



## *Prediction # 1*

**Prediction: The single most promising solution to drive down anticipated health care costs that will occur over the next 5 years is ...**

**(Will tell you in 30 mins ...)**

**Hint: Tonight you will not drink pinot noir and you will ask for peanuts (boiled not raw).**

# Elections: Interesting Facts

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- First time since 1928 that no incumbent president or VP is running.
- Over the past 50 years, only once has a party held the presidency for more than two terms.
- The first \$3 billion campaign ever (candidates \$1B; independent groups \$2B). The internet is playing an unprecedented role, moving the focus away from large fundraising events.

## *Prediction # 3*

If the Election Were Today ...



# Sarah Palin will be the next VP of the United States.

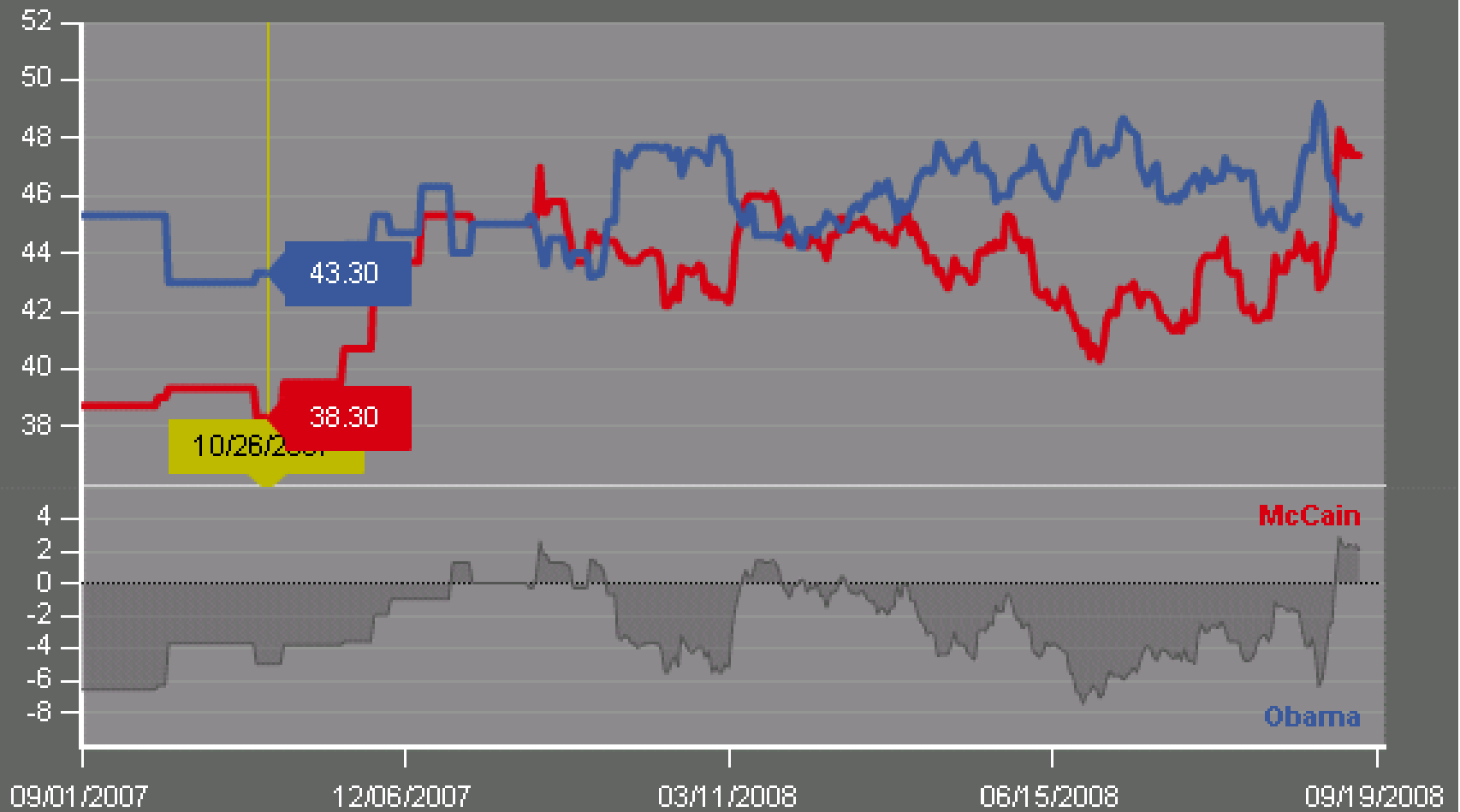
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Polls: RealClearPolitics National Average (yesterday):

- **McCain 47.3%, Obama 45.1%**
- InTrade Market Odds: M 51.1, O 47.2
- Electoral College: M 227, O 217 (Toss up 91)

## RCP Poll Average: General Election: McCain vs. Obama

■ McCain 38.30 ■ Obama 43.30



RealClearPolitics





## McCain

- NO Mandates
- Provide tax credits (\$2,500/5,000) to buy own insurance
  - Eliminate tax deductibility of employer-sponsored insurance
- State grants for those rejected in open market



## Obama

“Children” Mandate  
Employer Mandate

Regulate private insurance:  
guaranteed coverage and  
rate

Create new public plan like  
Medicare

Expand Medicaid and  
Children’s Health Plan  
(SCHIP)

