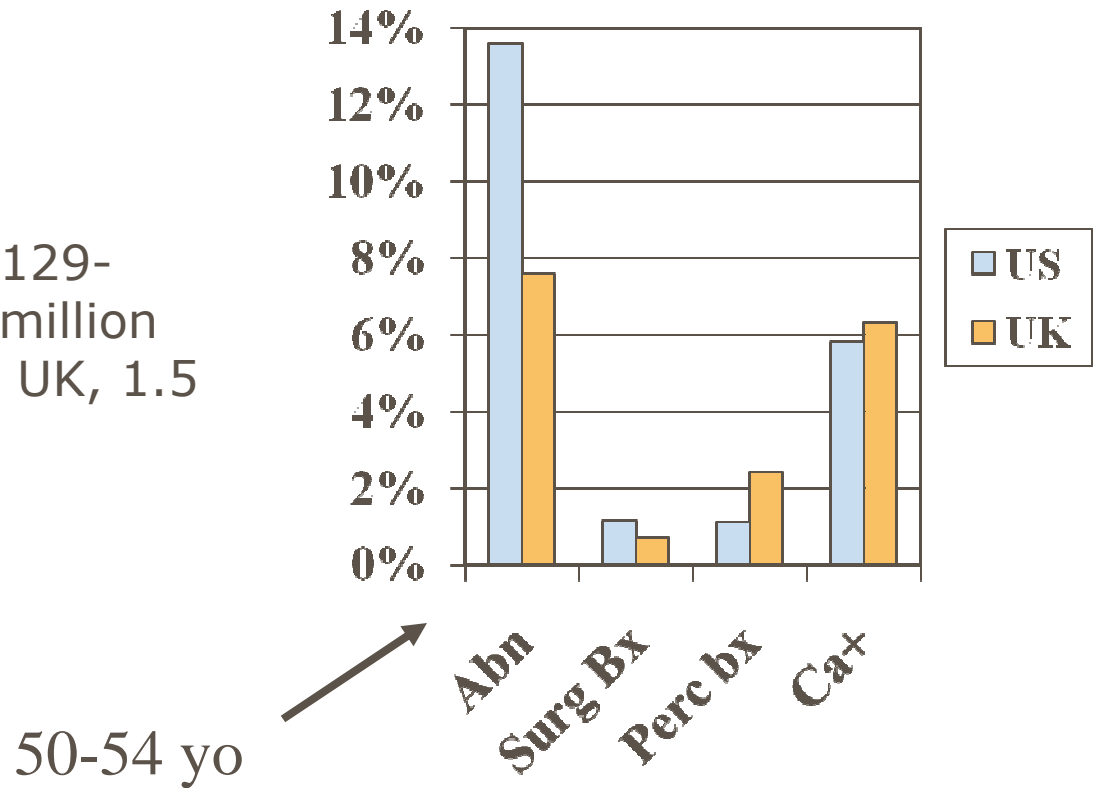
Myth: So if other nations do not have lower costs by rationing, the American Consumer must be a Health System Wrecker.

The American Consumer is too:

Old	Obese
Smoking	Drinking
Over financed	Armed with Lawyers

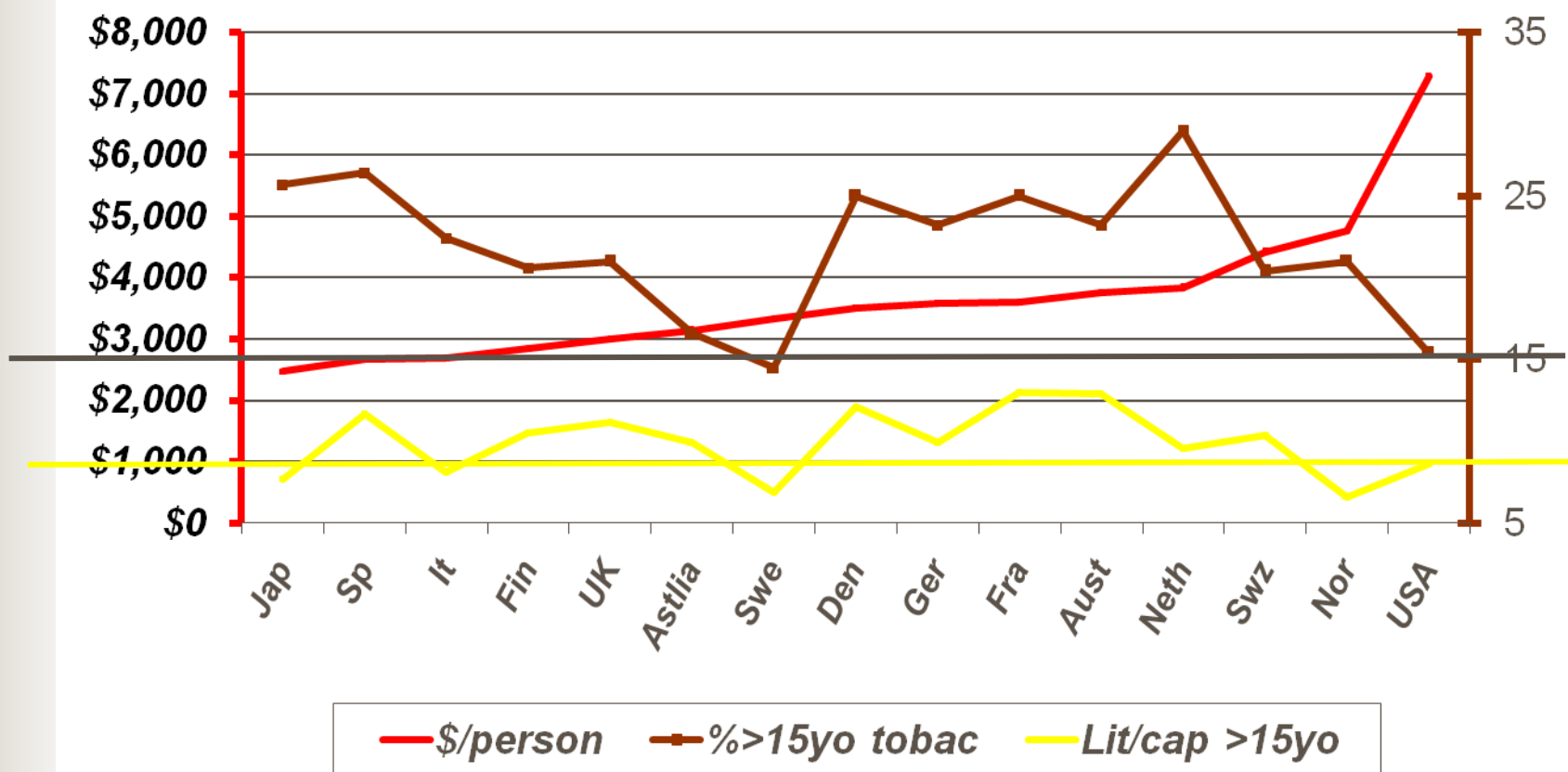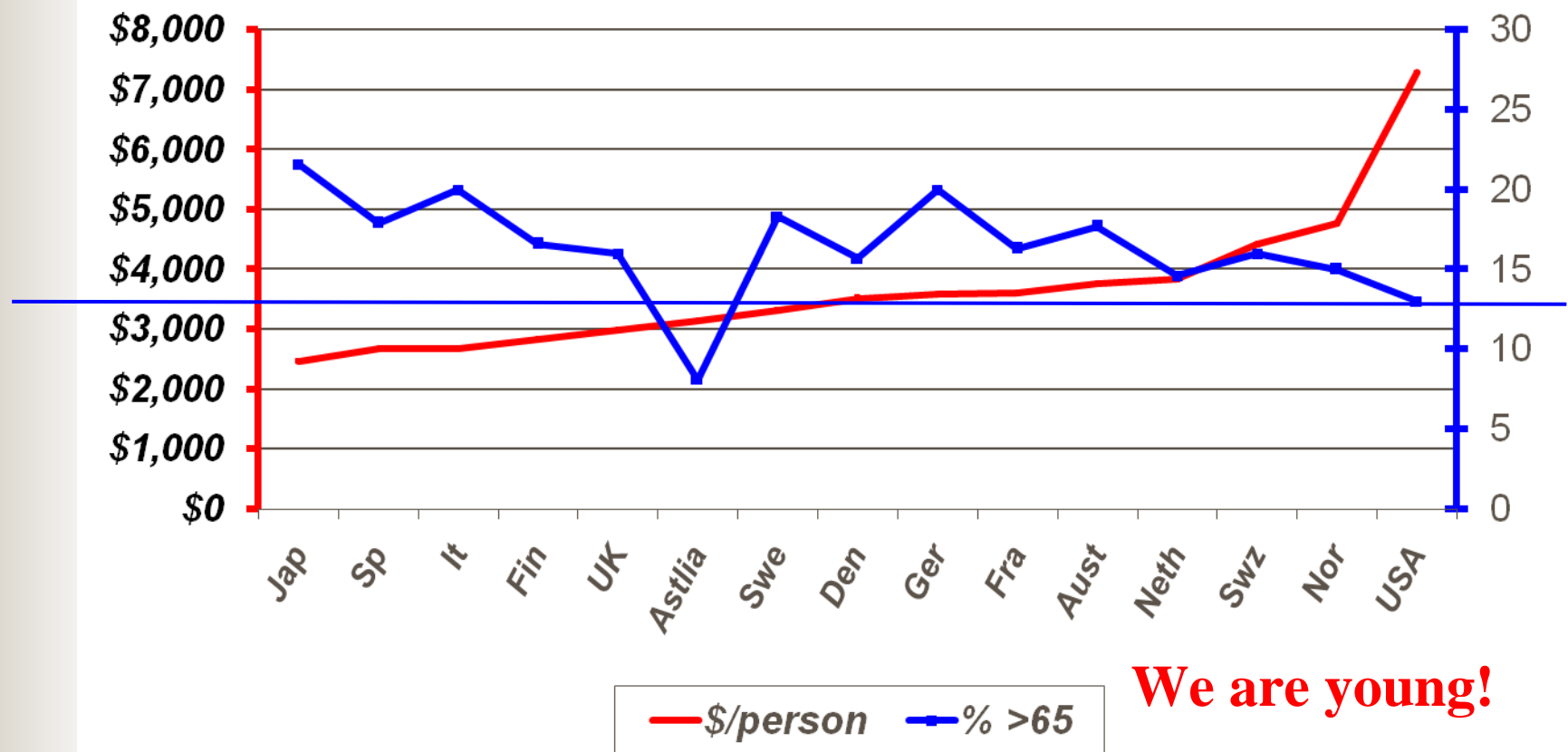# Myth: The US Health System is handicapped because Americans Drink and Smoke so much.

