

A Closer Look at the Economic Argument for Disease Prevention

Congressional Briefing
WHAT'S SO BAD ABOUT LIVING LONGER?
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The Logic of Prevention

- 38% of all U.S. deaths attributable to 4 behaviors*:

- Tobacco use
- Diet
- Physical inactivity
- Alcohol misuse



- For some, health argument is reason enough to invest in prevention

*Mokdad et al., 2001

The Politics of Prevention

Cancer screening and other measures for heading off disease don't always reduce health-care costs.

Preventing Chronic Disease: An Important Investment, But Don't Count On Cost Savings

An overwhelming percentage of preventive interventions add more to medical costs than they save.

by Louise B. Russell

Do Prevention Or Treatment Services Save Money? The Wrong Debate

Instead of debating whether prevention or treatment saves money, we should determine the most cost-effective ways to improve population health.

by Ron Z. Goetzel

PREVENTION'S POTENTIAL FOR SLOWING THE GROWTH OF MEDICAL SPENDING

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OCTOBER



Collaborating to Conquer Cancer

Making the Business Case for Cancer Prevention and Early Detection
Key Messages

ISSUE REPORT

Prevention for a Healthier America:

INVESTMENTS IN DISEASE PREVENTION
YIELD SIGNIFICANT SAVINGS,
STRONGER COMMUNITIES



JULY 2008

PREVENTING EPIDEMICS.
PROTECTING PEOPLE.



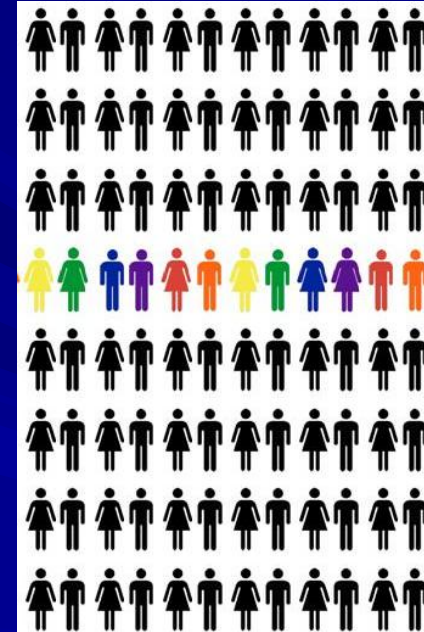
The Importance of Value

- Health is a *good*
- *Goods* are not purchased to save money; there is no free lunch
- The priority is optimizing *value*: making the dollar go farther
- Money is saved relative to competing options
- Return on investment

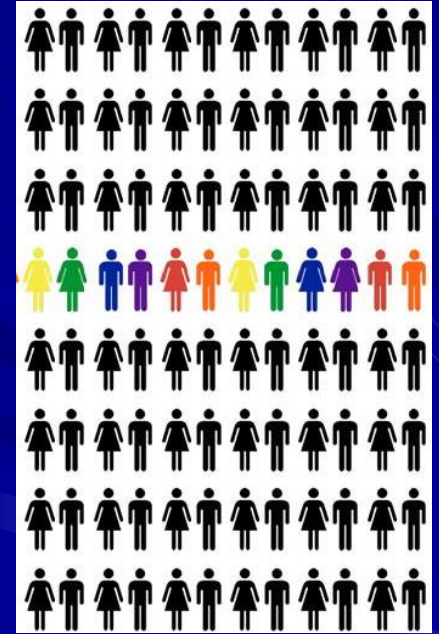
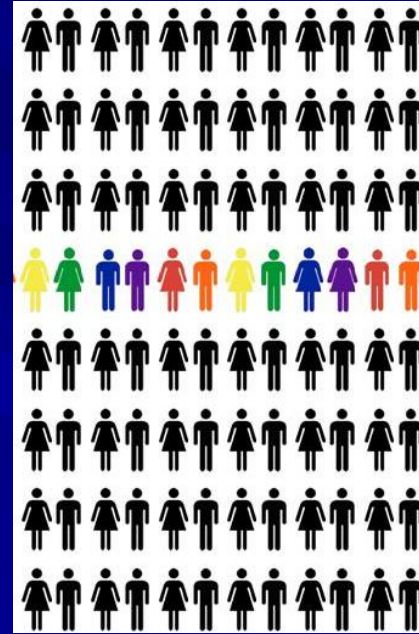
Net Savings is Not the Panacea

