

Depression and Chronic Medical Illness

**Wayne J. Katon, MD
University of Washington**

Depression and Chronic Medical Illness

- Increased prevalence of major depression in the medically ill
- Depression amplifies physical symptoms associated with medical illness
- Comorbidity increases impairment in functioning
- Depression decreases adherence to prescribed regimens
- Depression is associated with adverse health behaviors (diet, exercise, smoking)
- Depression increases mortality

Adverse Bidirectional Interaction

Major Depression

- Smoking
 - Sedentary lifestyle
 - Obesity
 - Lack of adherence to medical regimens
 - Psychophysiologic
 - ↓ Insulin sensitivity
 - ↑ Autonomic NS
 - ↑ Inflammatory markers
-
- Medical illness at earlier age
 - Poor symptom control
 - ↑ functional impairment
 - ↑ complications of medical illness
 - ↑ mortality
-

Major Depression Prevalence: Chronic Medical Illness

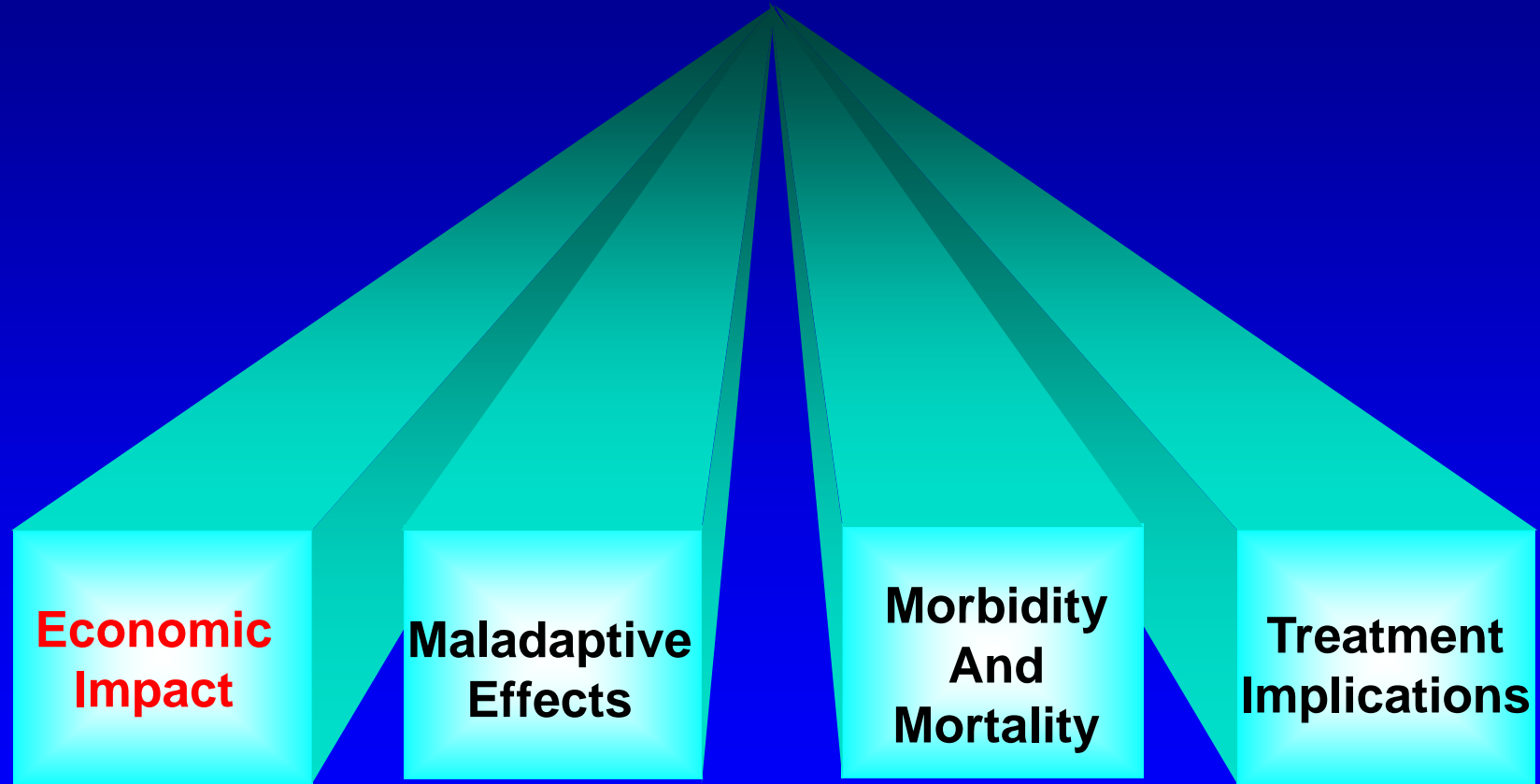
- Heart disease 15 to 23%
- Diabetes 11 to 12%
- Chronic obstructive pulmonary disease (COPD) 10 to 20%

Depression Prevalence Is Especially High in Neurological Illness

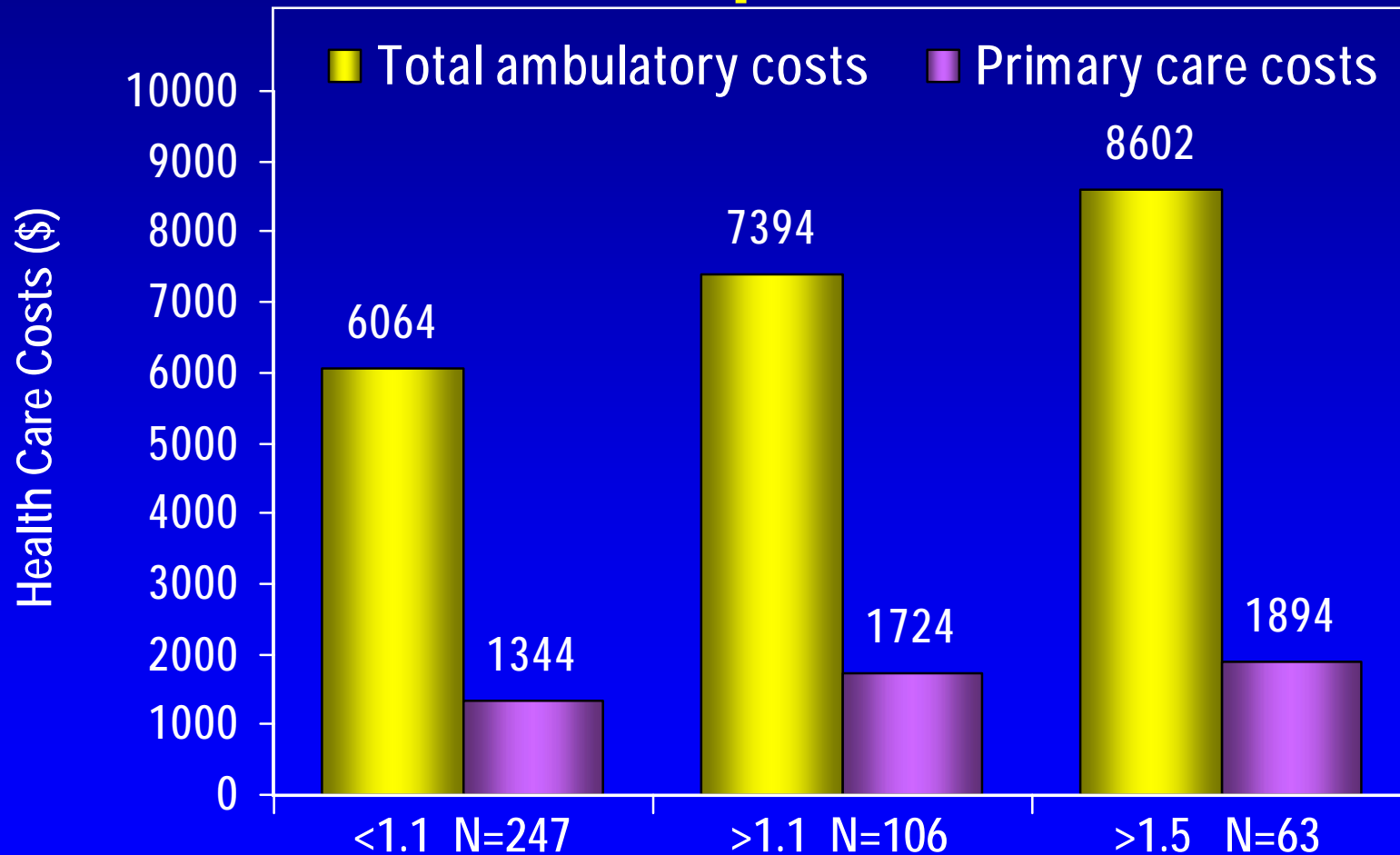
Lifetime prevalence

- Parkinson's disease: 40-50% lifetime prevalence
- Huntington's disease: 40% lifetime prevalence. Depression may antedate chorea by years
- Multiple sclerosis: 10-50% lifetime prevalence
- Alzheimer's disease: 15-55% prevalence
- CVAs: 30-50% lifetime prevalence