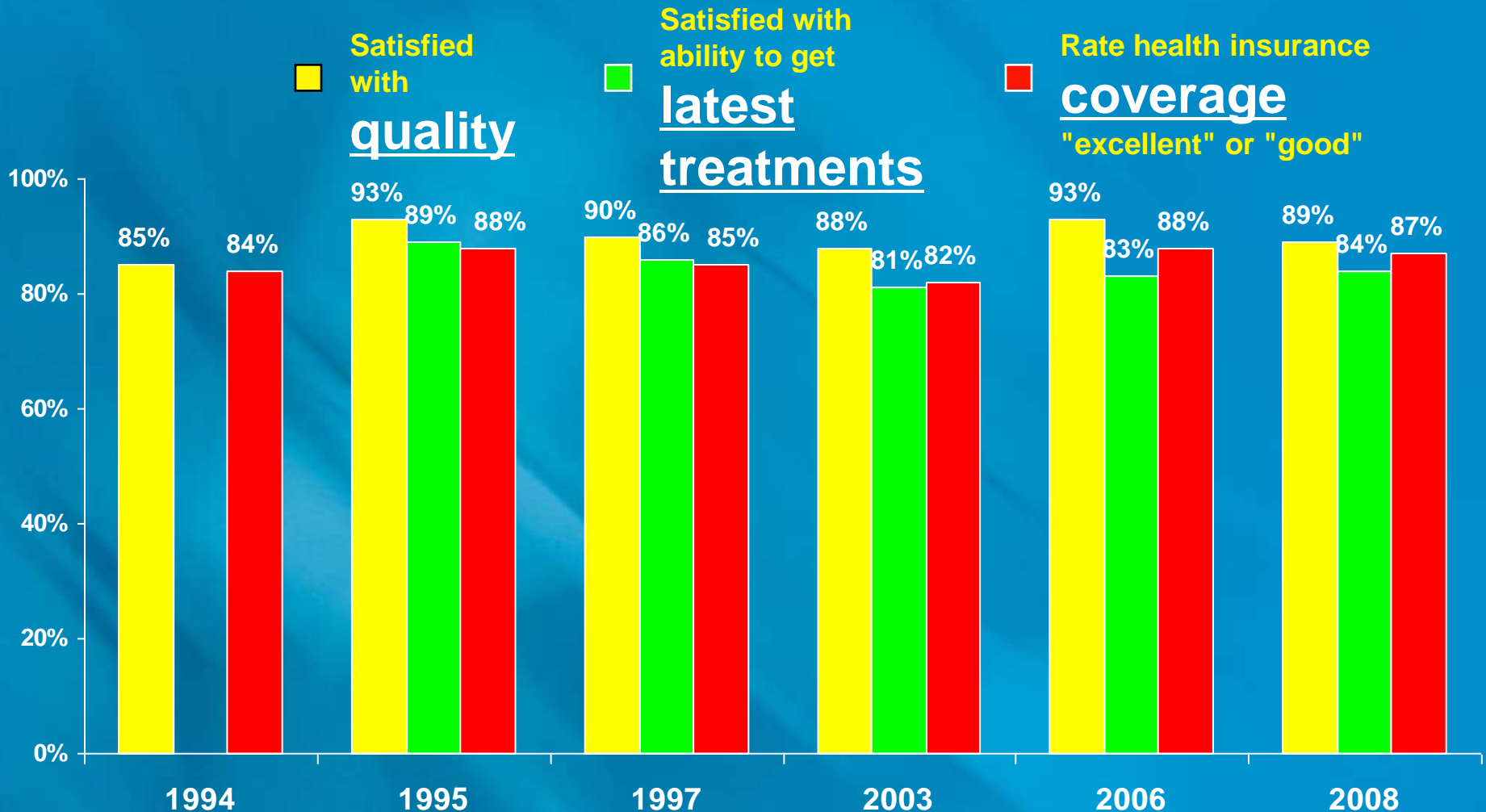
## *Prediction # 3*

**Healthcare Reform will  
be a NON-ISSUE in the  
Presidential race** (at least not  
a driving issue).



# Majorities Satisfied with Own Situation

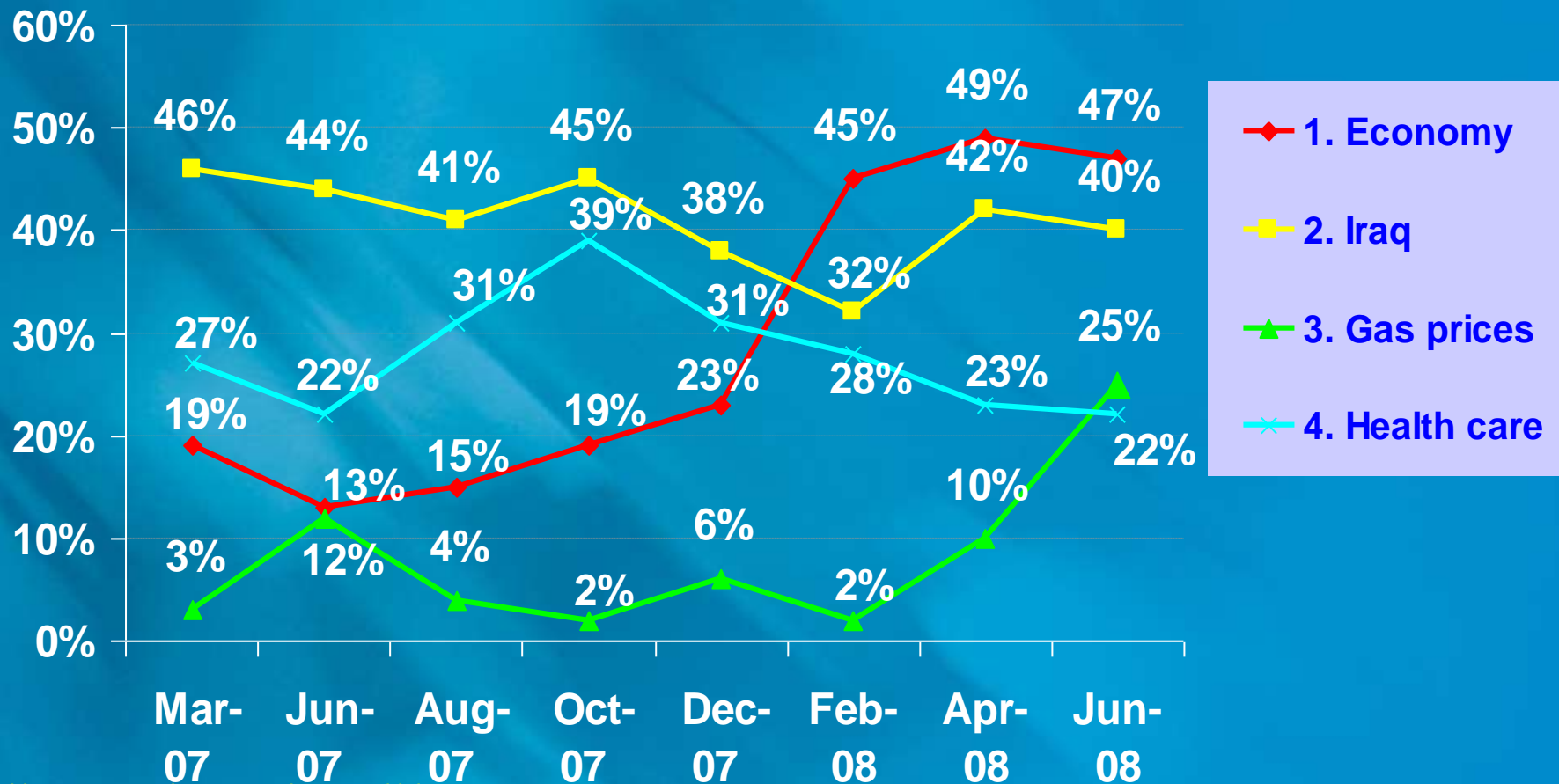
Among those with health care coverage, % who ...



Sources: ABC News Poll (Jul. 1994, Nov. 1995, Aug. 1997), ABC News/Washington Post Poll (Oct. 2003), ABC News/Kaiser Family Foundation/USA Today Poll (Sept. 2006), Kaiser Family Foundation (June 2008)

# Issue Agenda: Health Care Diminishing

What two issues would you most like to hear the presidential candidates talk about?

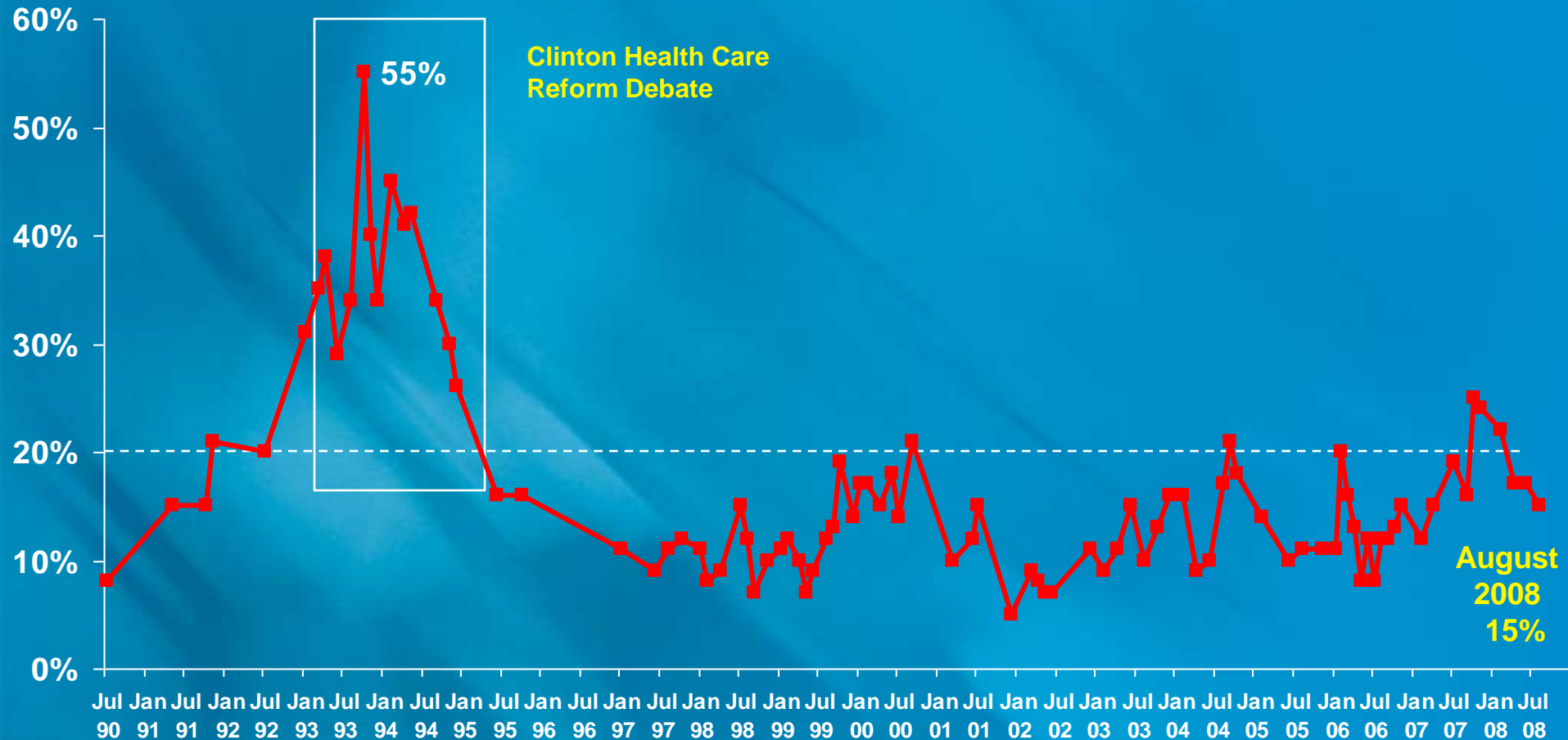


Note: Adds up to more than 100% due to multiple responses.

