

# **Future Perspectives On Diabetes**

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What can we do for seniors?

**Slaying the Medicare Dragons:  
The Promise of Innovation**

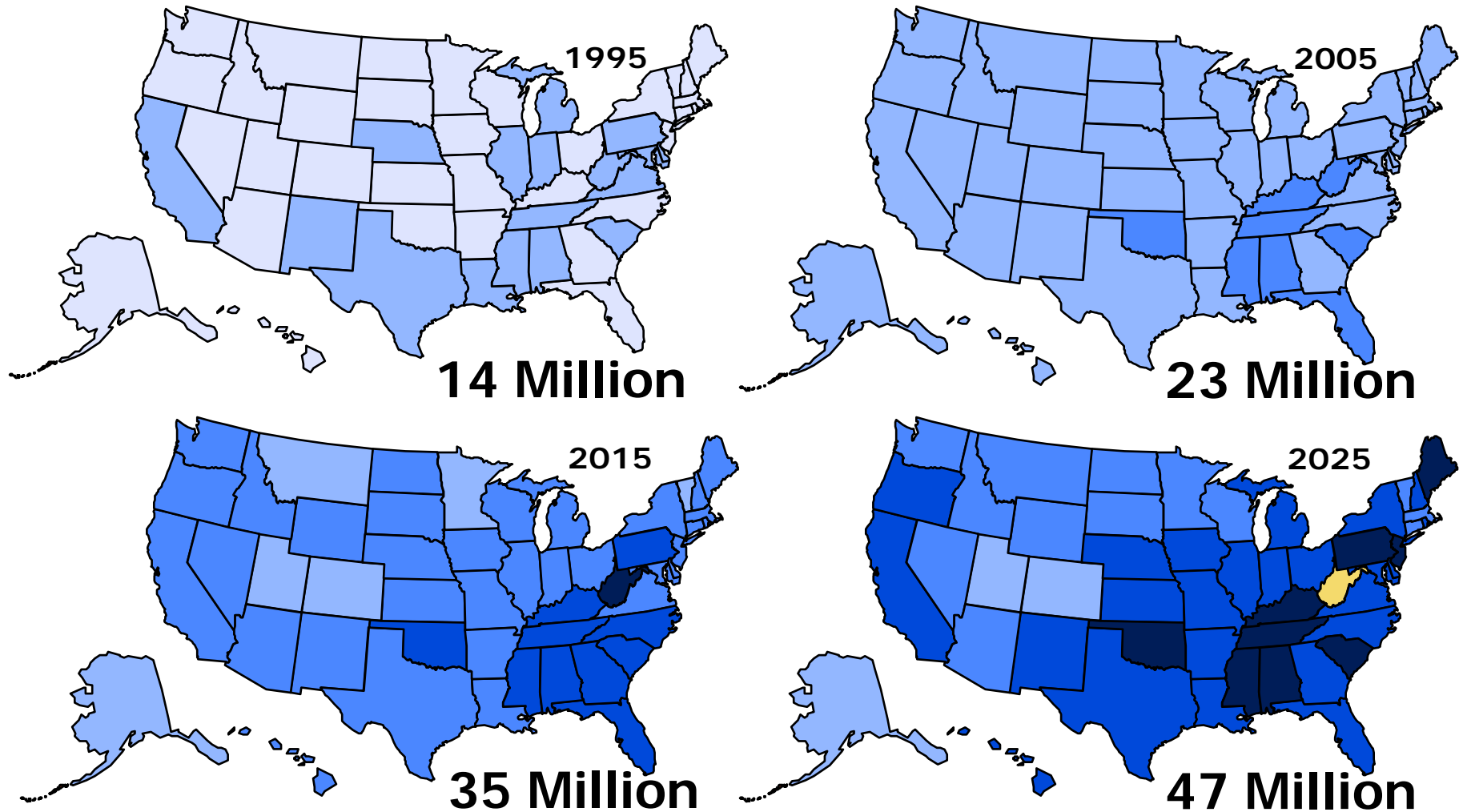
**October 17, 2007**

**Dr. William Rowley**

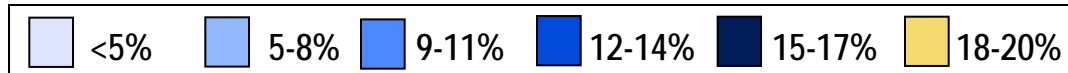
Institute for Alternative Futures



# Increasing Prevalence of Diabetes



Diagnosed &  
undiagnosed



Sources: CDC Behavioral Risk Factor Surveillance System; Narayan. Impact of Recent Increase in Incidence on Future Diabetes Burden. *Diabetes Care* 2006;29:2114-2116