Impact of Depression In Chronic Medical Illness



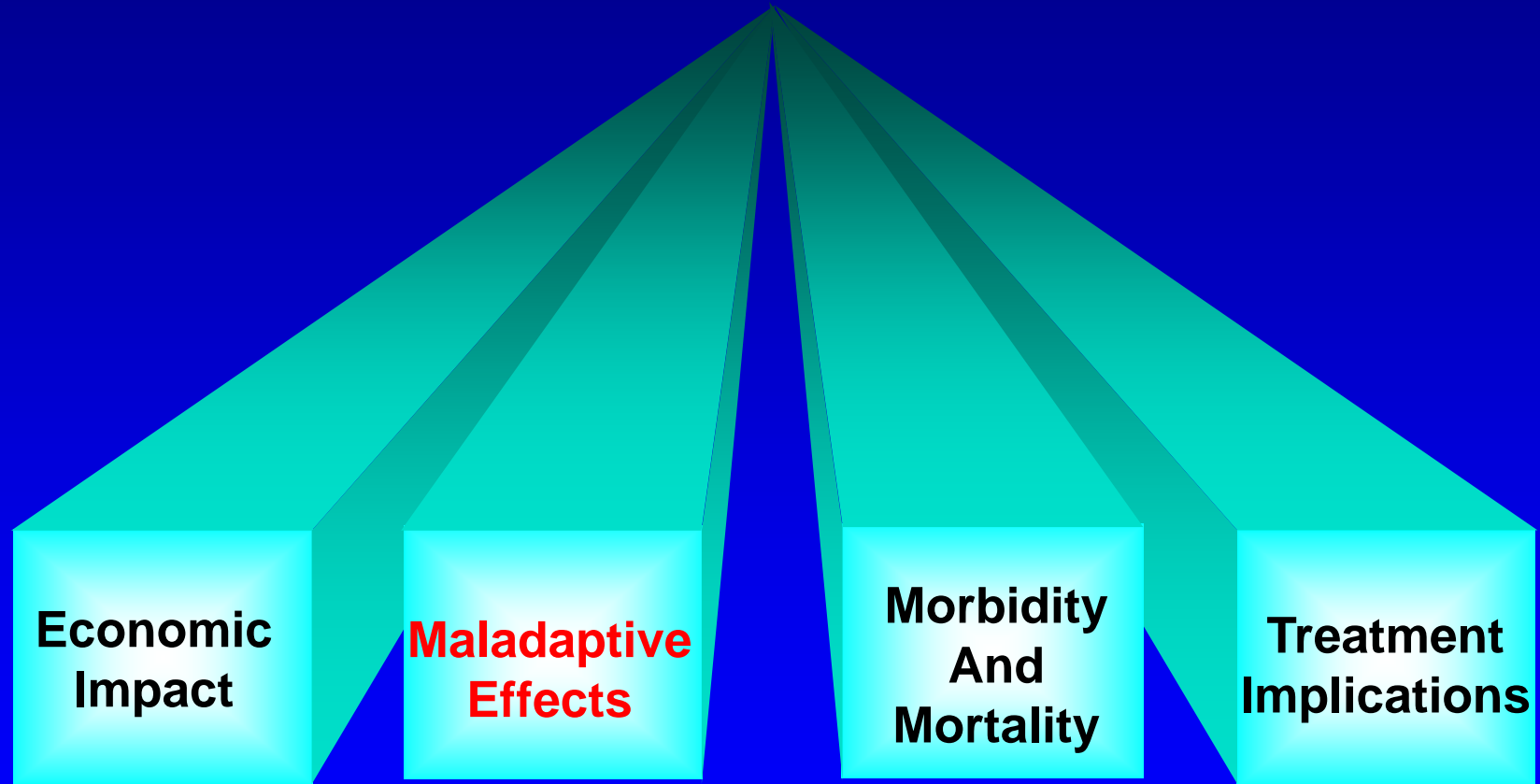
Health Care Costs Are Higher in Patients With Diabetes and Depression



cw3

Title : Health Care Costs in Patients with Diabetes and Depression
christy walsh, 2/21/2005

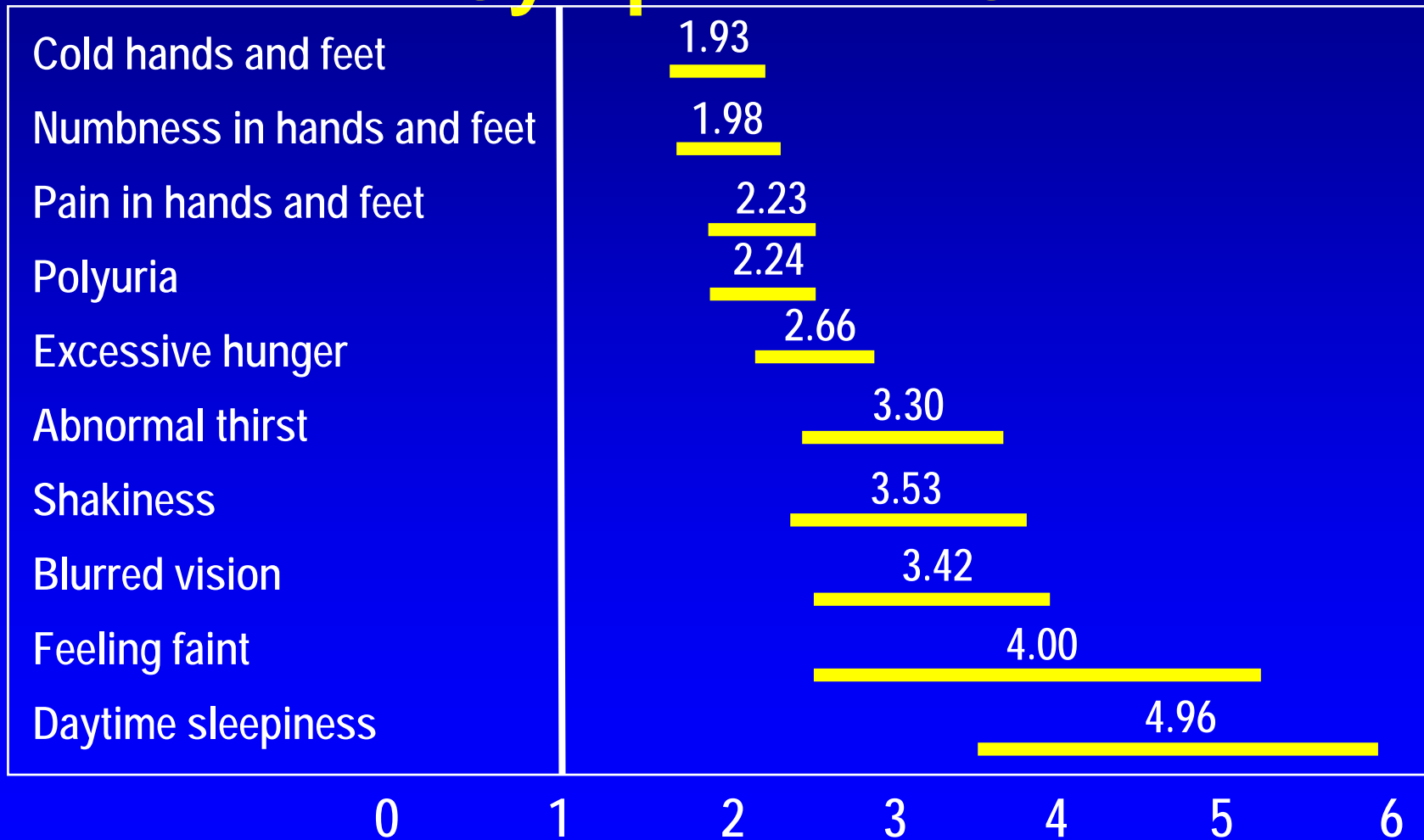
Impact of Depression In Chronic Medical Illness



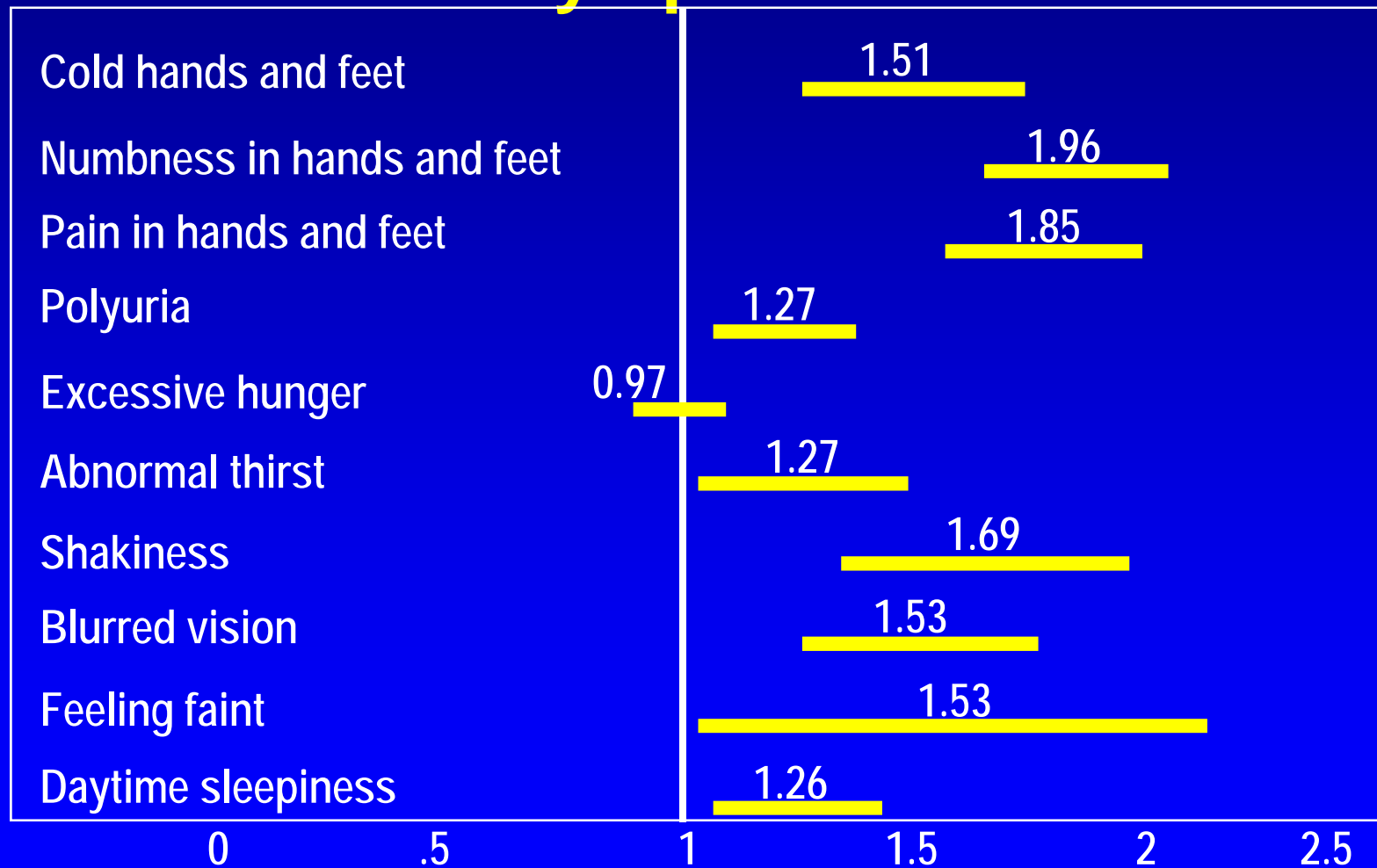
4 Maladaptive Effects of Affective Illness on Chronic Medical Illness