OCED 2009, data 2005,6
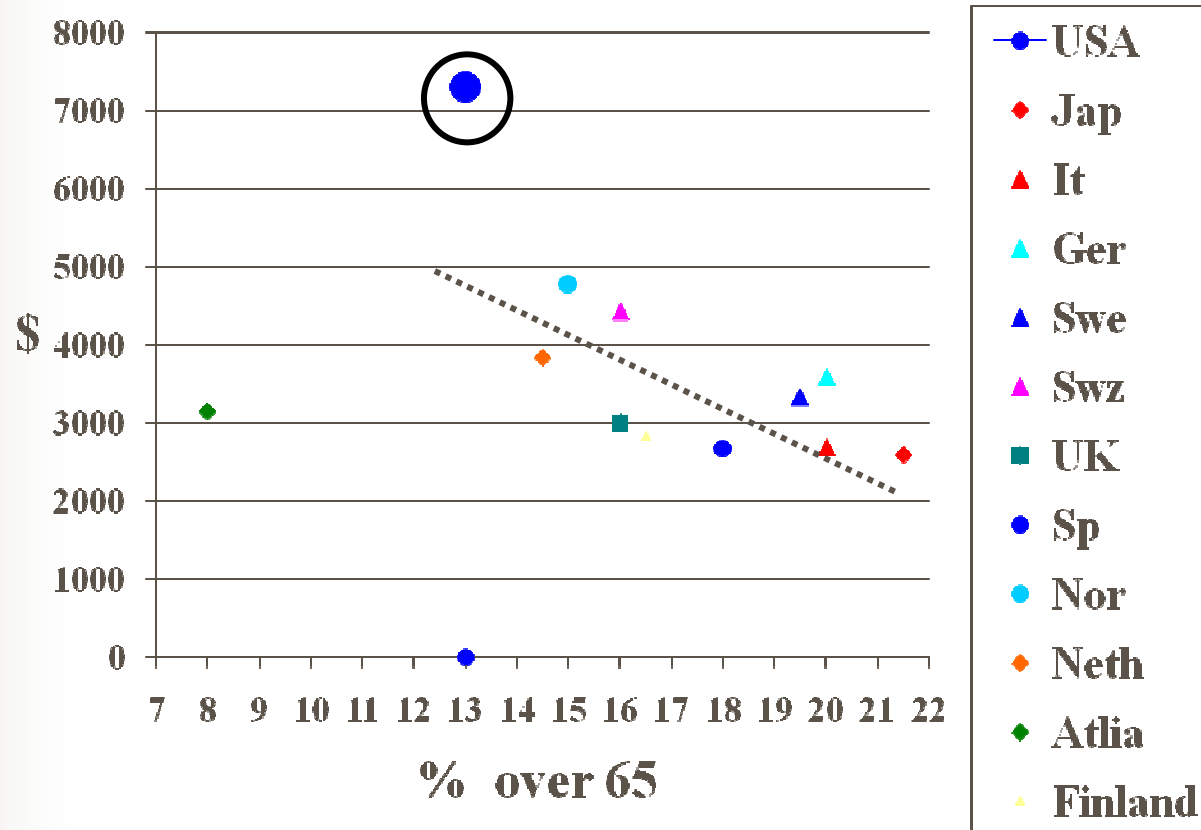
Myth: US Health Care Costs so Much Because Americans are Really Old!