# Risks of Diabetes

## Lifetime Risk



52%



49%



31%



45%

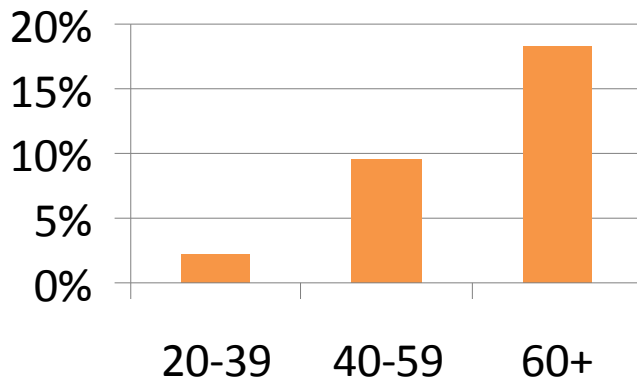


40%



27%

### Prevalence Increases with Age

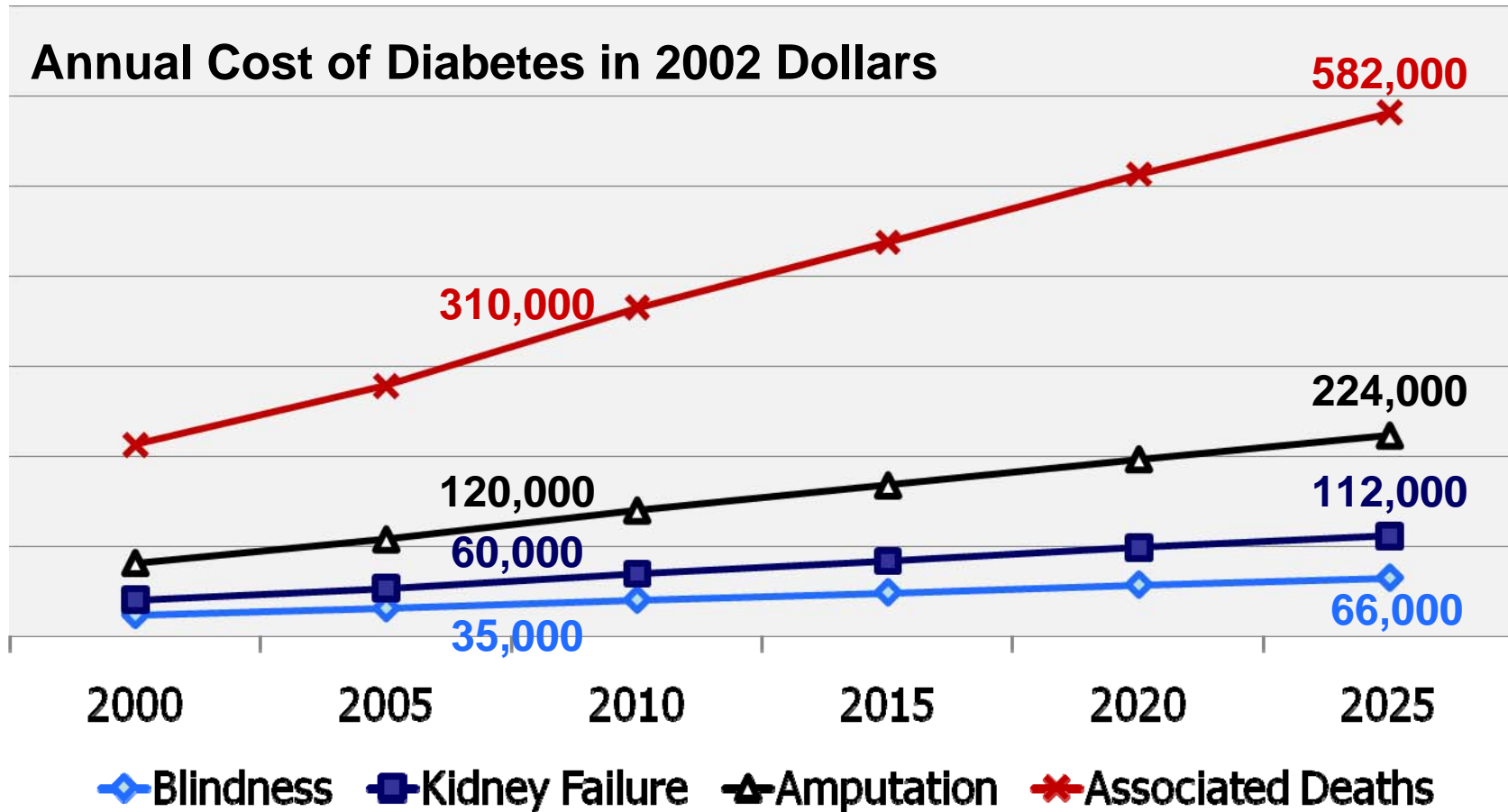


### If onset at 50 years old

- Quality of life shortened 14-18 years
- Lifespan shortened 9-14 years
- 65% die of heart disease