Source: Kaiser Health Tracking Poll: Election 2008

# Not very high on voters' minds ...

% naming health care one of two most important issues for government to address



Theme: "Don't know" responses were included in the base when percentages were calculated.

Source: NBC/Wall Street Journal; Harris Polls

## *Prediction #4*

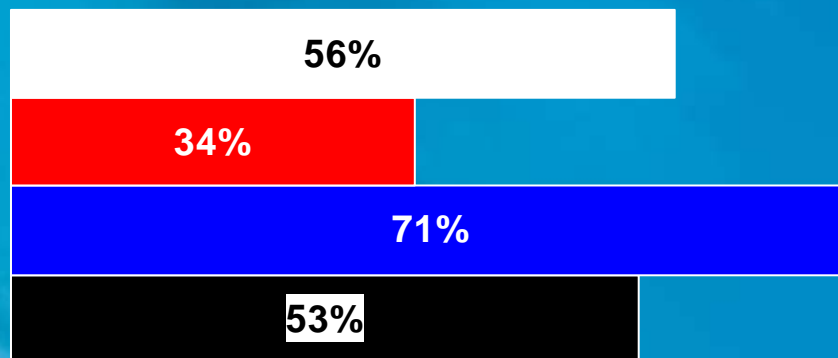
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- Republicans will talk about and legislate principally on COSTS.
- Democrats . . . on ACCESS.

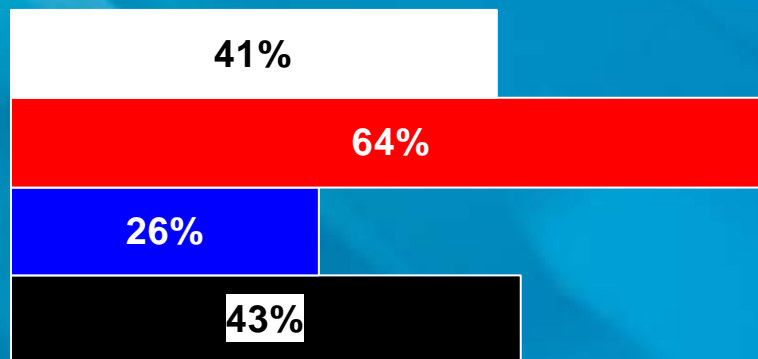
# Main Goals of Health Reform Differ by Party

Which of the following comes closest to your view?

The main goal of these efforts should be to make sure that **EVERYONE** is covered by health insurance



The main goal of these efforts should be to make health insurance **more** available & **AFFORDABLE** in the private marketplace, even if everyone doesn't get covered



■ Total  
■ Republicans  
■ Democrats  
■ Independents

Note: "Don't know/Refused" responses not shown.

Source: Kaiser Health Tracking Poll: Election 2008 (conducted June 3-8, 2008).

**Policy: Economic uncertainty and large federal deficit guarantees that we will see no significant federal reform over next 3 years.**

**Why? ... cost.**

# Cost Impact of Obama Health Reform Proposal

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“The total cost impact of the proposal is \$452 billion per year, assuming it is implemented immediately and in total. The ten-year impact of the proposal is likely to top \$6 trillion assuming that medical care inflation will be 7% per year.”

Assessment by IISI Network LLC, August 2008

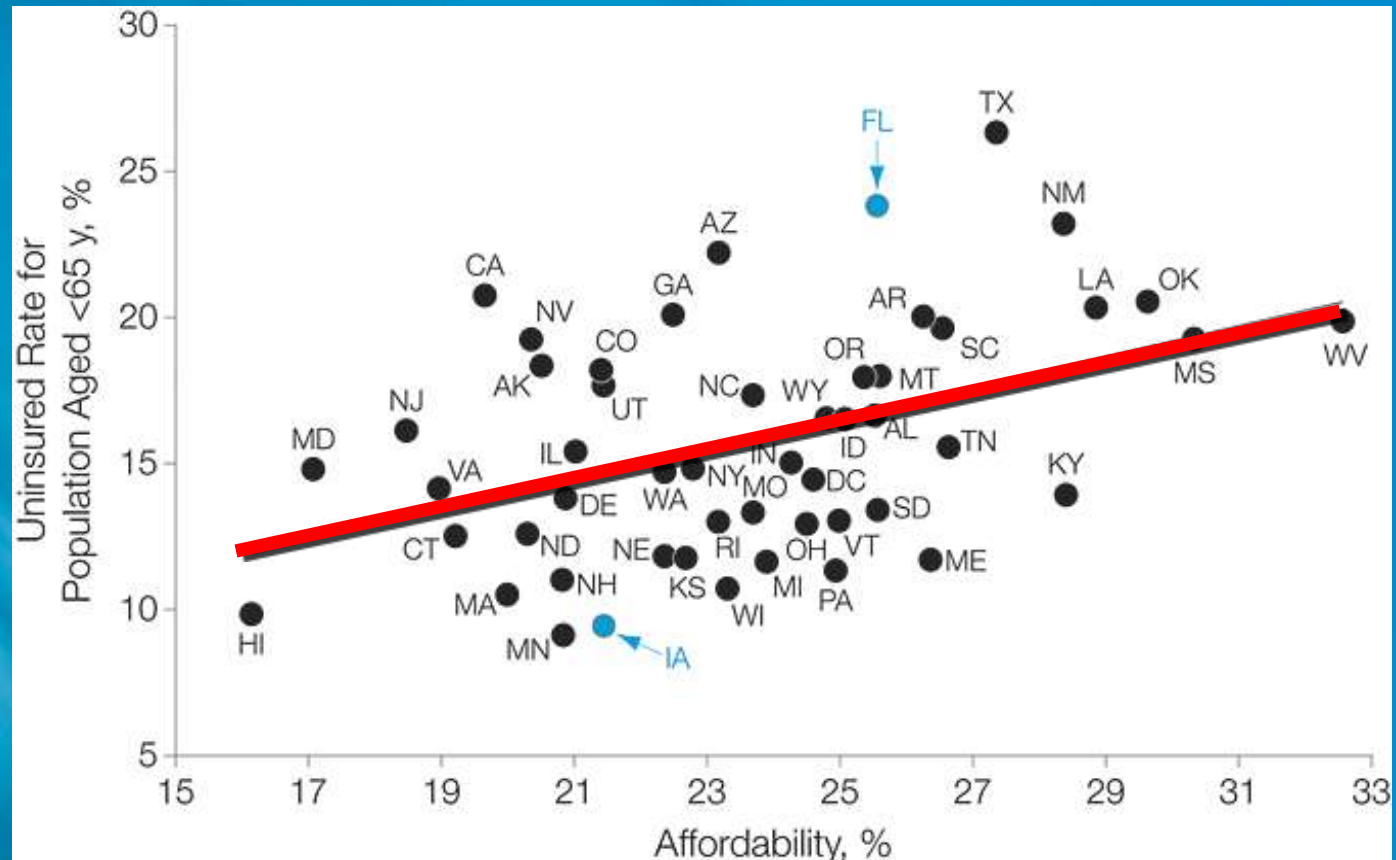
The underlying simulation model used is ARCOLA, a proprietary version of a health reform coverage and cost assessment analytic engine. A peer-reviewed presentation of the core model structure is available as a DHHS report at [www.ehealthplan.org](http://www.ehealthplan.org) and previously summarized in Health Affairs.



# Cost-Coverage Trade-off by State (2005)

Higher the cost ... the more uninsured

Uninsured  
(%)



(Un)Affordability  
(premium/income)

Emanuel, E. J. JAMA 2008;299:947-949.



