



Health Information Technology and Exchange Roadmap for California

July 10, 2009

Redwood MedNet HIE Conference

National Interstate and Defense Highways Act (Eisenhower – 1956)

- First conceived after first US Army transcontinental convoy in 1919 on the Lincoln Highway:
 - Left Washington DC on July 7
 - Arrived in San Francisco on September 6
- Inspired by German Autobahn:
 - Allocated \$25 Billion over 20 years
 - Cost \$144B (\$425 B in 2006 dollars)
 - Completed in 1992!
- Reduced convoy travel time from two months to two weeks
- Created standards: speed limits, controlled access, etc

Infrastructure of Another Sort

“...Within 10 years, every American must have a personal electronic medical record.

That's a good goal for the country to achieve.

The federal government has got to take the lead in order to make this happen..”

George W. Bush, Speaking to the American Association of Community Colleges, April 26, 2004

Historical Look at Spending in Health IT

- Total Federal Health IT Spending (through ONC) before HITECH:
 - \$300,000,000
- Total expected gross outlays through HITECH:
 - \$36,000,000,000
 - i.e., a 12,000% increase
- Put another way – it represents a 600% increase in the EMR market, essentially overnight



HITECH Overview

(aka – an Unprecedented Opportunity)

Funding Flows – Entitlements

Entitlement Funds (\$34 billion in gross outlays)

Program

Medicare
Payment
Incentives

Medicaid
Payment
Incentives

Distribution Agency*

CMS

CMS
and states

Use of Funds

Incentive Payments
through Carriers

Incentive Payments
through State Agencies



Acute Care and
Children's Hospitals



Physicians and
Dentists



Nurse Practitioners and
Midwives

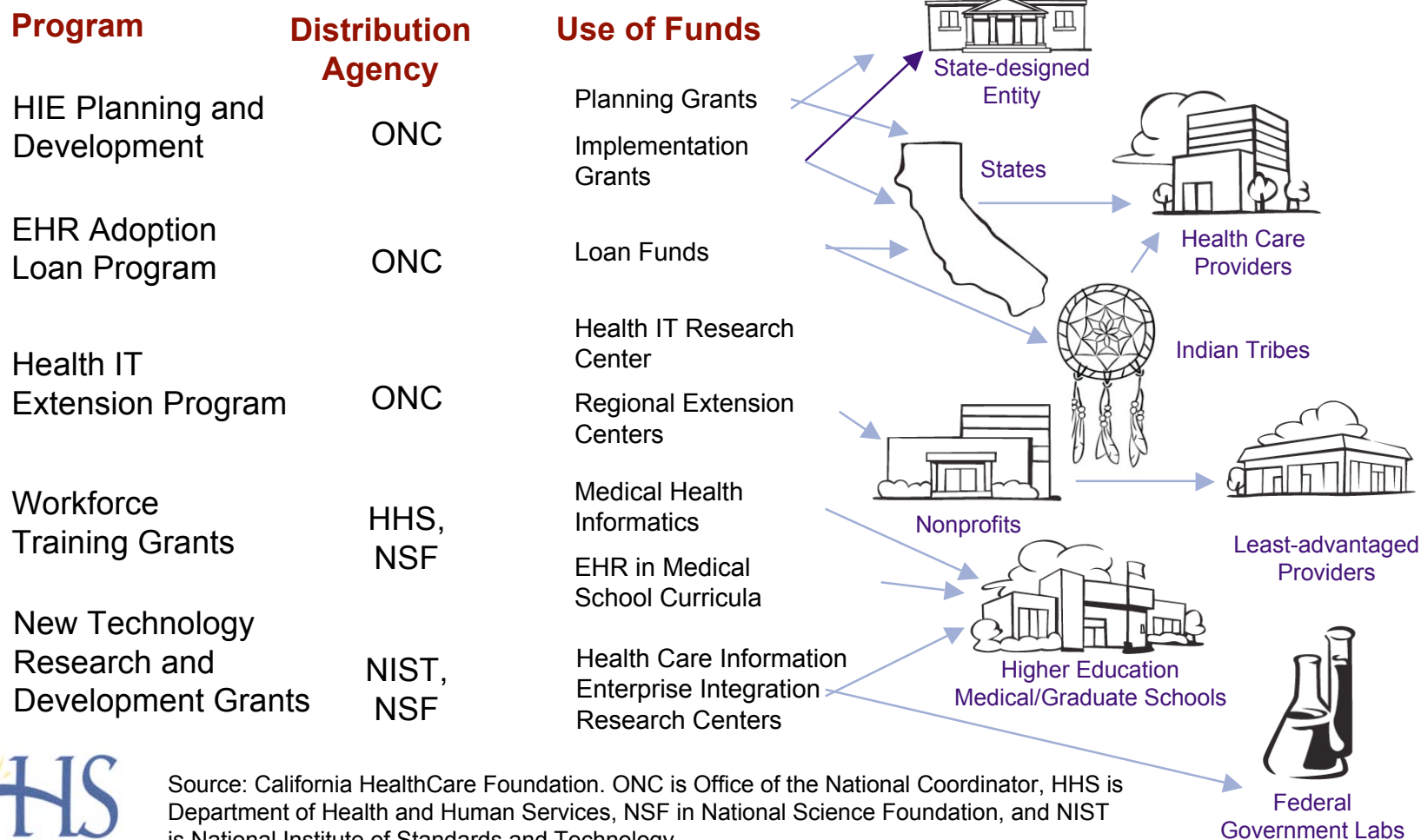


FQHC

“Meaningful Use”

Funding Flows – Appropriations

Appropriated Funds (\$2 billion in gross outlays)



Estimate of California HITECH Funding

Program	Federal Allocation*	California Estimate**
Medicare EHR Incentive Program	\$20 billion Up to \$44,000 per physician	\$2 billion
Medicaid EHR Incentive Program	\$14 billion Up to \$64,000 per physician	\$1.4 billion
Appropriations Grant Programs	\$2 billion	???

* Congressional Budget Office estimate of outlays

** California's proportionate share estimated at 10%

Related Areas of Funding

Broadband and Telehealth

- \$4.3 billion for broadband
- \$2.5 billion for distance learning / telehealth grants

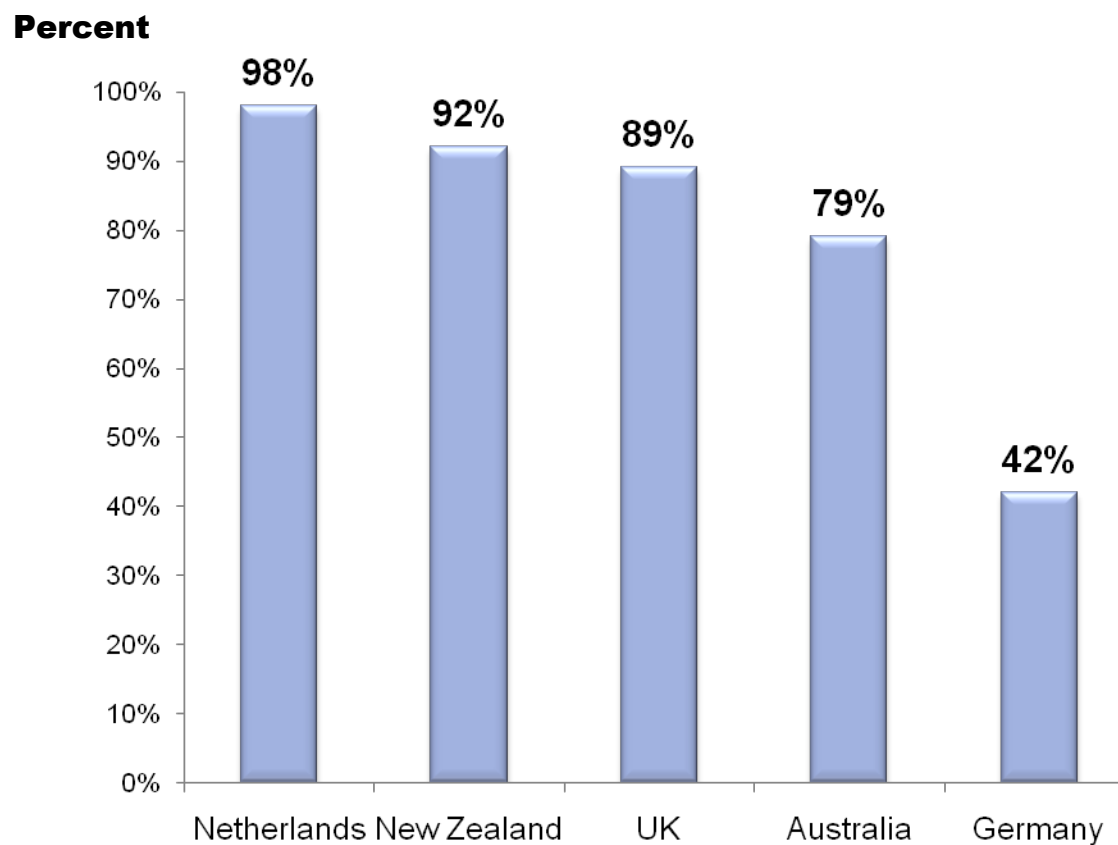
Comparative Effectiveness

- \$1.1 billion to HHS for comparative effectiveness research

Federally Qualified Health Centers

- \$1.5 billion for construction, renovation, equipment and acquisition of health IT systems