We are young!

UN Census Dept: 2009 (data 2008)

Per Capita Health Spending and % Elderly:
US uniquely out of position to deal with an aging population.

Myth: Health Care Costs are High Because of Last Year Medical Care for Very Old.

- Last year of life
  - 11% USA health $
  - 27% M'care costs (flat x20y)
  - Health Aff 2001;20:188-95.
- Universal use of
  - Advance directives
  - Hospice care
  - Futility guidelines

would save US 3.5% med $.
  - NEJM 1993:1092

Legend: ☐ M'care $1000/yr ☐ % using ICU

Categories: 65-74, 75-74, 85+

JAMA 2001;2861349-55.
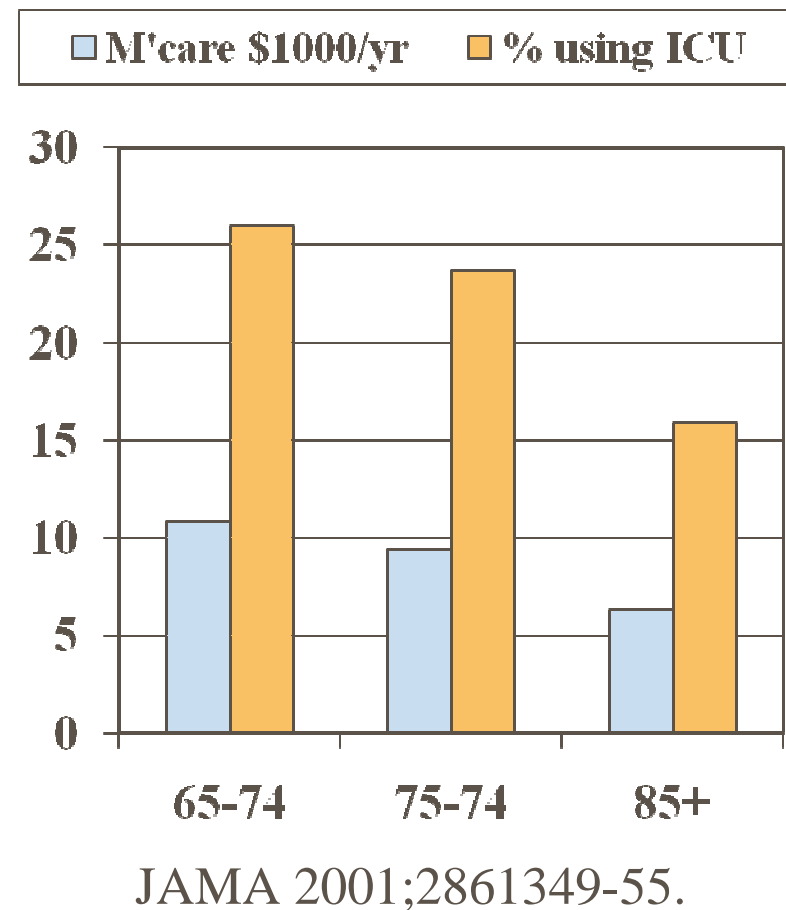
Americans are Heavy

