

Medicare Coverage Advisory Committee

Dean Ornish, M.D.

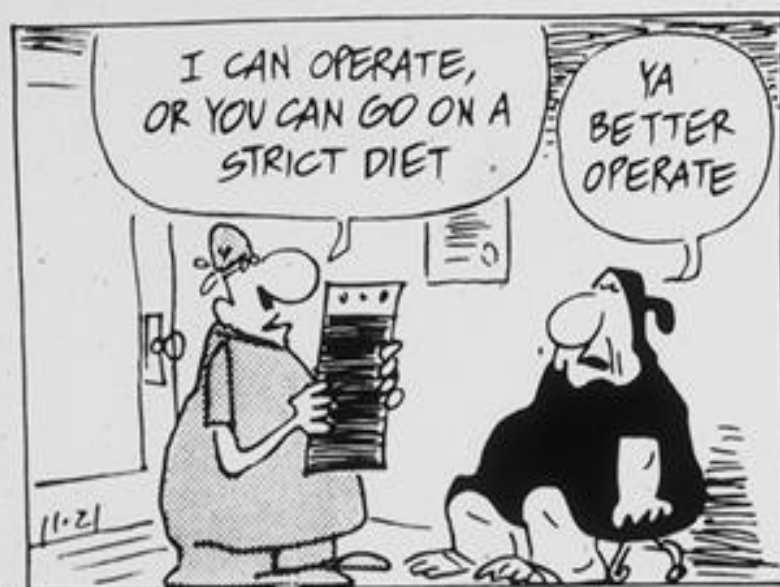
President, Preventive Medicine Research Institute

Clinical Professor of Medicine, UCSF

January 25, 2005

THE WIZARD OF ID

Brant parker and Johnny h





Optimal Lifestyle Program

- Diet (low-fat, whole foods, plant-based)
- Stress management training
- Moderate exercise
- Psychosocial support groups

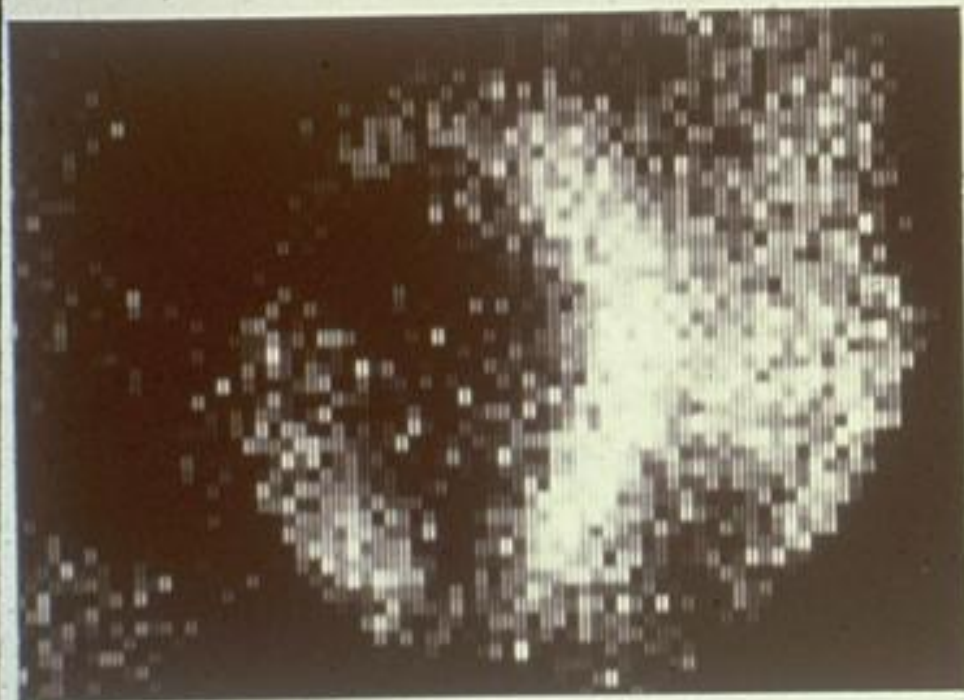
Pilot Study

- 10 patients with CHD documented by ischemia perfusion defects on thallium-201 scintigraphy
- 30-day residential intervention
- 91% reduction in mean frequency of angina
- 8 of 10 patients showed improvement in myocardial ischemia

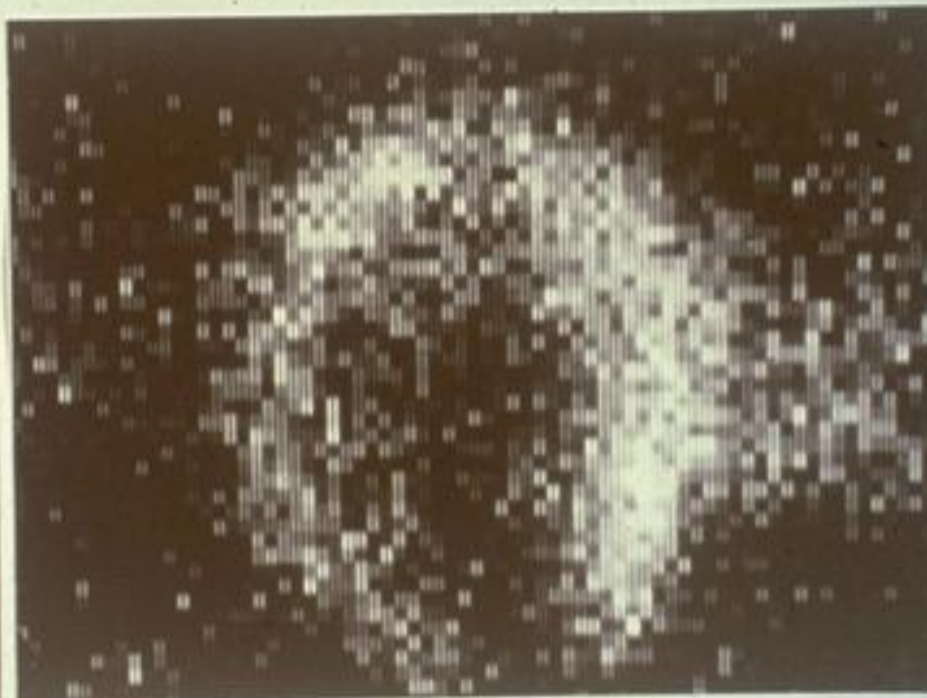
Reference: Ornish DM, Gotto AM, Miller RR, et al. Effects of a vegetarian diet and selected yoga techniques in the treatment of coronary heart disease. *Clinical Research*. 1979;27:720A.