# Burden of Diabetes

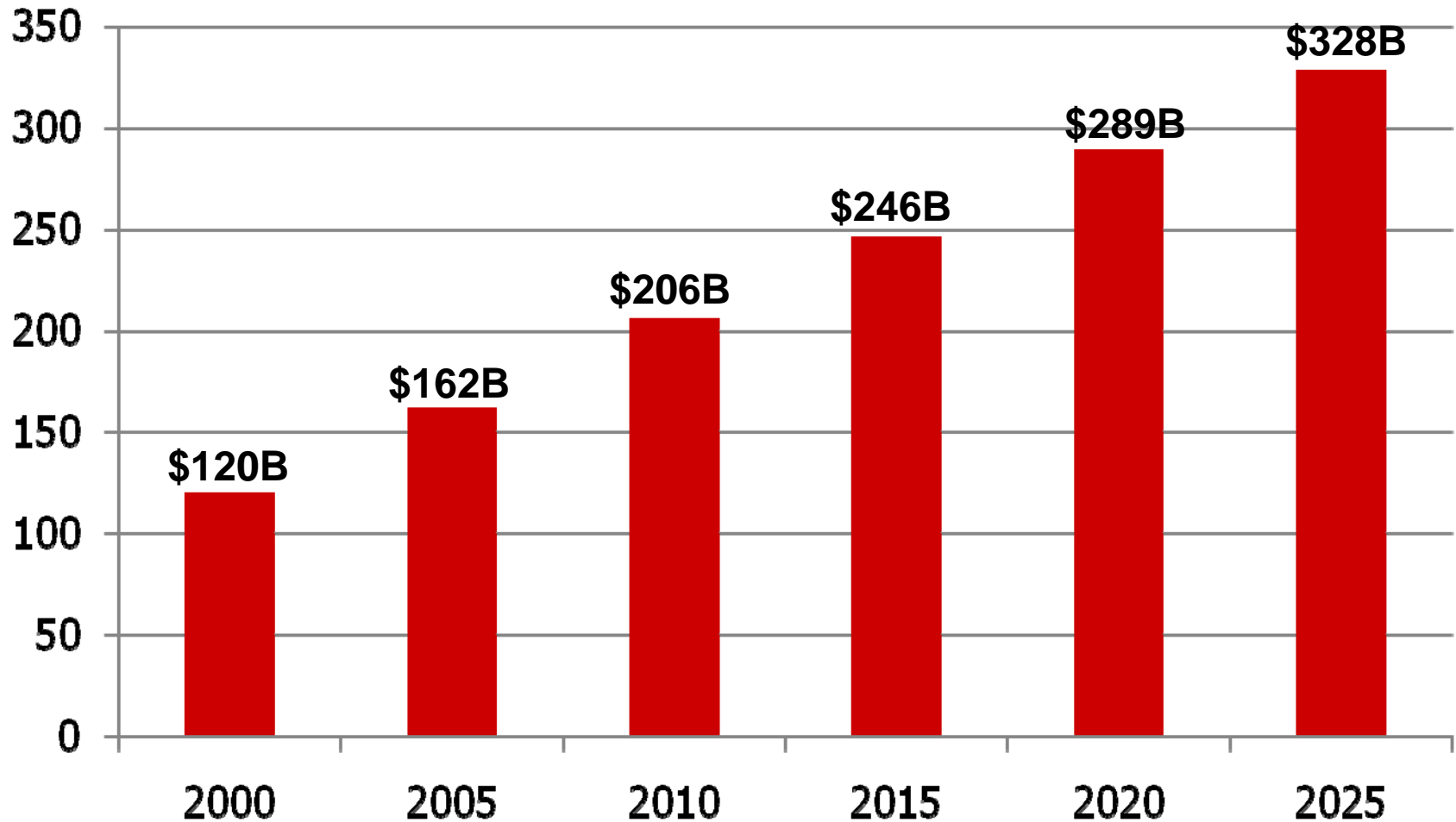
## Americans with Diabetes



Data from CDC and American Diabetes Association projected to 2025

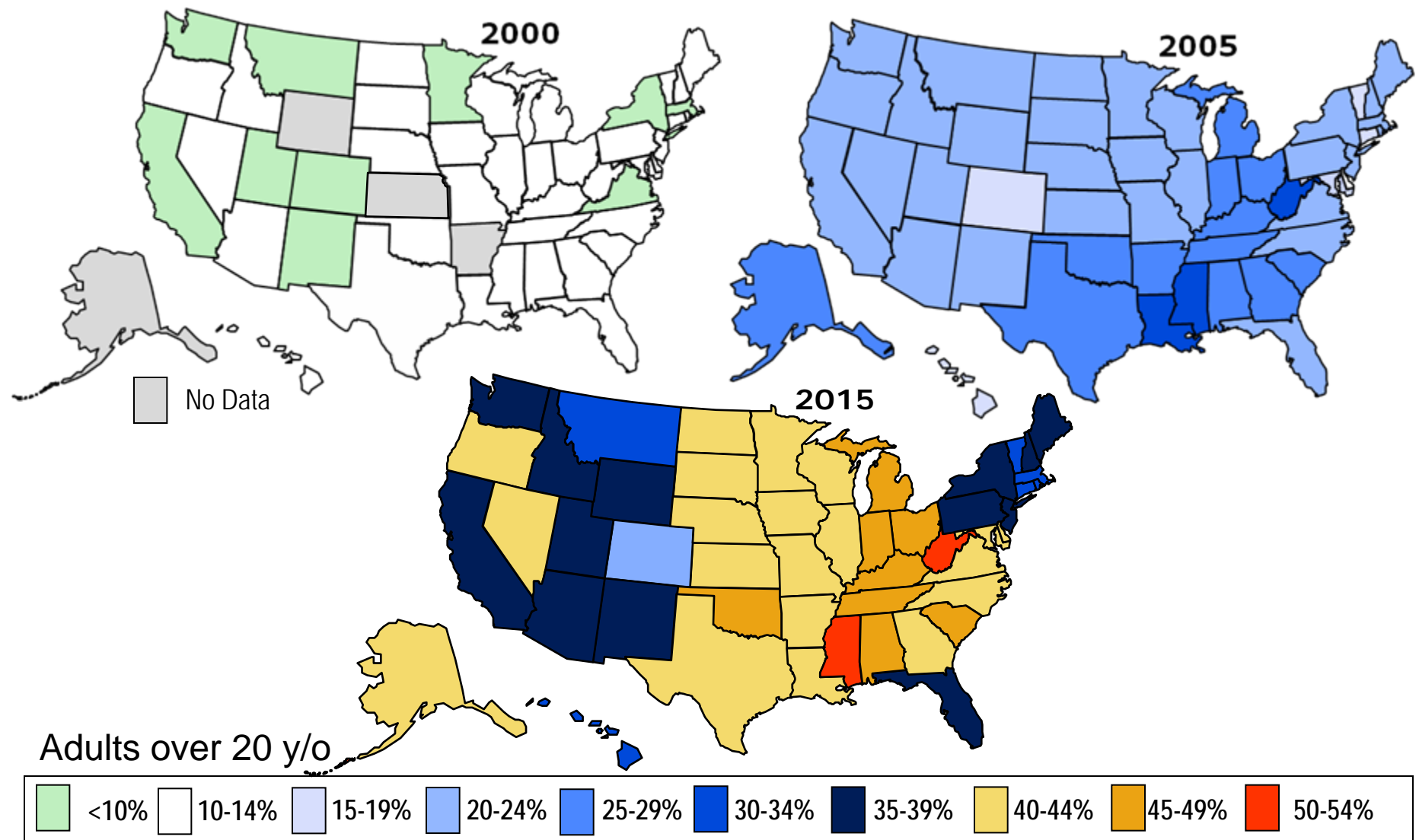


# The Annual Cost of Diabetes



Data American Diabetes Association projected to 2025

# Increasing Prevalence of Obesity



Source: CDC Behavioral Risk Factor Surveillance System

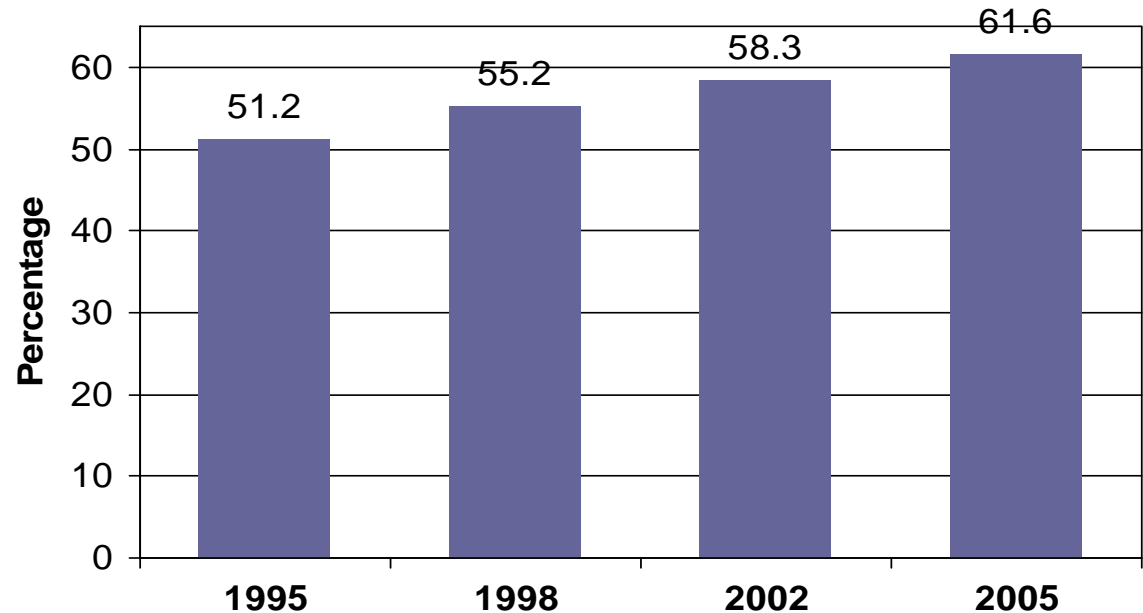
2015 Projection: Wang & Beydoun. The Obesity Epidemic in the United States ... *Epidemiologic Reviews*, 5/17/07