Obese % Adults BMI > 30 Kg/M^2 e.g. 5'9" 200+ pounds

Overwt % Adults BMI > 25 Kg/M^2 e.g. 5'9" 170+ pounds

OECD 2009

Obesity does raise health costs, esp in elderly.
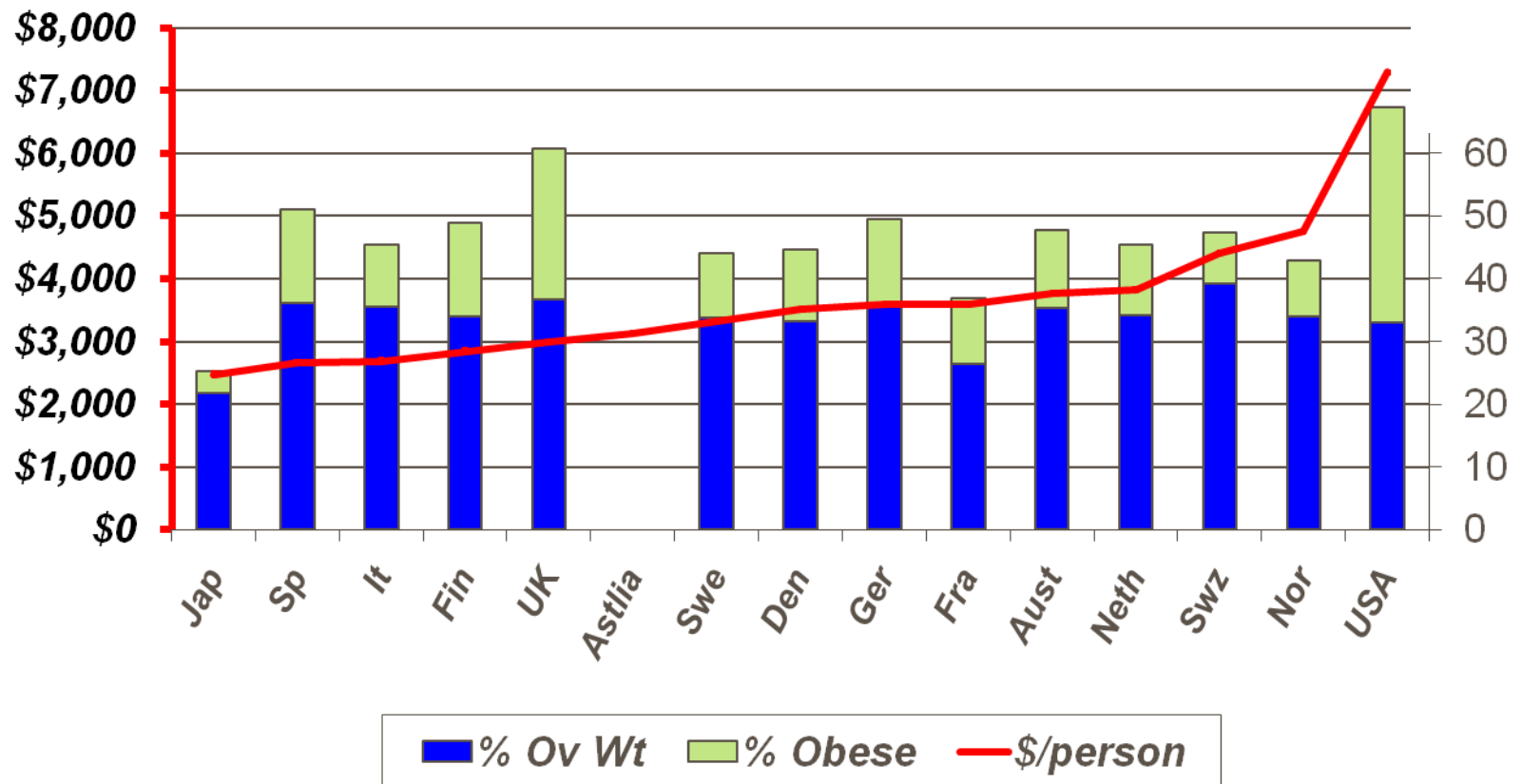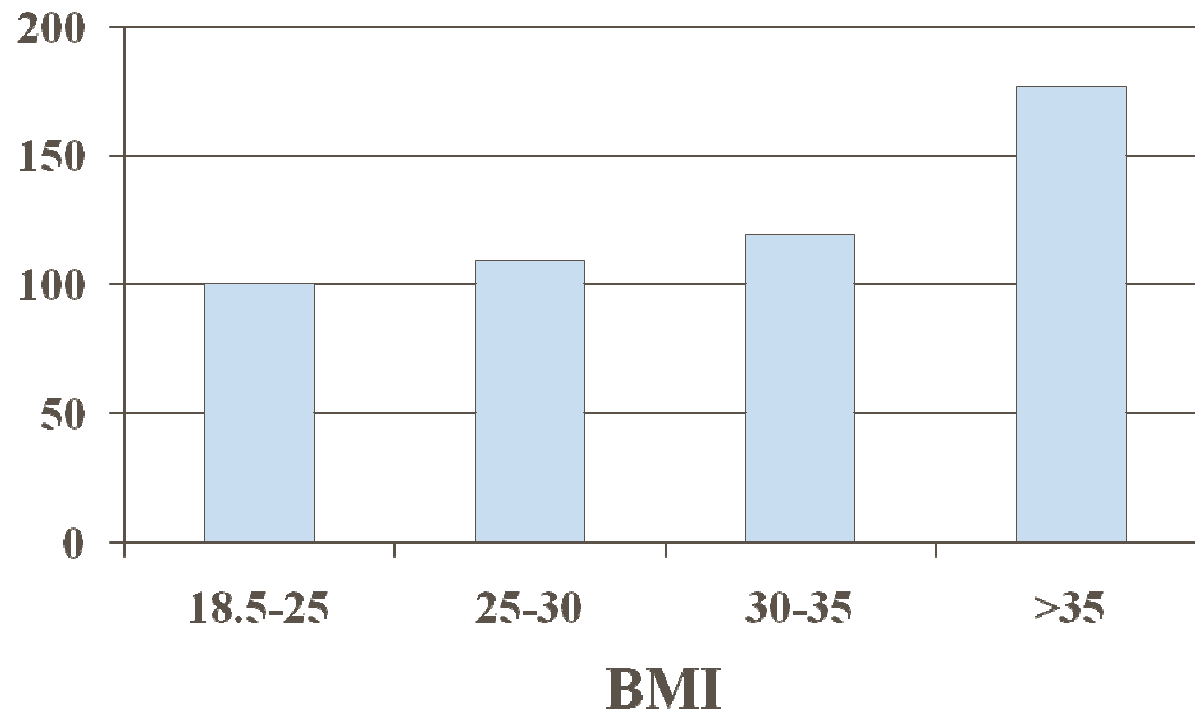
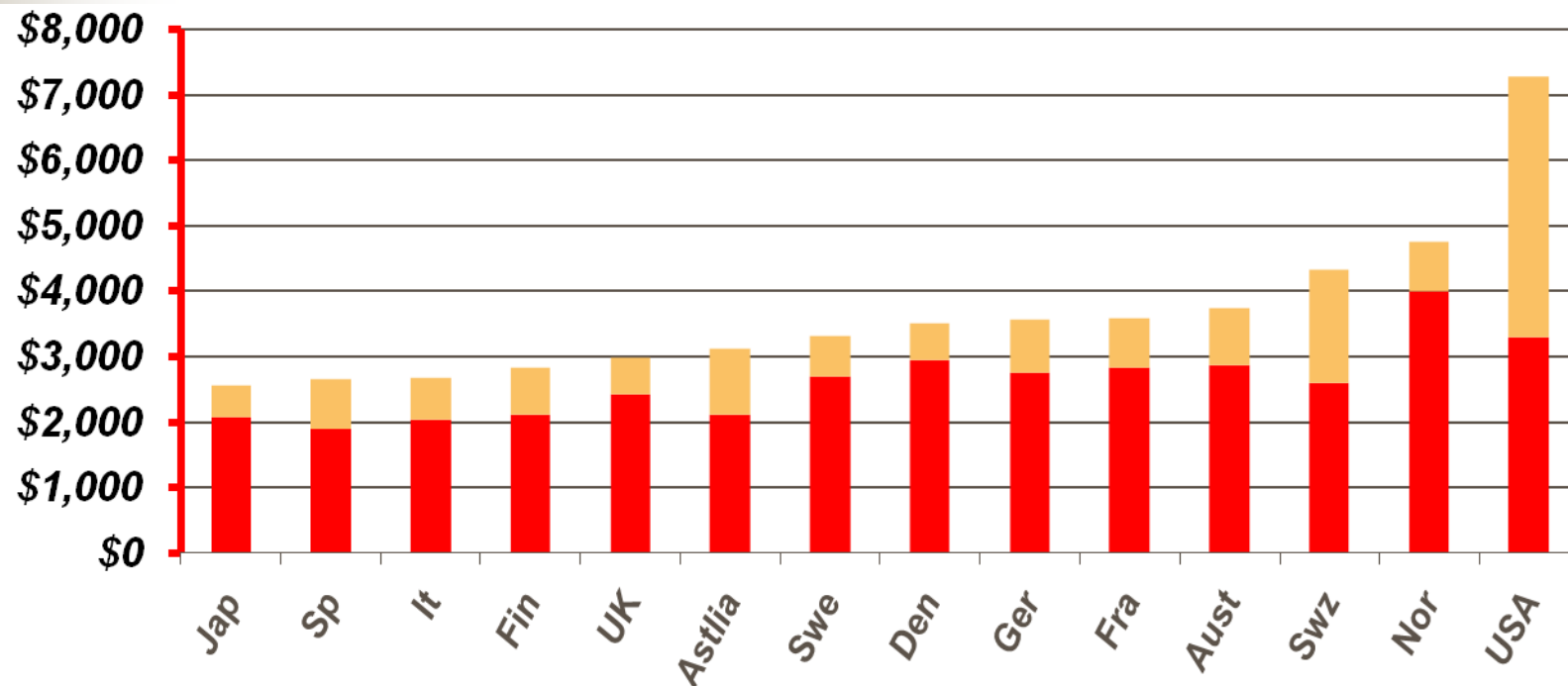HC costs in
$1000s
from 65 to
death or 83
yo

JAMA 2004;292:2743-9.

- 2-4% of our excess costs relative to other developed countries.
- 11% of Medicare $ Health Affairs 2003;(May).

Myth: US Health Care Costs so Much Because Americans don't Personally Pay for Health Care

Note: Our gov expenditures are comparable to other nations!