# Cost drives the uninsured

Every 10% increase in the average family health insurance premium, the rate of the uninsured younger than 65 years increases by 0.55%

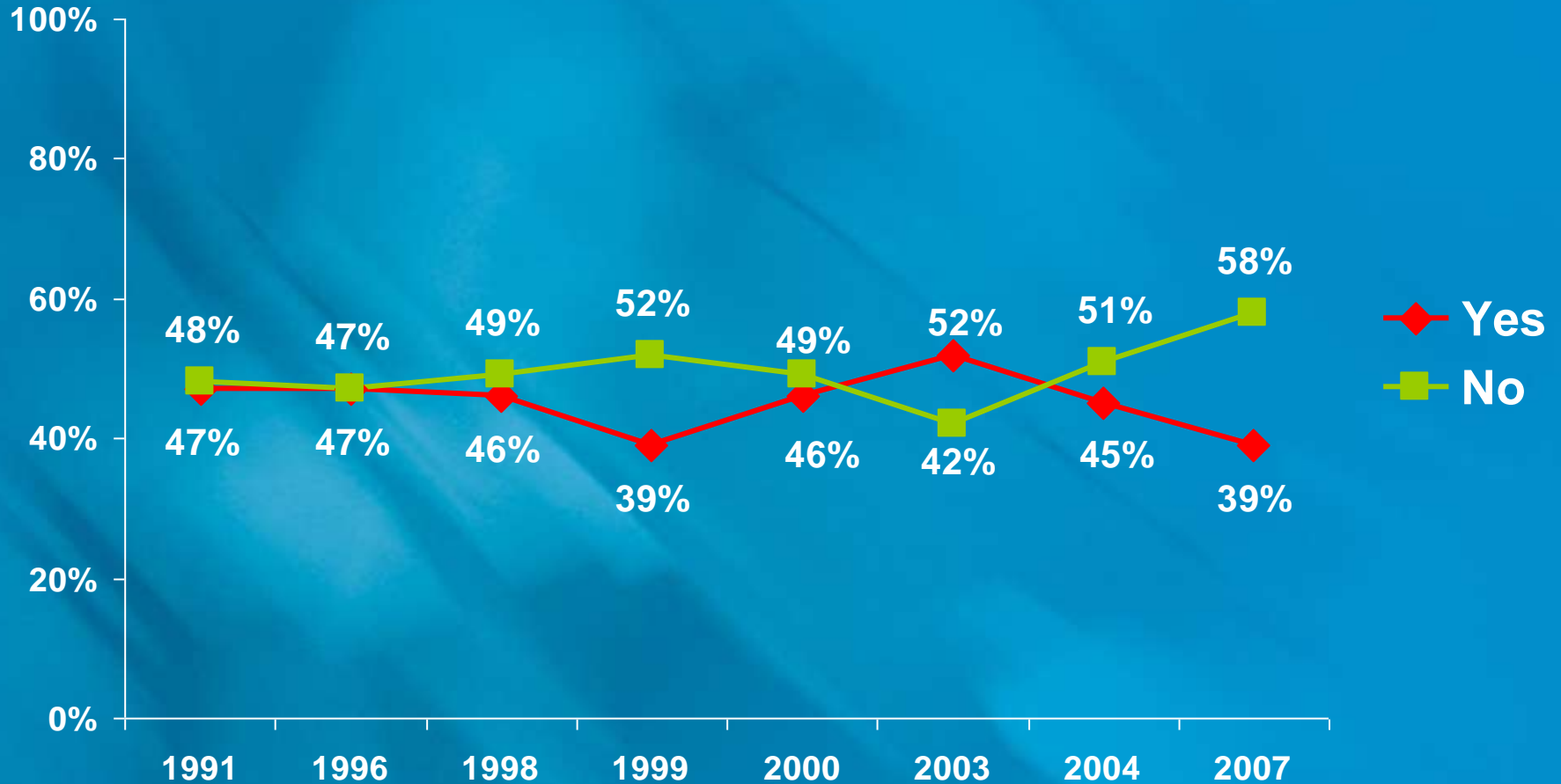
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Emanuel, E. J. JAMA 2008;299:947-949.

**Thus, any reform to cover the uninsured must address rising costs ... or it is doomed to failure.**

# Challenge for Any Proposal: Limited Willingness to Pay

Would you be willing to pay more -- either in higher insurance premiums or higher taxes -- to increase the number of Americans who have health insurance?



Note: "Don't know/refused" responses not shown

Sources: NBC News/Wall Street Journal Poll (Jun. 1991), KFF/Harvard School of Public Health Polls (Nov. 1996; Nov. 1998; Oct. 1999; Nov. 2000; Feb. 2003; and Nov. 2004), slight wording variation in *Washington Post*/KFF/Harvard Univ. (June 2007).

## *Prediction # 6*

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**The next President will appoint  
a Medicare Commission in first  
100 days.**

**(... and the results will be ignored)**

# Breaux-Thomas Commission

## Bipartisan Medicare Commission

Majority supported recommendations combined competitive reforms and prescription drug benefit.

President Clinton reacted by rejecting the 11-person recommendation and proposing his own Rx benefit



## *Prediction # 7*

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**Will see continued movement from high-cost in-hospital settings to lower cost (more value-laden) delivery settings.**

**But expect a lot more scrutiny by Washington of outpatient delivery due to flow of money.**

# How does the Washington-insider policy maker think?

1. Policy maker moves where there is consensus:

Expect the next Congress to move on the “Fabulous Five”: Quality improvement; Disease management; Prevention; IT; Comparative effectiveness

2. Congress will move where there is a perceived problem...



## ... Where there is a perceived problem

- If “cost,” what are the drivers.
- Where are we spending more than optimum (one comparison might be vs other similar countries)?
- Show me where the high costs are ... but what I am really interested in is the GROWTH in COST.
- How can I bend the cost curve?  
Shifting the curve and bending the curve are two different things.

# **“High Costs” does not mean a “Cost Driver”**

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## High Costs

- Buy too much ... of the wrong things
- Pay too much
- High administrative cost

## Growth in Costs

- Fee for service: Crazy payment system
- Out-of-pocket costs diminishing as a %
- Consumer lacks information
- Physician (provider) unaffected
- No comparative effectiveness data
- Explosion of technology



## Is there an answer?

If you want to bend the cost growth line ...  
...and you reject a highly regulated system,  
...and will not compromise on access or  
quality,  
...and your goal is to hold people  
accountable for higher quality and lower  
cost ...

The only alternative is continued movement  
toward capitation (more bundling) with  
quality measurements, coupled with a  
strong dose of pay for performance.

# Healthcare investors in US will increasingly turn global.

- Recent experience in England.
- Eagerness among other socialized governments to engage market reforms and market solutions as their programs are growing as fast as ours.

**The % uninsured will fall from 15.3% to 11% over the next 5 years without comprehensive reform.**

**Why and How?**

# Remember who the uninsured are:

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- 45.7 million (15.3% of population)
- 12 million eligible for Government programs today (takes it to 12%)
- 10 million are NON-US citizens
- 9 million make more than 3x poverty level
- 25 million are 18-34 year olds
- Variation by state: TX 24.4% to MASS 8.3%

## Prediction # 12

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**Congress will expand coverage regardless of Presidential outcome, to the tune of \$10 billion/year.**

(based on Congressional debate of last year and elections in Congress)

**Why won't we see universal coverage for the uninsured?**

**“Total healthcare spending would increase by \$122.6 billion to \$208.6 billion if uninsured were fully covered.”**

Health Affairs, Jack Hadley et al, Urban Institute, August 25, 2008

**Notes: \$86 billion currently spend (out-of-pocket \$30B; “FREE CARE” \$56B). Beware when someone declares it would cost \$56B to insure the uninsured (that is the amount cost shifted as “free care).**

## *Prediction #13*

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# **Medicaid: Medicaid rolls will grow over the next 3 years.**

- Medicaid grows in down economy
- Kaiser (2008): 1% rise in unemployment equates to 1 million people losing health insurance (400k adults, 600k children).

## **Healthcare Policy Predictions (2)**

**1. Any increase in coverage (S-CHIP) will be offset by increased regulation: NO NET GAIN to hospitals or managed care.**

**2. With Democrat Congress, A NEW Government-run HEALTH INSURER that will compete with private insurers is certain (even if Republicans win presidency).**

**Concern: Will “competition” with government as a major player ultimately fix prices and destroy market forces (fear of Republicans)?**

## *Prediction # 15*

# The % population with employer coverage will continue to drop.

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- Absolute number flat
- % with private coverage overall fell from 67.9 to 67.5%.
- Under McCain would likely fall much quicker as promotes individual market (“radical reform”).
- Fell 59.7 to 59.3% this year.



## ***Prediction # 16***

**Medicare Prescription Drug Part D: The Democratic Congressional leadership will totally back off opposition to the Republican-led Part D Program** (which introduced market forces, transparency in pricing, disease management, prevention).

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July GAO study: Senior satisfaction is high and number of complaints down 74% since start. Spending coming in more than 25% below expected.

# Congress will continue to lose credibility as a reforming leader.

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1. Republican-led Congress passes competitive bidding of DME in 2003.