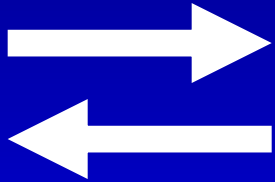
- Amplification of somatic symptoms (especially pain) and functional disability
- Increased adverse health behaviors (obesity, smoking, sedentary lifestyle)
- Decreased self-care and adherence to medical regimens
- Direct maladaptive physiologic effects
 - Modulated by autonomic nervous system, hypothalamus, and immunologic effects

Relationship of Major Depression to Diabetes Symptoms – Odds Ratios



Number of Diabetes Complications (≥ 2) also Increases Number of Diabetes Symptoms

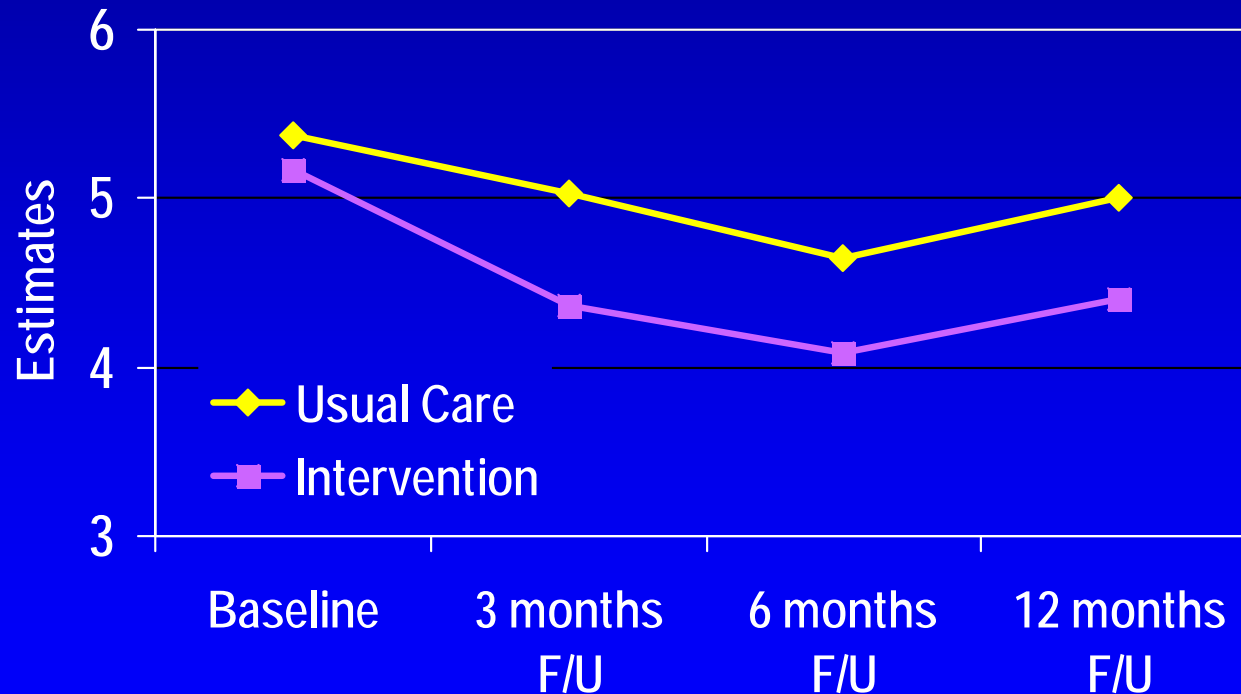


Pain  **Depression**

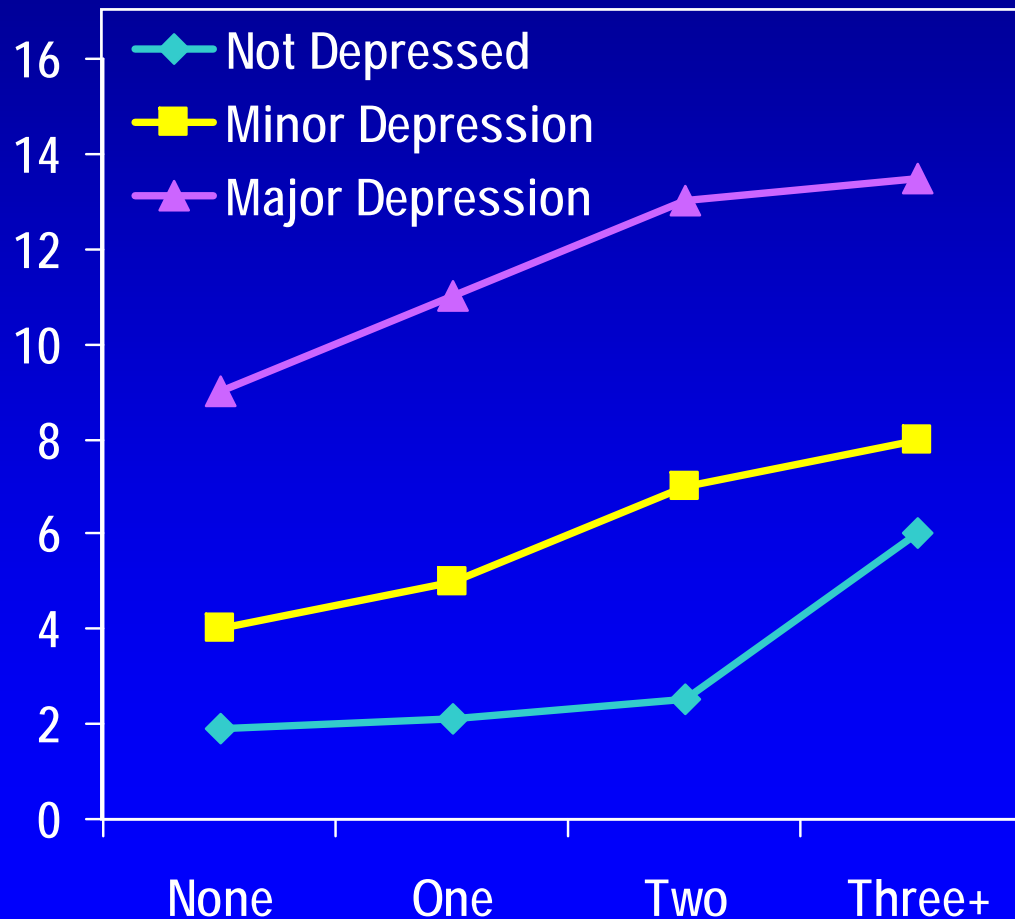
Bidirectional Relationship

Treatment of Depression Improves Pain Outcomes in Patients With Arthritis and Depression

Arthritis Interference With Daily Activities (0-10)



Depression Has Larger Impact on Days Reduced Household Work Than Diabetes Complications



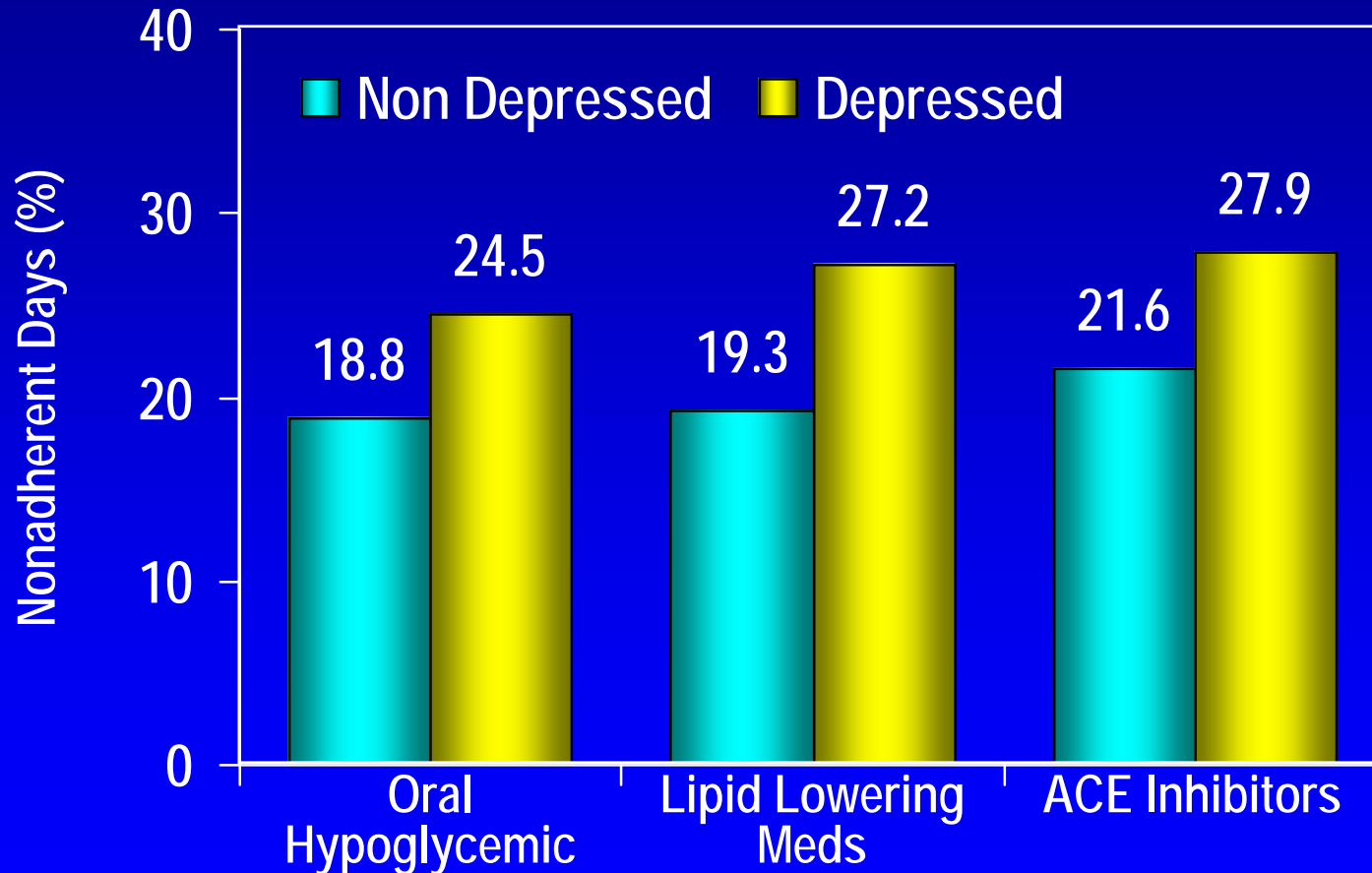
Depression Decreases Adherence to Medical Regimens