- Gov $/pers-yr
- Persn'l $/pers-yr

OECD 2009 for 2007

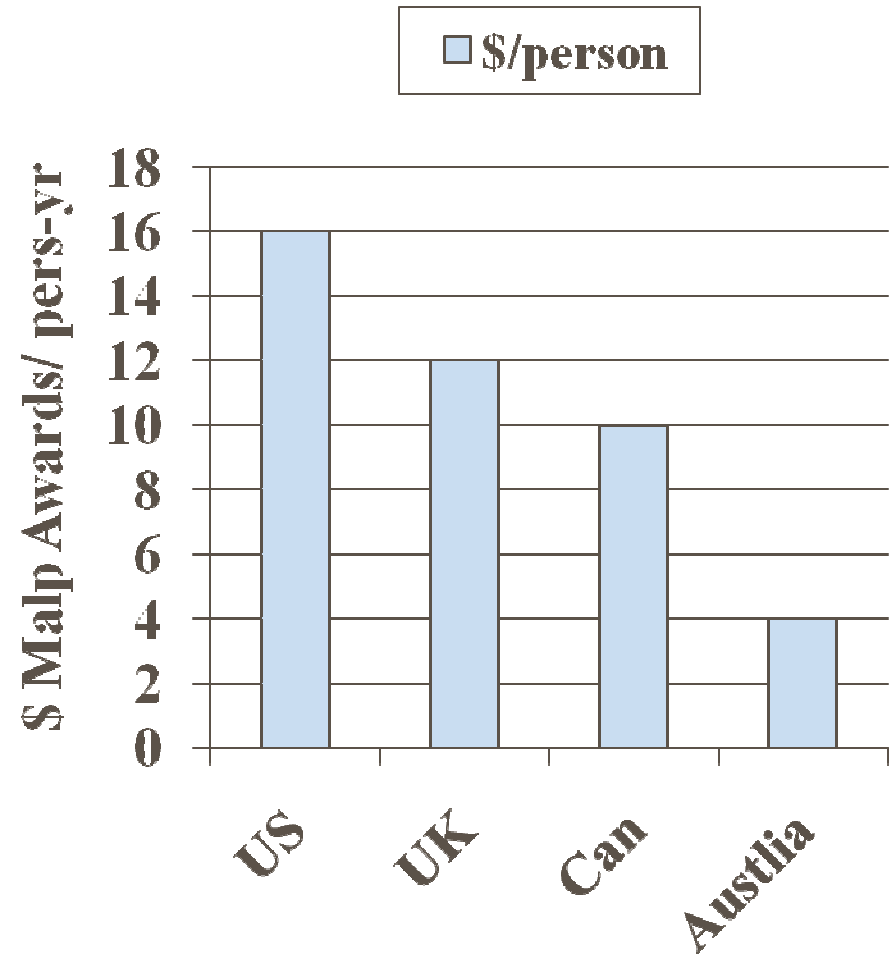# Myth: Malpractice Costs are why US Health Care Costs so Much

% of US Health Spending

- Insurance, awards, settlements, legal fees **.46%**
  - Health Affairs 2005, 24:903-914

Defensive medicine ? 2-6%

Legend: $/person

Y-axis: $ Malp Awards/ pers-yr (0 to 18)

Bar chart values:
- US: 16
- UK: 12
- Can: 10
- Austlia: 4

How do they do it?
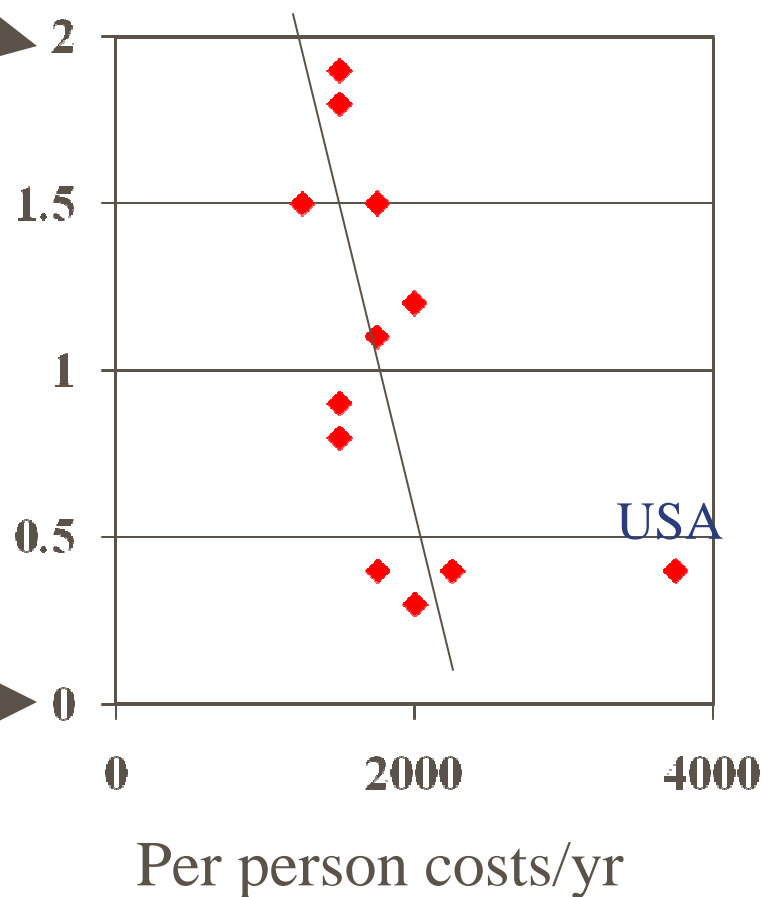
(or, How can we do better?)

Primary Care Orientation

Lowers Health Care Costs

- **1^0 Care Oriented (2 high)**
  - Longitudinal
  - Comprehensive
  - Coordinated with secondary/tertiary care
 - Community located

Low 1^0 care orient

Health Policy 2002;60:201-18.

Per person costs/yr

Primary Care Orientation Improves Health Outcomes

- Many fewer low birth weight babies.

- Less bronchitis, emphysema, heart disease asthma, and death from pneumonia mortality.

- Fewer productive years lost 0-69.

- Higher life expectancy at 40 and 65 years of age.

  - HSR 2003;38: 831-64.
  - Health Policy 2002;60:201-18.