^{201}Tl Myocardial Scintigraphy

Case D



May 15, 1978



June 15, 1978

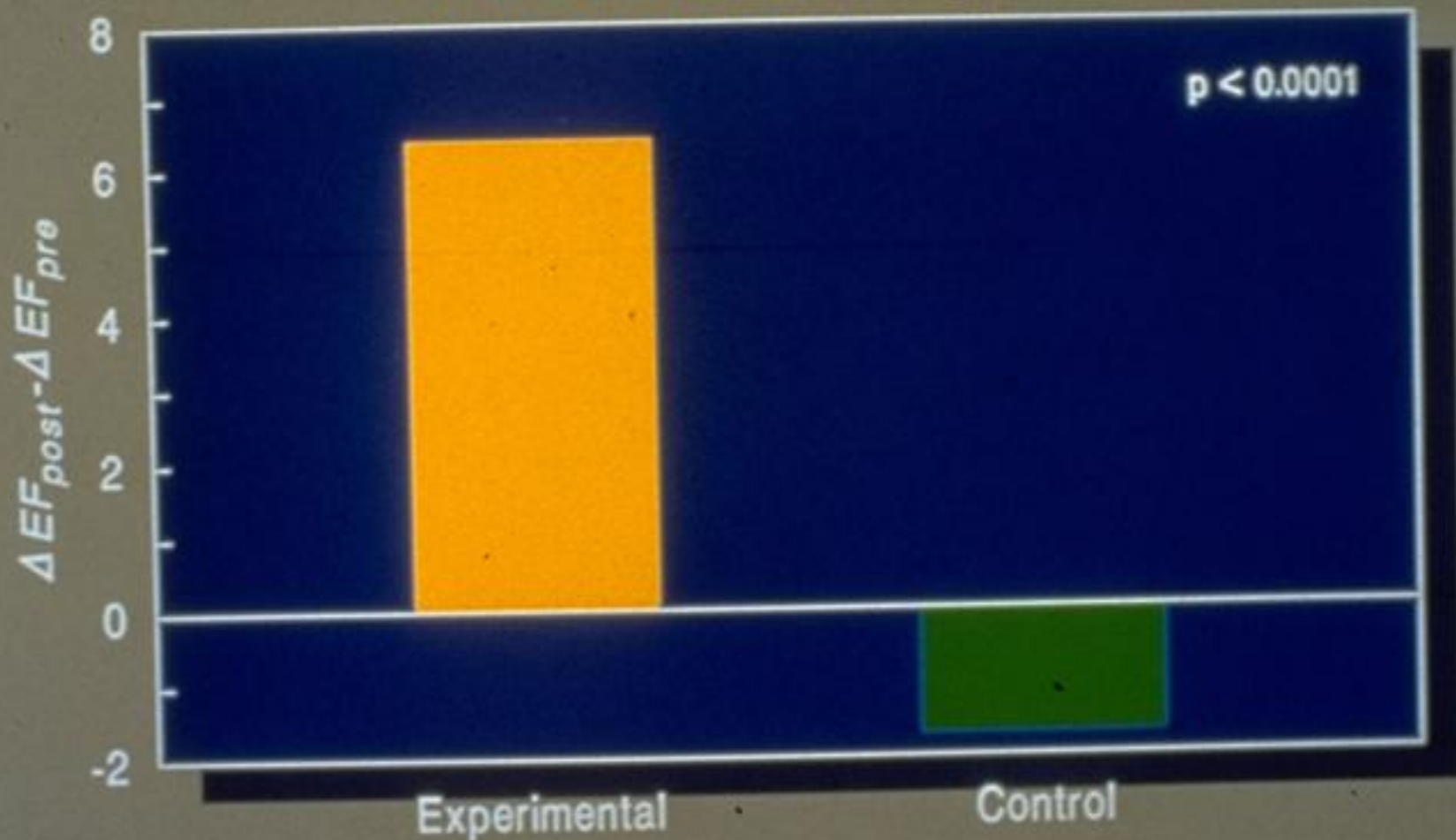
Randomized Controlled Trials

- 48 patients with documented CHD
- Randomly assigned to comprehensive lifestyle changes or usual care
- 24-day residential intervention
- 90% reduction in mean frequency of angina
- Statistically significant improvement in exercise radionuclide ventriculography

Ornish DM, Scherwitz LW, Doody RS, et al. Effects of stress management training and dietary changes in treating ischemic heart disease.

JAMA. 1983;249:54-59.

**CHANGES IN LEFT VENTRICULAR EJECTION FRACTION
FROM REST TO MAXIMUM EXERCISE (ΔEF)
Pre/Post Intervention**



Randomized Controlled Trials: The Lifestyle Heart Trial

- 48 patients with documented CHD
- Randomly assigned to comprehensive lifestyle changes or usual care
- 1-year ambulatory intervention extended to 5-years
- Primary endpoint measures were quantitative coronary arteriography, cardiac PET scans, and cardiac events

Ornish DM, Brown SE, Scherwitz LW, et al. Can lifestyle changes reverse coronary atherosclerosis? The Lifestyle Heart Trial. *The Lancet*. 1990; 336:129-133.