Optimizing value

Return on Investment



Return on Investment



Return on Investment

- Cost-benefit
- Cost-effectiveness
- Cost-utility

Cost-effectiveness ratio:

$$\frac{\text{Cost (\$)}}{\text{Health Benefit}}$$

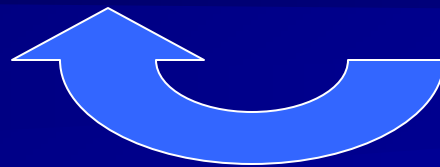
Health Care Expenditures

Cost Saving
(CE ratio ≤ 0)

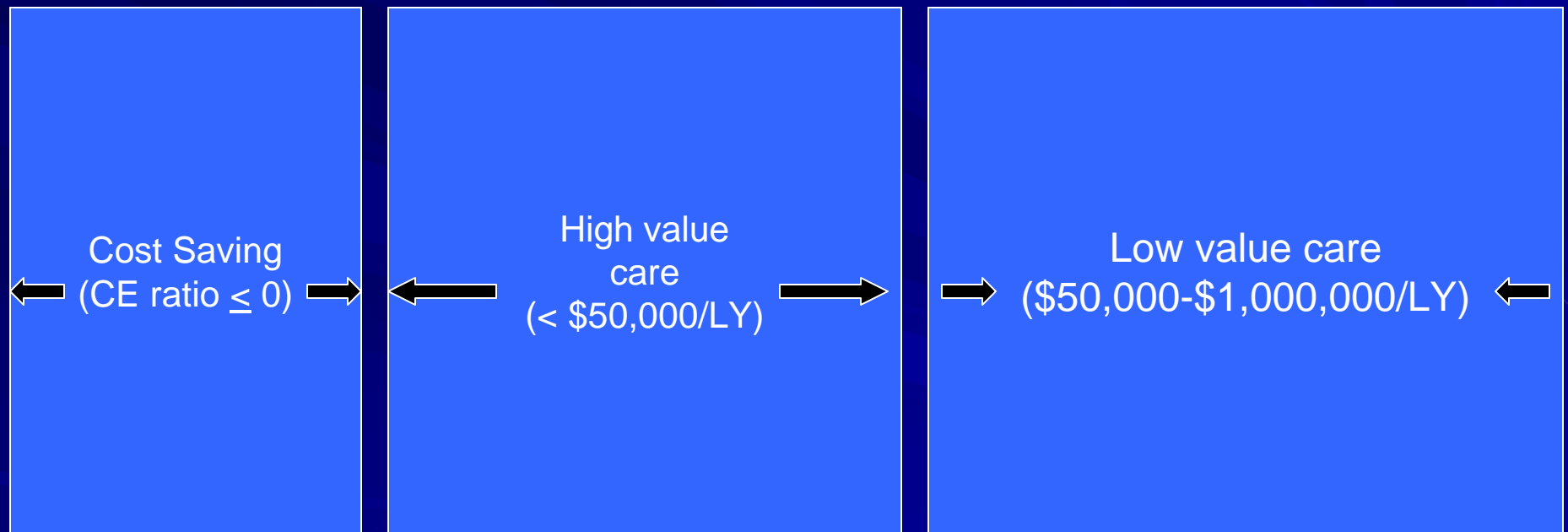
High value
care
($< \$50,000/\text{LY}$)

Low value care
($\$50,000-\$1,000,000/\text{LY}$)