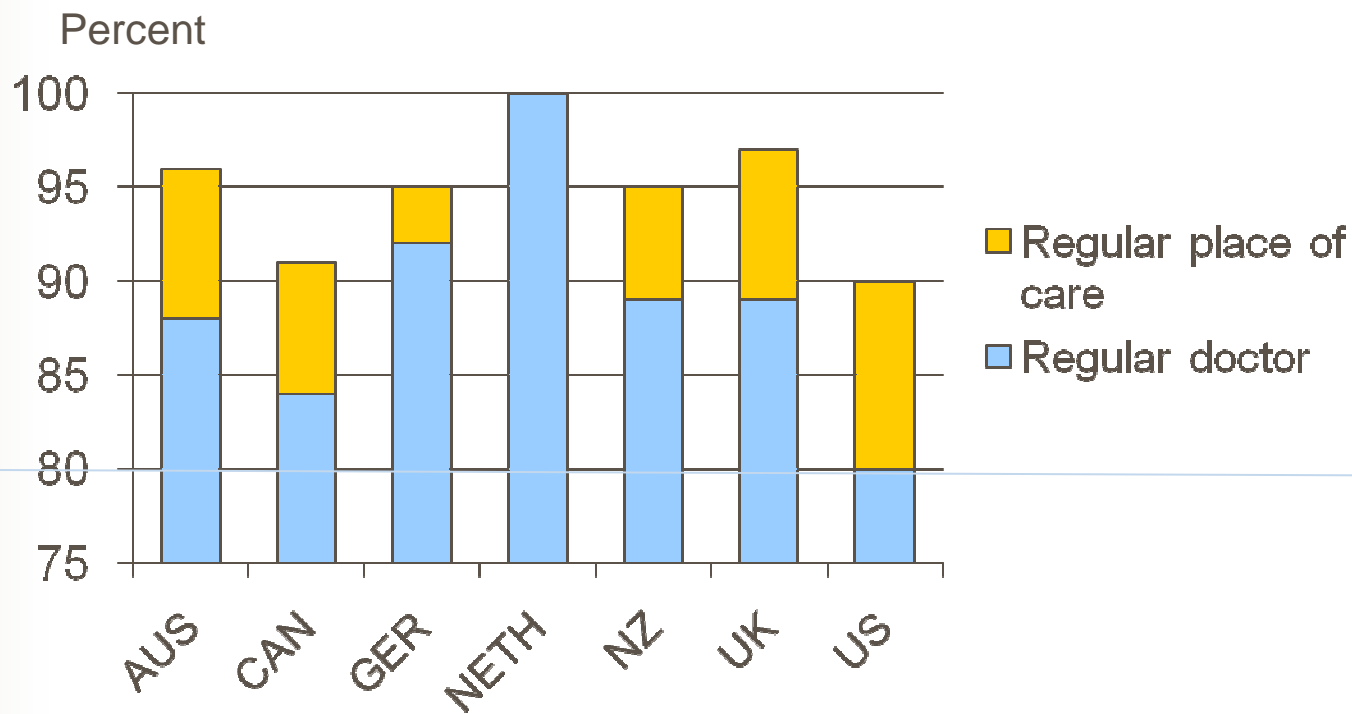# Primary Care Barriers

Legend:
- Not see MD when sick
- Skipped Rec Test/treat
- Not fill Rx
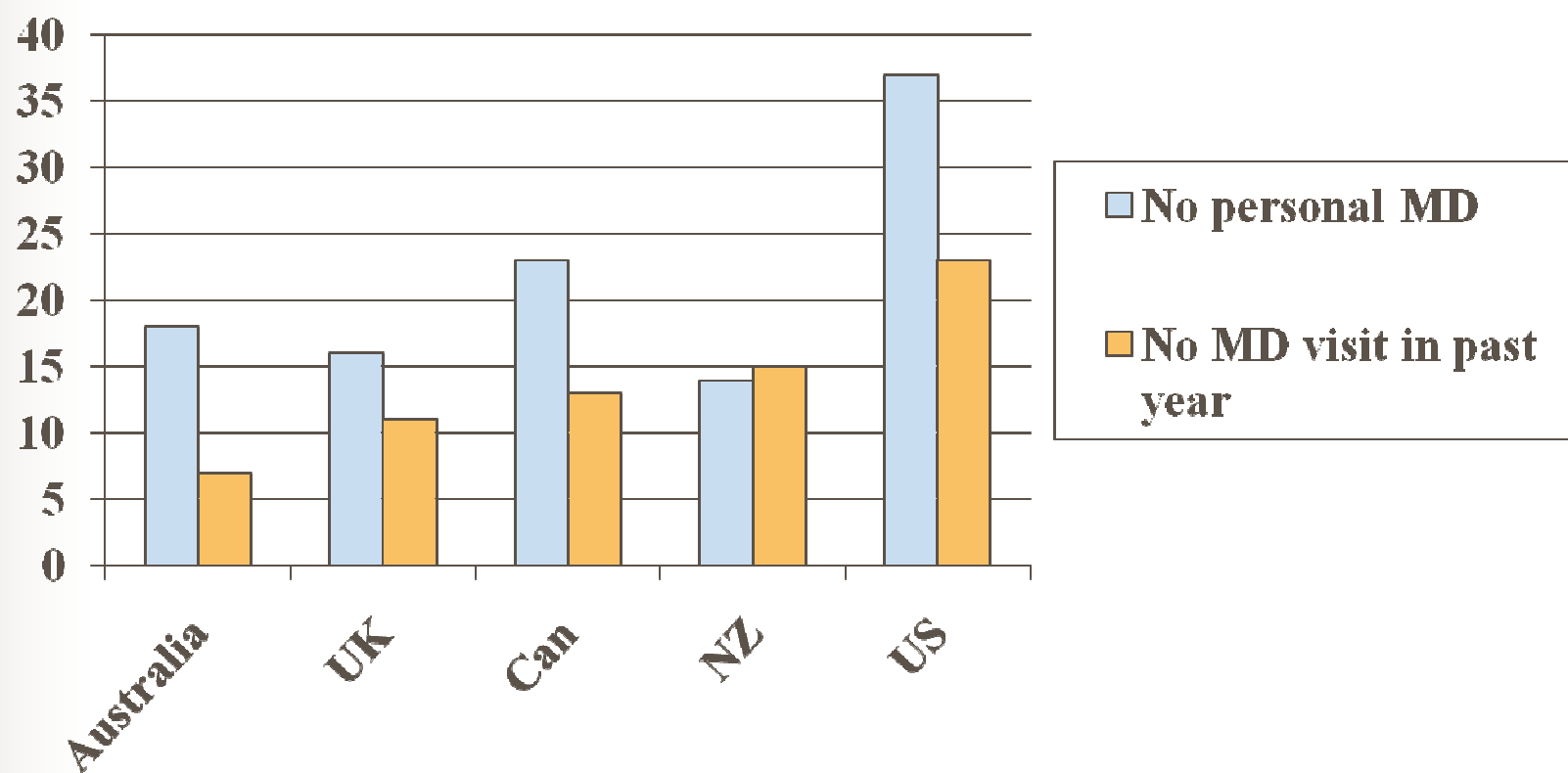- one of above
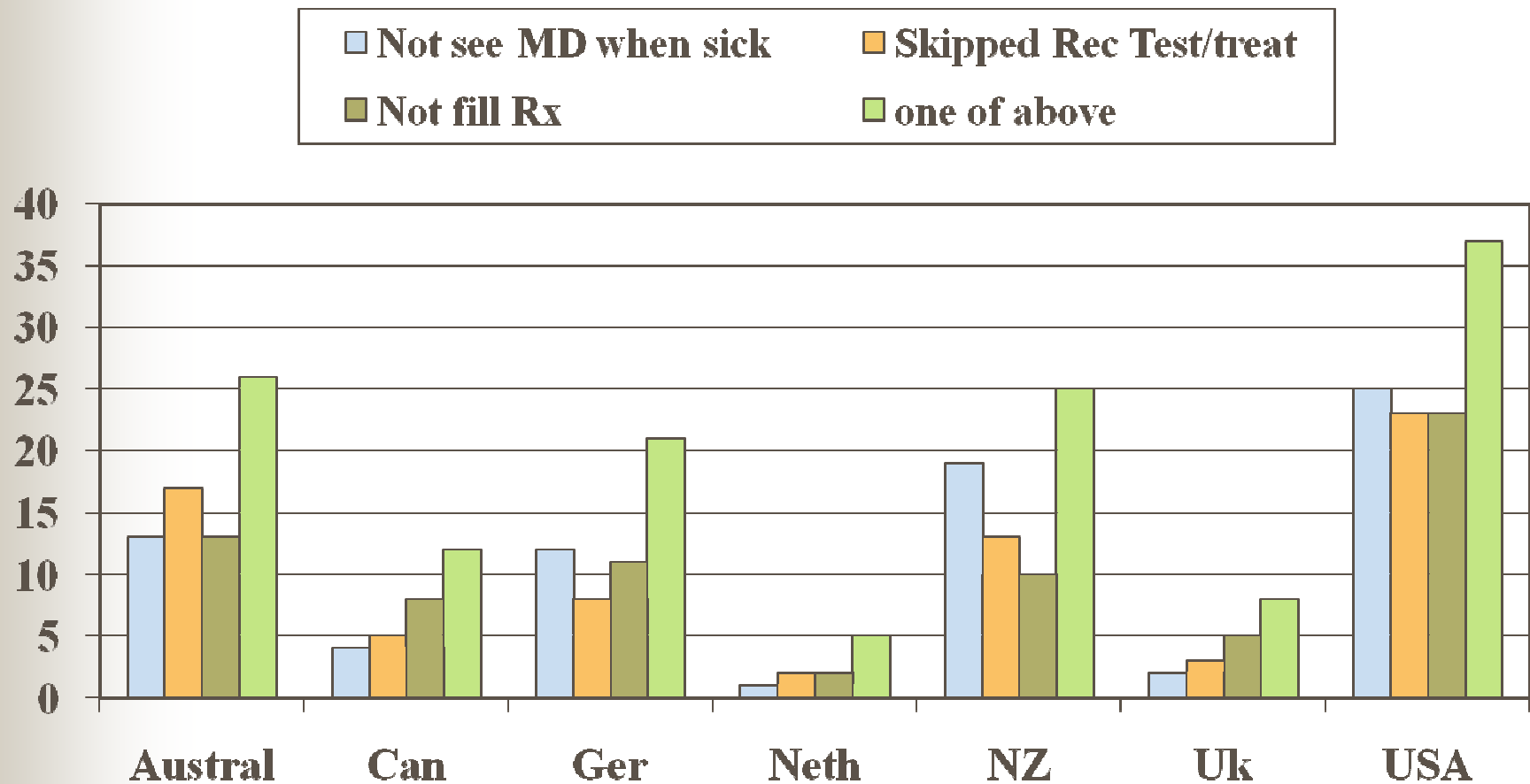
Health Aff 2007;10. w7171-34.