Primary Care Doctors' Use of Electronic Medical Records, 2006



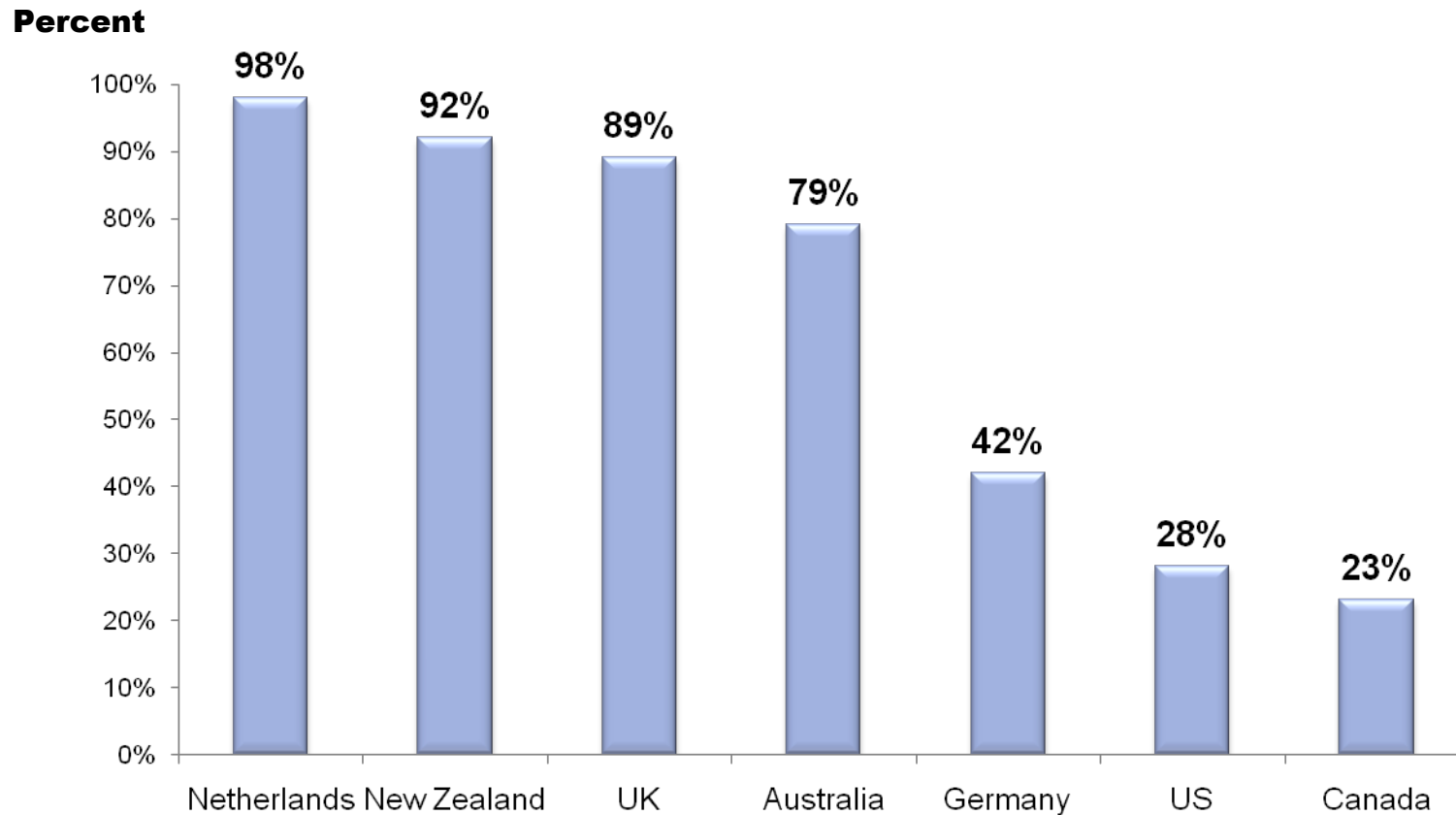
Source: 2006 Commonwealth Fund *International Health Policy Survey of Primary Care Physicians*.

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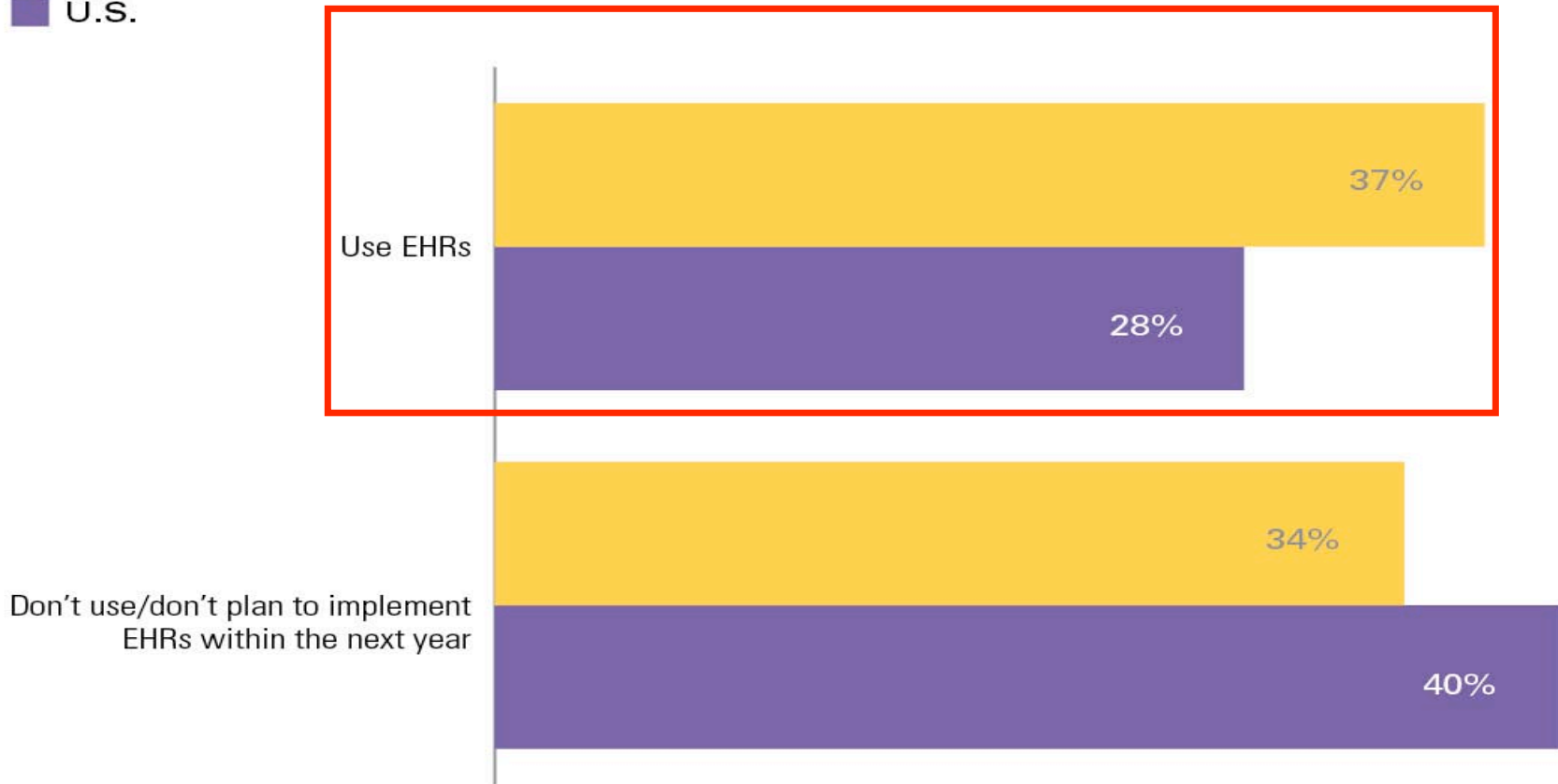
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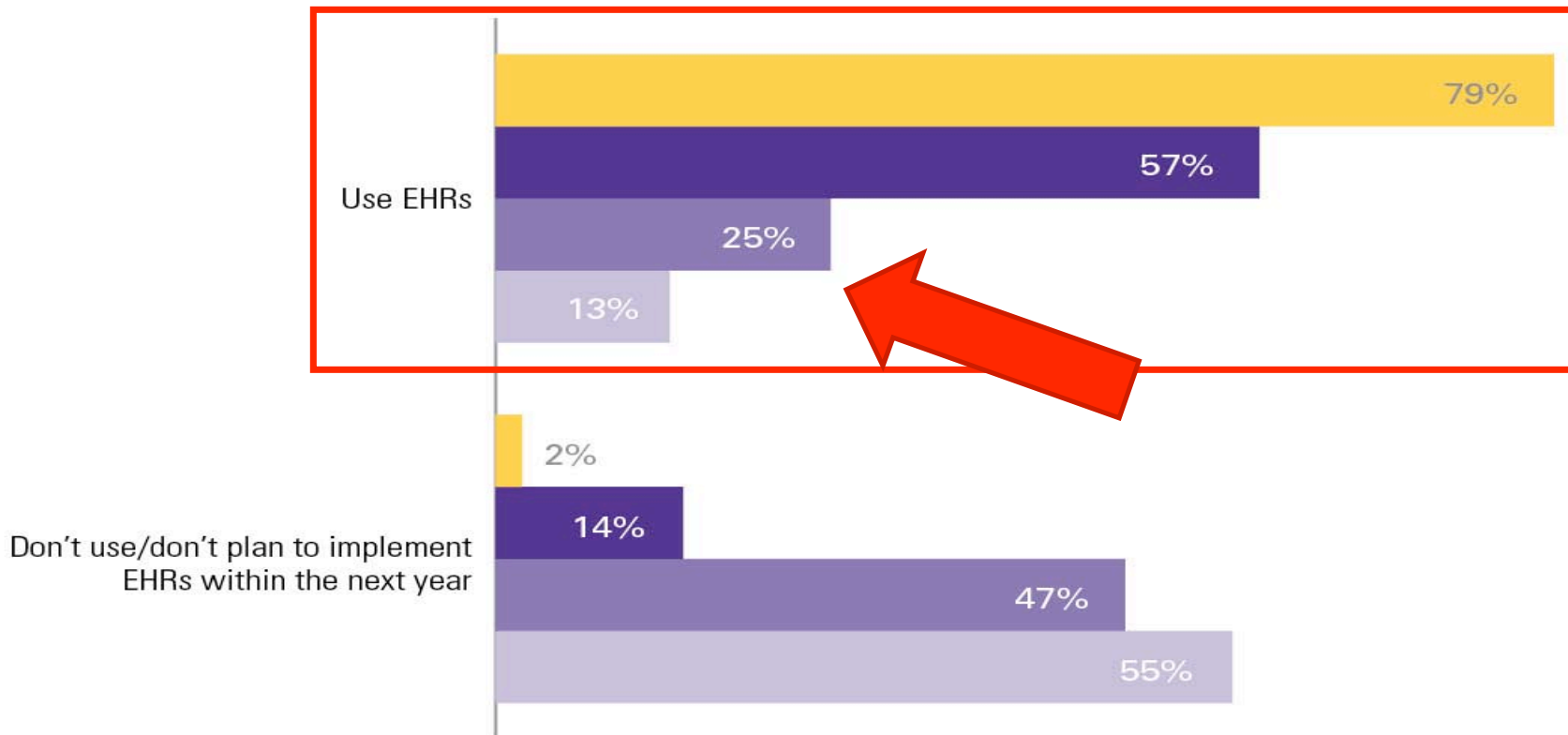
Individual Physician Use of Electronic Health Records, California vs. U.S., 2007

California
U.S.