- Depression may affect adherence by
 - Adversely influencing expectations and benefits about efficacy of treatment
 - Increasing withdrawal and social isolation
 - Reducing cognitive functioning and memory
 - Influencing dietary choices and reducing energy to exercise and follow self-management regimens (ie, checking blood glucose)

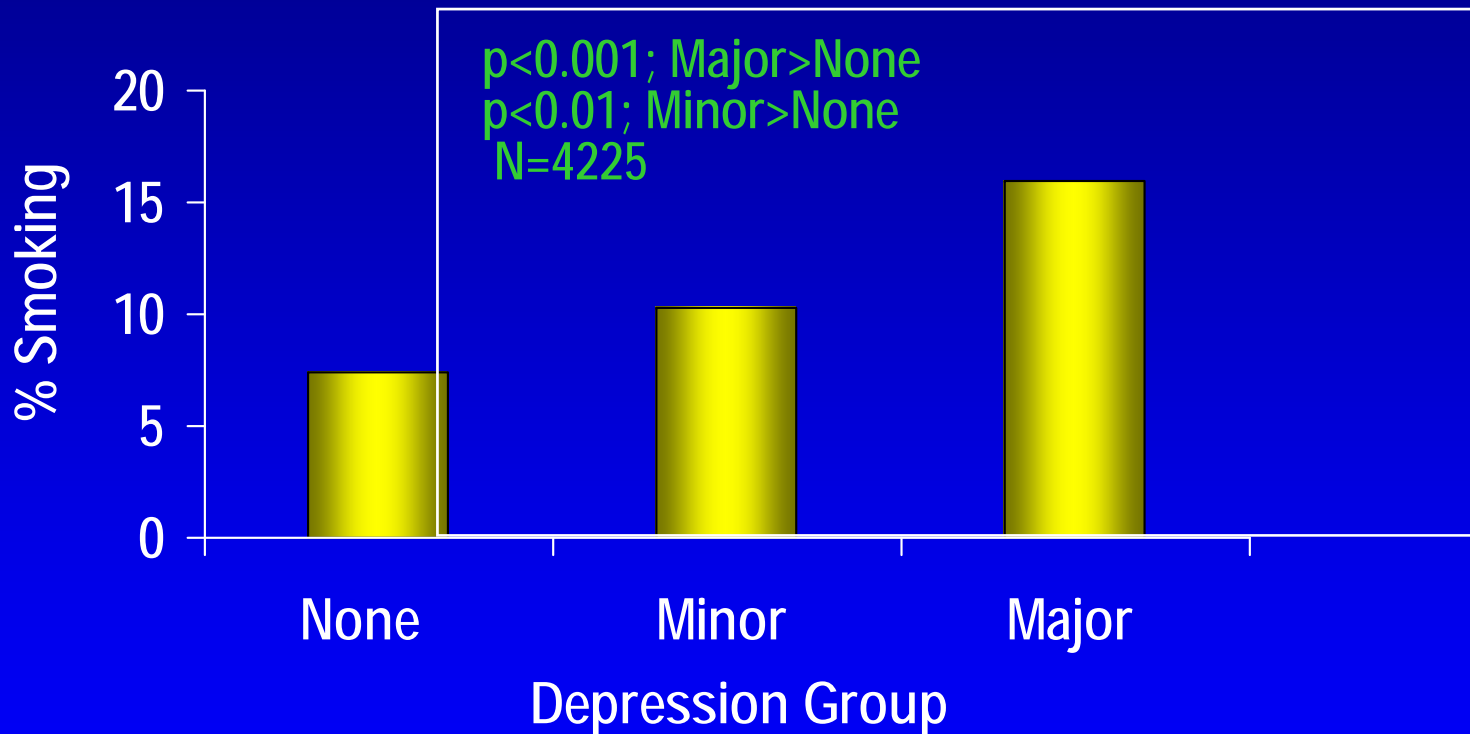
Meta-Analysis of the Adverse Effect of Depression on Patient Adherence

- Compared to nondepressed patients, the odds are 3 times greater that depressed patients would be nonadherent with medical treatment recommendations

Depression Decreases Medication Adherence in Patients With Diabetes



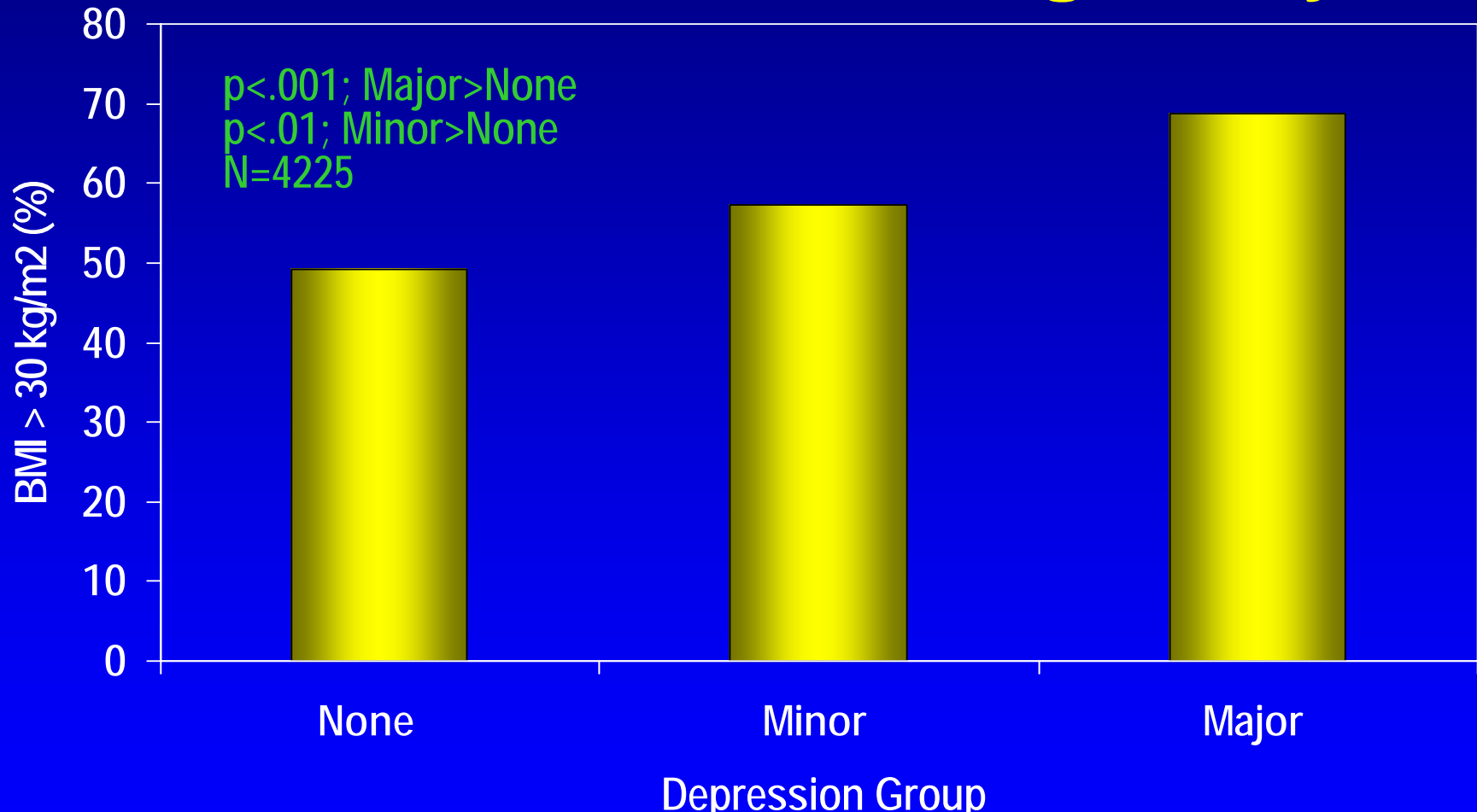
Depression Is Associated With an Increased Percent of Smoking



Adjusted for demographics, medical comorbidity, diabetes severity, diabetes type and duration, treatment type, HbA1c and clinic.