6 months ago: savings of 25% heralded

2 months ago: deep-sixed by Congress

2. Medicare Trigger to reduce spending

- House Resolution July 2008: deep-sixed the self-imposed responsibility
- MMA 2003: When for 2 consecutive years dedicated revenues are estimated to reach 45% of Medicare program outlays, legislation is required to reduce spending (on an “expedited basis”).

# Presidential Credibility

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“Today I want to lay out the details of that plan – a plan that not only guarantees coverage for every American, but also brings down the cost of health care and reduces every family’s premiums by as much as \$2,500.”

Barack Obama, Speech in Iowa City, IA, May 29, 2007

## **Prediction # 18**

**Watch for a Minimum MLR bill to come to the Senate floor within 24 months.**

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- **California: MLR mandate bill that requires health plans to maintain MLRs of 85%**
- **Caps profitability (85 cents of every \$1 in premium spent on medical costs)**
- **Implications for small group and individual market; disease management; drug utilization management**
- **17 other states**

## **Prediction # 19**

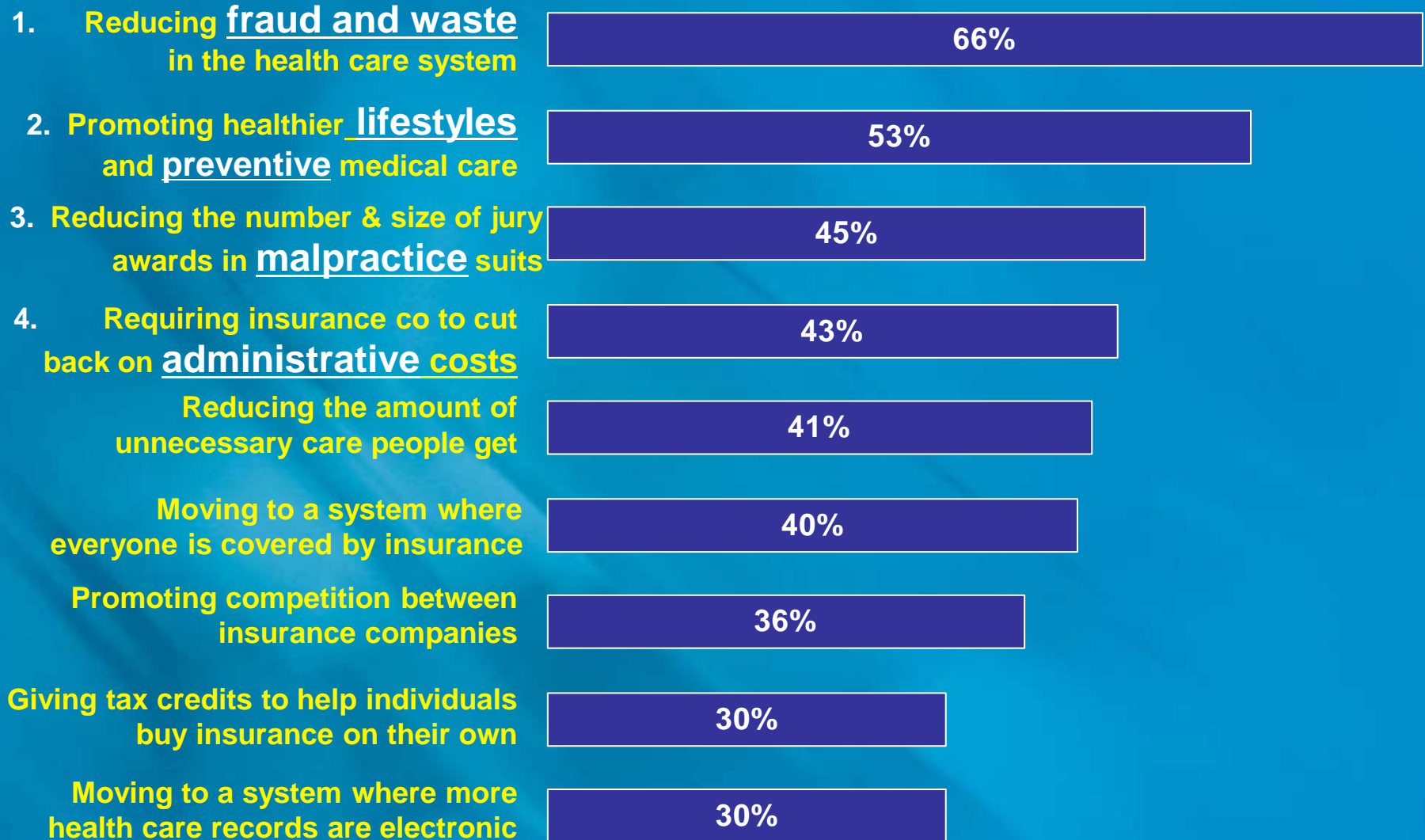
**The next big 3 areas to shift and bend the cost curve of healthcare spending will be:**

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- 1. Simplify administrative complexity (payment and provision).**
- 2. Reduce economic distortions inhibiting value consciousness (for both consumers and providers).**
- 3. Reverse the rapid deterioration of underlying health status of individuals.**

# Voters' Views on HOW to Reduce Costs

Percent who say each of the following will do “a lot” to lower health care costs for people like them:



# **I. Administrative complexity**

- Shifts the cost curve, doesn't bend it
- 50 states with thousands of payors and different rules
- Adds 8 to 18% of spending
- Move to more of a “single payor” mindset (NOT single payor system!)
- Legislate it (California)



## **II. Reduce economic distortions inhibiting value consciousness (for both consumers and providers)**

**Transparency associated with electronic data transfer and decision support capabilities will transform doctor-patient relationship from one of “art to science” (McKinsey).**