# All it takes is personal responsibility



## 2005 Health Behaviors Survey Percent of Overweight Active Duty



- 13% are obese
- 3,000 separations per year

All it takes is personal responsibility

**Every segment of society  
shares in this  
responsibility**

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**We can't afford all the  
disease we are creating!**

# Prevention at the Societal Level

## Start with children



# Prevention at the Societal Level

## Change the way we eat



# Prevention at the Societal Level

## Universal Design for Active Living



# Prevention at the Societal Level

## Bring Activity Back into Life



# Prevention at the Societal Level

## Bring Activity Back into Work



# Prevention at the Health System Level

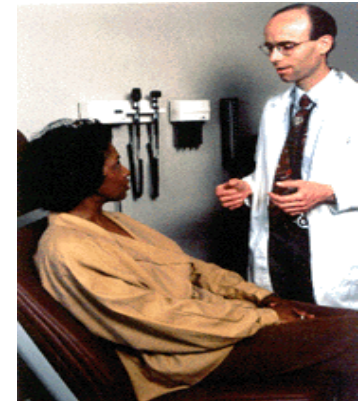
## Lifetime diabetes risk in 18 y/o man

- Normal weight = 20%
- Overweight = 30%
- Obese = 57%
- Very obese = 70%



## 1. Prevention

- Early detection of risk
- Early intervention
  - Education
  - Coaching



# Prevention at the Health System Level

## 2. Screening

- Of 35 million seniors in Medicare, 17 million have undiagnosed diabetes or prediabetes
- Can stop progression of prediabetes to diabetes 71% of time with walking and modest weight loss