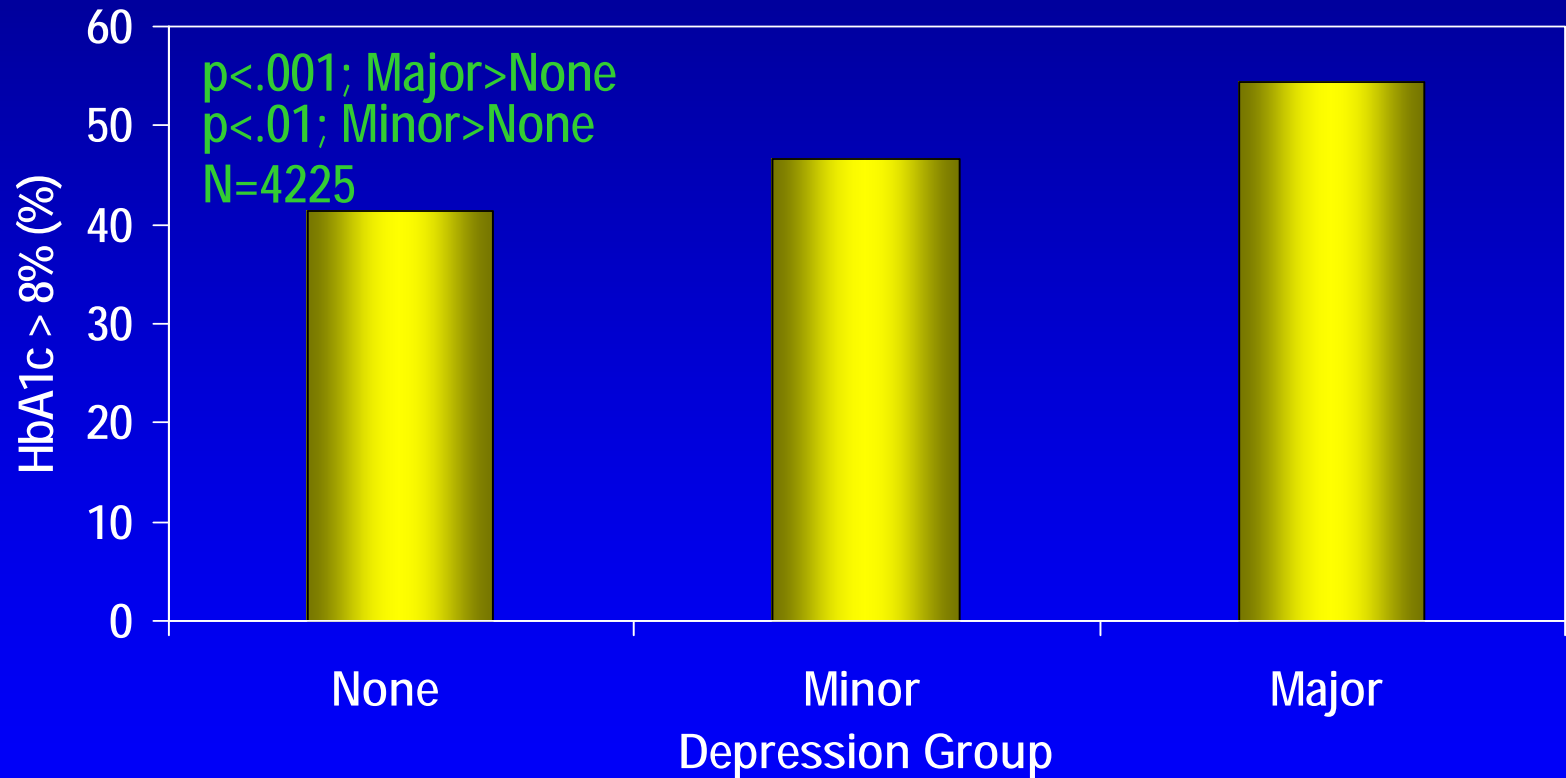
Katon et al, Diabetes Care, 2004

Depression is Associated with an increased BMI >30 kg/m² by



Adjusted for demographics, medical comorbidity, diabetes severity, diabetes type and duration, treatment type, HbA1c and clinic
Katon et al, *Diabetes Care*, 2004

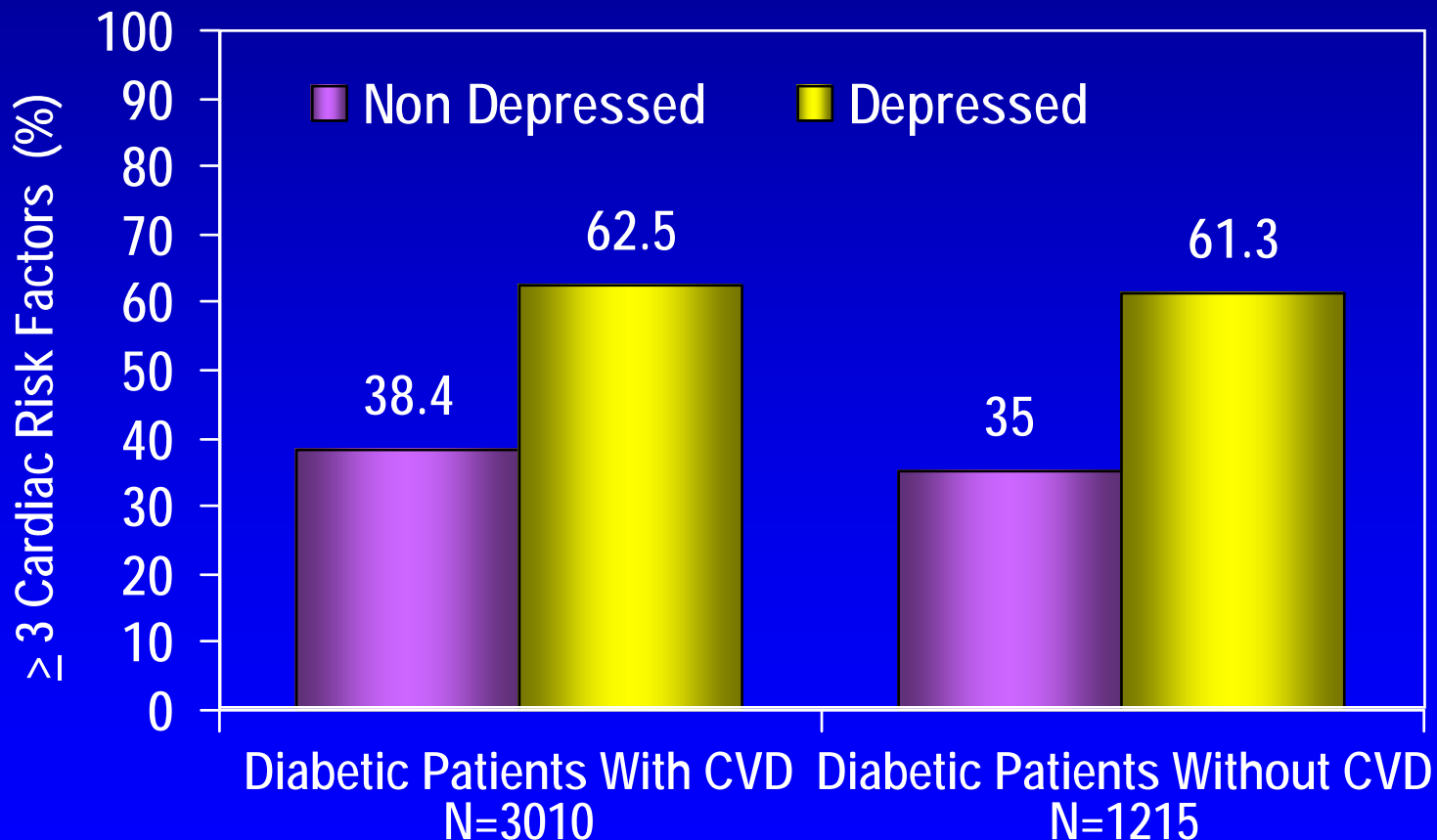
Depression Is Associated With Higher Percentage with HbA1c > 8%



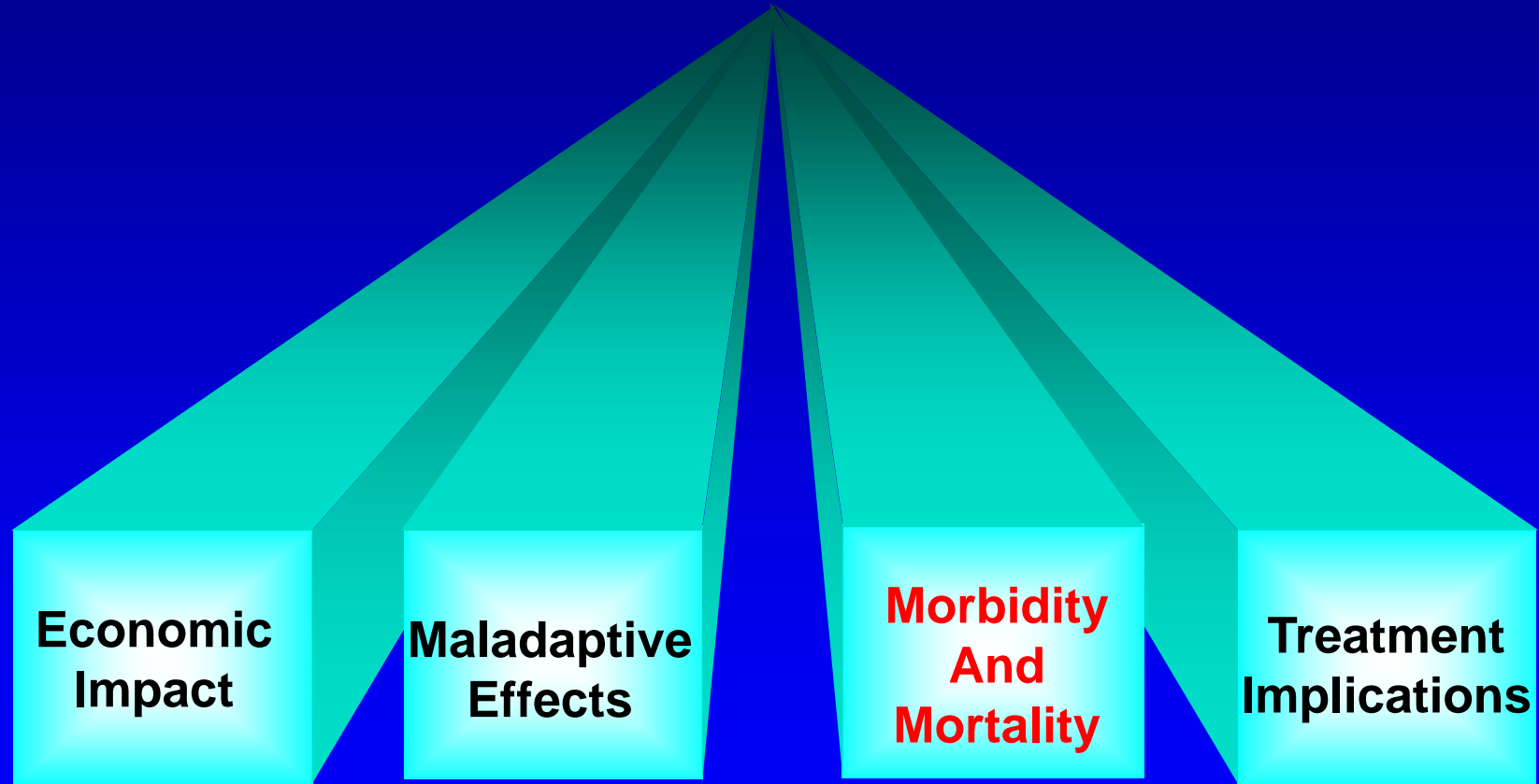
Adjusted for demographics, medical comorbidity, diabetes severity, diabetes type and duration, treatment type and clinic.

