



Just What the LTC Medical Director Ordered

What Lies Beneath

November 9, 2004

Agenda

- **Morbidity Compression – The Million Dollar Question**
- **The Obesity Epidemic**
- **Diabetes**
- **Alzheimer's Disease**
- **Increased Applicant Savvy**

Morbidity Compression

Present



Live longer, same onset morbidity



Live longer, delayed morbidity



Life no longer, morbidity compressed



After Fries; Ann Intern Med. 2003. 139(5):456

The Obesity Epidemic

- **Fast Facts**

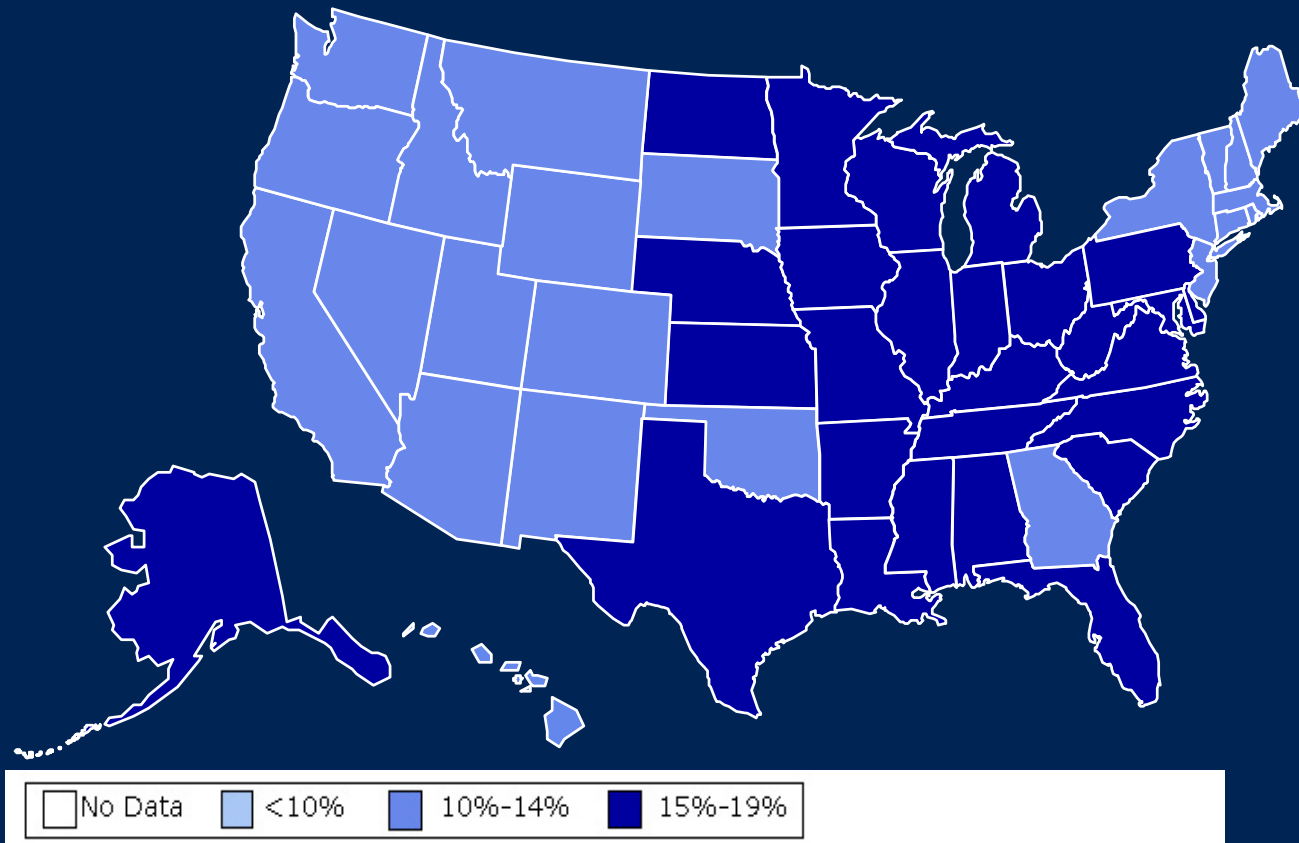
- 61% US adults overweight or obese
- 300,000 deaths/year in US associated with obesity
- Economic cost of obesity in US estimated at \$ 117B (2000)
 - Approximately 8% healthcare budget
- Less than 1/3 adults engage in recommended physical activity
- 40% US adults do not participate in any leisure time physical activity

Adapted from: www.surgeongeneral.gov/topics/obesity/calltoaction/fact_glance.htm

The Obesity Epidemic

Obesity Trends* Among U.S. Adults
BRFSS, 1995

(*BMI ≥ 30 , or ~ 30 lbs overweight for 5'4" woman)