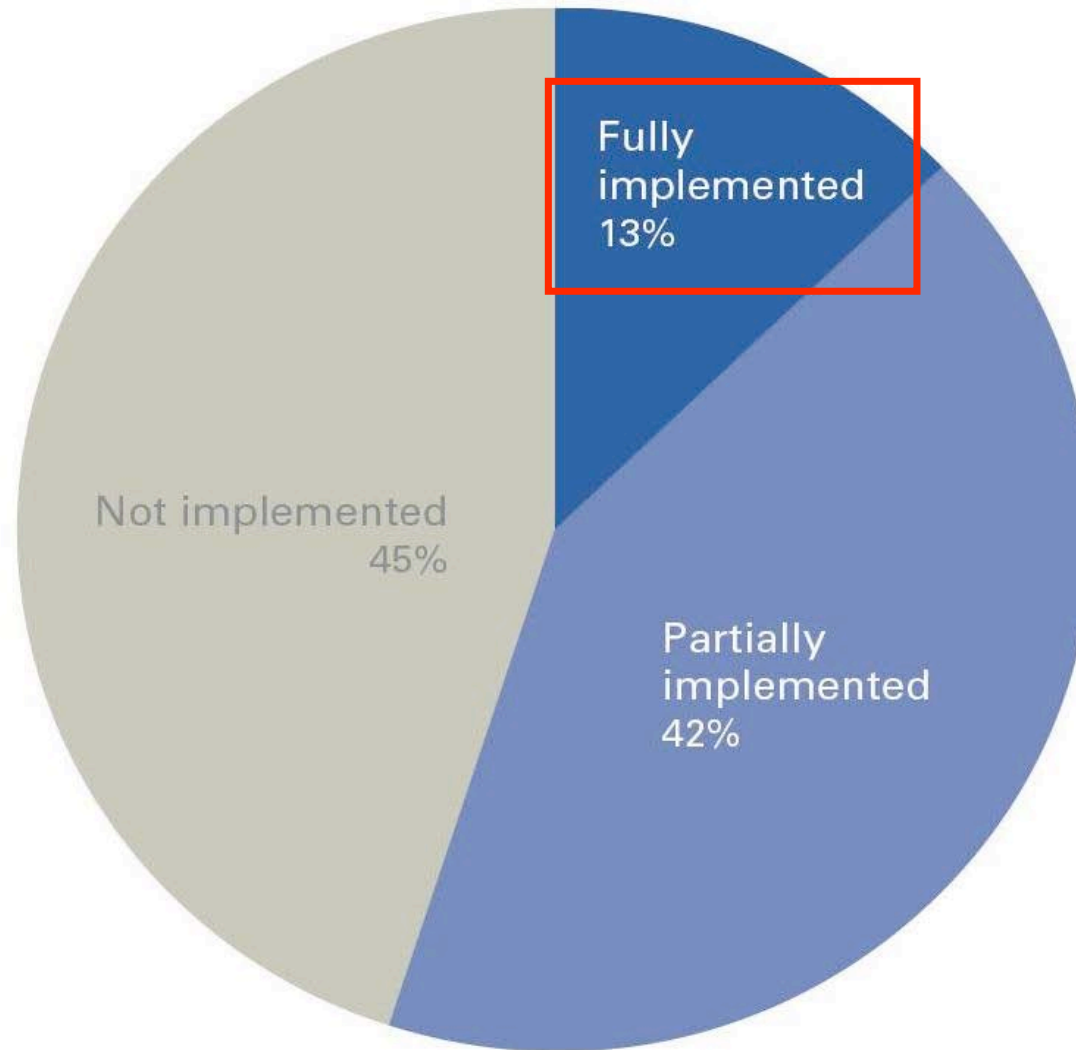


Physician Use of EHRs, by Practice Size, California, 2007

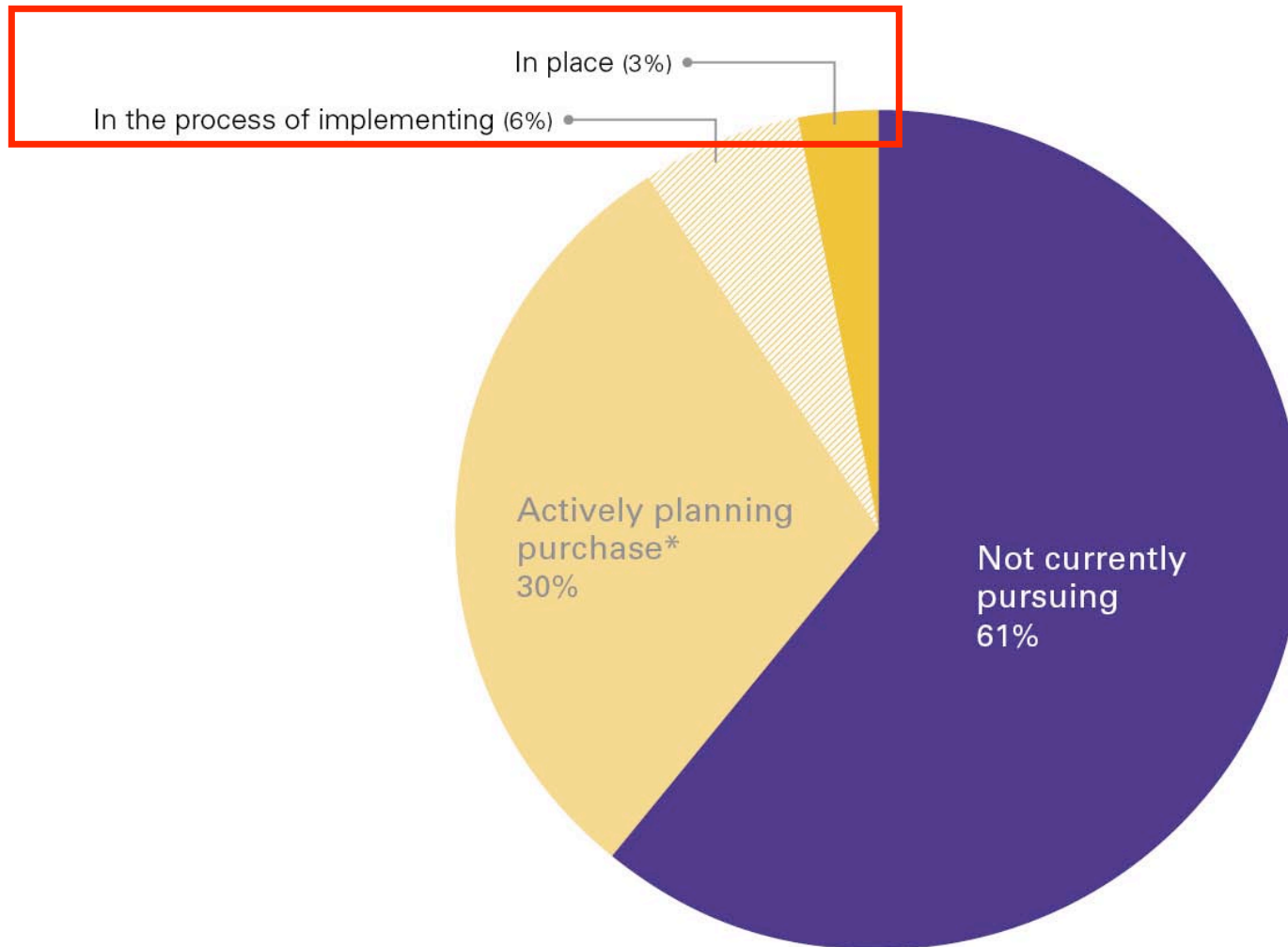
- Kaiser
- Large Practice
- Small/Medium Practice
- Solo Practitioner



Use of EHRs at Hospitals, California, 2006/2007

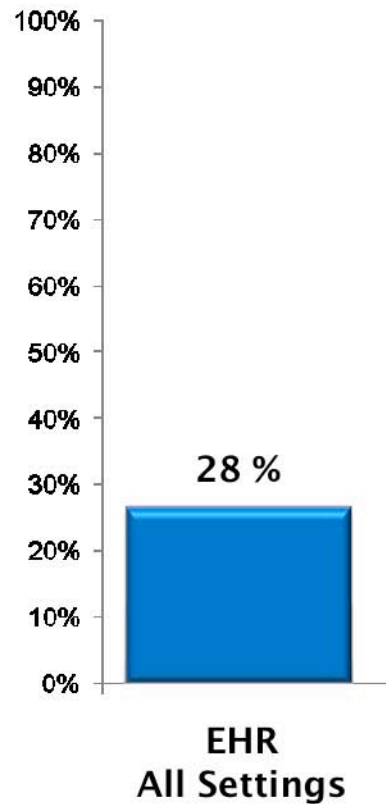


Use of EHRs at Community Clinics, California, 2005



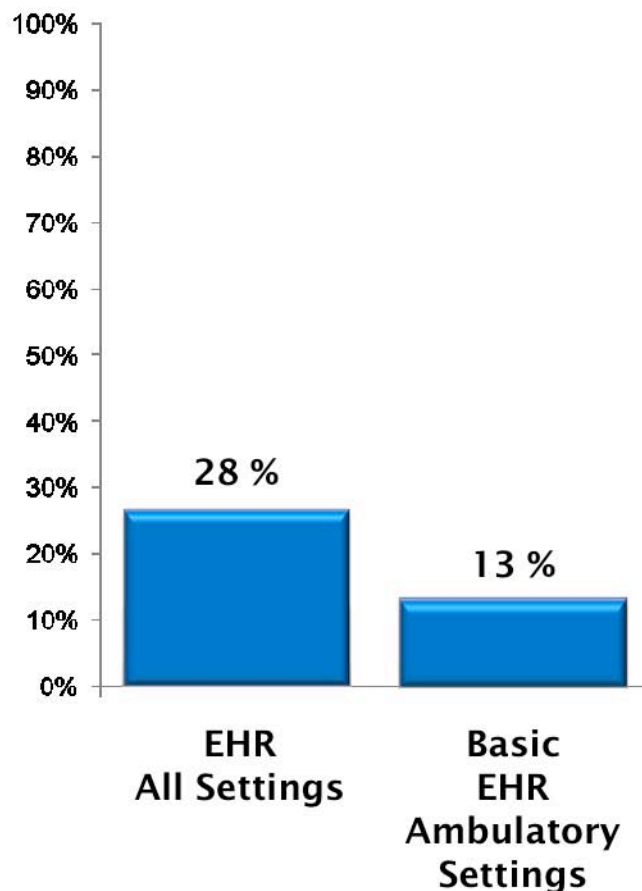
“Meaningful Use” of Ambulatory EHRs in the US