Randomized Controlled Trials: The Lifestyle Heart Trial Results after One Year

- 91% reduction in frequency of angina in the experimental group but 165% increase in control group
- Significant regression of coronary atherosclerosis in the experimental group but progression in the control group
- 40% reduction in LDL-cholesterol

Ornish DM, Brown SE, Scherwitz LW, et al. Can lifestyle changes reverse coronary atherosclerosis? The Lifestyle Heart Trial. *The Lancet*. 1990; 336:129-133.

Randomized Controlled Trials: The Lifestyle Heart Trial Results after Five Years

- 72% reduction in frequency of angina in exp. group
- Continued statistically significant regression of coronary atherosclerosis in the experimental group but continued progression of coronary atherosclerosis in the control group
- Significant improvements in myocardial perfusion by cardiac PET. 99% of experimental group patients were able to stop or reverse the progression of CHD.
- 2.5 times (60%) fewer cardiac events in the experimental group

Ornish D, Scherwitz L, Billings J, et al. Intensive lifestyle changes for reversal of coronary heart disease *JAMA*. 1998;280:2001-2007.

Gould KL, Ornish D, Scherwitz L, et al. Changes in myocardial perfusion abnormalities by positron emission tomography after long-term, intense risk factor modification. *JAMA*. 1995;274:894-901.

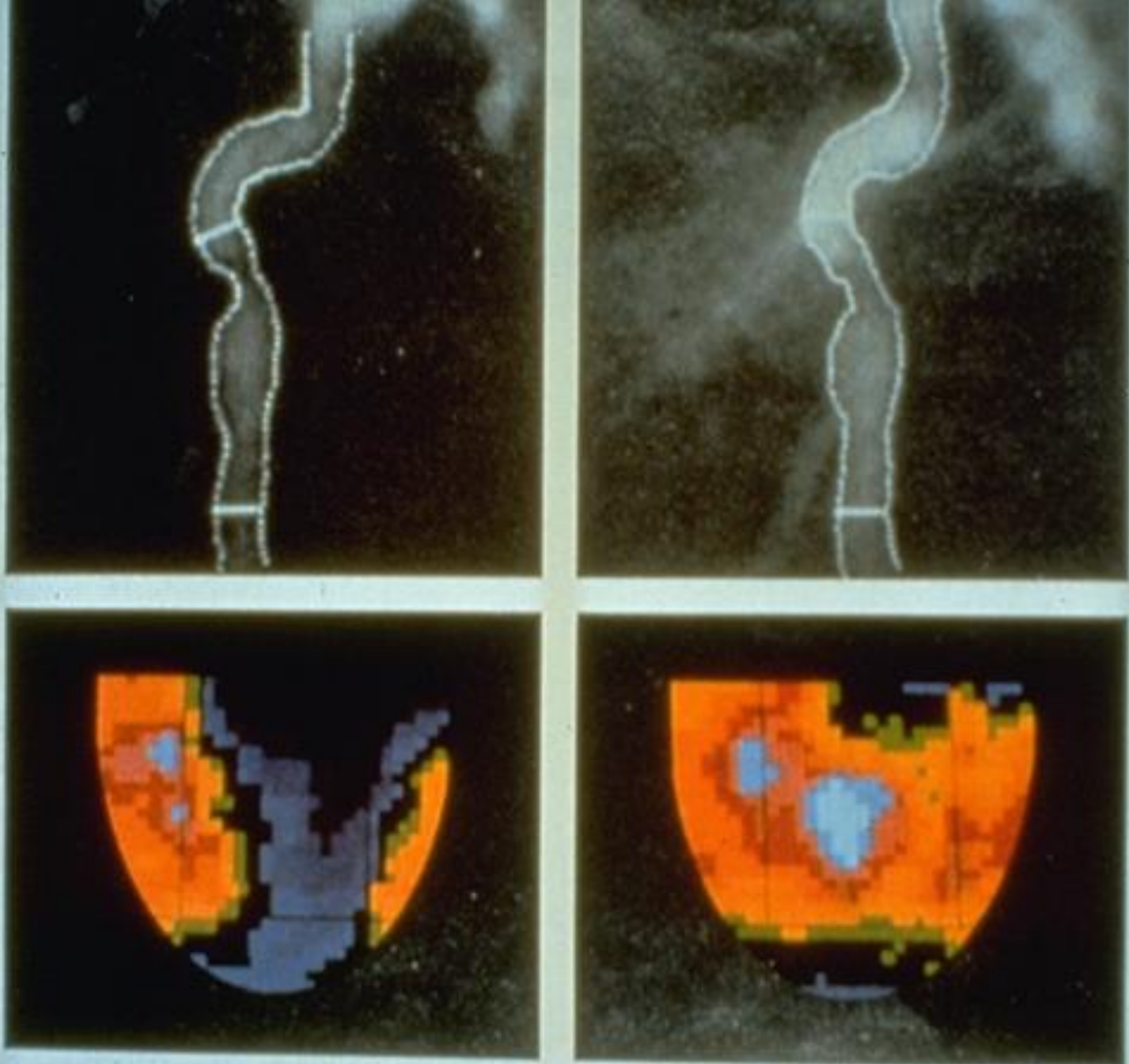
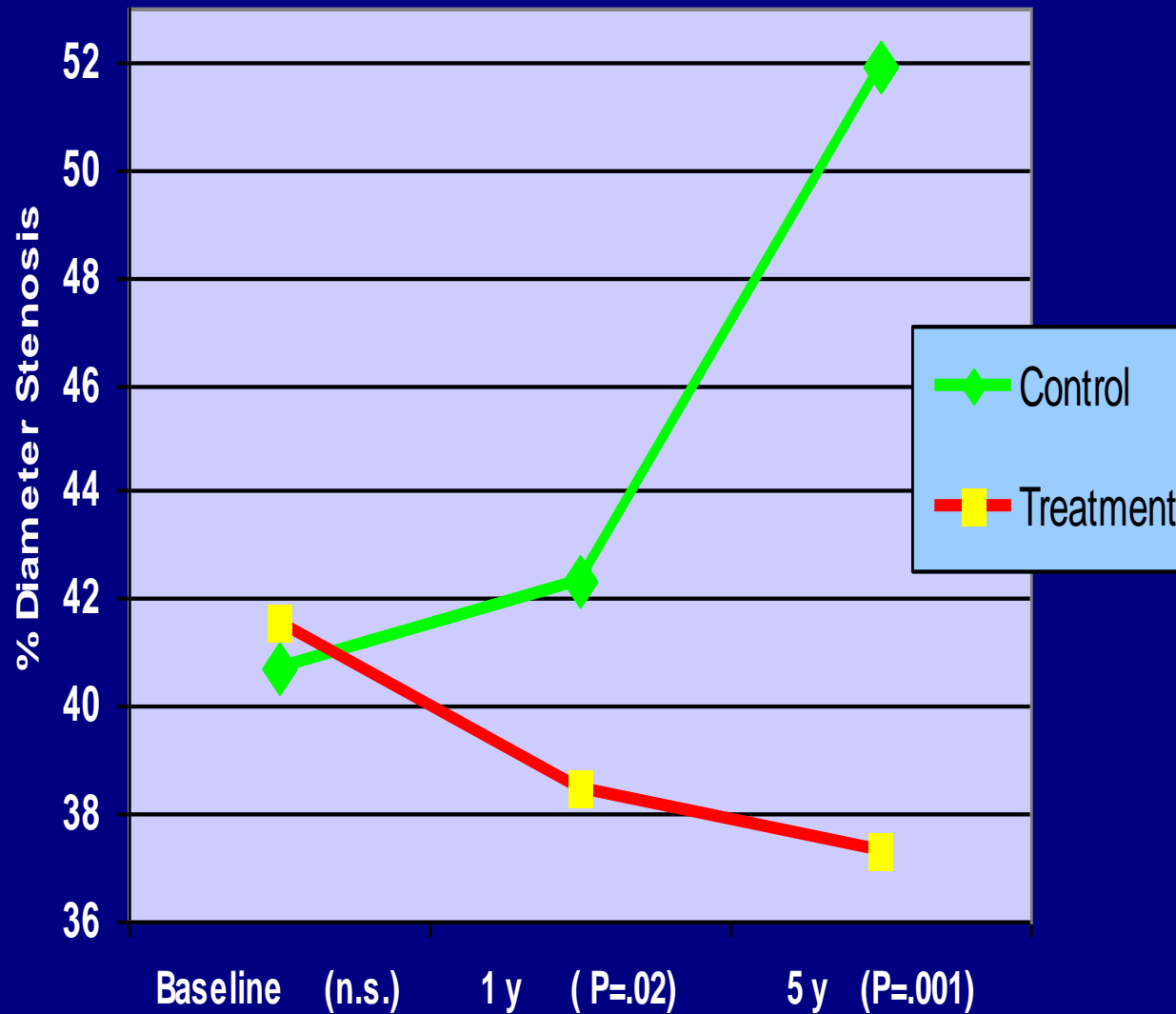