Katon et al, Diabetes Care, 2004

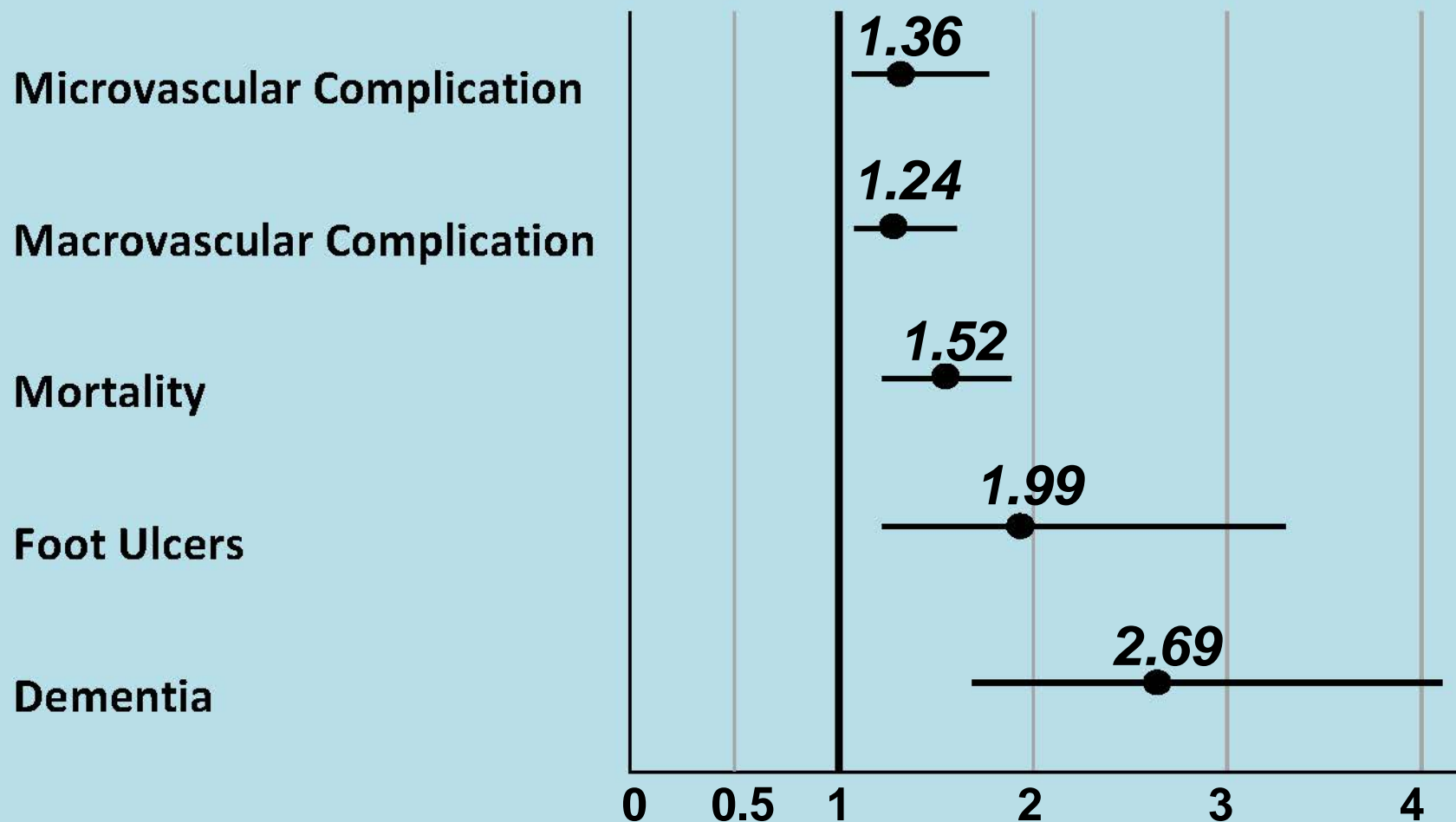
Depression Is Associated With a Higher Number of Cardiac Risk Factors