Health Care Expenditures



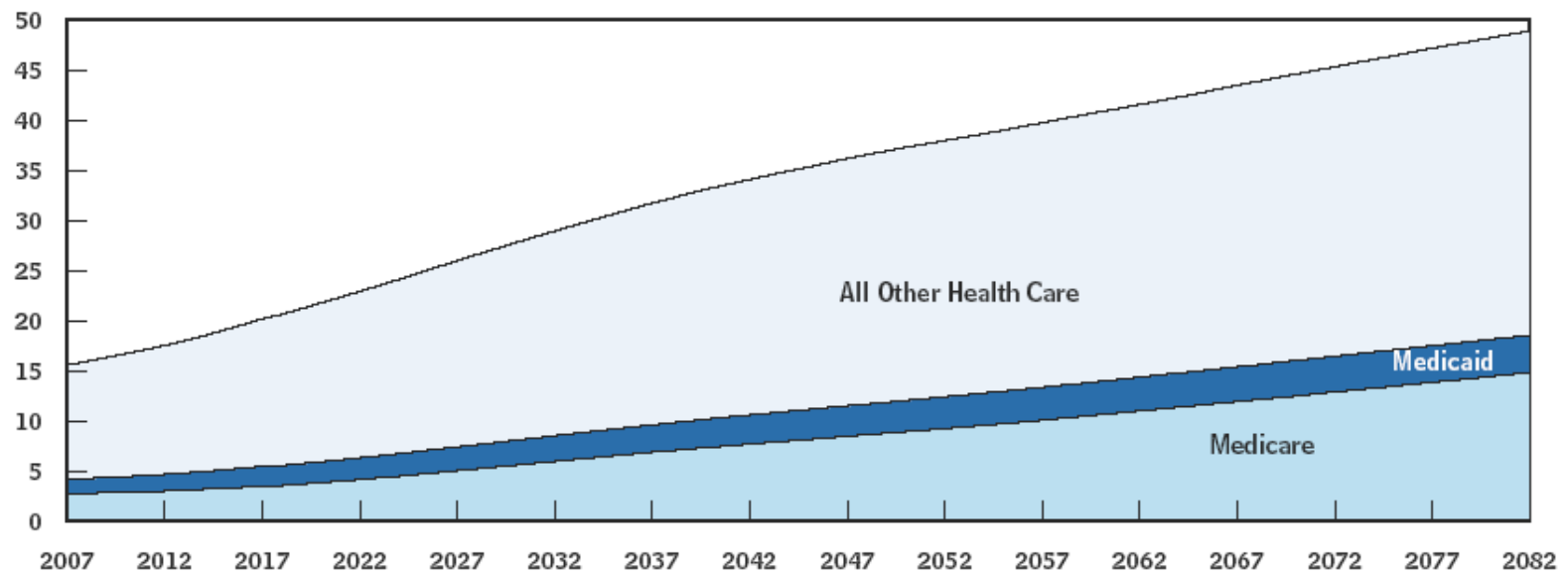
Health Care Expenditures



Health Care Expenditures

Projected Spending on Health Care as a Percentage of Gross Domestic Product

(Percent)

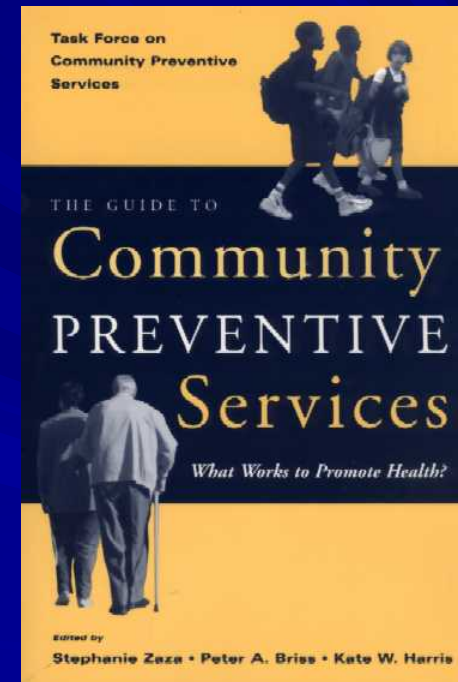
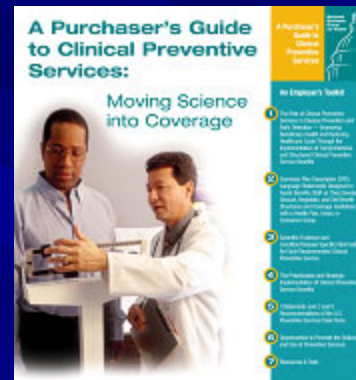
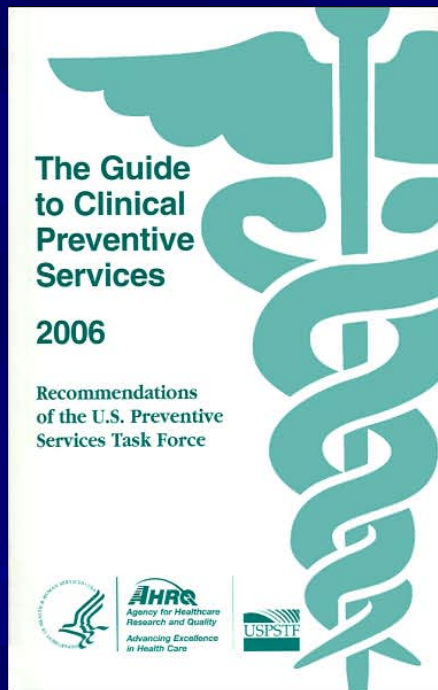


Source: Congressional Budget Office.