Figure 2. Quantitative coronary angiograms and cardiac PET scans obtained at baseline and 12 months later were used to assess effects of lifestyle

Changes in Quantitative Coronary Arteriography



Control

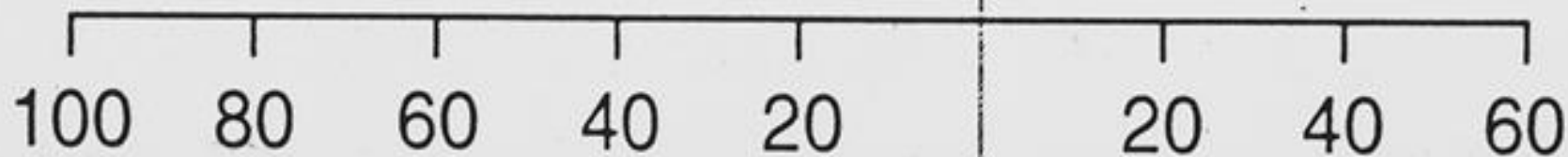
55%

45%

$P=.03$

99%

1% Experimental



Better or No Change, %

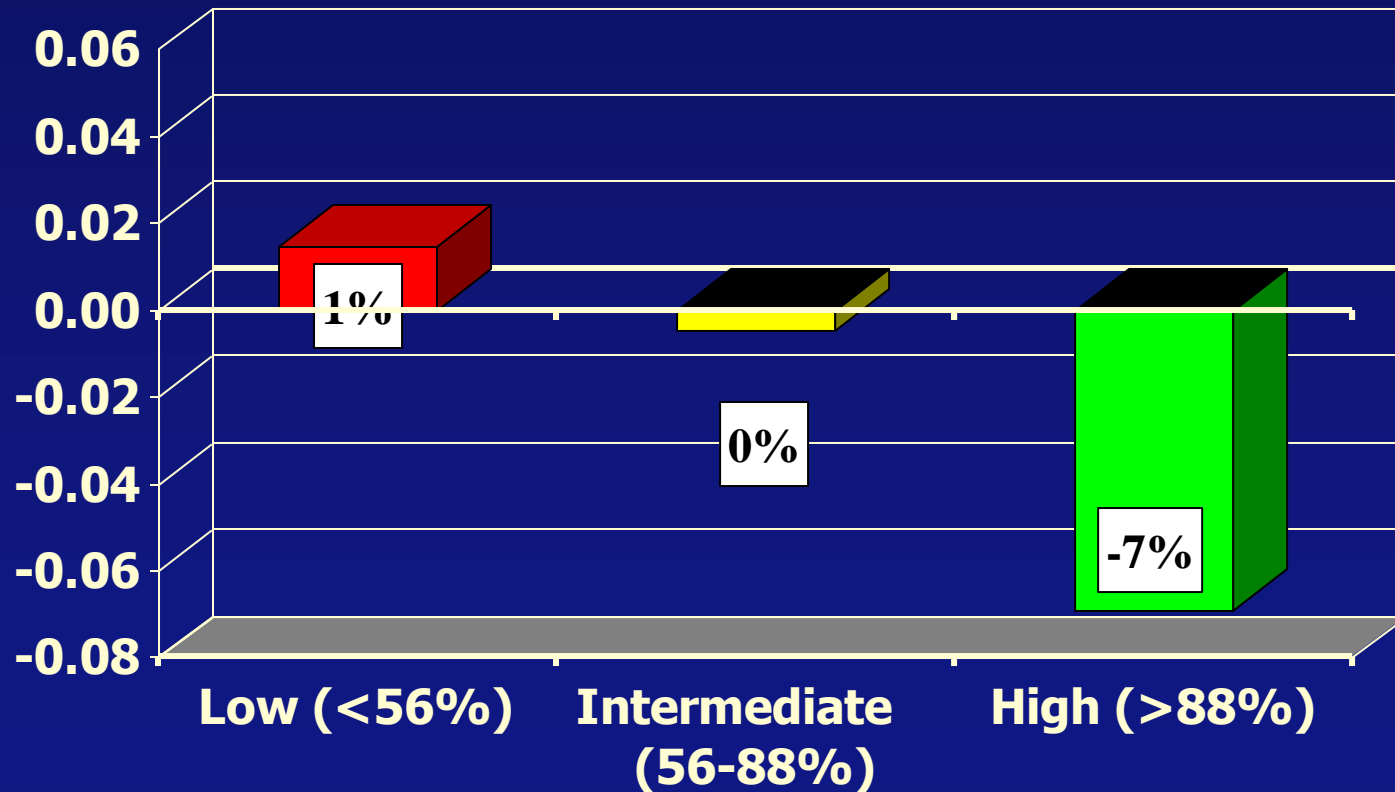
Worse, %

A Smaller Sample Size that Shows Statistical Significance Indicates a Powerful Treatment Effect

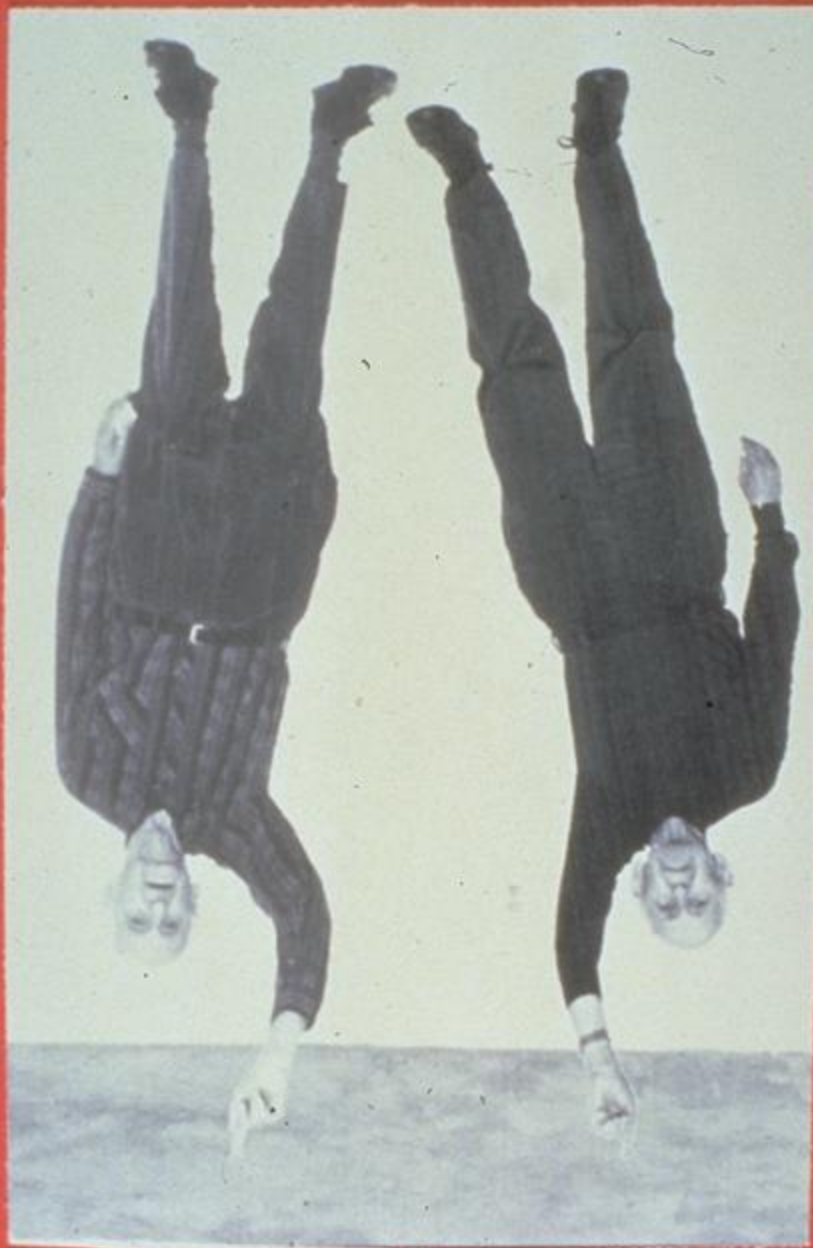
“The larger the number of patients that have to be included in a trial in order to prove a statistically significant benefit, the greater the uncertainty about the reason why the beneficial effects of the treatment cannot be detected in a smaller trial.”