Impact of Depression In Chronic Medical Illness



Major Depression: Association with Complications & Mortality



Major Depression: Association with Hospitalizations & ER Visits

Serious Hypoglycemic

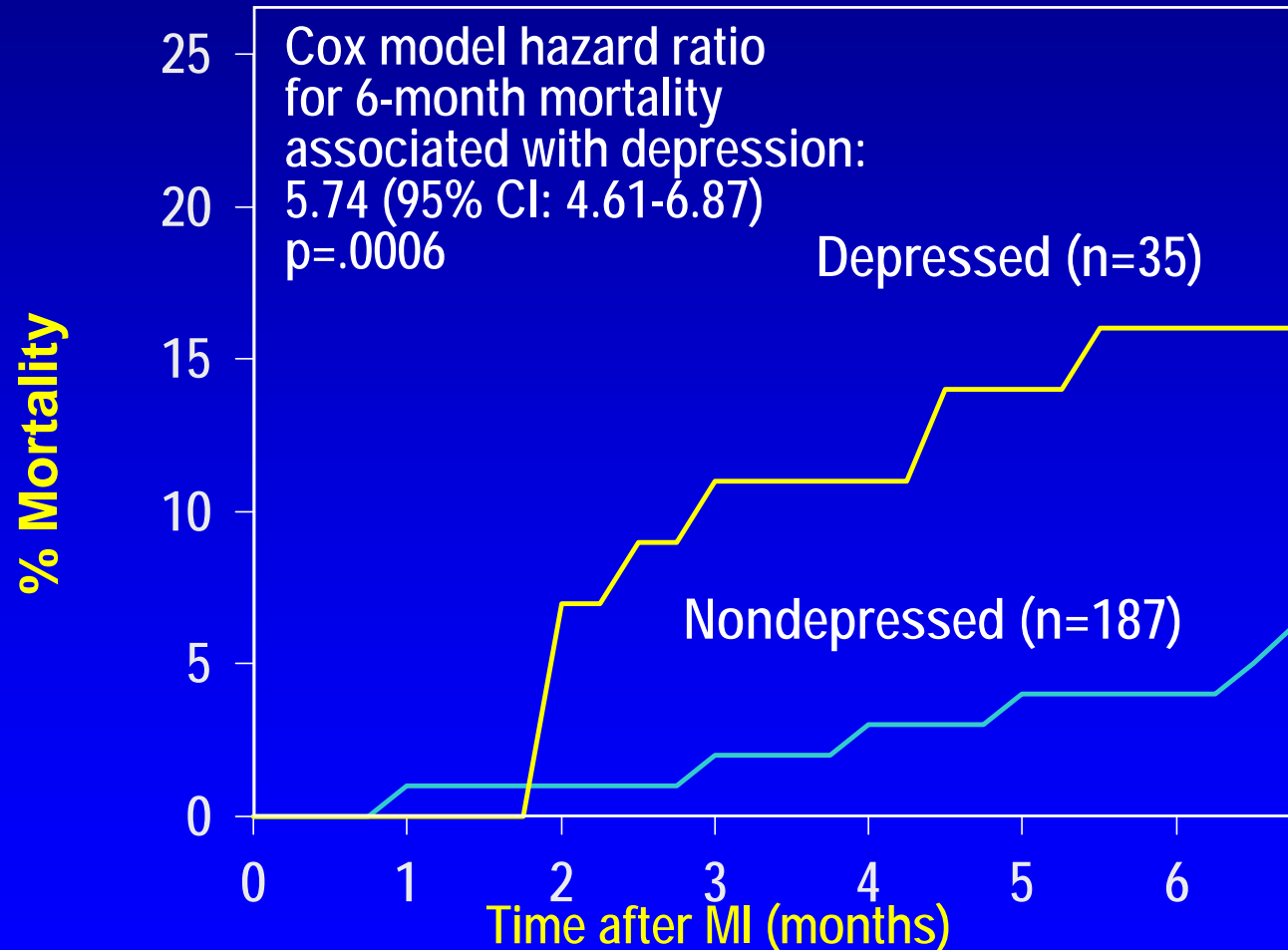
ICU Admission

Ambulatory Care

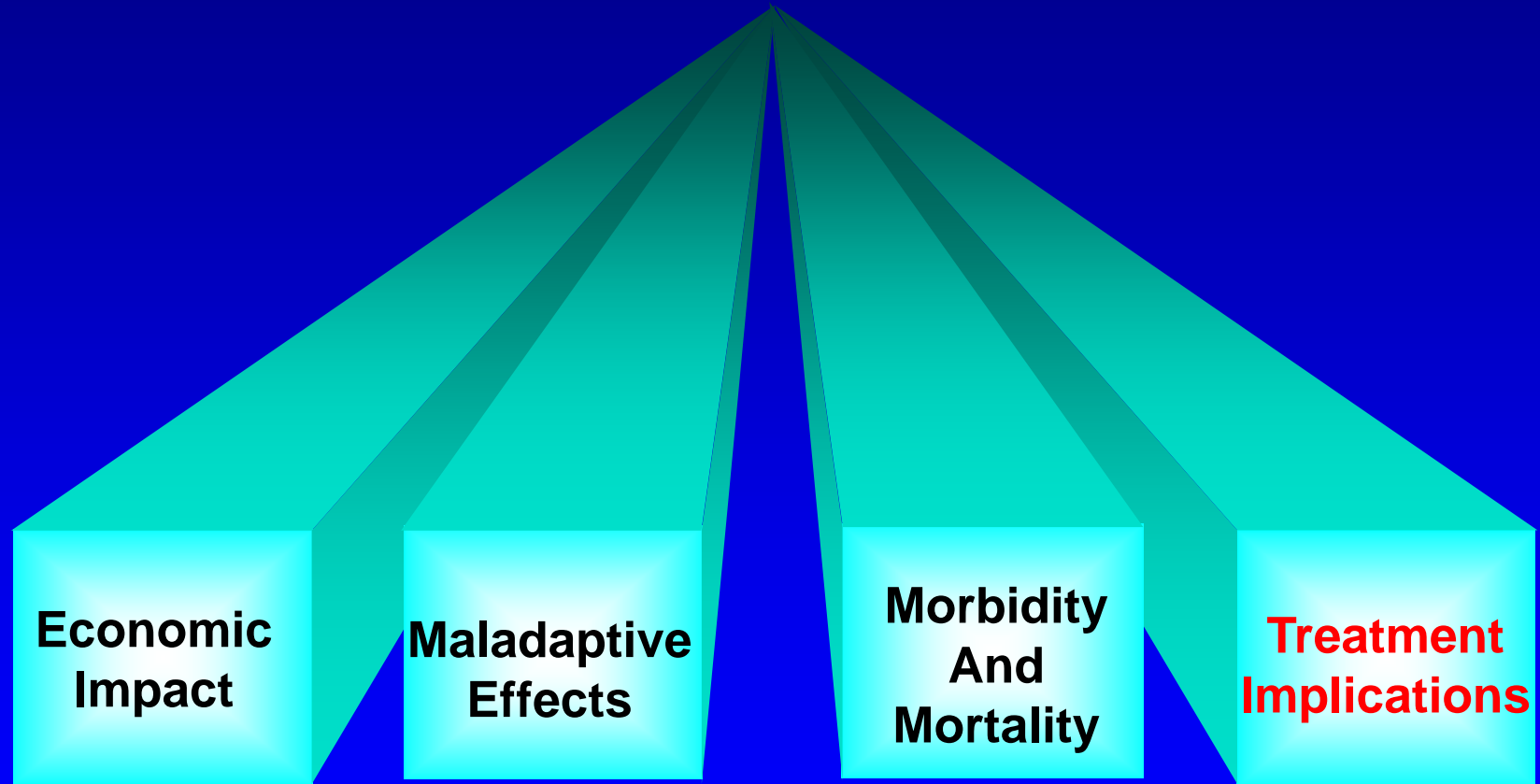
Sensitive Hospitalizations



Depression Associated With Increased Mortality Post-Myocardial Infarction



Impact of Depression In Chronic Medical Illness



Pathways Randomized Controlled Trial

- Participants randomly assigned to Pathways nurse collaborative care intervention (N = 165) vs. usual care (N = 164)
- Usual Care
 - Primary care or referral to specialty MH care as available
- Pathways Care
 - Collaborative/stepped care disease management program for depression in primary care

Treatment Protocol

- 1) Behavioral Activation / Pleasant Events Scheduling
 - 2) Antidepressant medication
 - usually an SSRI or other newer antidepressant
- OR
- Problem Solving Treatment in Primary Care (PST-PC)**
- 6-8 individual sessions followed by monthly group maintenance sessions
- 3) Maintenance and Relapse Prevention Plan
 - for patients in remission

Collaborative Care

Patient

- Chooses treatment in consultation with provider(s)

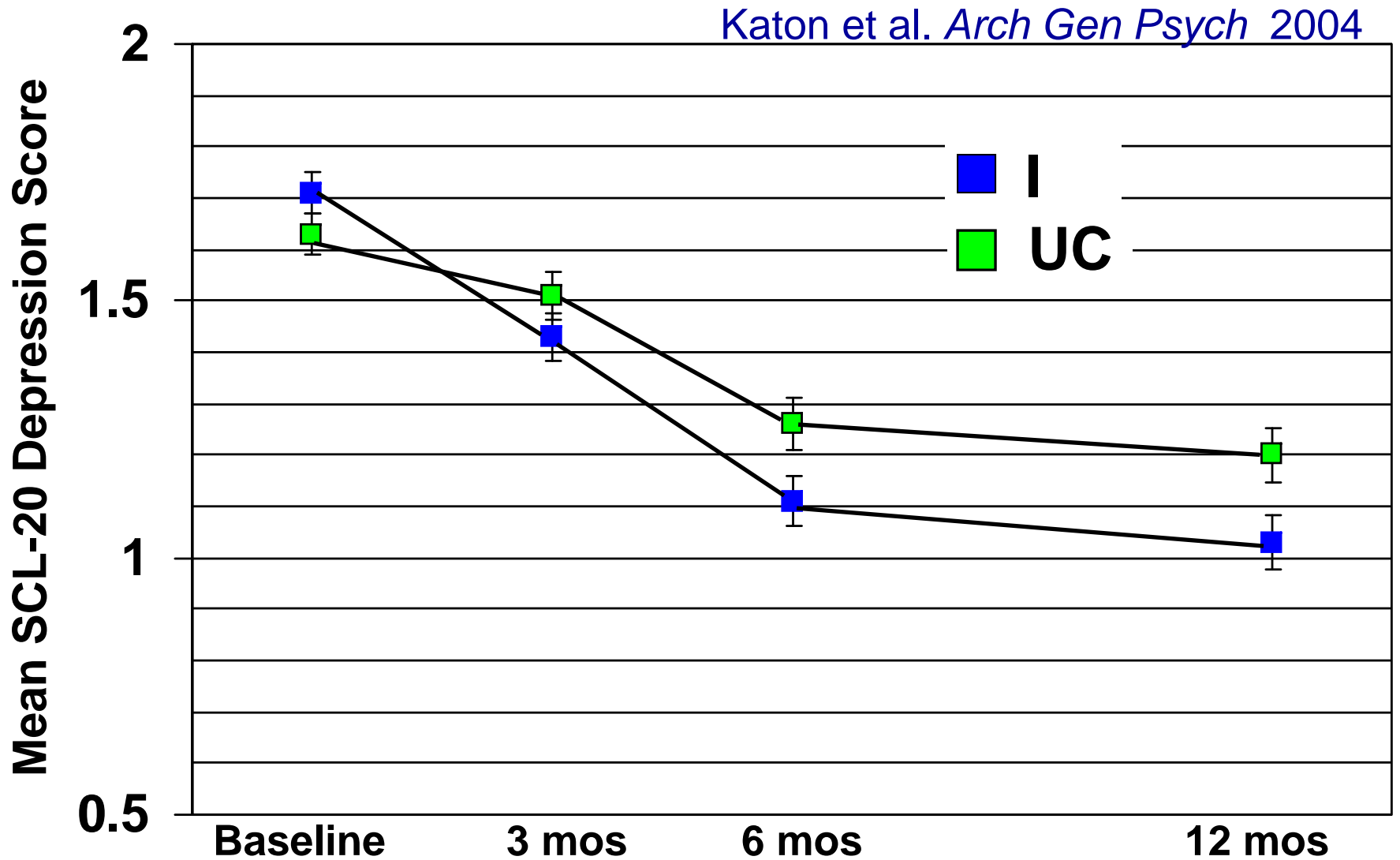
Primary care provider (PCP)

- Refers; prescribes antidepressant medications

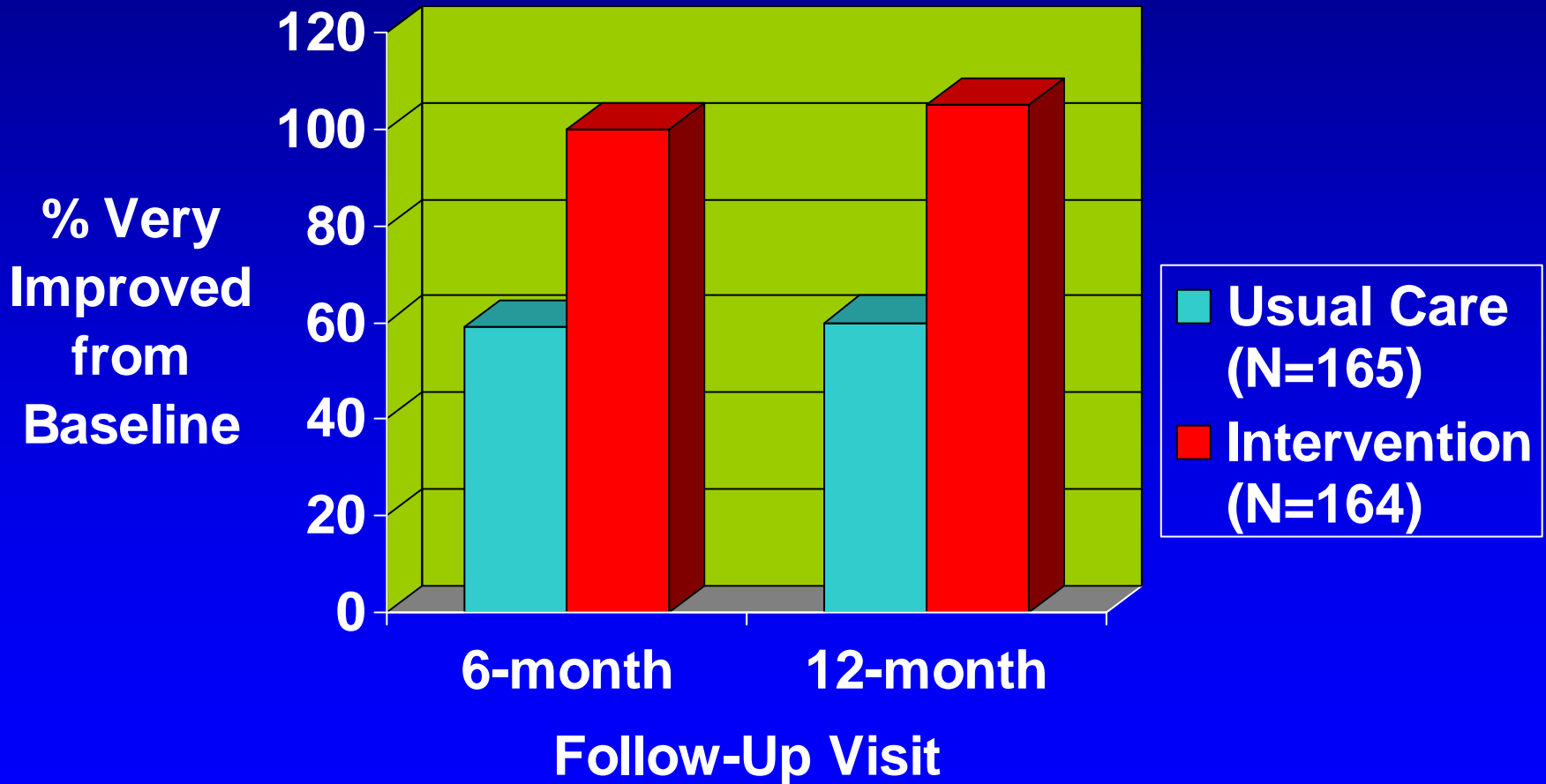
+ Depression Care Manager

+ Consulting Psychiatrist

Intervention vs Control Differences on Mean SCL Depression Scores (Range 0 – 4).