Percent



“Meaningful Use” of Ambulatory EHRs in the US

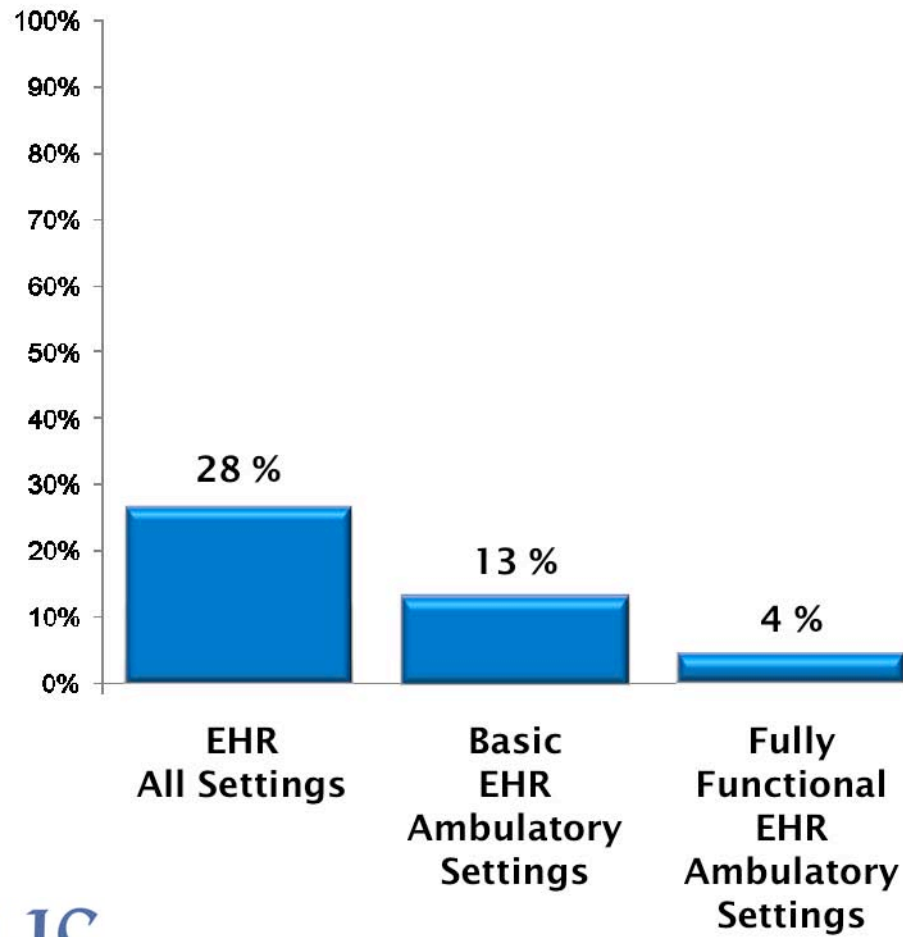
Percent



Survey Response	Basic System
Does your main practice site have a computerized system for any of the following?	
Health information and data	
Patient demographics	X
Patient problem lists	X
Electronic lists of medications taken by patients	X
Clinical notes	X
Notes including medical history and follow-up	
Order-entry management	
Orders for prescriptions	X
Orders for laboratory tests	
Orders for radiology tests	
Prescriptions sent electronically	
Orders sent electronically	
Results management	
Viewing laboratory results	X
Viewing imaging results	X
Electronic images returned	
Clinical-decision support	
Warnings of drug interactions or contraindications provided	
Out-of-range test levels highlighted	
Reminders regarding guideline-based interventions or screening	

“Meaningful Use” of Ambulatory EHRs in the US

Percent



Survey Response	Fully Functional System
Does your main practice site have a computerized system for any of the following?	
Health information and data	
Patient demographics	X
Patient problem lists	X
Electronic lists of medications taken by patients	X
Clinical notes	X
Notes including medical history and follow-up	X
Order-entry management	
Orders for prescriptions	X
Orders for laboratory tests	X
Orders for radiology tests	X
Prescriptions sent electronically	X
Orders sent electronically	X
Results management	
Viewing laboratory results	X
Viewing imaging results	X
Electronic images returned	X
Clinical-decision support	
Warnings of drug interactions or contraindications provided	X
Out-of-range test levels highlighted	X
Reminders regarding guideline-based interventions or screening	X



A Plan for the State

Purpose

To dramatically improve safe and secure patient and provider access to personal health information and decision-making processes, benefiting the health and wellbeing, safety, efficiency, and quality of care for all Californians.

Objectives

1. To ensure patients have safe, secure access to their personal health information and the ability to share that information with others involved in their care
2. To engage in an open, inclusive, collaborative, public-private process that supports widespread EHR adoption and a robust, sustainable statewide health information exchange
3. To maximize California's access to critical ARRA stimulus funds
4. To integrate and synchronize the planning and implementation of HIE, HIT, telehealth and provider incentive program components of the federal stimulus act
5. To improve health care outcomes and reduce costs
6. To ensure accountability in the expenditure of public funds
7. To improve public health through stronger public health program integration, bio-surveillance and emergency response capabilities

A Plan for the State

- Health Information Exchange
- Workgroups to develop:
 - Health IT Extension Centers
 - EHR Loan Fund
 - Workforce Training/Development Programs
 - Technology R&D Centers
 - Broadband/telehealth expansion
- A plan that coordinates:
 - Medi-Cal EHR incentive program
 - Consistent and effective privacy and security policies
 - Integrated emergency response and public health systems

Timeline

Phase 1, Plan Development: April – August 2009

- Development and publication of a State HIT and Exchange Strategic Plan

Phase 2, Submit Proposal: September-November 2009

- State and non-state entities will submit proposals to federal agencies to implement elements of the State strategic plan

Phase 3, Implementation: November 2009+

- Federal funding will be received and activities outlined in the State strategic plan will be initiated based on the level of financial support.

Important Upcoming Dates

■ HIE Stakeholder Meetings

- July 13th – Oakland, The California Endowment
- July 15th – Los Angeles, The Center at Cathedral Plaza
- July 16th – Fresno, Saint Agnes Medical Center

Registration Link: www.acteva.com/go/cahie

■ Health IT and Exchange Workgroup Stakeholder Meeting

- July 20th – Sacramento

■ Future HIE Advisory Board Meetings

- August 10th – Review stakeholder feedback
- August 27th – Review draft final report
- September – Final report

■ Public Comment Period

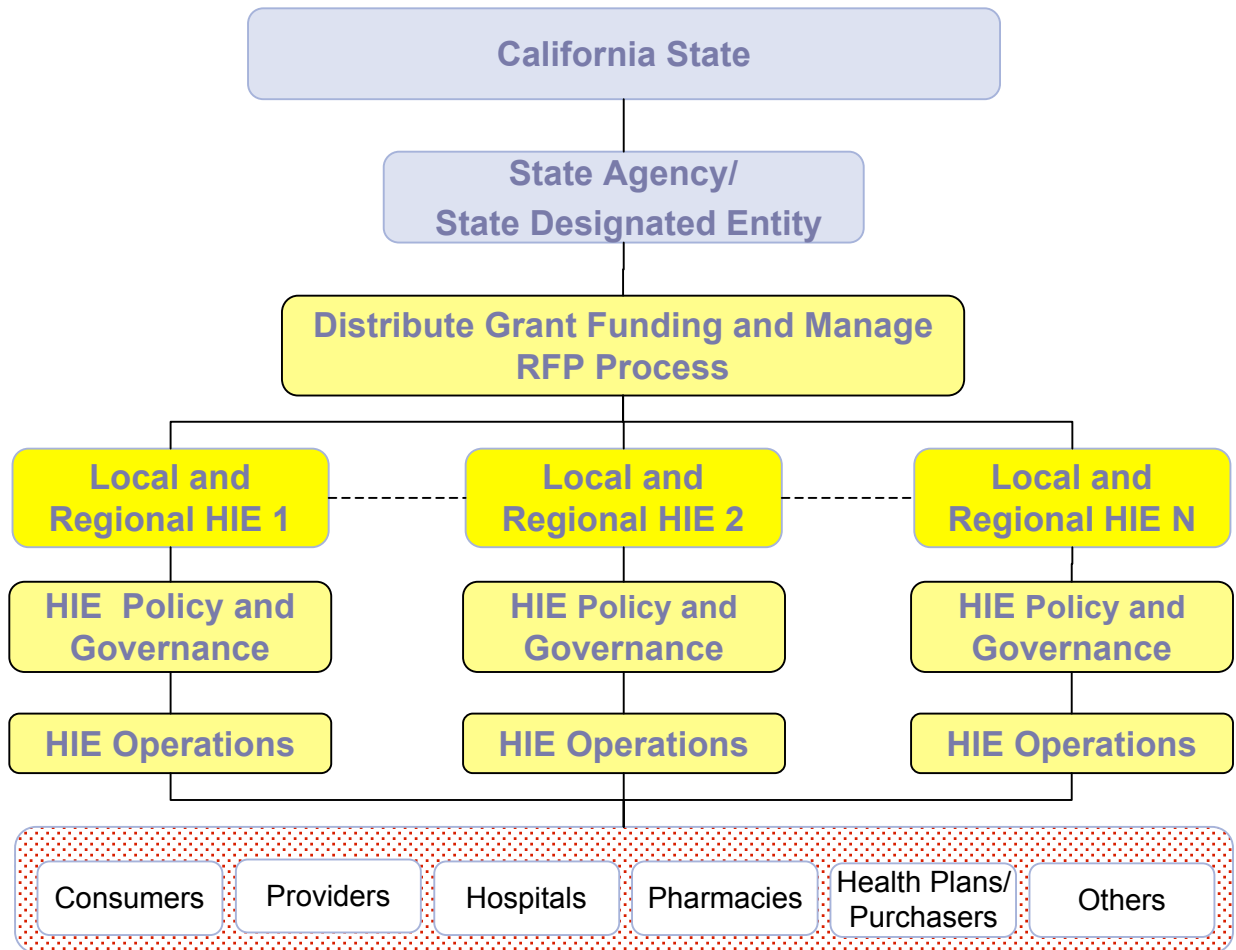
- August 27th – September 10th

Health Information Exchange – Key Considerations

- Considering various HIE governance models, criteria for evaluating them, key considerations and tradeoffs associated with each
- A framework that includes consideration of:
 - Health outcomes
 - Privacy and security
 - Technical models
 - Financing