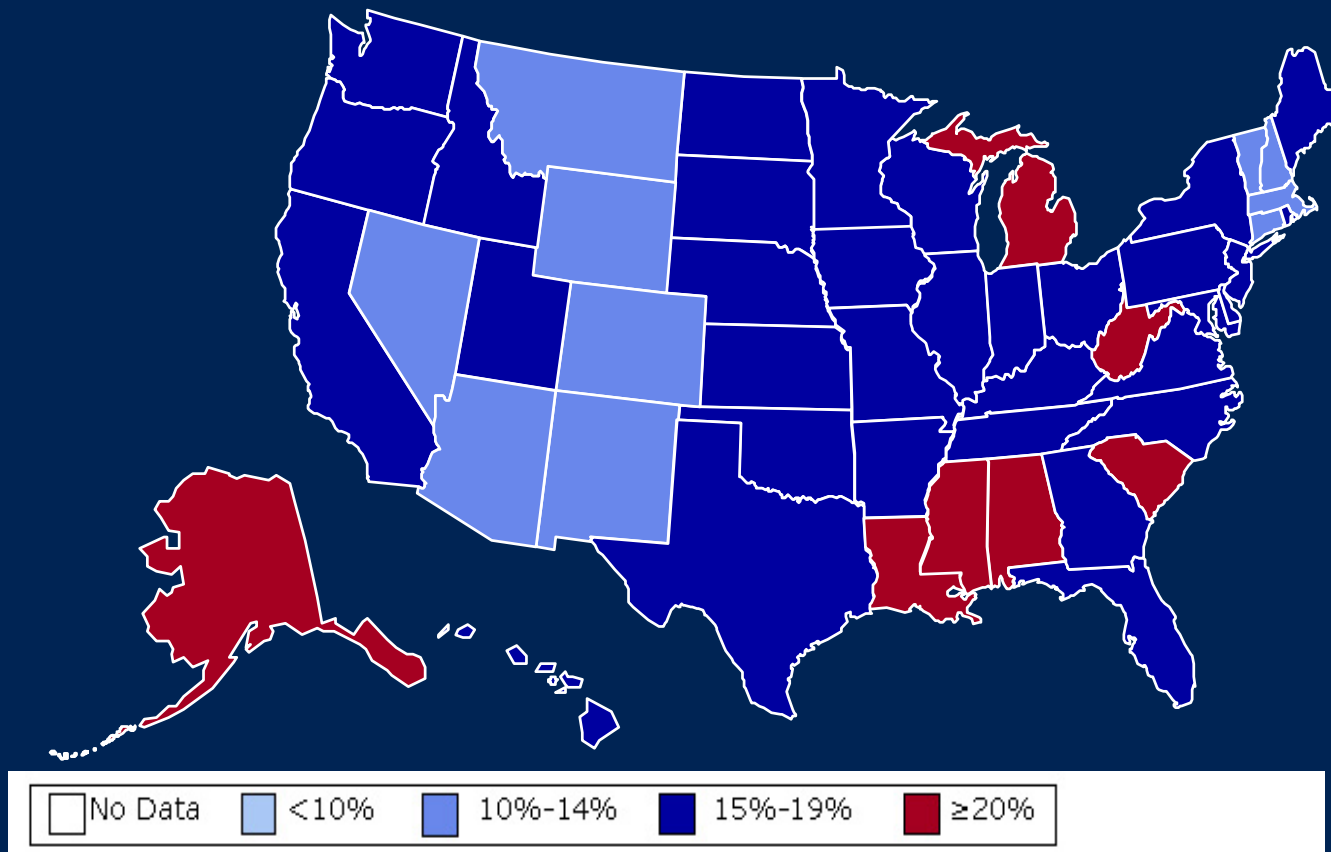


Source: Mokdad A H, et al. *J Am Med Assoc* 1999;282:16, 2001;286:10.

The Obesity Epidemic

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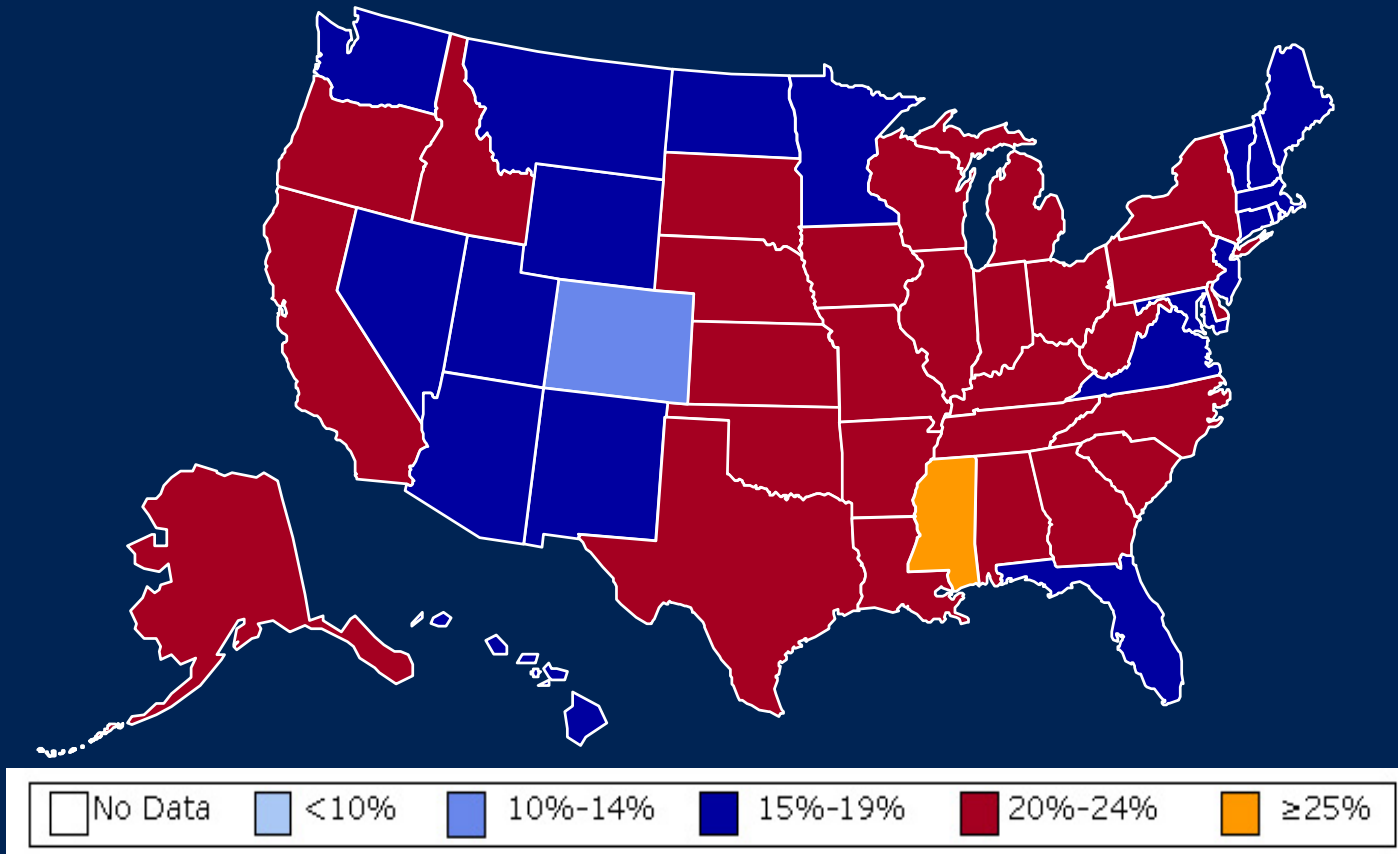
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The Obesity Epidemic

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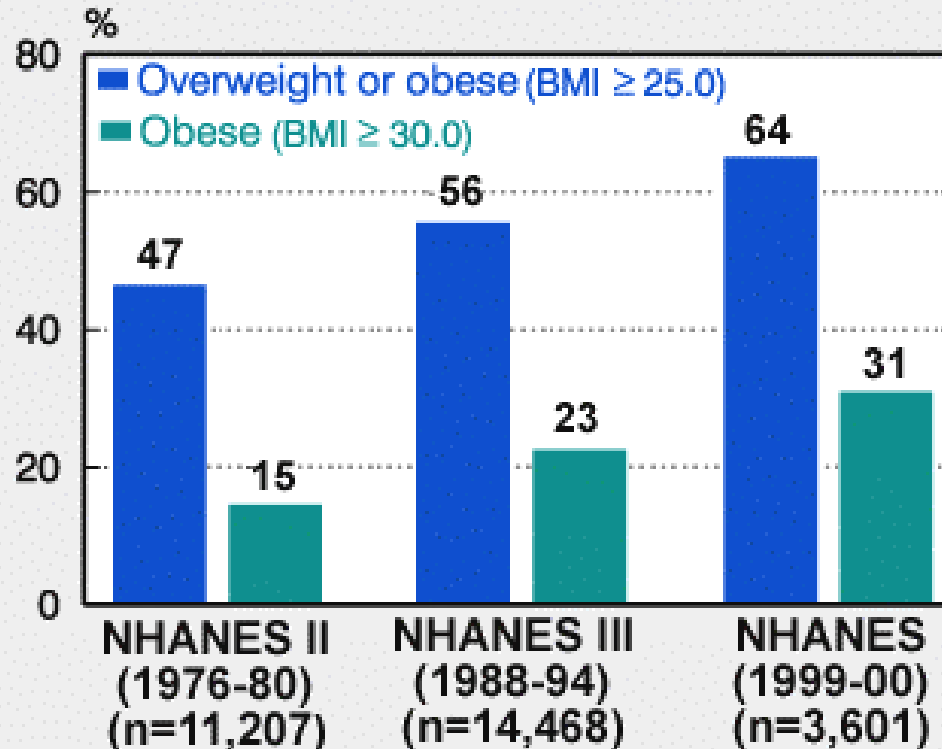
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The Obesity Epidemic