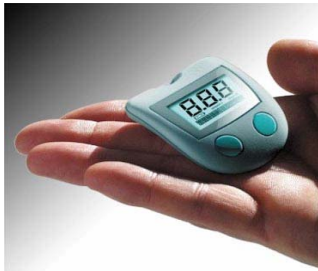
## 3. Behavior Modification



# Effective Management of Chronic Diseases

## Medical Problems

- Diabetes
- HTN
- Dyslipidemia
- Cardiac Risk



**Noninvasive monitoring**



**Wireless capture to electronic record**

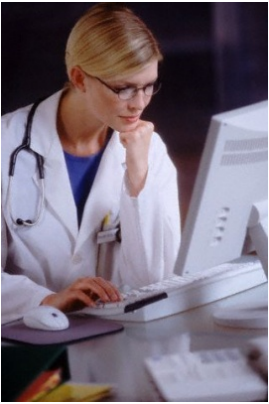


**Targeted Therapies**



# Effective Management of Chronic Diseases

## “Medical Home”



- Collaborative team connected by EHR
- Continuous planned healing relationship
- Address all health problems & risks - coordinated
- Effective evidence-based interventions
- Access to information & coaching
- Shared decision-making & responsibility

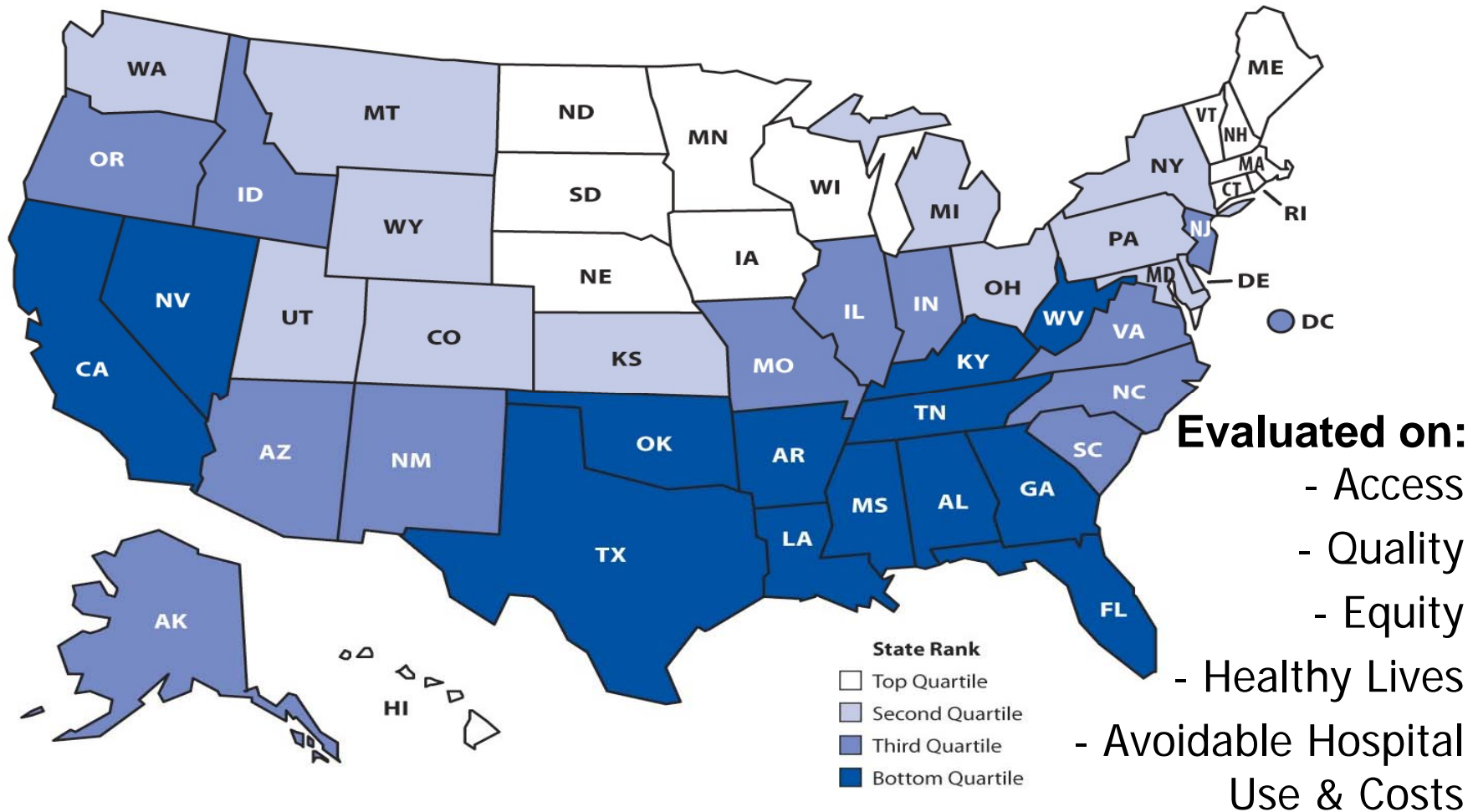
# How Much Could We Prevent?