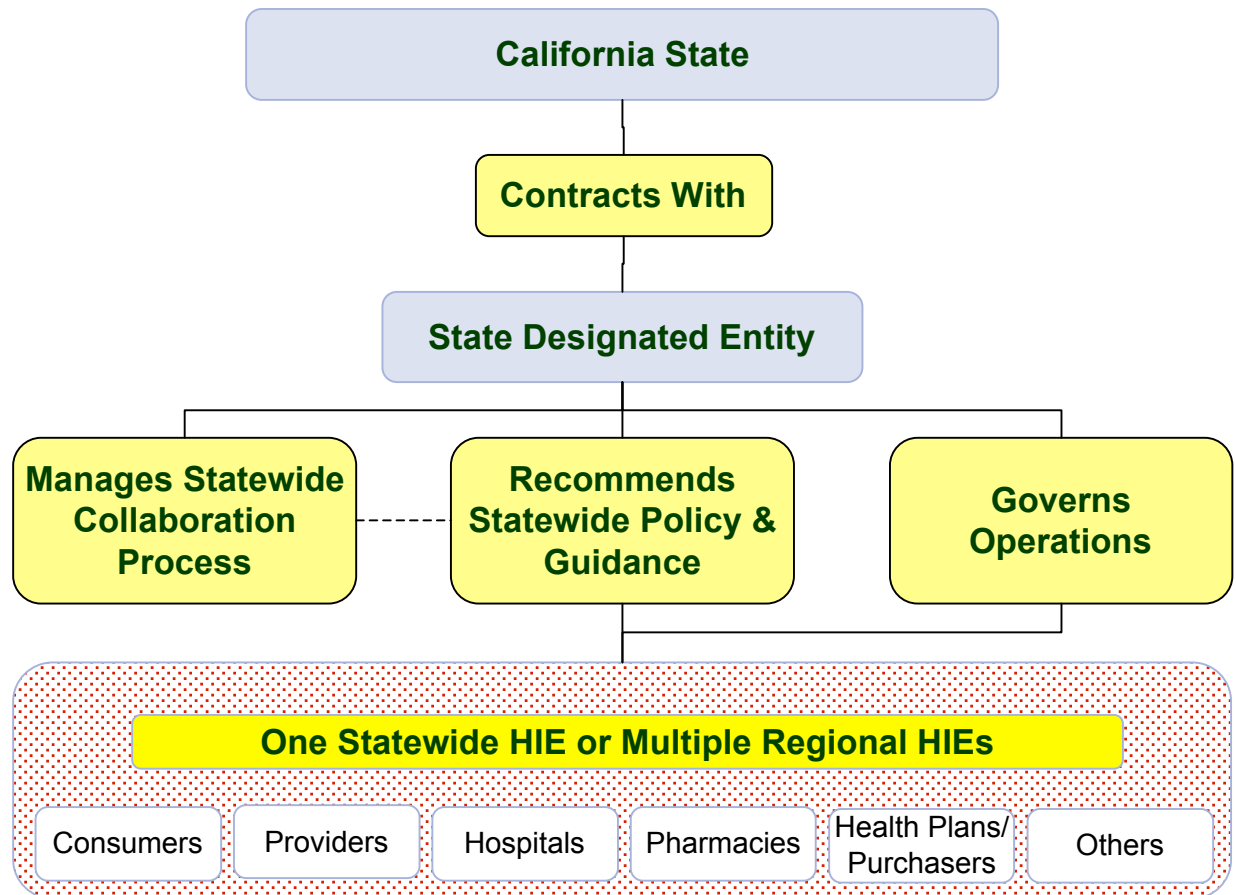
Option One – Market Driven Approach

The State, either directly through a State agency or through a contract with a state designated entity, obtains and distributes grant funds through an RFP process to local and regional HIE efforts across the state. Each local or regional HIE effort is responsible for its own policy, governance and operations. Coordination and interoperability across HIEs is dependent upon existing and emerging federal standards.



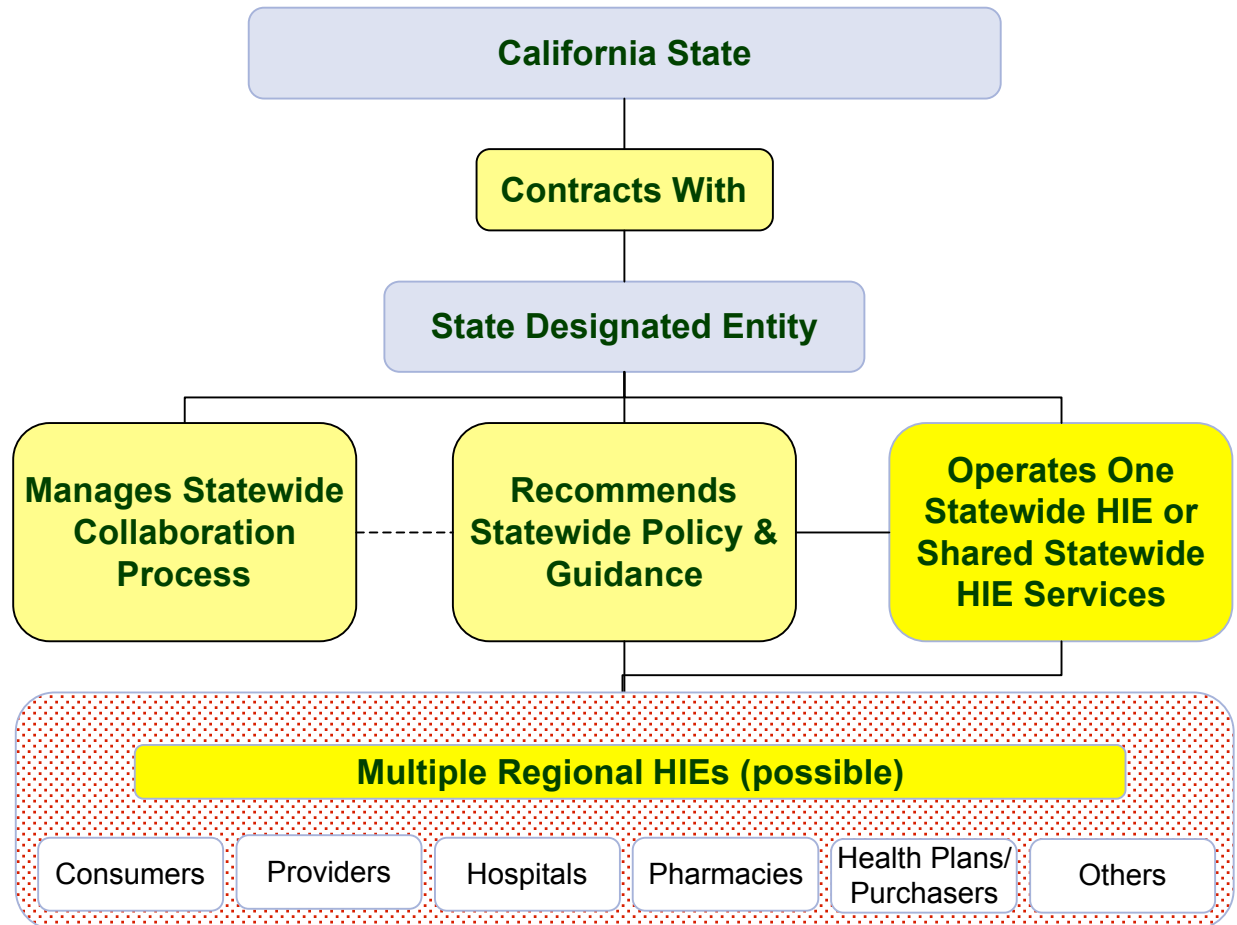
Option Two (A) – State Designated Entity

The State contracts with a state designated entity that is responsible for managing the statewide collaboration process, recommending statewide policy and guidance and governing the operations of HIE efforts throughout the state. The SDE does not operate the HIE directly, but contracts with either one statewide HIE or multiple regional HIEs to provide HIE operations.



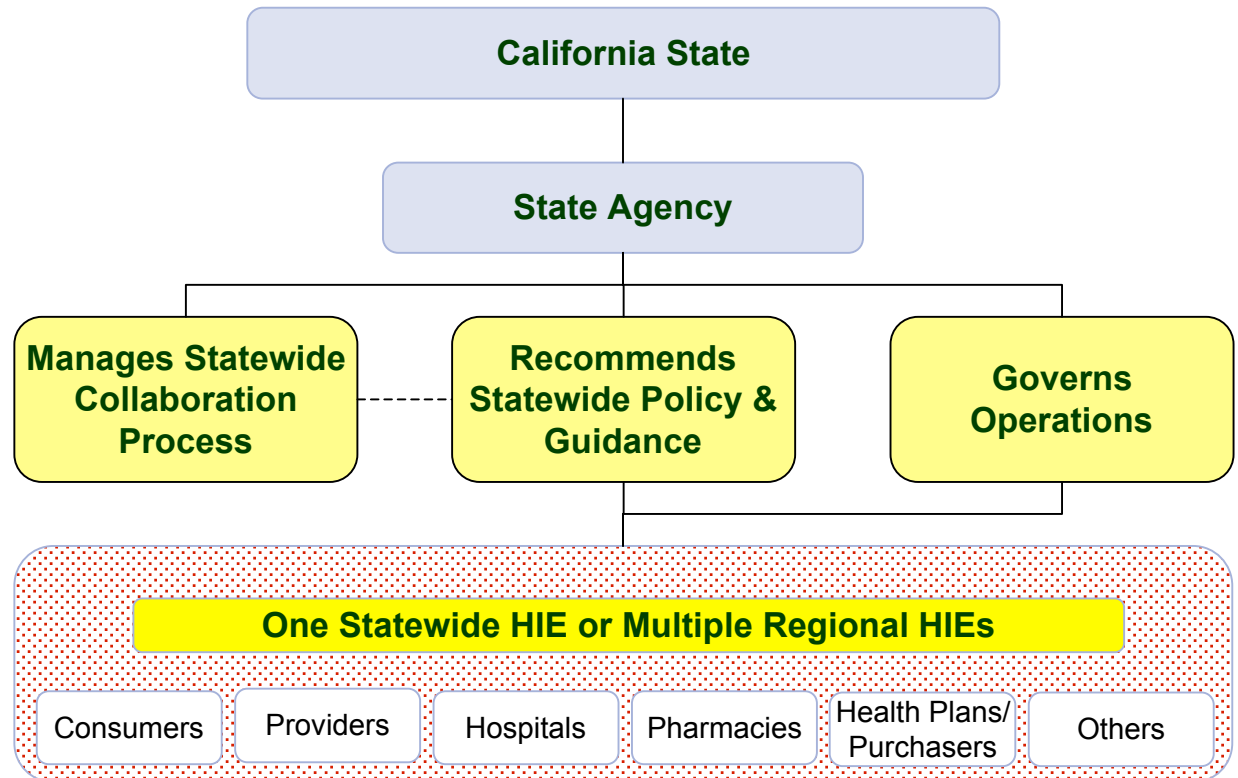
Option Two (B) – State Designated Entity and Operator

The State contracts with a state designated entity that is responsible for managing the statewide collaboration process, recommending statewide policy and guidance and governing the operations of HIE efforts throughout the state. The SDE is responsible for operating the statewide HIE or shared statewide HIE services.



Option Three – State Led

The State, directly through a State agency, is responsible for managing the statewide collaboration process, recommending statewide policy and guidance and governing the operations of HIE efforts throughout the state. The State does not operate the HIE directly, but contracts with either one statewide HIE or multiple regional HIEs to provide HIE operations.



...A Foundation for Health Reform

“...investments in electronic records and preventive care are just preliminary steps. They will only make a dent in the epidemic of rising costs in this country...

But what accounts for the bulk of our costs is the nature of our health care system itself – a system where we spend vast amounts of money on things that aren't making our people any healthier; A system that automatically equates more expensive care with better care...”