Figure 2. Age-adjusted* prevalence of overweight and obesity among U.S. adults, age 20-74 years



*Age-adjusted by the direct method to the year 2000 U.S. Bureau of the Census estimates using the age groups 20-39, 40-59, and 60-74 years.

The Obesity Epidemic

- **Health Consequences**
 - Hypertension
 - Type 2 Diabetes/Metabolic Syndrome
 - Coronary Artery Disease
 - Stroke
 - Osteoarthritis
 - Sleep Apnea
 - Cancer
 - Depression

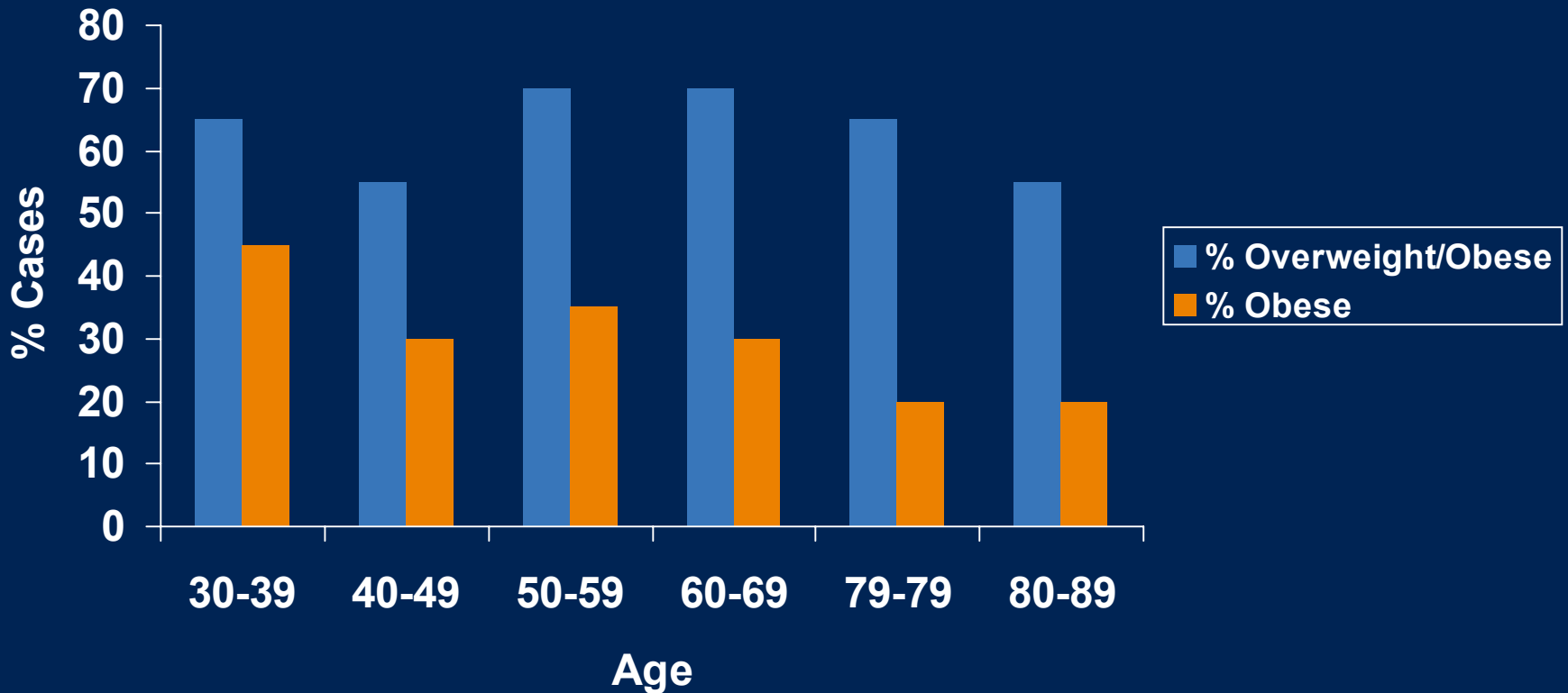
The Obesity Epidemic

RR Developing Diabetes

BMI	Women (Nurses Health Study)	Men (Health Professionals Study)
18.5-21.9	1.0	1.0
22.0-24.9	2.2	1.8
25.0-29.9	8.1	5.6
30.0-34.9	17.9	18.2
≥ 35	30.1	41.2

From Warren G. Thompson, MD presentation, 111th Annual Meeting AAIM, Orlando, October 2002

The Obesity Epidemic



Percentage of patients with hip osteoarthritis who were overweight or obese, according to age ($N = 1021$).

Marks, R. , Allegrante, JP. *Body mass indices in patients with disabling hip osteoarthritis*. Arthritis Res 2002, 4:112-116.