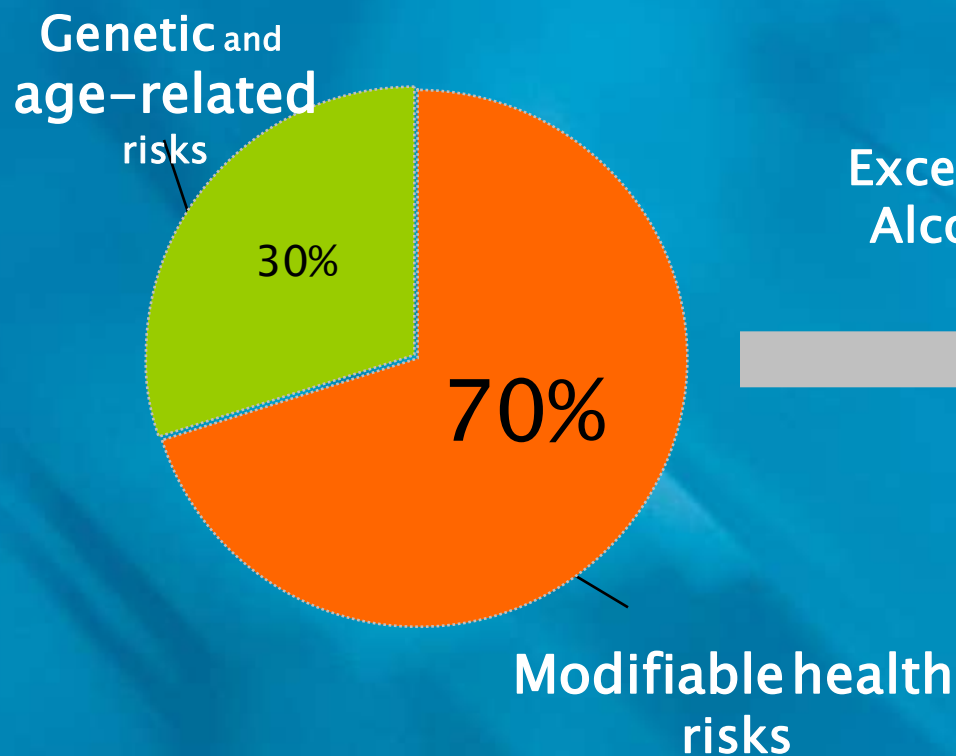


# **III. Reverse the rapid deterioration of underlying health status of individuals**

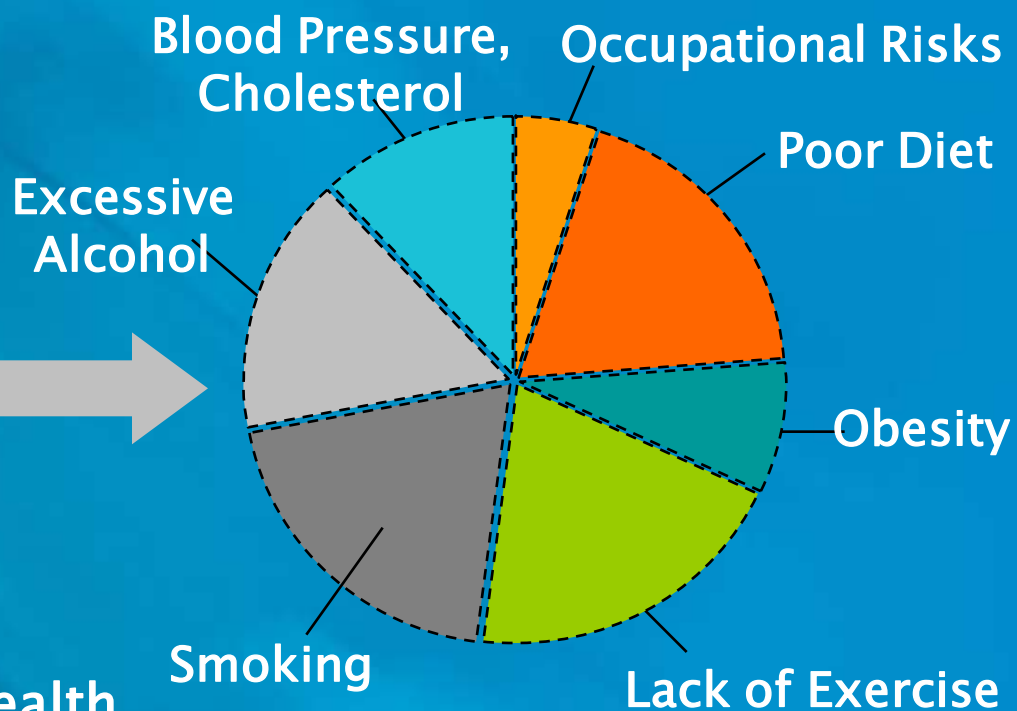
**...Wellness and behavior**

# Why the need for wellness?

Total healthcare costs \*



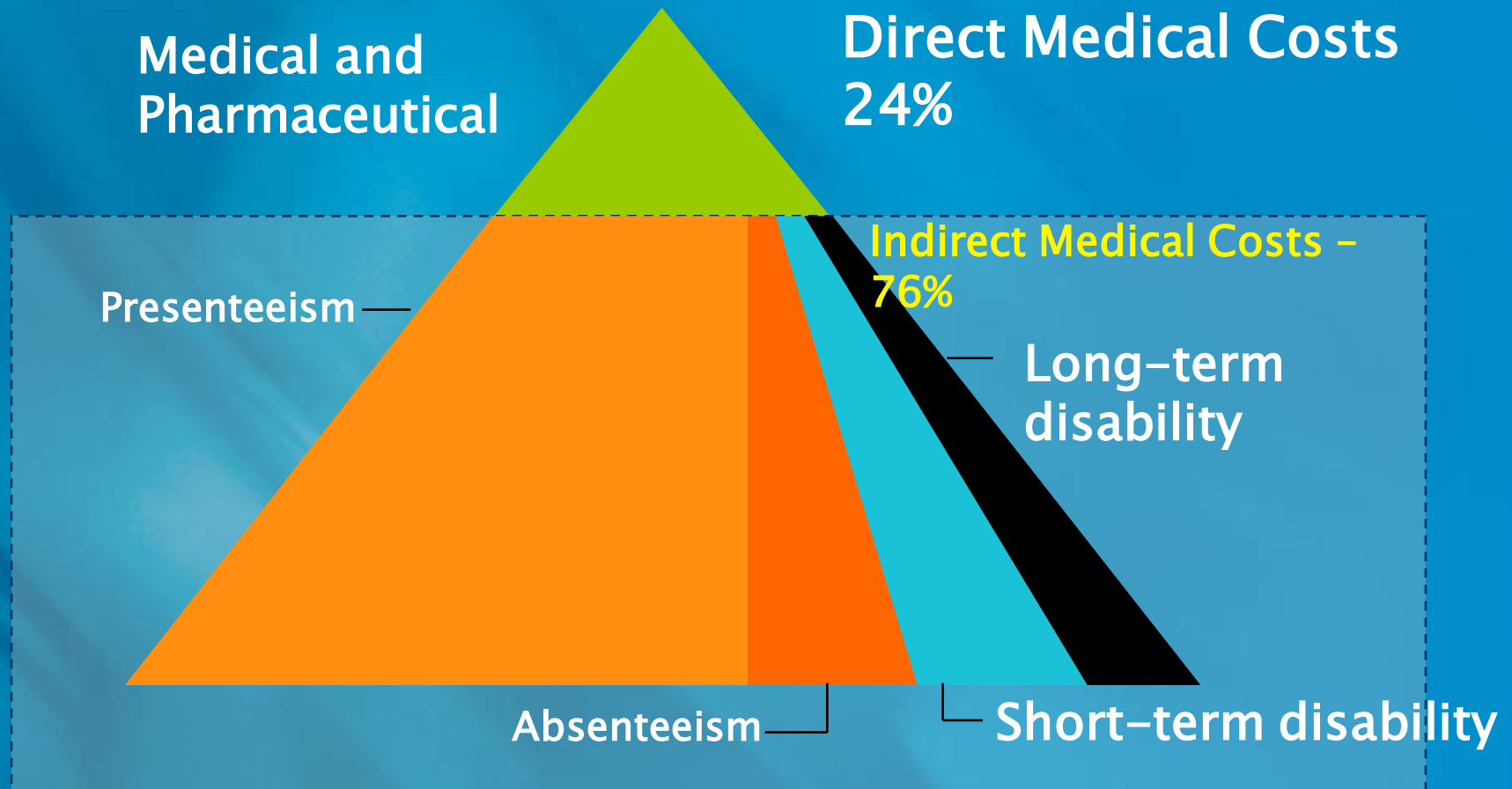
Disability adjusted life years ^



\* Source: Wellness Councils of America and the Center for Health Care Economics

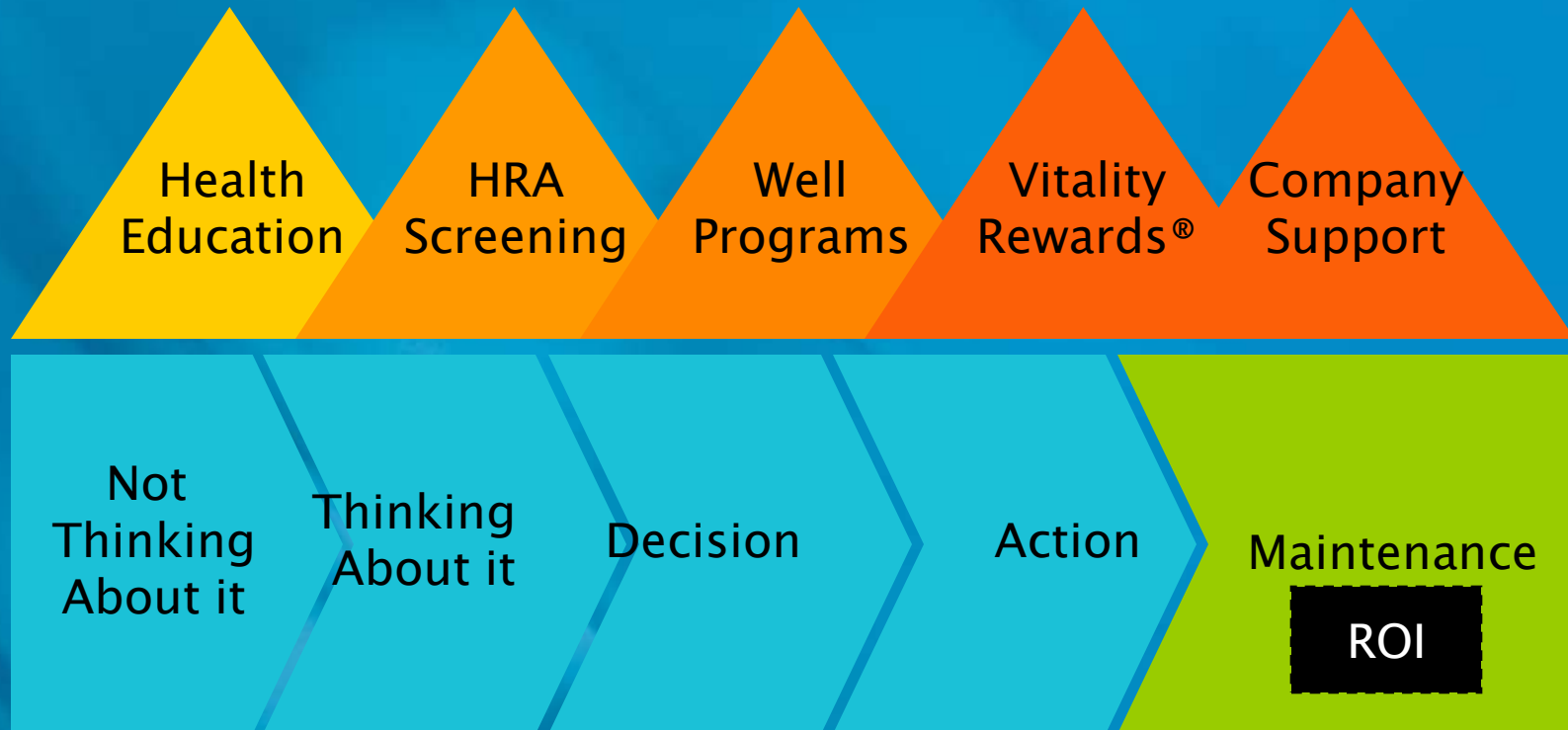
^ Source: Adapted from World Health Report, 2002