Maseri A et al, *Cardiovascular Drugs & Therapy*. 10(6):751-8, 1997.

Adherence and Change in Coronary Atherosclerosis after 5 years







BEHOLD! ONE FINGER

The Multicenter Lifestyle Demonstration Projects

Objectives of Demonstration Projects

- Can physician-supervised teams be trained to implement this program of comprehensive changes in diet and lifestyle?
- Can diverse patients in different parts of the U.S. make and maintain comprehensive changes in diet and lifestyle?
- Is this approach cost-effective as well as medically effective?
- Can payment mechanisms be developed to prevent fraud and abuse?

Medical Effectiveness: Demonstration Projects

- Three demonstration projects
- More than 2,000 patients
- Greater changes in diet and lifestyle and larger improvements in risk factors (weight, BMI, blood pressure, lipids, diabetes, functional capacity) and improved quality of life (decreased angina, emotional stress, and depression, and increased health, vitality, physical function, and well-being) than have ever before been reported in an ambulatory group of patients.

Implementation of Demonstration Projects

A physician supervises and directs the behavioral intervention, assisted by a team of health professionals:

- Nurse case manager
- Registered dietitian
- Clinical psychologist (support groups)
- Exercise physiologist
- Stress management instructor
- Program director

Implementation of Demonstration Projects

Patients meet twice/week during the first three months and once/week for the remaining nine months for four hours/session:

- 1 hour of supervised exercise
- 1 hour of stress management techniques
- 1 hour support group
- 1 hour lecture and group meal

1. The Multicenter Lifestyle Demonstration Project

- Diverse academic and community hospitals
- Funded by Mutual of Omaha, which provided a matched control group
- Data coordinating center at Harvard Medical School and the Massachusetts General Hospital
- One year intervention with 3-year follow-up
- 194 CHD patients in the experimental group were compared with 139 CHD patients in the control group
- Patients were matched for age, gender, left ventricular ejection fraction, and severity of coronary atherosclerosis

Ornish D. Avoiding revascularization with lifestyle changes: The Multicenter Lifestyle Demonstration Project. *American Journal of Cardiology*. 1998;82:72T-76T.

Koertge J, Weidner G, Elliott-Eller M, et al. Improvement in medical risk factors and quality of life in women and men with coronary artery disease in the Multicenter Lifestyle Demonstration Project. *American Journal of Cardiology*. 2003;91:1316-1322.

1. The Multicenter Lifestyle Demonstration Project Sites

- Alegent Immanuel Medical Center
- Beth Israel Deaconess Medical Center/Harvard Medical School, Boston
- Beth Israel Medical Center/New York, NY
- Broward General Hospital, Ft. Lauderdale, FL
- Franciscan Health System, Cincinnati, OH
- Highmark Blue Cross Blue Shield, Pittsburgh, PA
- Mercy Hospital/Iowa Heart Center, Des Moines, IA
- Mt. Diablo Medical Center, Concord, CA
- Palmetto Richmond Memorial Hospital, Columbia, SC
- Scripps Institute/ScrippsHealth, La Jolla, CA
- SwedishAmerican Health System, Rockford, IL
- Swedish Medical Center, Seattle, WA
- University of California, San Francisco, School of Medicine

1. The Multicenter Lifestyle Demonstration Project

- 77% of patients in the experimental group who were eligible for revascularization were able to safely avoid it for at least three years with comparable health outcomes when compared with the control group
- Mutual of Omaha calculated saving \$29,529 per patient

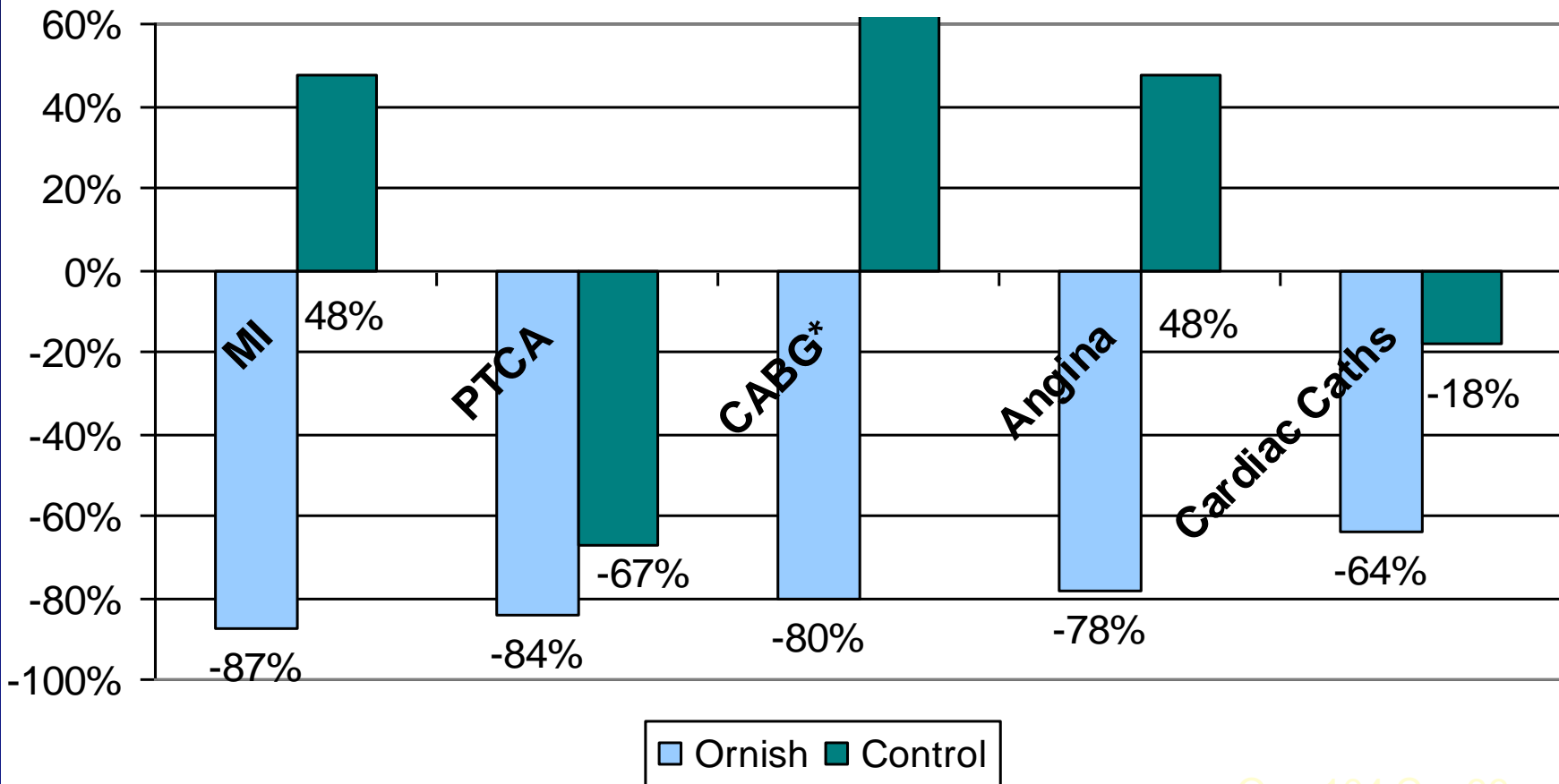
Ornish D. Avoiding revascularization with lifestyle changes: The Multicenter Lifestyle Demonstration Project. *American Journal of Cardiology*. 1998;82:72T-76T.