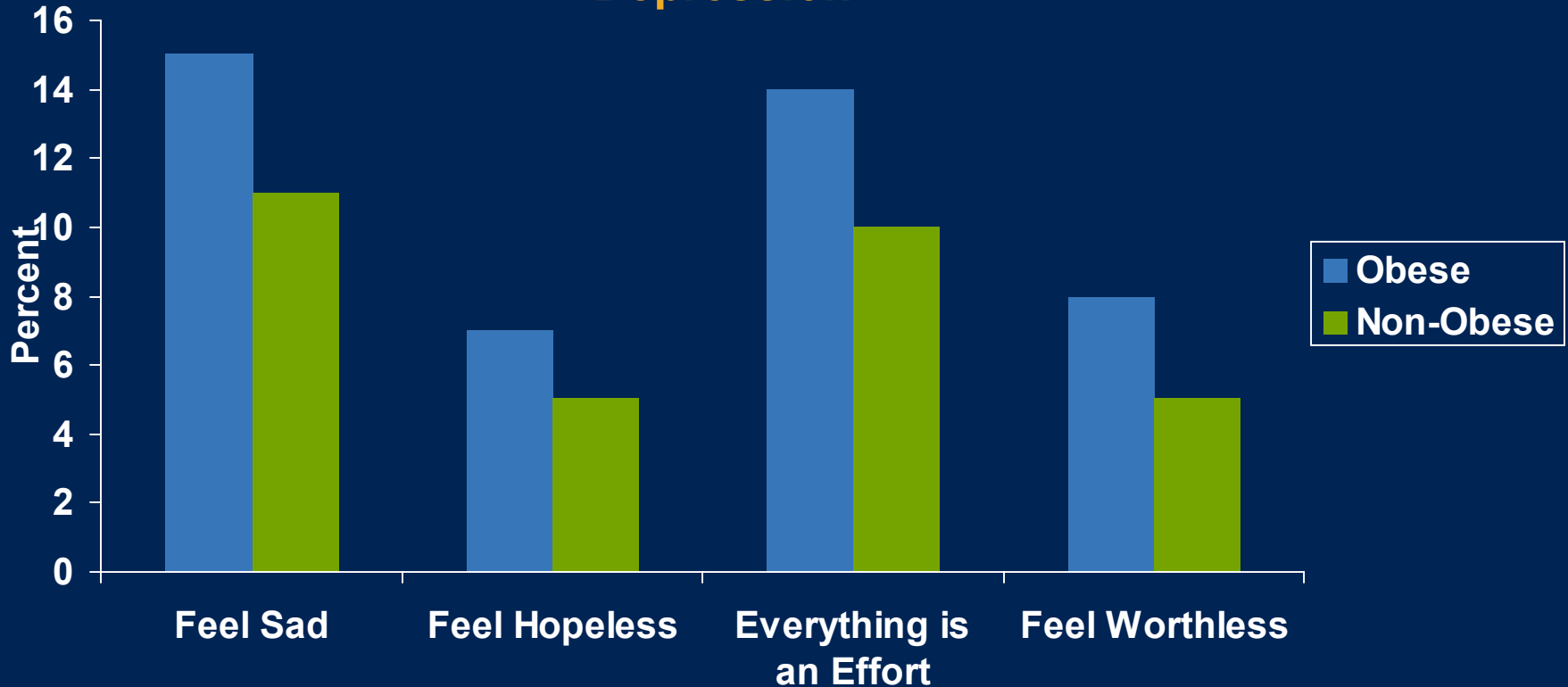
The Obesity Epidemic

Type of Cancer	Relative Risk BMI 25-30 kg/m ²	Relative Risk BMI \geq 30 kg/m ²
Colorectal (men)	1.5	2.0
Colorectal (women)	1.2	1.5
Female Breast (postmenopausal)	1.3	1.5
Endometrial	2.0	3.5
Kidney	1.5	2.5
Esophageal	2.0	3.0

Adapted from Calle EE, Kaaks R. Overweight, obesity, and cancer: Epidemiological evidence and proposed mechanisms. *Nat Rev Cancer* 4(8):579-91 (2004)

The Obesity Epidemic

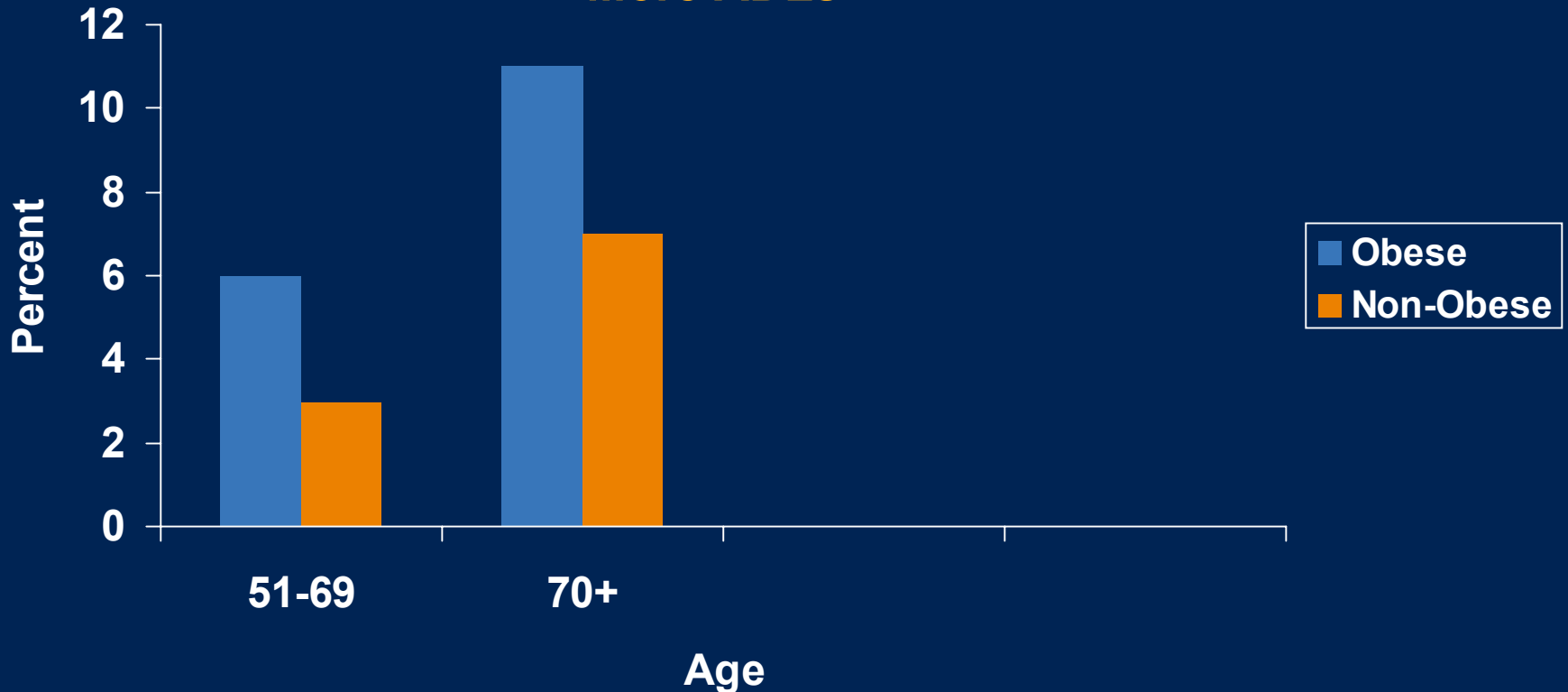
Proportion of Adults 51+ Reporting Symptoms of Depression



Center on an Aging Society analysis of data from the 2000 National Health Interview Survey