Areas of Consensus

1. A core set of preventive services is effective
2. Evidence-based preventive services offer high economic value
3. A subset of core preventive services yields net savings
4. Some preventive services, like many disease treatments, offer poor economic value

1. A Core Set of Preventive Services is Effective



2. Evidence-Based Preventive Services Offer High Economic Value

Theme Articles

Priorities Among Effective Clinical Preventive Services

Results of a Systematic Review and Analysis

Michael V. Maciosek, PhD, Ashley B. Coffield, MPA, Nichol M. Edwards, MS, Thomas J. Flottemesch, PhD, Michael J. Goodman, PhD, Leif I. Solberg, MD

- Screening
 - Breast cancer
 - Cervical cancer
 - *Chlamydia* infection
 - Colorectal cancer
 - Hypertension
 - Problem drinking*
 - Poor vision*
- Health behavior counseling
 - Smoking cessation*
 - Calcium supplementation
 - Folic acid use
 - Injury prevention among children
- Immunizations (vaccines)*
- Chemoprophylaxis
 - Aspirin use (high-risk adults)*

* Net cost savings in certain groups

Source: Am J Prev Med 2006;31(1):52–61

3. A Subset of Core Preventive Services Yields Net Savings

- Aspirin prophylaxis among persons at risk for cardiovascular disease
- Childhood immunizations
- Smoking cessation & smoking cessation counseling
- Screening for problem drinking
- Vision screening among seniors

4. Some Preventive Services (Like Many Disease Treatments) Offer Poor Economic Value

- When effectiveness or safety is uncertain
- When the absolute probability of benefit is low
 - low-risk patients
 - frequent rescreening
 - aggressive treatment targets

The Importance of Context

Who is doing the preventive intervention?

- Individuals
- Health care system
- Community-based programs



Questions About the Economics of Prevention

- How much time do interventions and outcomes require?
- Are the absolute benefits on the population level too modest?
- Does prevention delay but not avert spending?
- Does it cost more if people live longer?

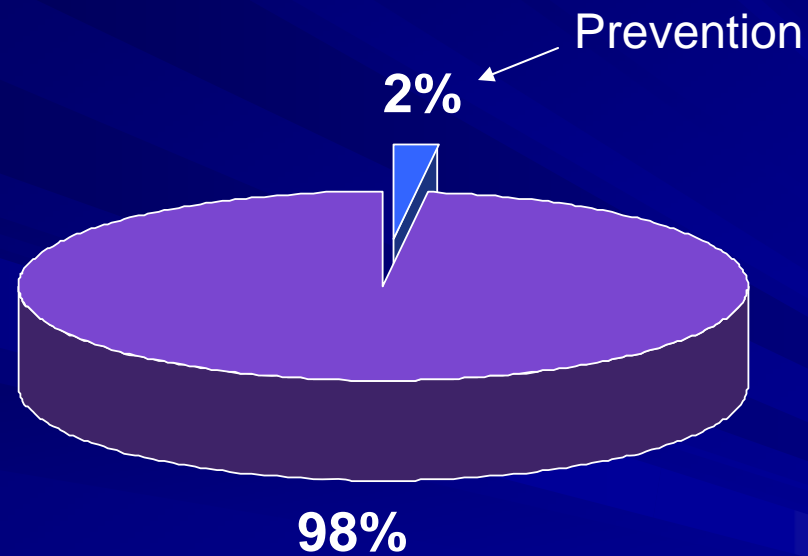
Economic Advantages of Preventive Interventions

- Single risk factors influence multiple diseases
- Long time horizon is an opportunity for “compounding” of benefits (e.g., childhood obesity)
- Intangible benefits of good health (longer, healthier life; workforce productivity; competitiveness; broader societal effects)

Community-Based Prevention

- Many community-based preventive measures are (a) effective, and (b) offer high economic value, and (c) some produce net savings
- Some community or public health measures outperform clinical interventions
- Collaborations between clinical and community interventions offer high yield

The Double Standard



\$2 Trillion Health Care Budget, United States

Leveling the Playing Field

1. Does the intervention improve health outcomes, and how strong is the evidence?
2. If the intervention is effective, is it cost-effective (a good value)?
3. Can other options achieve better results, or the same results at lower cost?



Prevention



Diagnostic Tests
Treatments

Conclusion

- The spending crisis requires a comprehensive search for ways to shift spending from services of low economic value to those with high cost-effectiveness or net savings.
- Whether they are preventive or otherwise is not the point.
- What matters is getting good value on the dollar.
- It makes sense to invest in a core package of preventive services that are effective and offer good economic value.
- Services that yield net savings are obvious priorities, but shifting spending to high-value services offers the greatest gains.
- We can't afford to apply this test to prevention only and not to the rest of medical care.

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