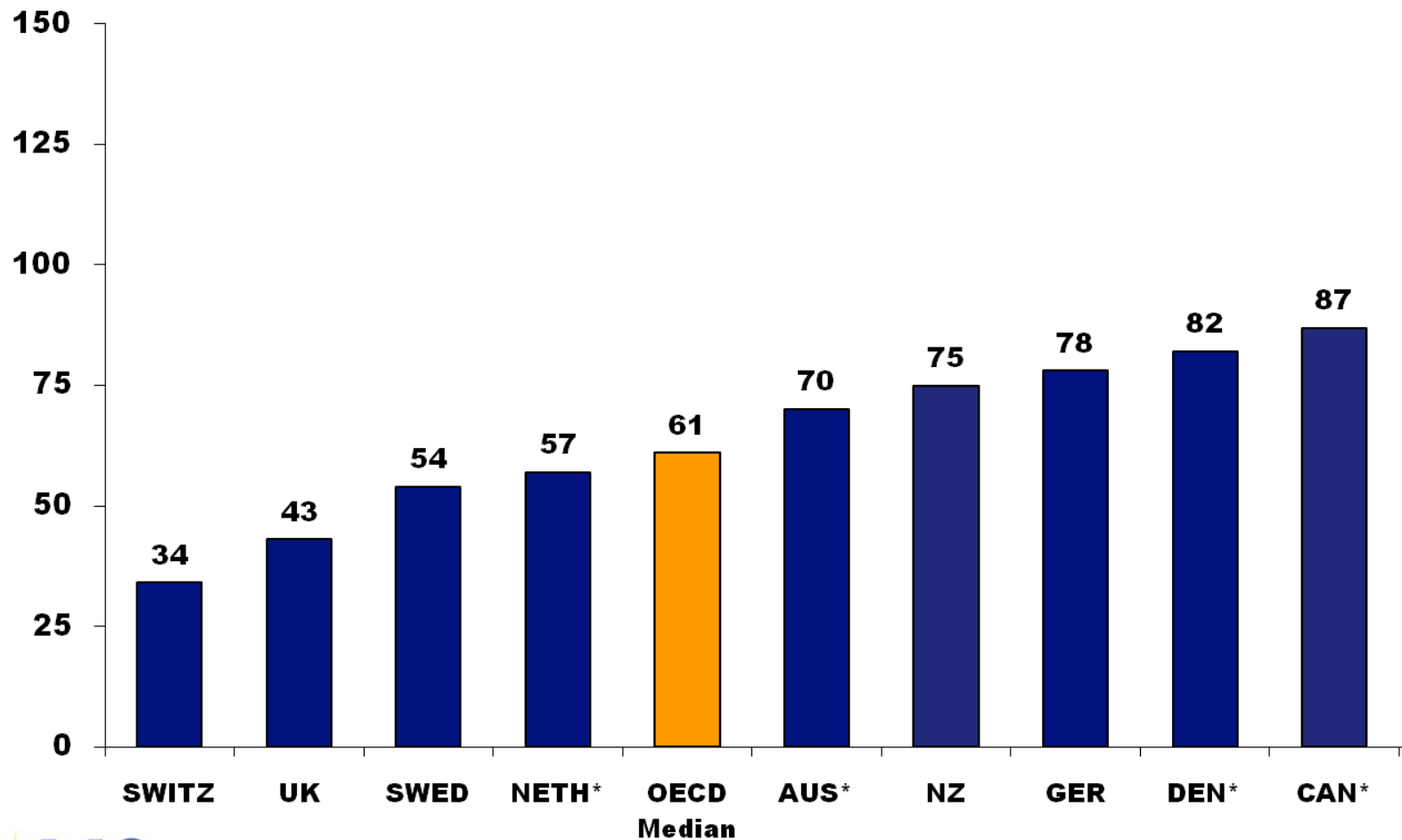
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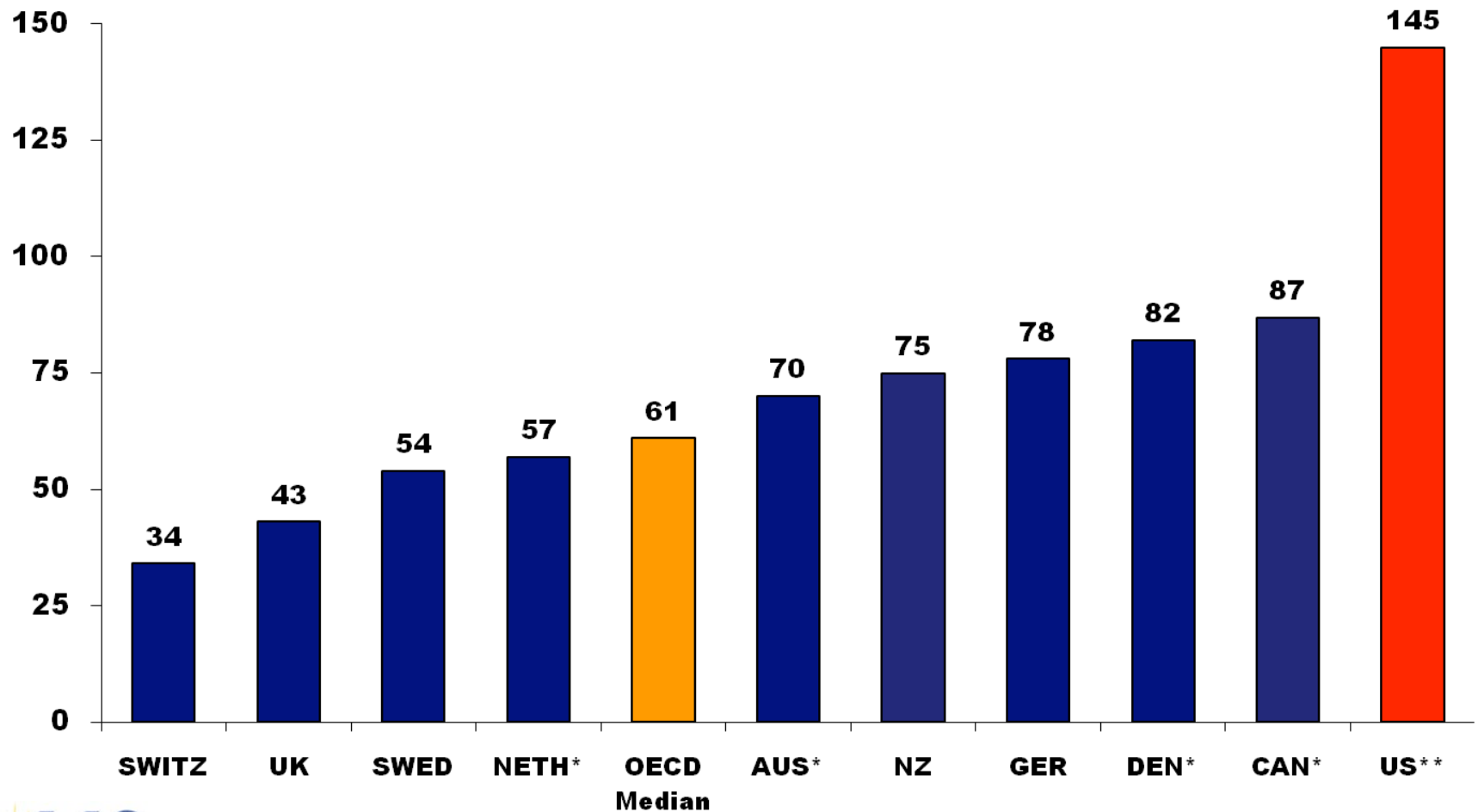
But what accounts for the bulk of our costs is the nature of our health care system itself – a system where we spend vast amounts of money on things that aren't making our people any healthier; A system that automatically equates more expensive care with better care...

Health care reform is the single most important thing we can do for America's long-term fiscal health..”

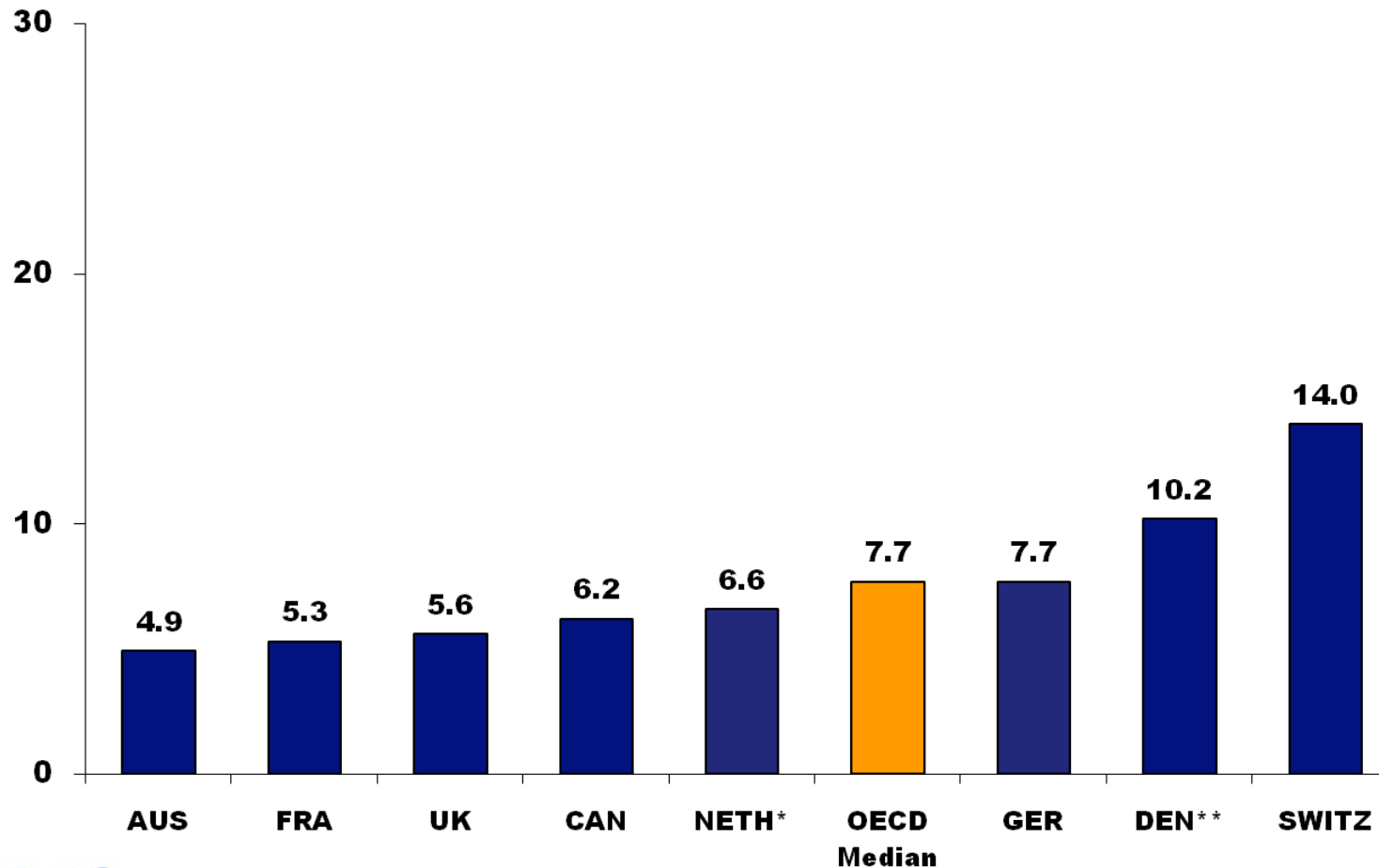
Coronary Bypass Procedures per 100,000 Population, 2006