Koertge J, Weidner G, Elliott-Eller M, et al. Improvement in medical risk factors and quality of life in women and men with coronary artery disease in the Multicenter Lifestyle Demonstration Project. *American Journal of Cardiology*. 2003;91:1316-1322.

2. The Highmark Blue Cross Blue Shield Demonstration Project

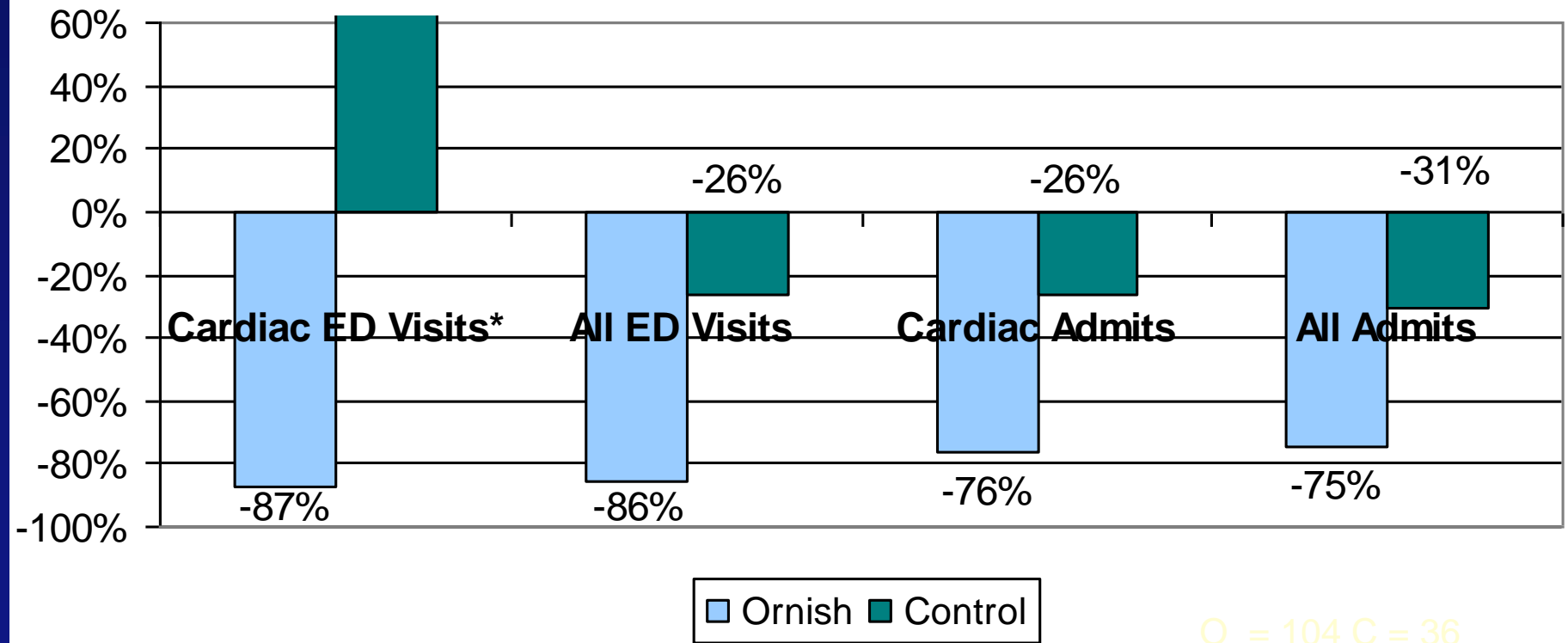
- 75 CHD patients in the experimental group were compared with 75 CHD patients in the control group matched for age, gender, and disease severity
- 1-year intervention with 3-year follow-up
- Matched control patients with equivalent future predicted costs using DxCG risk profiling software including age, gender, standard coronary risk factors, prior cardiac procedures and events, and claims utilization costs for the 1-year period prior to enrollment in the lifestyle program