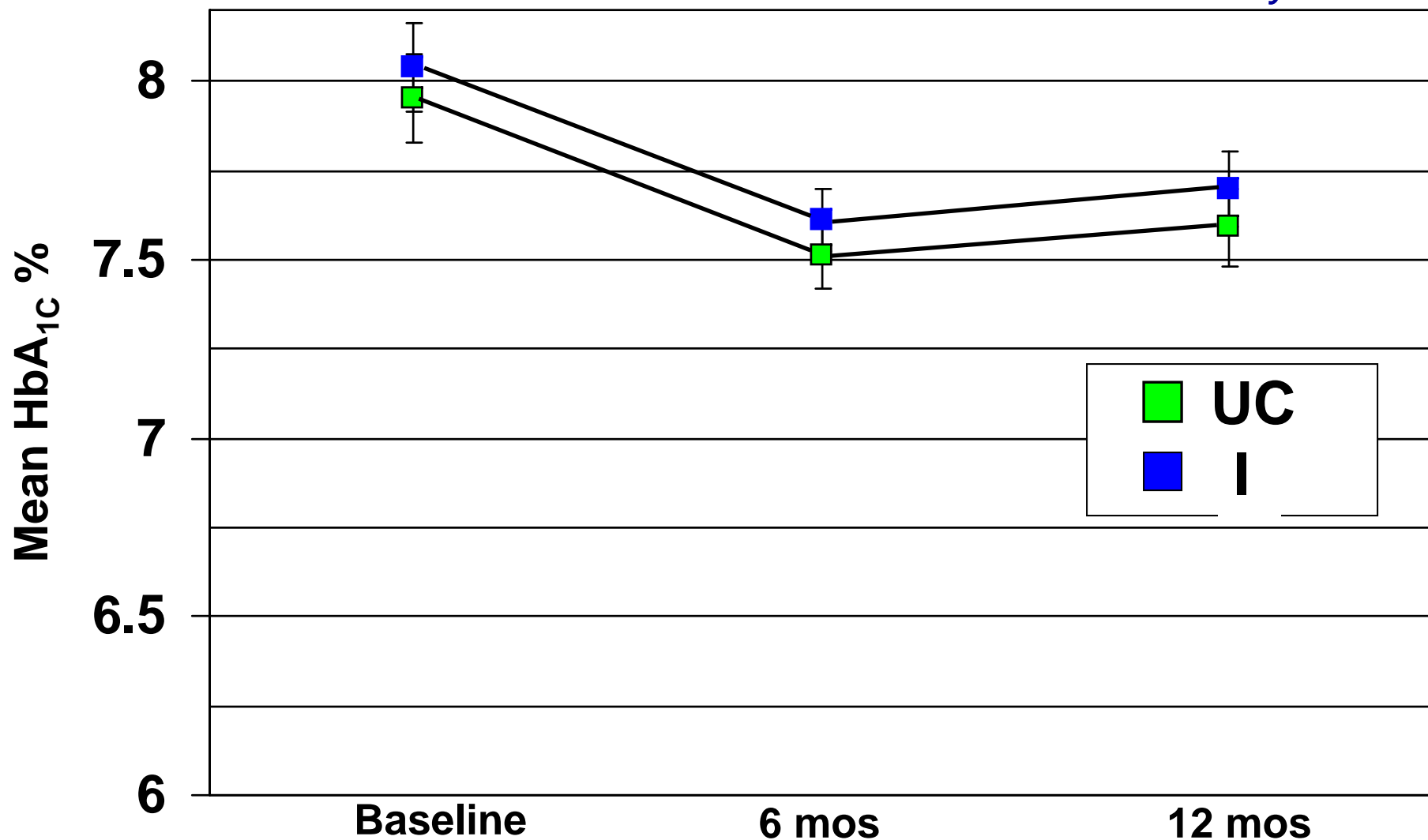


Patient Global Improvement

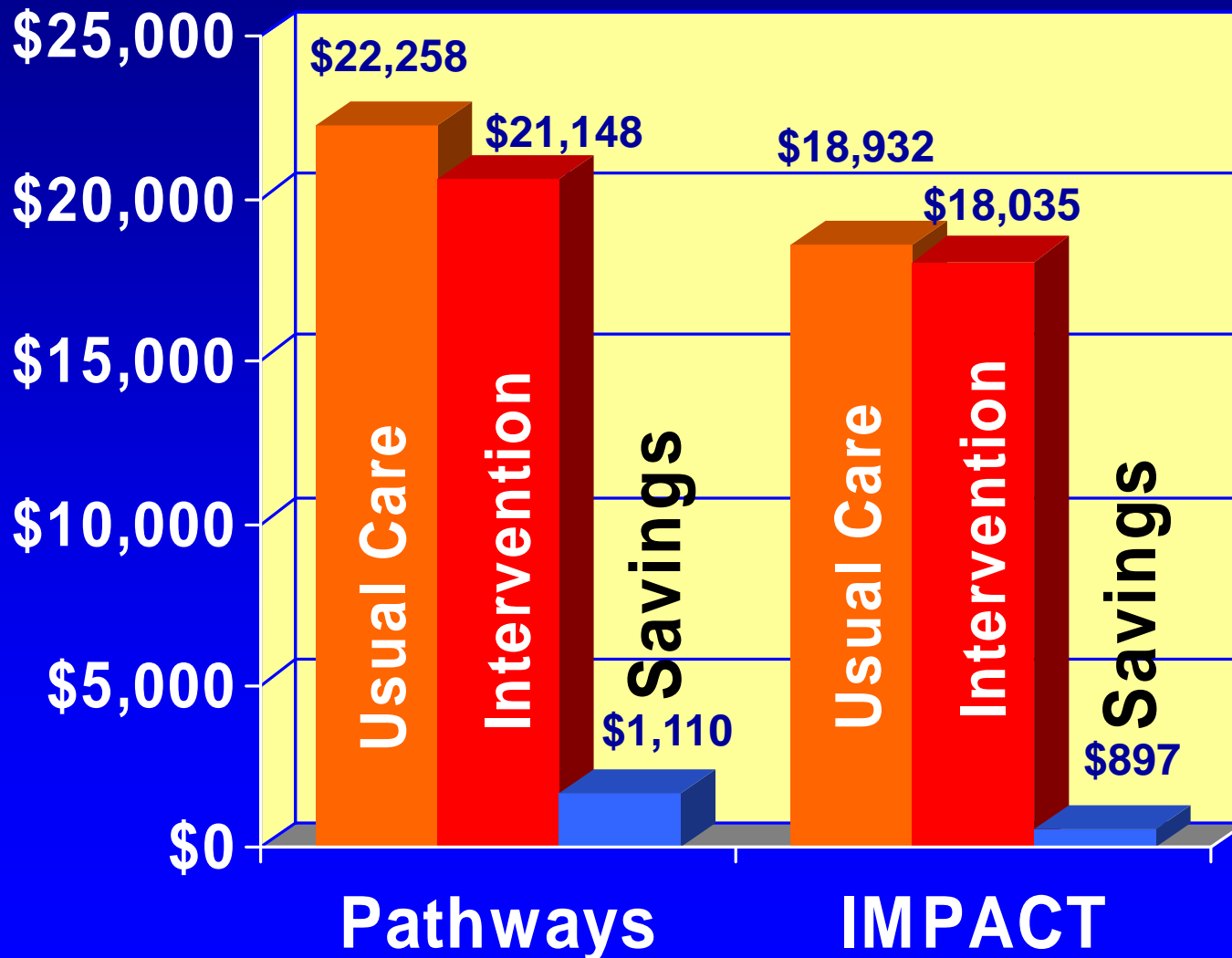


Intervention vs Control Differences on Mean HbA_{1c}

Katon et al. *Arch Gen Psych* 2004



Two Collaborative Care Trials Demonstrate Improved Depression Care in Diabetes Lowers Total Health Care Costs Over 2 Years



TEAMcare

Clinical Trial & Program

“Multi-Condition Collaborative Care”

For chronic conditions and depression to address:

A1c

Blood pressure

Cholesterol (LDL)

Depression



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Collaborative Care for Patients with Depression and Chronic Illnesses

Wayne J. Katon, M.D., Elizabeth H.B. Lin, M.D., M.P.H., Michael Von Korff, Sc.D., Paul Ciechanowski, M.D., M.P.H., Evette J. Ludman, Ph.D., Bessie Young, M.D., M.P.H., Do Peterson, M.S., Carolyn M. Rutter, Ph.D., Mary McGregor, M.S.N., and David McCulloch, M.D.

N Engl J Med 2010; 363:2611-2620 | [December 30, 2010](#)

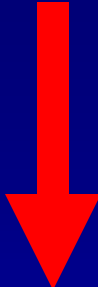
BACKGROUND

Patients with depression and poorly controlled diabetes, coronary heart disease, or both have an increased risk of adverse outcomes

MEDIA IN THIS ARTICLE

FIGURE 1





A1c



Blood pressure



Cholesterol (LDL)



Depression

TEAMcare

Meets the Triple Aim

- Improved quality of care, including Patient Satisfaction
- Improved Outcomes
- Cost Savings

a TEAM behind you committed to care

training

research

resources

in the news

January, 2011 - In a randomized controlled trial, testing an intervention called TEAMcare, nurses worked with patients and their doctors and health teams to manage care for depression and physical disease together, using evidence-based guidelines.

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our program

WHO WE ARE



training

GET STARTED



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