Have a Regular Doctor or Place of Care

Percent
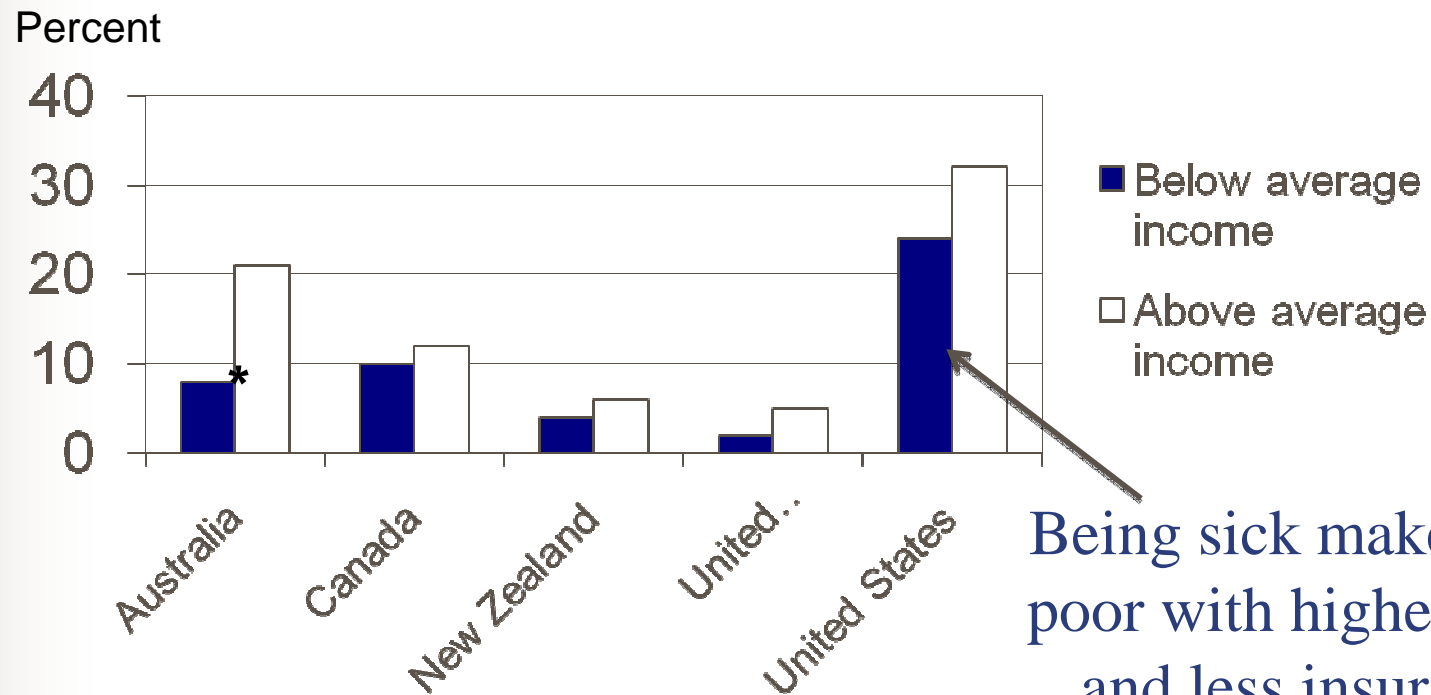

2007 Commonwealth Fund International Health Policy Survey.

MD Access by Lowest 35% Income


Health Policy 2000;51L67-85

Spent More than US $1,000 Out-of-Pocket for Medical Care in Past Year, by Income, 2004

Percent

Legend:
- Below average income
- Above average income

Categories: Australia, Canada, New Zealand, United..., United States

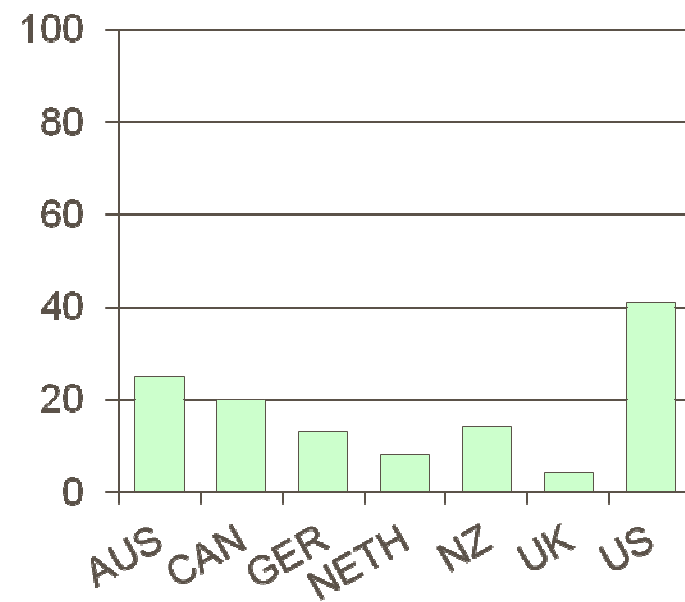Being sick makes your poor with higher needs and less insurance.