The Obesity Epidemic

Proportion of Adults 51+ Having Difficulty with 3 or More ADLs



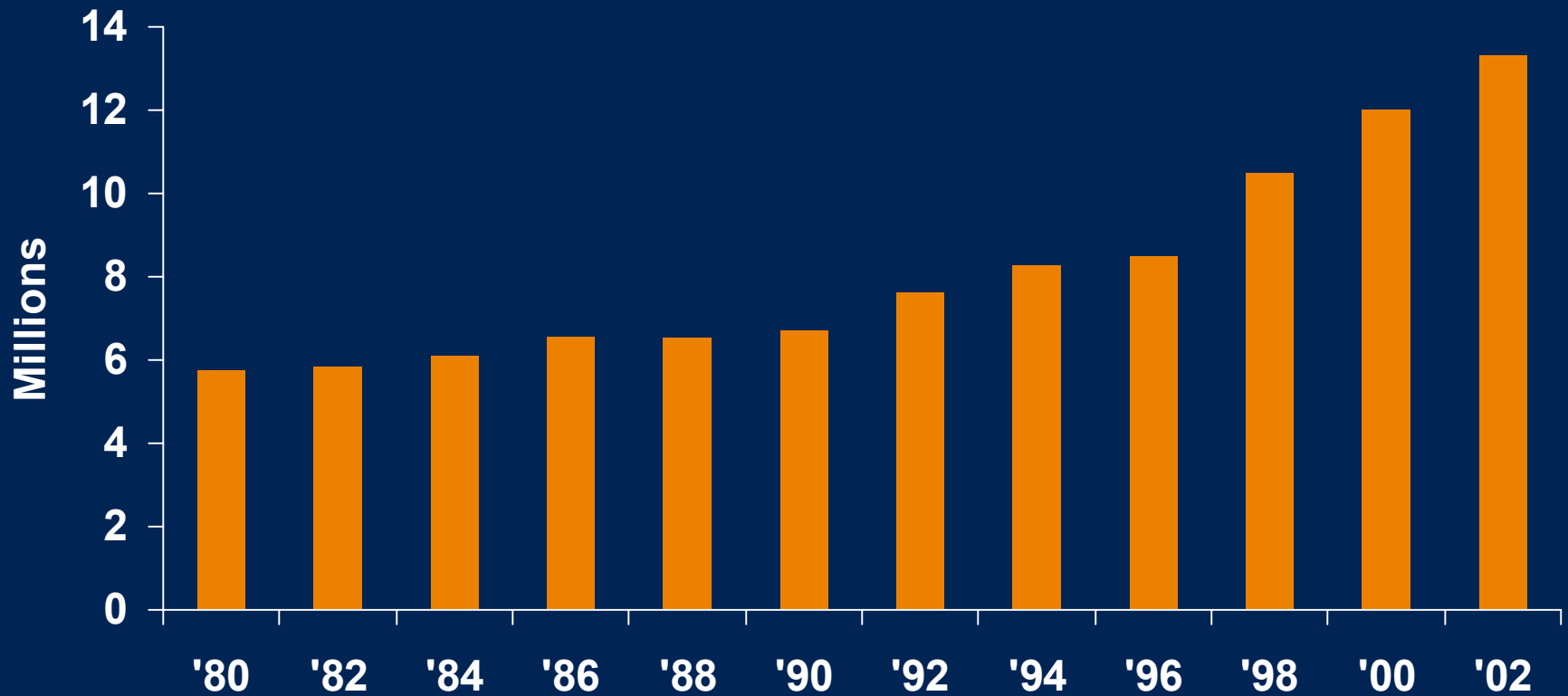
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The Obesity Epidemic

- **UnumProvident Short Term Disability Experience (1996-2003)**
 - 4000% increase fibromyalgia, chronic fatigue syndrome, irritable bowel syndrome
 - 100% increase hypertension
 - 100% increase diabetes
 - 78% increase musculoskeletal disorders
 - 63% increase in cancer
 - 46% increase in back disorders
 - 17% increase cardiovascular disease

http://www.unumprovident.com/newsroom/news/corporate/08182004_Obesity.aspx

Diabetes



<http://www.cdc.gov/diabetes/statistics/prev/national/tablepersons.htm>

Diabetes

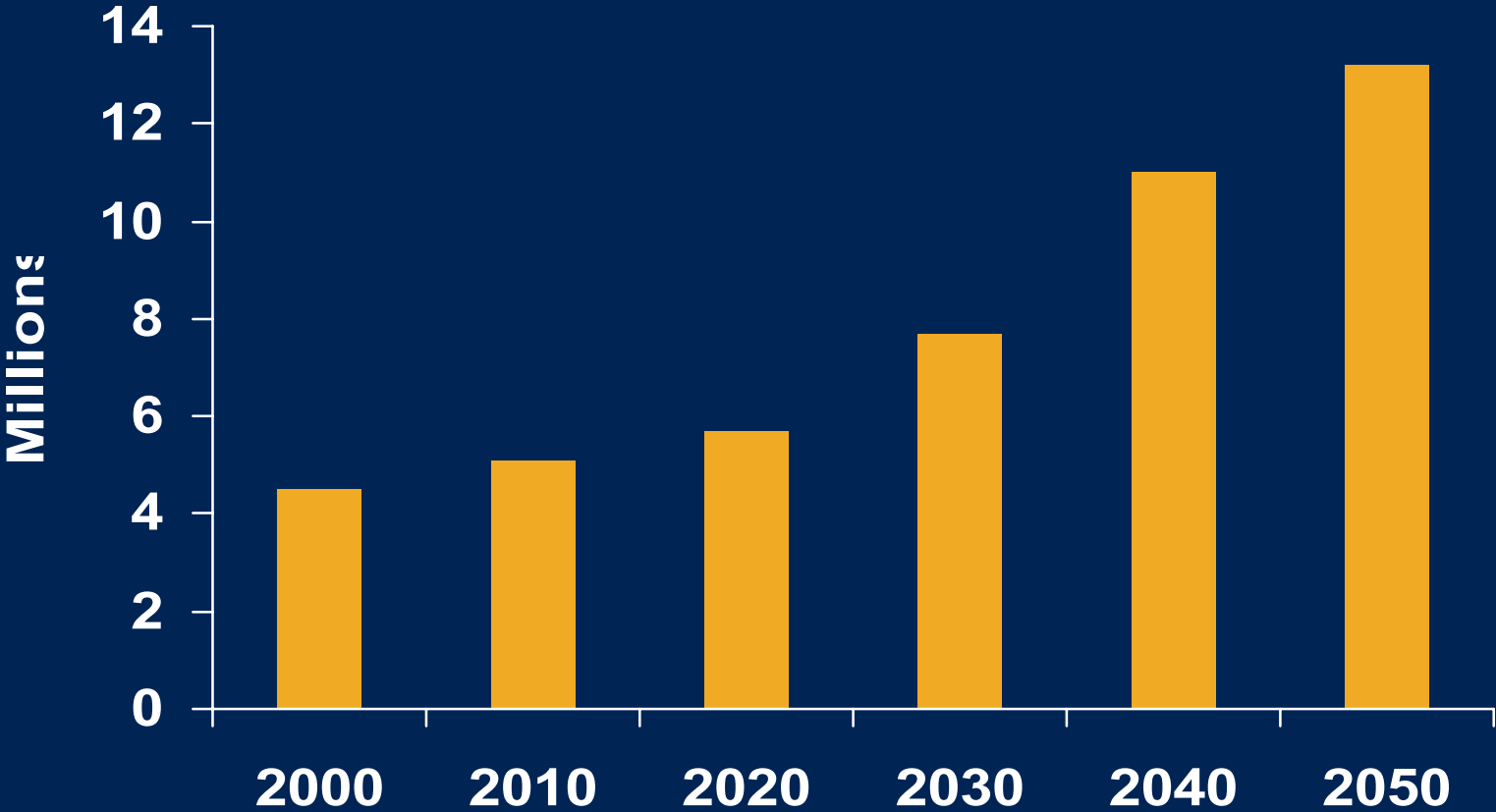
- **Heart Disease – 2 – 4X Risk**
- **Hypertension – 73%**
- **Blindness - #1 Cause Ages 20-74**
- **Kidney Failure - #1 Cause (44%)**
- **Nerve Damage – 60-70%**
- **Non-Traumatic Amputation – 60% of Cases**