# Wellness Impacts More Than Healthcare Costs



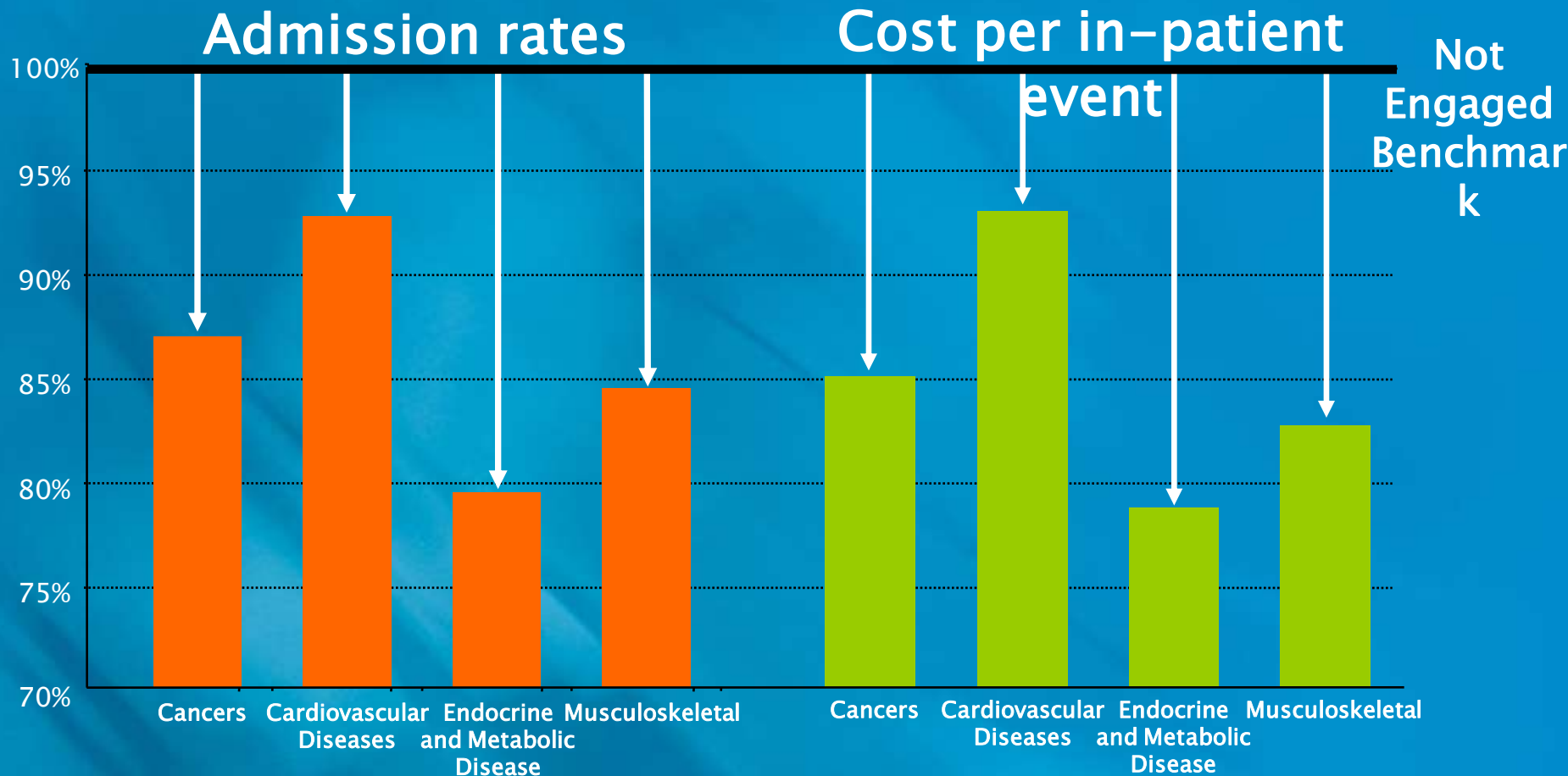
Source: Harvard Business Review - Presenteeism: At Work-But Out of It, 2004

# Behavioral Science Underpins



Based on Prochaska and DiClemente's Stages of Change Model

# The Impact of “Vitality” on Healthcare Costs



Highly-engaged members experienced lower costs per patient, shorter stays in hospital, and fewer admissions compared to all other groups.

Data supports a 15% decline in healthcare costs for the highly-engaged.

# Prediction: Taxes

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- Estate (death) taxes: Prediction that after 2009 exemption of \$3.5 m and estate tax of 40% (somewhere between marginal tax rate and 45%. [Exemption disappears in 2010 (die in 2009!]
- Marginal tax rates:  
Dems: high income (\$250,000) will increase from 35% to 39.6%
- Long-term capital gains and dividend rates:  
Dems will increase capital gains from 15% to 20%.  
And dividends to be taxed at marginal income rates: (Could happen before 2010).

Back to *Prediction # 1* ...

**Prediction:** The single most promising solution to drive down anticipated health care costs that will occur over the next 5 years is ...



# History

- Since 1930s, known that **CALORIC RESTRICTION** in rats leads to 40% longer life.
- 1990s: Discovery that there are genes that double and triple the lives of nematodes (1 mm worms).
- If we can identify these genes – then theoretically we can make a drug that targets the gene (the mediator of caloric restriction).

Next question: Can a molecule be found to do the same thing as Caloric Restriction?

Howitz and Sinclair, Nature, 2003:  
**RESVERATROL extends the lifespan of yeast.**



20-60%



10-35%



20-30%



33-58%



20-30%

Lifespan  
Extension

# Resveratrol

Trans-3, 5, 4'-Trihydroxystilbene

Molecular formula: C<sub>14</sub>H<sub>12</sub>O<sub>3</sub>

Molecular mass 228.25



... is a small, dumbbell-shaped organic molecule (phytoalexin) made naturally by certain plants when under attack by pathogens such as bacteria or fungi.

... best found in red grapes

# Resveratrol

Mimics caloric restriction (“Lance Armstrong mice”)

In animals:

- Anti-aging
- Anti-cancer
- Protective against Alzheimer’s
- Lowers blood sugar (type-II diabetes)
- Prevents cardiovascular disease
- Cataracts
- Kidney failure

# Business Story

- Aging was the backwater of research until 2005
- A dream of a scientist from Australia (David Sinclair) and Harvard (Christoph Westphal)
- Started biotech company with VC in 2004
- Venture capital of 10m, then 16m, then public 70m, then bought for \$700m by GSK this year
- Why? A pill a day times 77 million baby boomers = \$25 billion





# Practical stuff you need to know

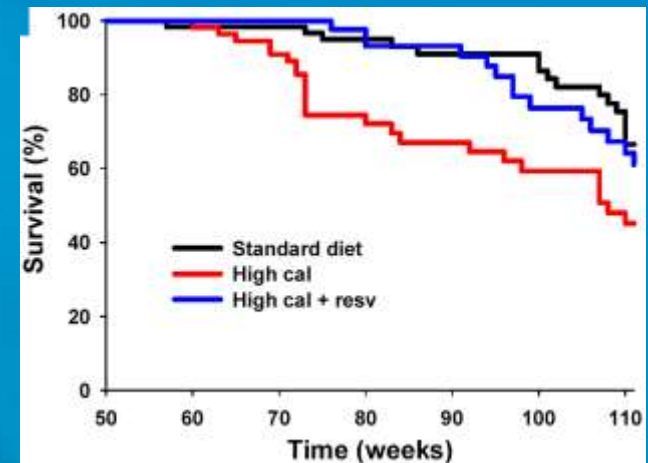
- Glass of red wine (5 oz):  
1 mg (0.30-1.07)
- What you need to take is  
1000 mg or 1 g (some  
take 2 g). You do the math.
- Red wine, not white (white has only 0.01  
– 0.27 mg) (not pinot noir)
- Also trace in peanuts (0.32 – 1.28)  
(boiled, not raw) and red grapes  
(skin)



And NOW we enter the world of altering  
**GENETICS** (interacting with behavior)...