- Effective prevention could eliminate at least half the cases of diabetes
- Effective management of diabetes could:
  - Avoid or slow peripheral neuropathy by 2/3
  - Reduce amputations by more than 1/2
  - Prevent or delay blindness by 2/3
  - Reduce renal failure by 1/2
  - Reduce death from stroke/heart attack by ~1/3?

***Besides saving lives and reducing suffering  
how many billions would society save?***

# A Time of Great Challenges!

## Overall Health System Performance



Source: Commonwealth Fund State Scorecard on Health System Performance, 2007



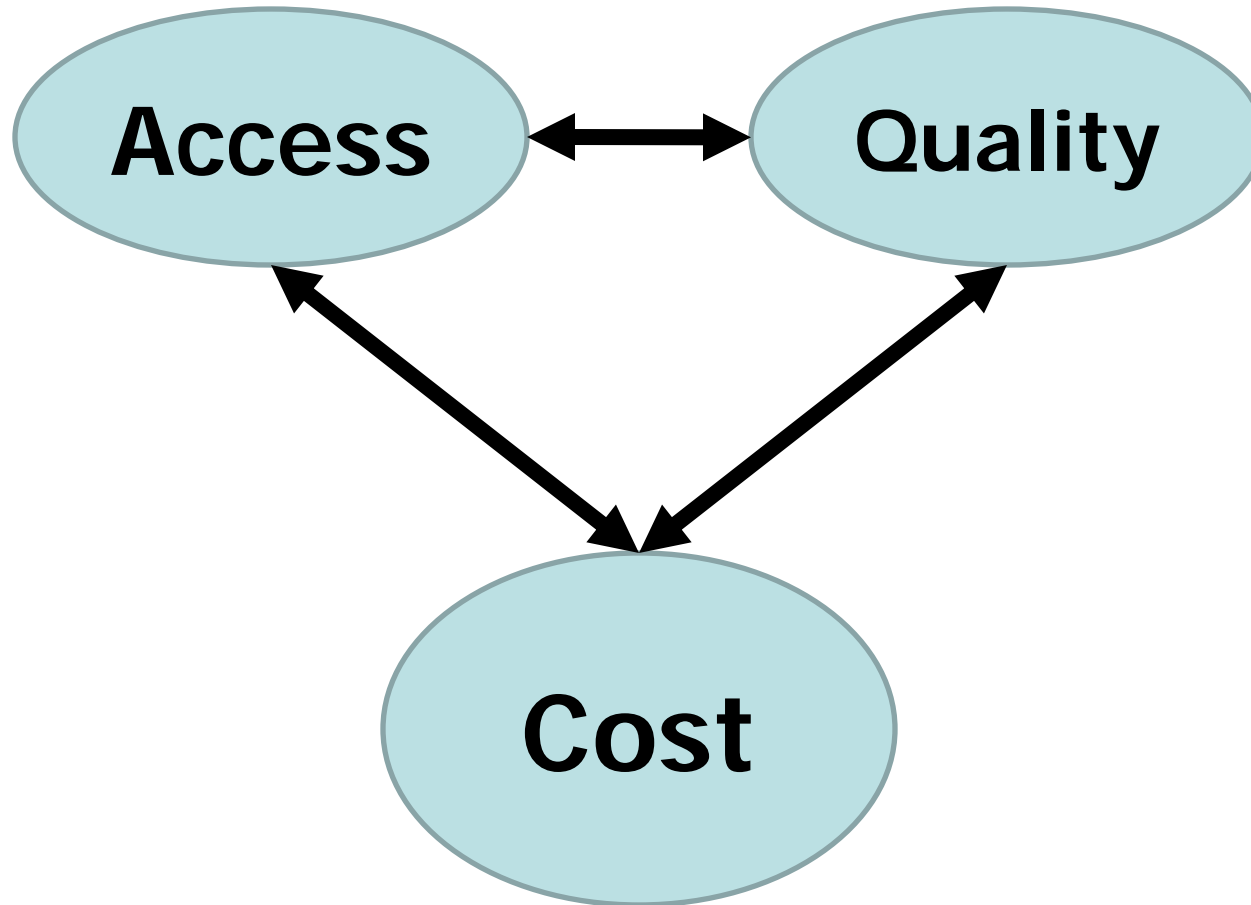
# A Time of Great Challenges!