<http://www.cdc.gov/diabetes/pubs/estimates.htm#complications>

Alzheimer's Disease (AD)

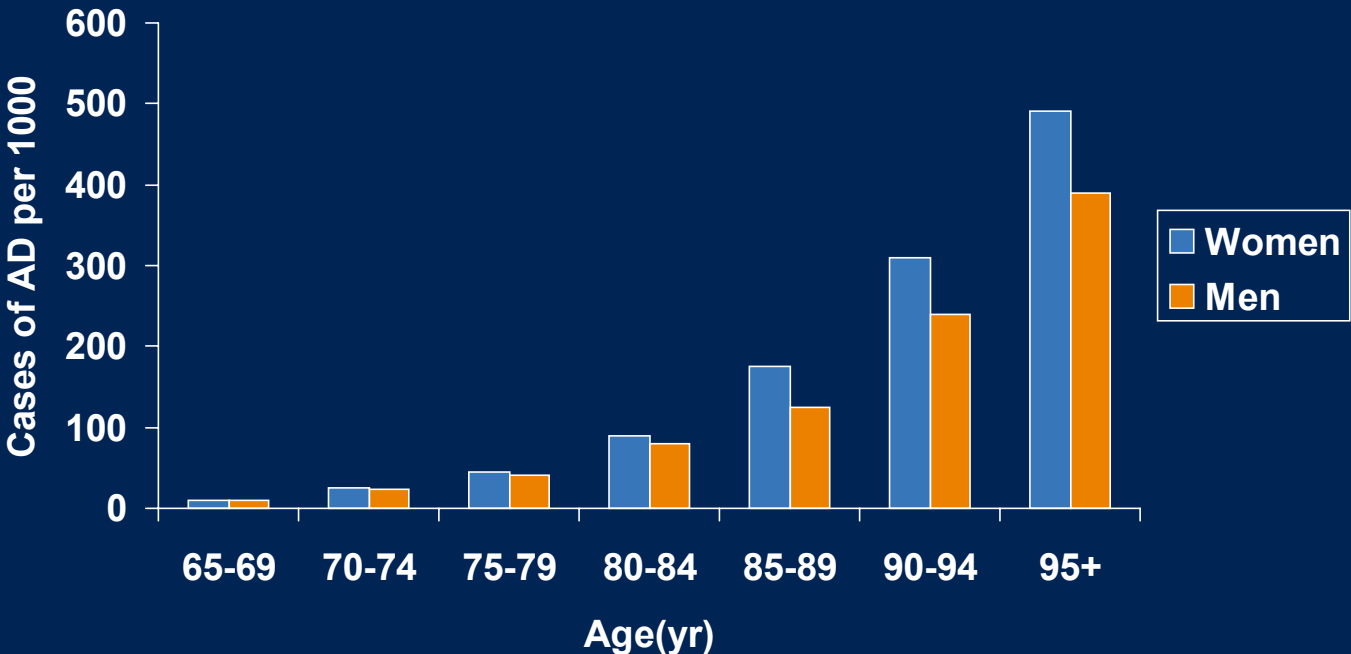
- **AD is the most common cause of dementia in those >65**
- **Affects 10% of people over the age of 65 and 50% of people over the age of 85**
- **Annual treatment costs = \$100 billion**
- **Costs increase as disease progresses**
- **AD is the fourth leading cause of death in the US**
- **The overwhelming majority of patients live at home and are cared for by family and friends**
- **Make up 50% of all nursing home beds**