Commonwealth Fund International Health Policy Survey (Schoen et al. 2004; Huynh et al. 2006).

Out-of-Pocket Medical Costs/Year
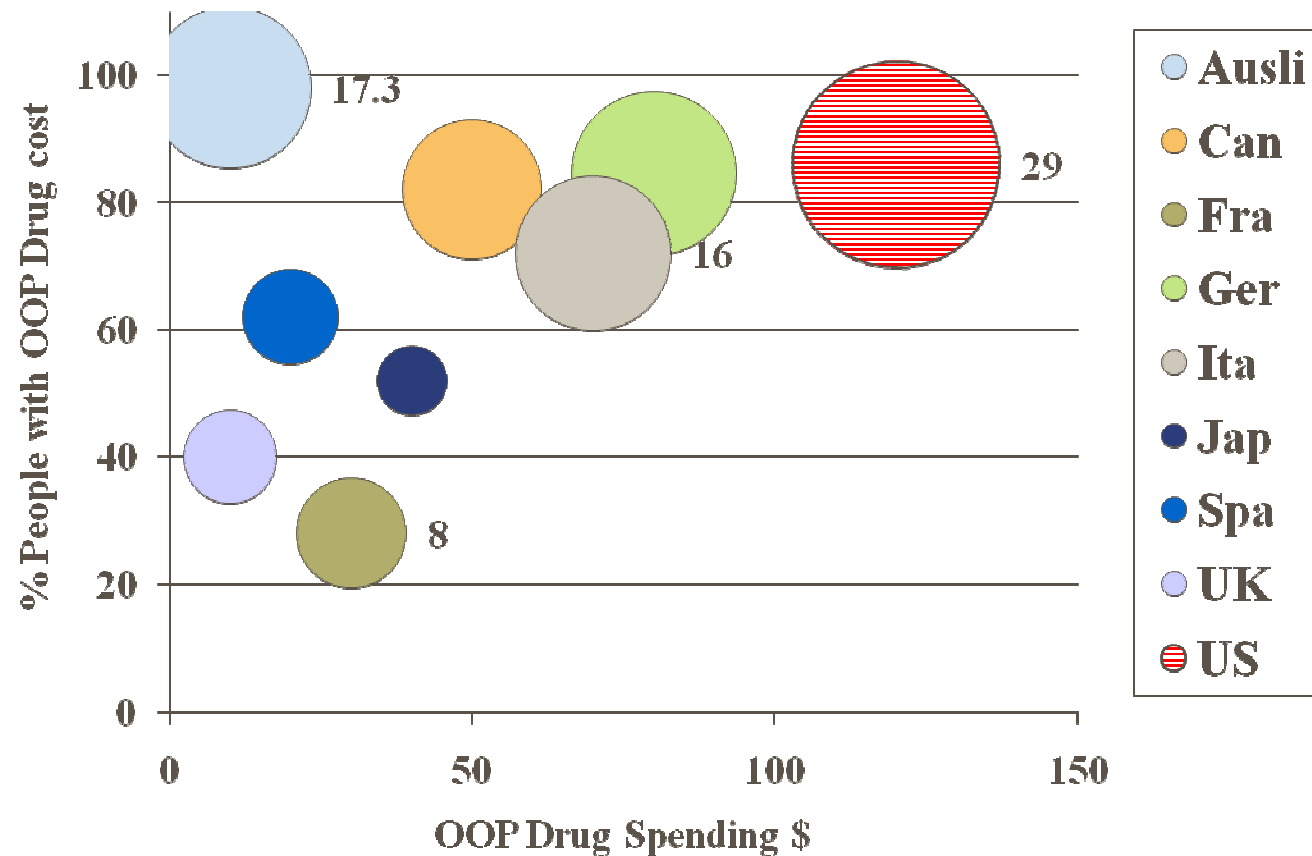# (% of adults with chronic disease)
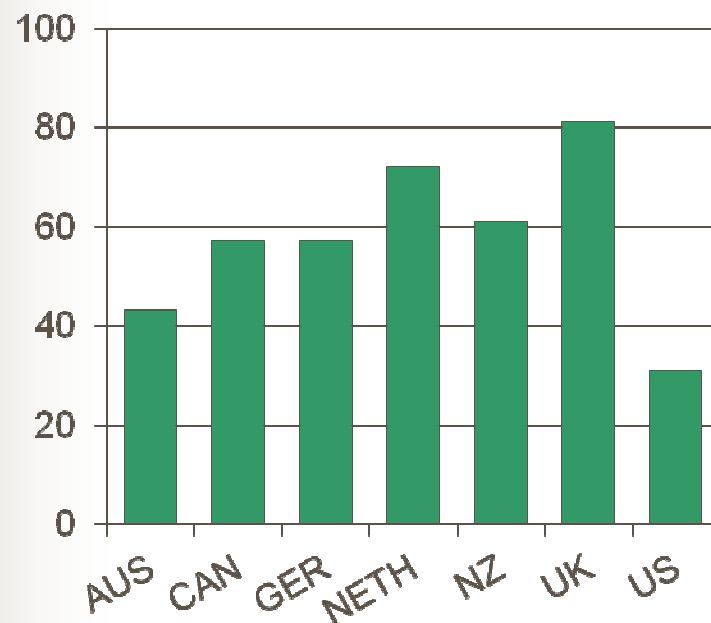
2008 Commonwealth Fund International Health Policy Survey of Sicker Adults.

⬆Out Of Pocket drug costs: ⬇ compliance.

Bubble Size = % non compliant with meds

Lessons from Developed Nations

- A universal primary care orientation controls costs and improve public outcomes.

- Low point of service charges are essential for timely/cost effective primary health care.

- Drug coverage not essential if system controls drug prices.

- Private opt-out insurance is politically necessary but will be only used for amenities by ~30% of people.

Many Models for Universal Health Care

- National Health Service-UK
- Single tax-based financing to regulated private managed care plans with mandatory enrollment, specified benefits, portability etc- Germany
- Multiple, progressive tax based financing for regulated, competing public and private insurers- France.
- Single insurer-Canada.

Steve Miles, MD

Slides available

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