## Overall Health System Performance

**Better access is closely associated with better quality**

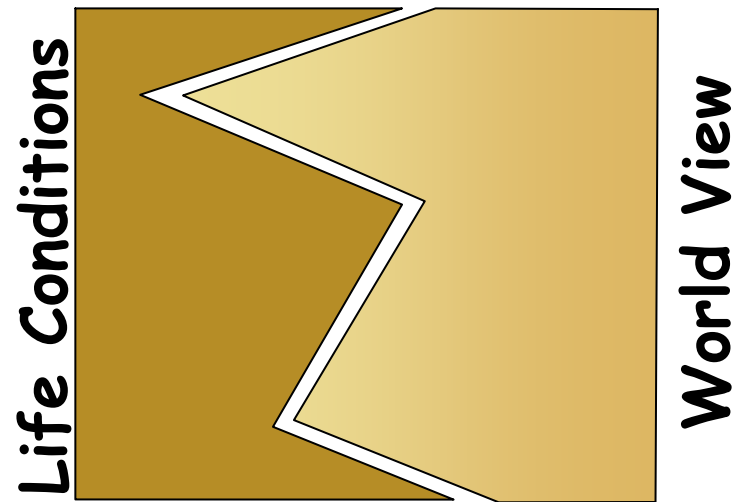
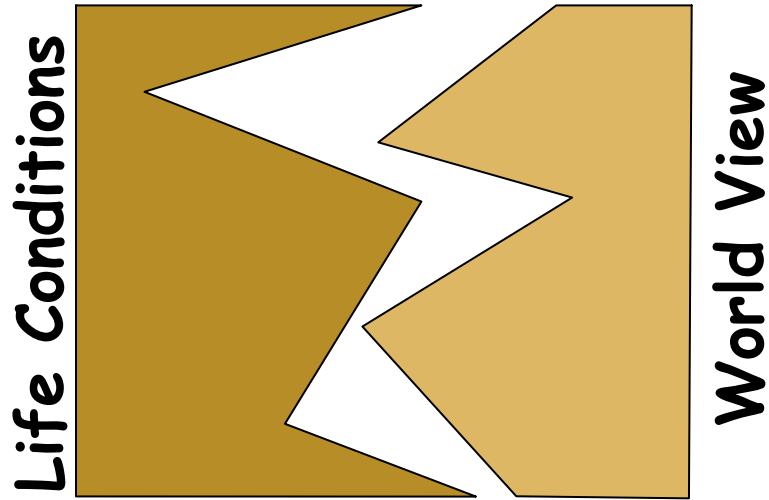
**Higher quality is not associated with higher costs**

# A Time of Great Challenges!



**To get one you need all three**

# The Lesson from the Future



**We adapt to major change by  
changing our minds**

# Summary

- Diabetes is one of the biggest challenges of our aging society
- We will not conquer diabetes until we also address obesity
- We must keep Americans healthy - prevention
- We must keep those with diabetes healthy - effective management of chronic diseases
- If we do these 2 things we will save \$ billions
- To do this we need to change our minds

**We cannot predict the  
future...**

**But we can create it**

**We need to start with a vision  
for a future worth creating**