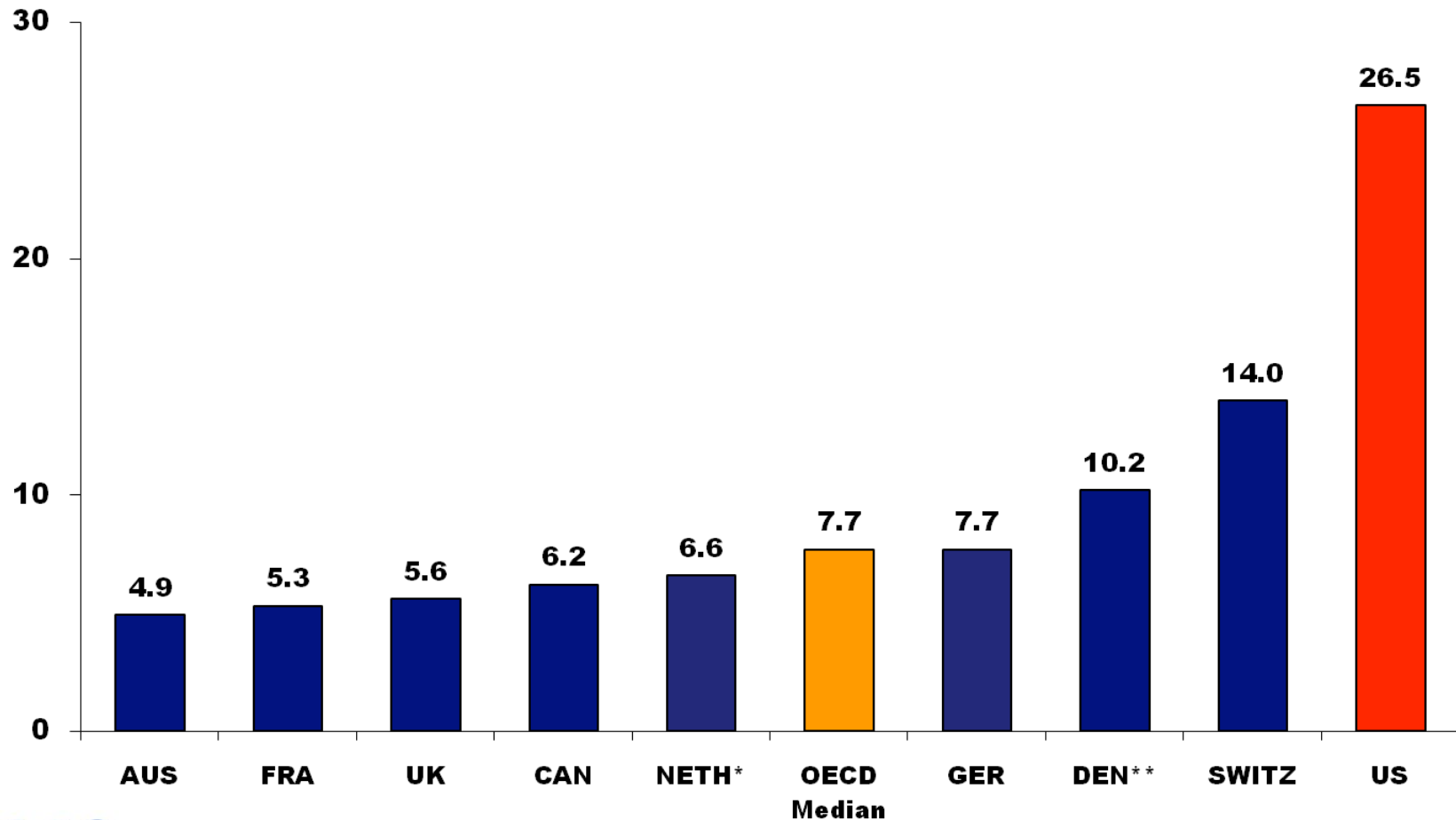
Coronary Bypass Procedures per 100,000 Population, 2006



Magnetic Resonance Imaging (MRI) Units per Million Population, 2006

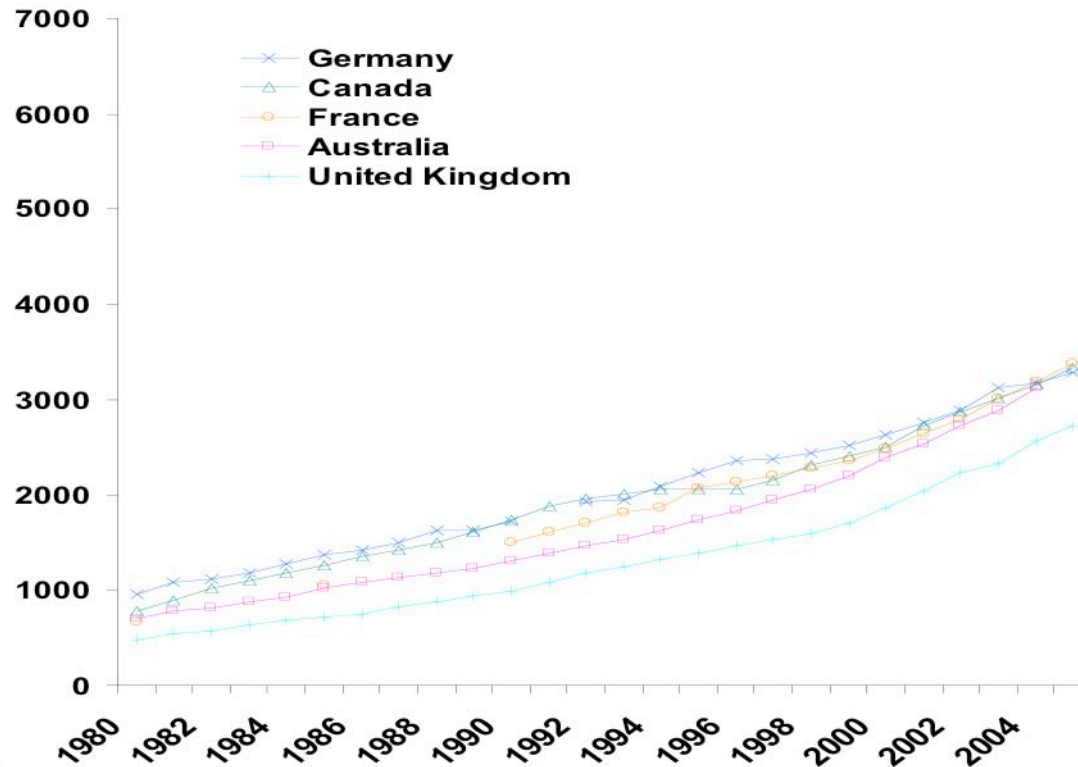


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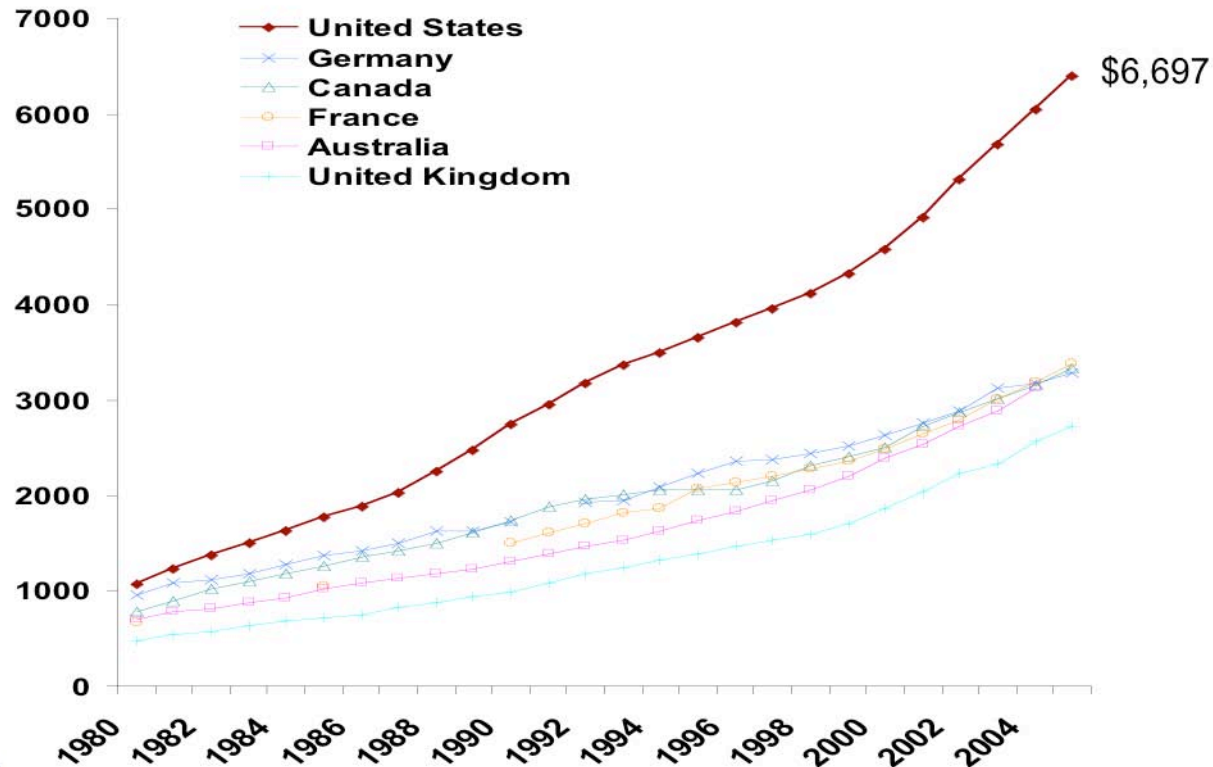
International Comparison of Health Spending

Average spending on health per capita 1980 – 2005 (\$U.S. PPP)