Bour, JA and Sinclair, D, Nature 2006

Conclusion: Resveratrol counteracts the detrimental effects of a high-fat diet in mice.



- Mice on R were fed high-fat diet: found to have 30% lower risk of death!
- Gene expression analysis: the addition of R opposed the alternation of 144 out of 155 gene pathways changed by a high fat diet.



*(Prediction # 1)*

**Prediction: The single most promising solution to drive down anticipated health care costs is ...**

**(Now you can answer it.)**

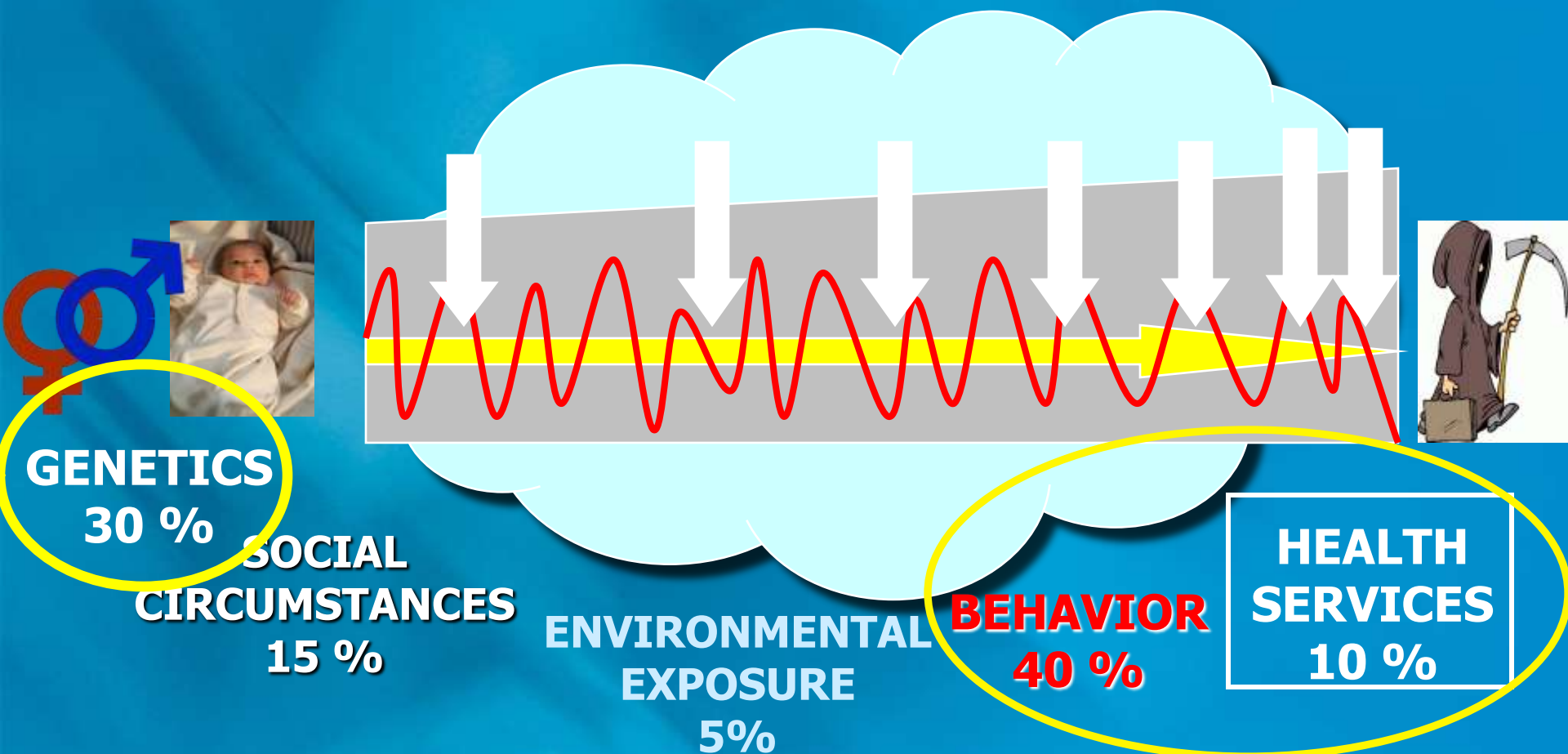
**A new world of GENETIC manipulation to counteract detrimental behavior has the single greatest potential in driving down anticipated health care costs over the next 10 years.**

**...The FRONTIER**

## Proportional Contribution to Premature Death

# What determines how long we live?

JM McGinnis, Health Aff 2002;21:78-93



Public  
(77m)

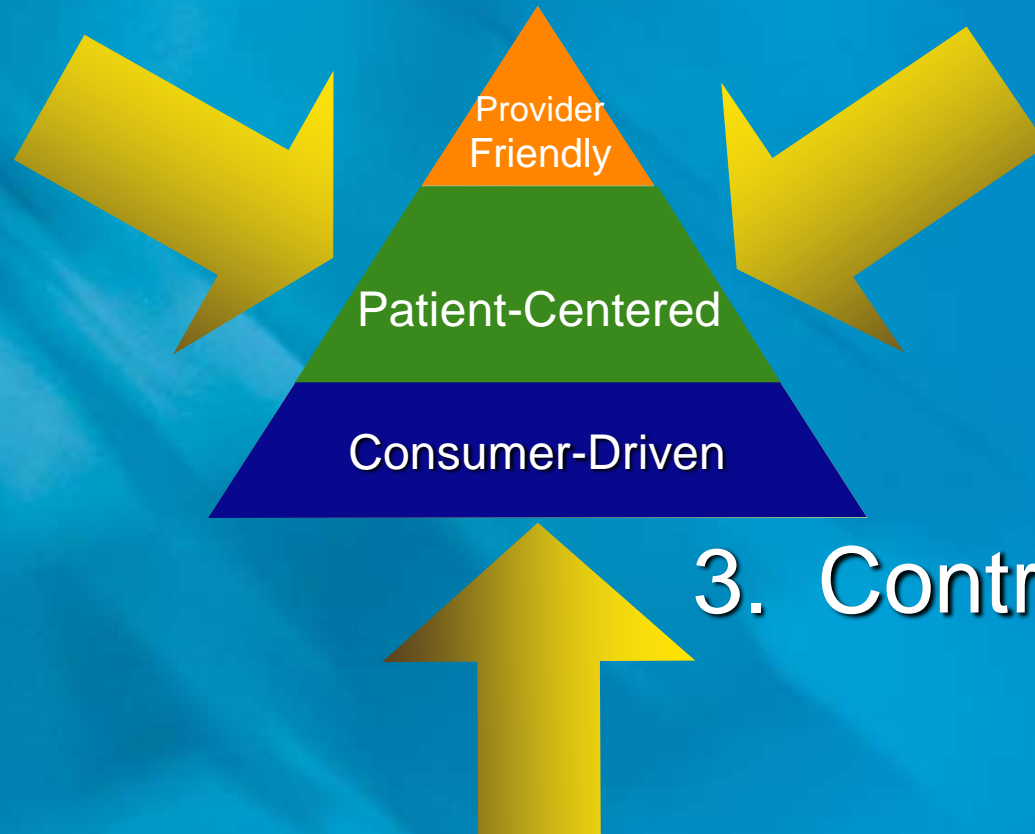
Private  
(172m)

Uninsured  
(47m)

# The New World of Health Care

1. Information

2. Choice



## Today's "Sector" OUT



## Tomorrow's "System" IN



Provider-centered  
Volume-driven (quantity)  
Disease-focused

Hidden price & quality  
information  
Limited choice

Information-disconnected  
Slow diffusion of innovation  
Paper-based

Predatory litigation

Process-focused  
Instincts-based

45 million Uninsured

Individual-centered  
Value-driven (quality)  
Prevention and wellness-  
focused

Transparent price & quality  
information  
Expanded choice

Knowledge-connected  
Rapid diffusion of innovation  
Electronically based

Health justice, Provider-  
friendly

Outcomes-focused  
Evidence-based

100% affordable coverage