Alzheimer's Disease



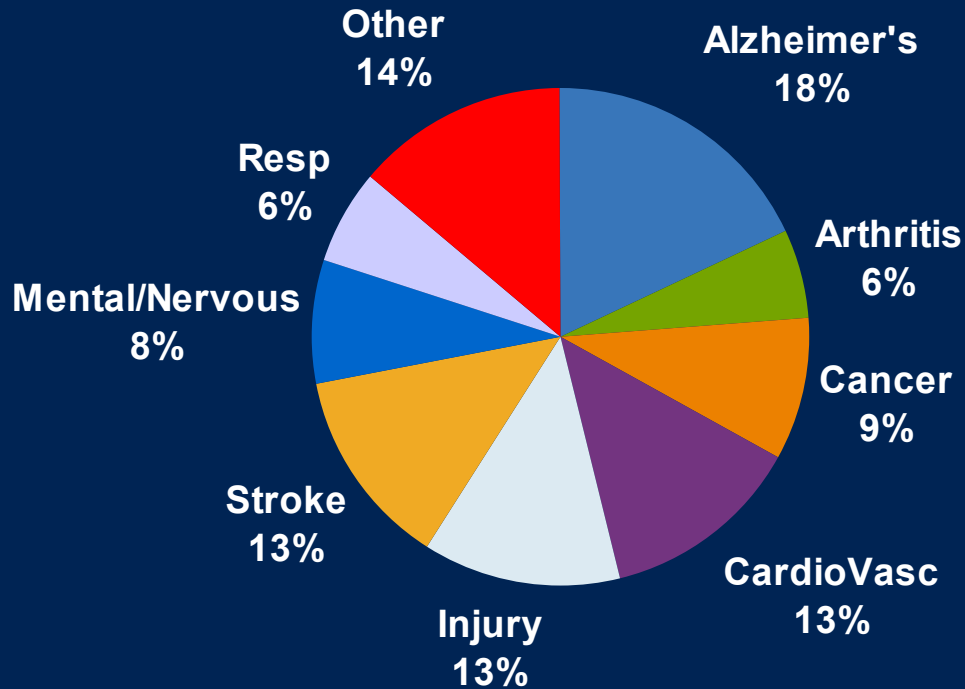
source: NIH News, 8/18/03

Alzheimer's Disease



Adapted from Nussbaum RL, Ellis CE. N Engl J Med 2003;348-1356

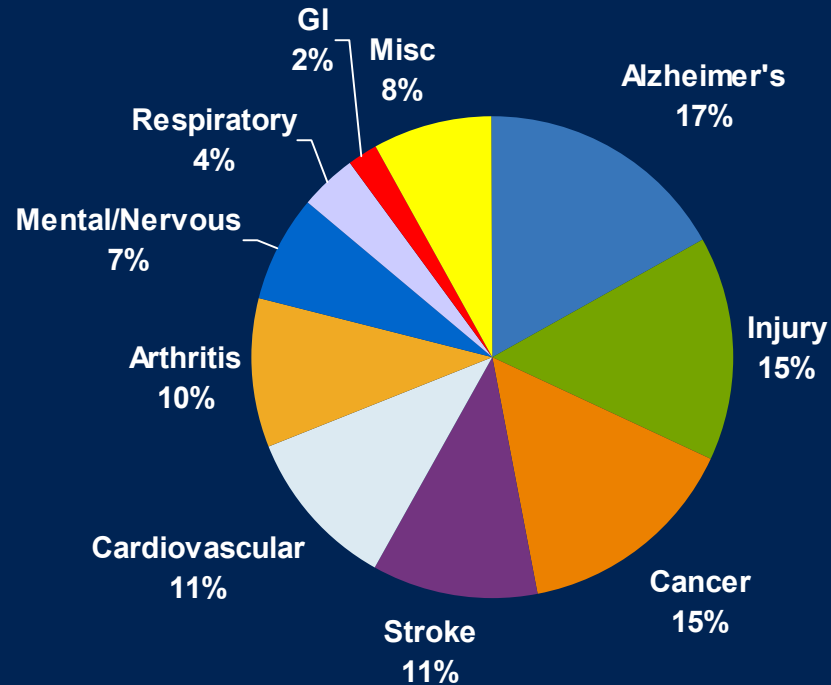
Alzheimer's Disease



NH Claims by Diagnosis

SOA Intercompany Experience Study, 2002

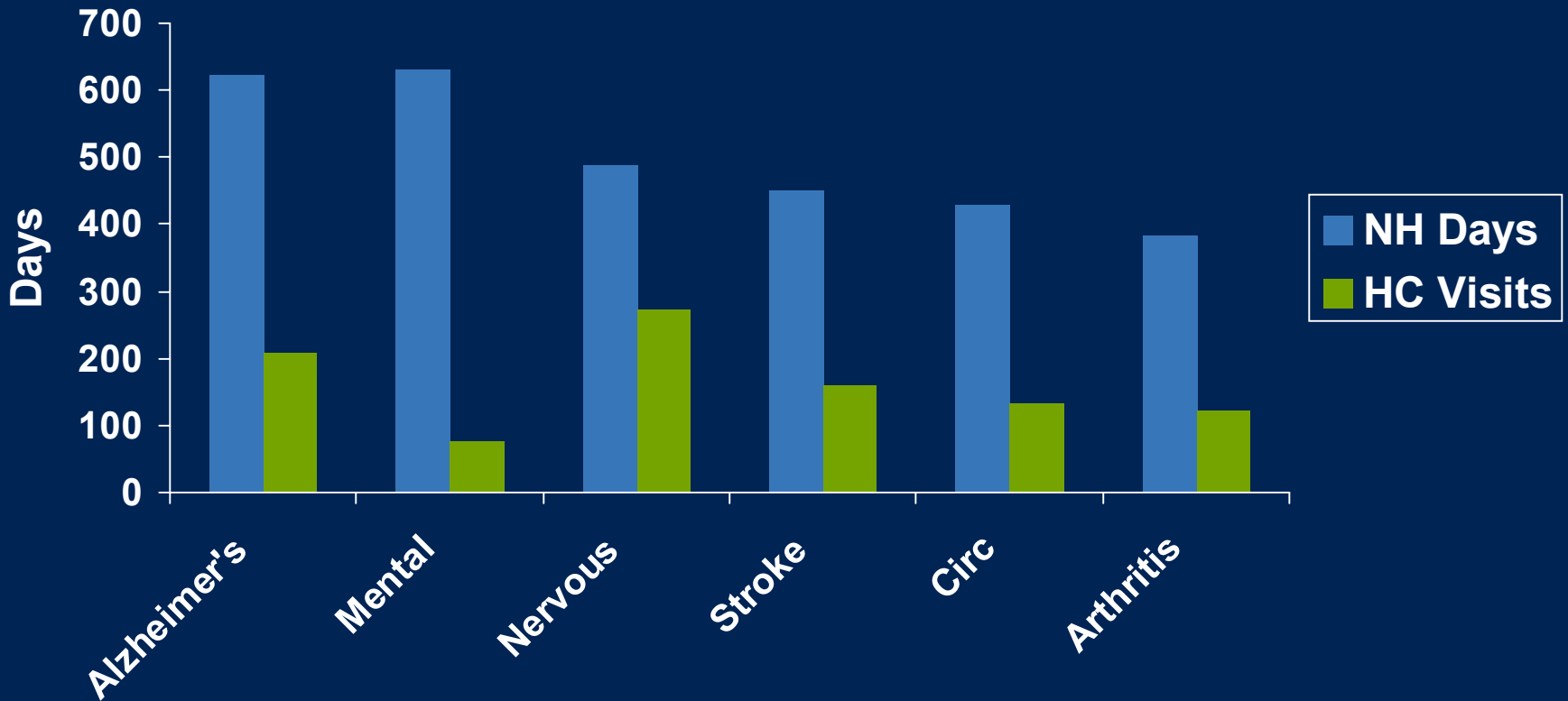
Alzheimer's Disease



HC Claims by Diagnosis

SOA Intercompany Experience Study, 2002

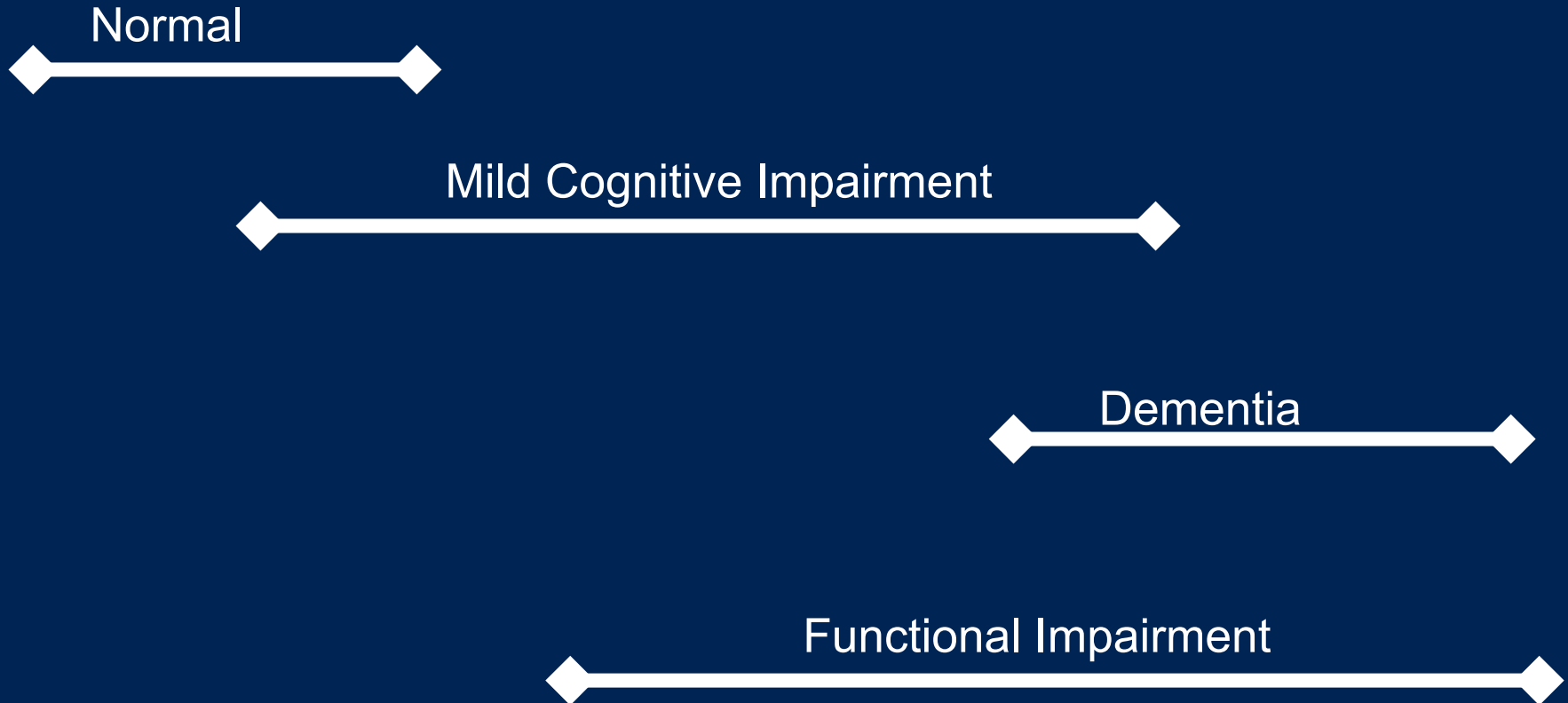
Alzheimer's Disease



SOA Intercompany Experience Study, 2002

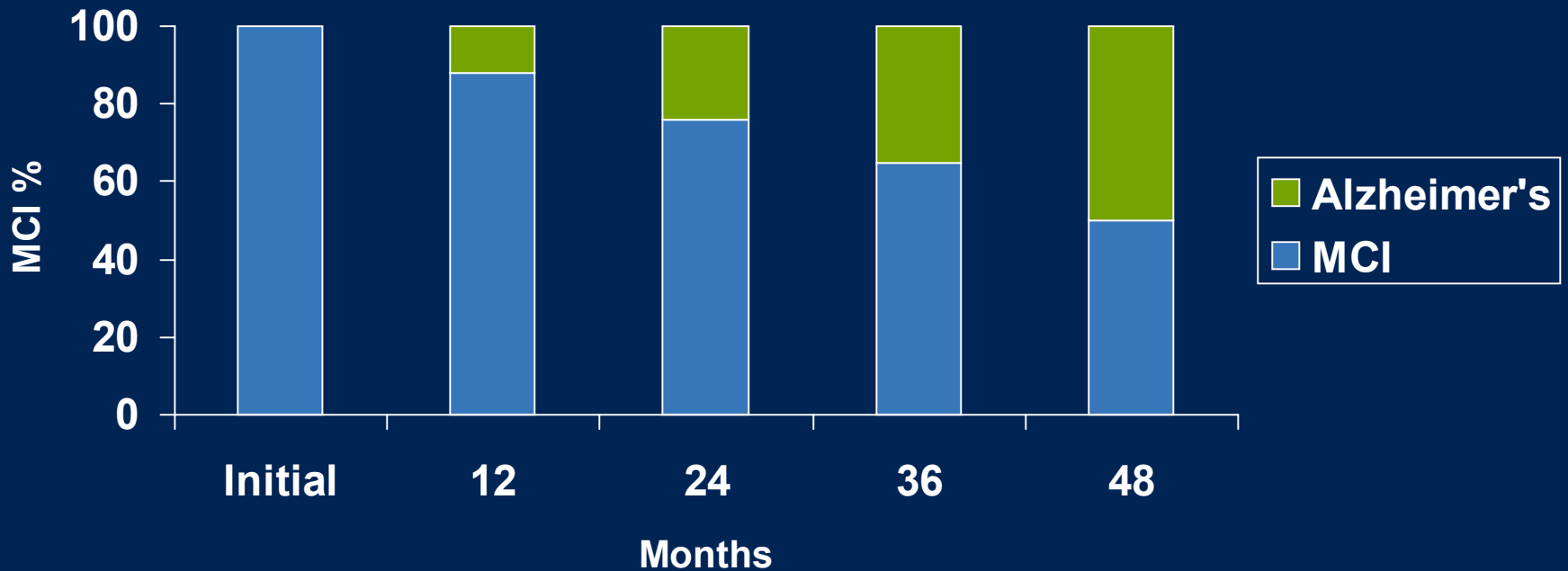
Alzheimer's Disease

Cognitive Changes



Alzheimer's Disease

Annual Conversion Rate MCI to Dementia



From: *Aging, Dementia and How to Tell the Difference*. Galvin J. Second Annual GEFA LTC Medical Advisory Board 2003

Alzheimer's Disease

Cognitive Testing

Test	Sensitivity	Specificity
MMSE	59-92%	62-92%
SPMSQ	55-92	72-87
7-Minute	92	96
DWR	89-96	98-100
MCAS	97.5	98.5

The Savvy Applicant

- **Find LTCi Requirements On Line**
- **In Home Testing**
 - Diabetes
 - HIV
- **Genetic Testing**
 - Over 900 tests available
- **Total Body Scan**
- **Non-Invasive Screening**
 - Vascular disease
 - Osteoporosis