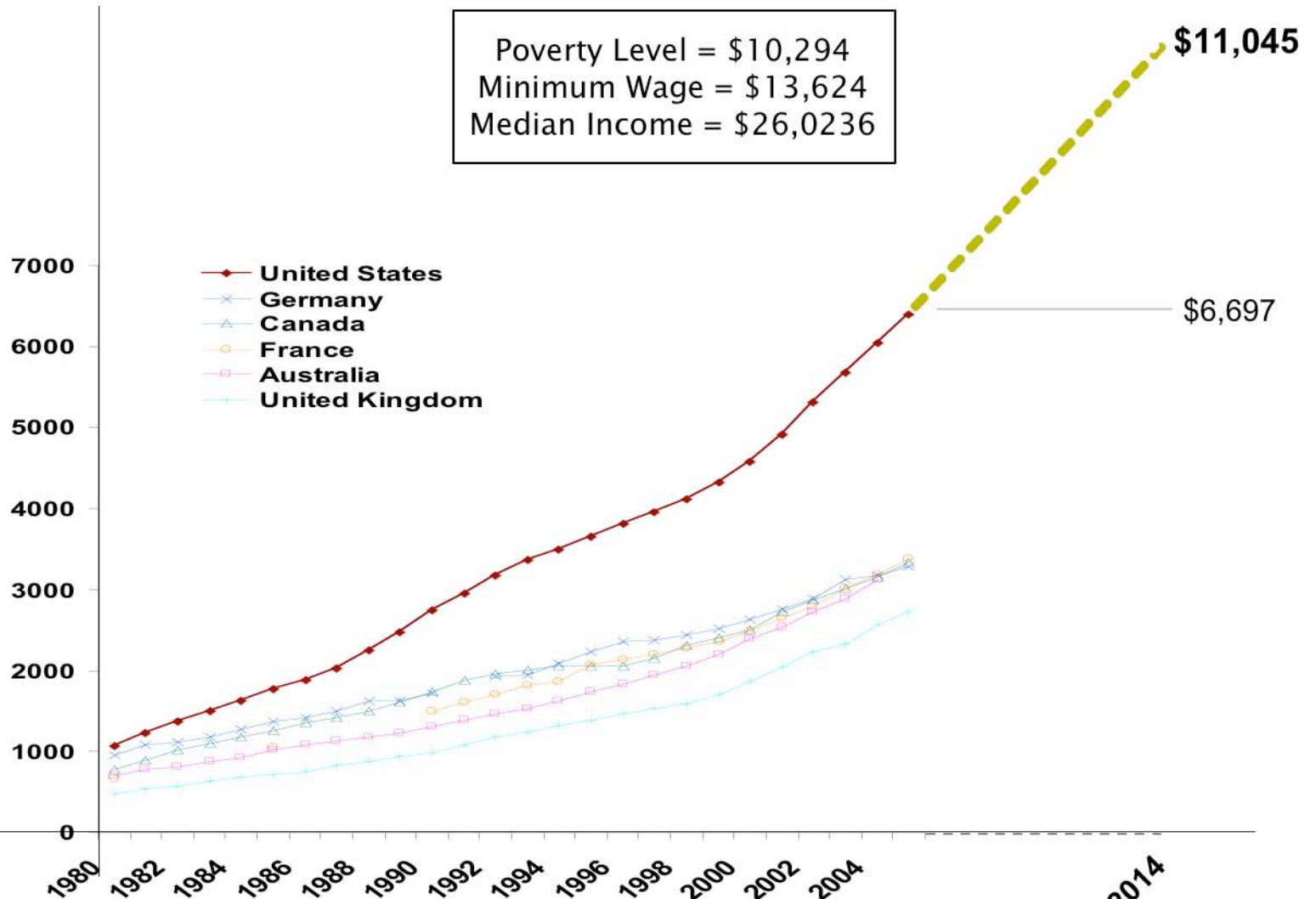
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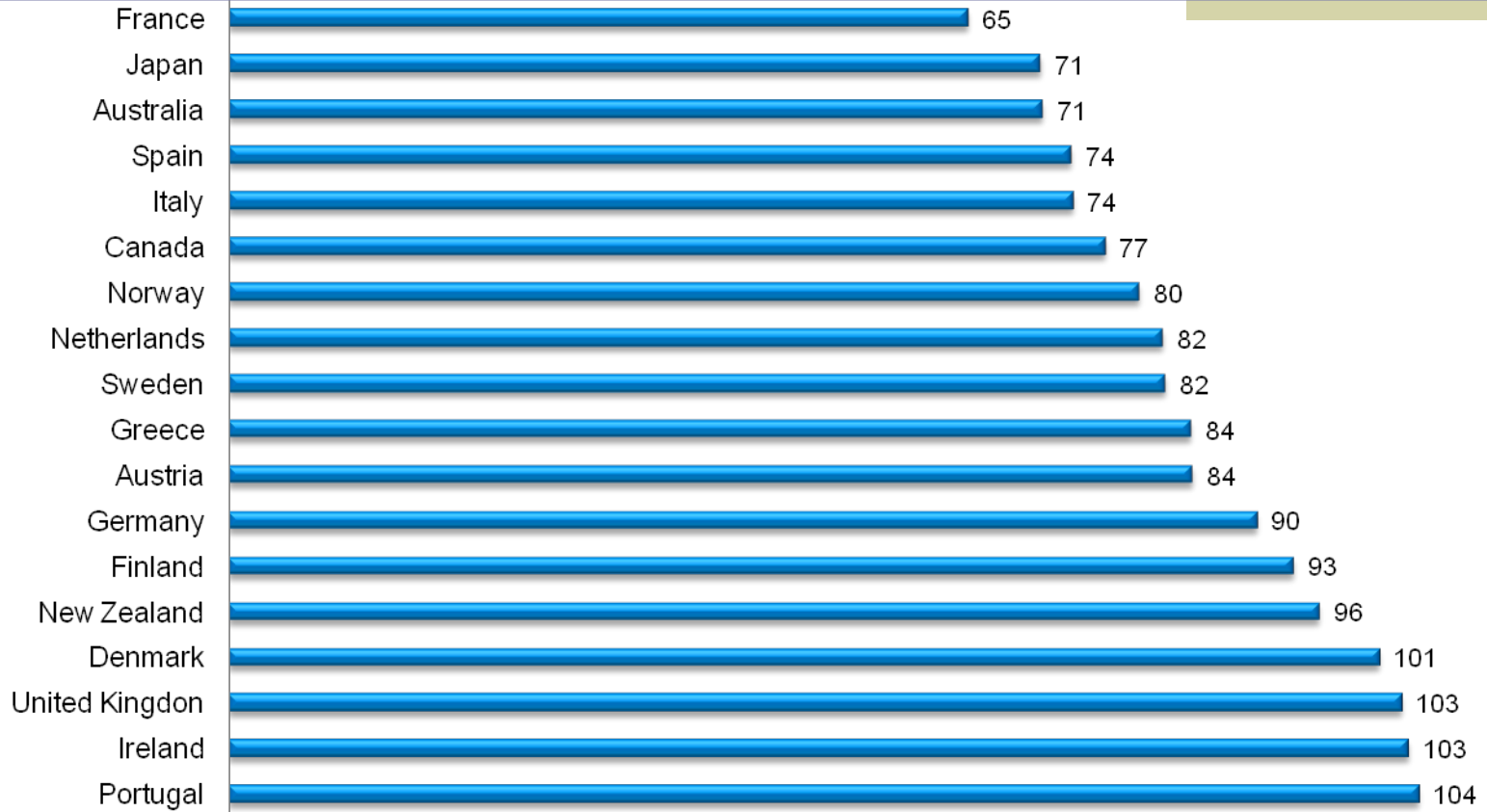
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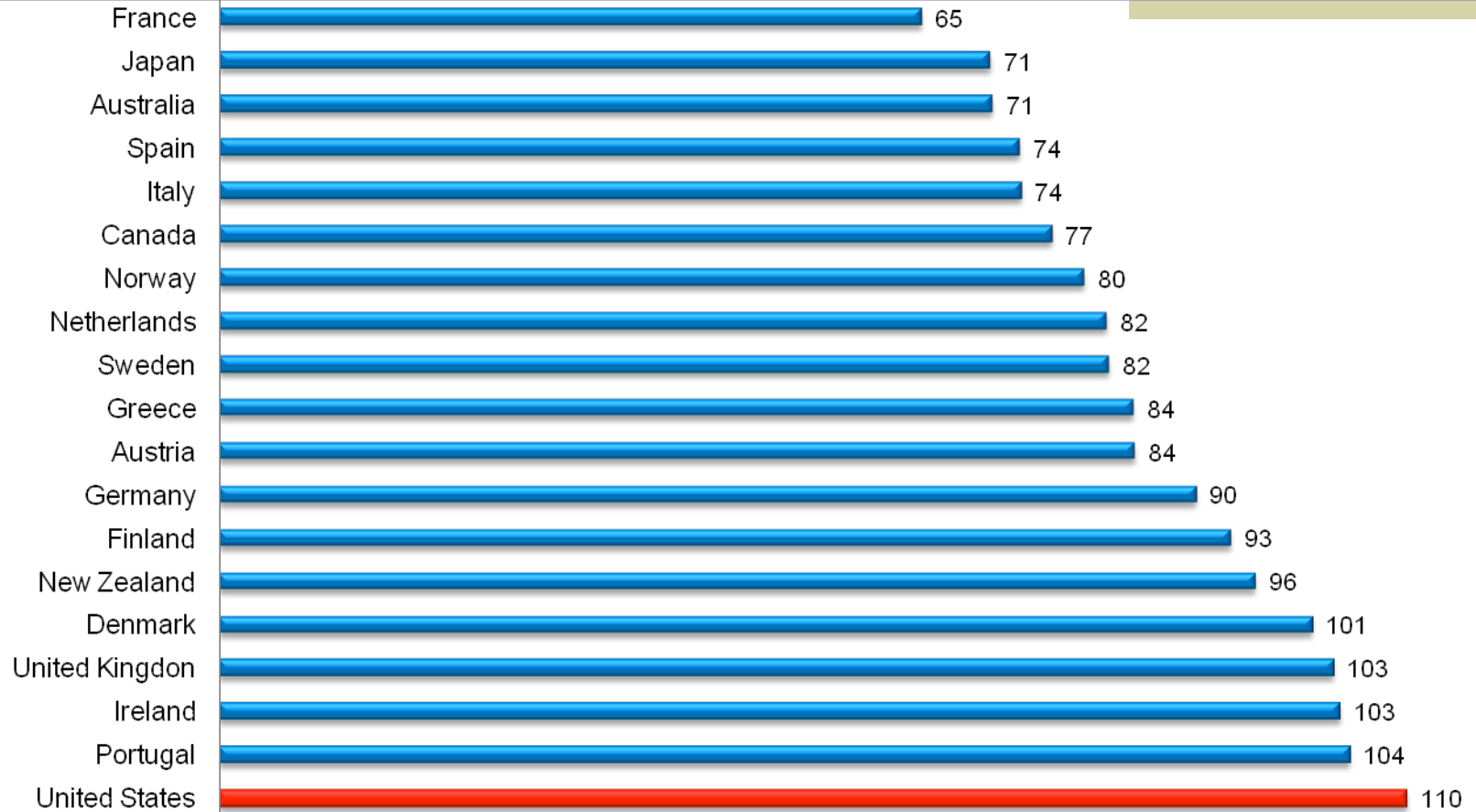
Deaths from Treatable Conditions

Adjusted Rate per Thousand Deaths



Deaths from Treatable Conditions

Adjusted Rate per Thousand Deaths



Source: Ellen Nolte and C. Martin McKee, "Measuring the health of nations: Updating an earlier analysis." *Health Affairs*, Jan/Feb 2008, Vol 27, Issue 1, 58-71.

NASA's Mission to the Moon

“First, I believe that this nation should commit itself to achieving the goal, before this decade is out, of landing a man on the Moon and returning him safely to the earth.

No single space project in this period will be more impressive to mankind, or more important for the long-range exploration of space.”

John F. Kennedy, Speaking to a Joint Session of Congress on May 25, 1961

A Final Word

Eugene Kranz, NASA flight director:

“The power of space...was to raise our aspirations to those things that are possible, IF WE WILL COMMIT.”

A Final Word

Eugene Kranz, NASA flight director:

“The power of space...was to raise our aspirations to those things that are possible, IF WE WILL COMMIT.”

Mr. Kranz is not just making a statement.

He’s asking a question —

Will we commit?

Thank You

Jonah Frohlich

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Sign-up for regular updates, get involved:

HIT&E@chhs.ca.gov

Up-to-date information on State and Federal activities:

www.hie.ca.gov