Change in Event Rates – Cumulative Two Year Follow-Up



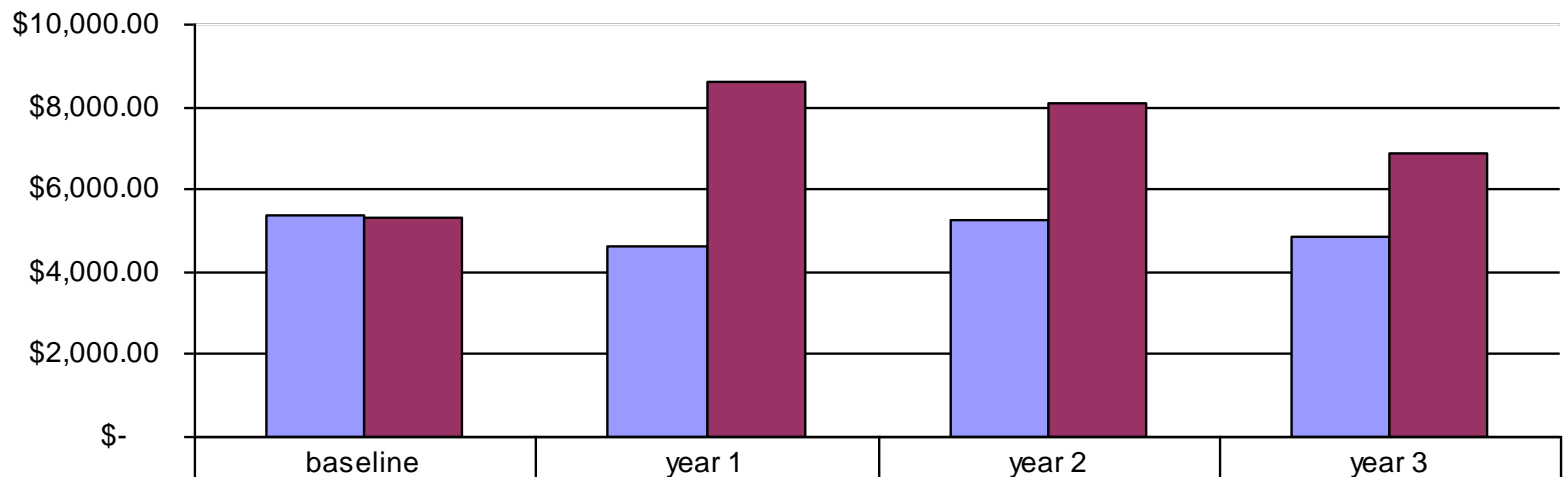
O = 104 C = 36

Change in Utilization Rates – Cumulative Two Year Follow-Up



2. The Highmark Blue Cross Blue Shield Demonstration Project: Cost Comparisons After 3 Years

Experimental Group (CAD) vs. Matched Cohort (CAD) Members Year by Year



■ Ornish Members (CAD)	5377.56	4627.88	5241.27	4865.17
■ Matched Cohort Members	5344.32	8586.89	8115.56	6897.78

■ Ornish Members (CAD) ■ Matched Cohort Members

Experimental Group (CAD) (N=75) Baseline vs. 3 year average

= 8.7% decrease in costs

Matched Cohort Members (CAD) (N=75) Baseline vs. 3 year average

= 47.2% increase in costs

2. The Highmark Blue Cross Blue Shield Demonstration Project

- Costs were approximately the same at baseline in the experimental and control groups
- Costs were significantly lower in the experimental group in each of the next 3 years, decreasing 8.7% in the experimental group but increasing 47.2% in the control group
- Total costs over 3 years were \$14,734/patient in the experimental group and \$23,600 in the control group, resulting in a net savings of \$8,865/patient

2. The Highmark Blue Cross Blue Shield Demonstration Project

- Since the control group patients were motivated to enter the program and received a lecture and a book describing the program, these findings indicate that most patients require the support of a formal physician-supervised behavioral intervention to achieve these changes in diet and lifestyle and the resulting benefits in medical effectiveness and cost effectiveness.

Summary of These Two Demonstration Projects:

“All the available evidence suggests that the Lifestyle Modification Program is highly likely to be cost saving, and extremely unlikely to be cost increasing.”

--David Eddy, M.D.

“I concur with Dr. Eddy’s analyses and conclusions.”

--Alan M. Garber, M.D., Ph.D.

Summary of These Two Demonstration Projects:

“Although my experience as a health actuary has left me with a healthy skepticism regarding the ability of Medicare benefit expansions to save money for the program, I concluded that Medicare coverage of this program would reduce Medicare expenditures even under a set of more pessimistic assumptions than I felt were appropriate.”

--Roland E. (“Guy”) King

Chief Actuary, HCFA, 1978-1994

Summary of These Two Demonstration Projects:

“One of the biggest concerns regarding my cost estimates by critics was that the program would be abused and made widely available to beneficiaries who didn’t meet the objective criteria for this program, and thus the cost would be much greater than estimated because of the number of beneficiaries who would be eligible, and savings would be much less because of essentially healthy beneficiaries participating in the program. I believe that the Medicare demonstration project, as well as the experience of health insurers, such as Highmark, has already proven that concern to be unfounded.”

--Roland E. (“Guy”) King

Chief Actuary, HCFA, 1978-1994

3. The Medicare Lifestyle Modification Program Demonstration (MLMPD)

The primary purpose of the Medicare Lifestyle Demonstration Project (MLMPD) was to determine if payment mechanisms could be established and if patient selection criteria could be implemented to prevent fraud and abuse. This goal has been achieved.

The medical effectiveness of this intervention in reversing the progression of coronary heart disease was already proven in earlier randomized, controlled clinical trials, which is why there are no cardiac endpoint measures such as angiography, thallium, or PET scans in the MLMPD.

3. The Medicare Lifestyle Demonstration Project (MLMPD)

- Patients in the MLMPD improved as much as patients > 65 years old in the two earlier demonstration projects and in the earlier randomized, controlled clinical trials
- Patients >65 improved as much as younger patients in all three demonstration projects and in the randomized, controlled clinical trials

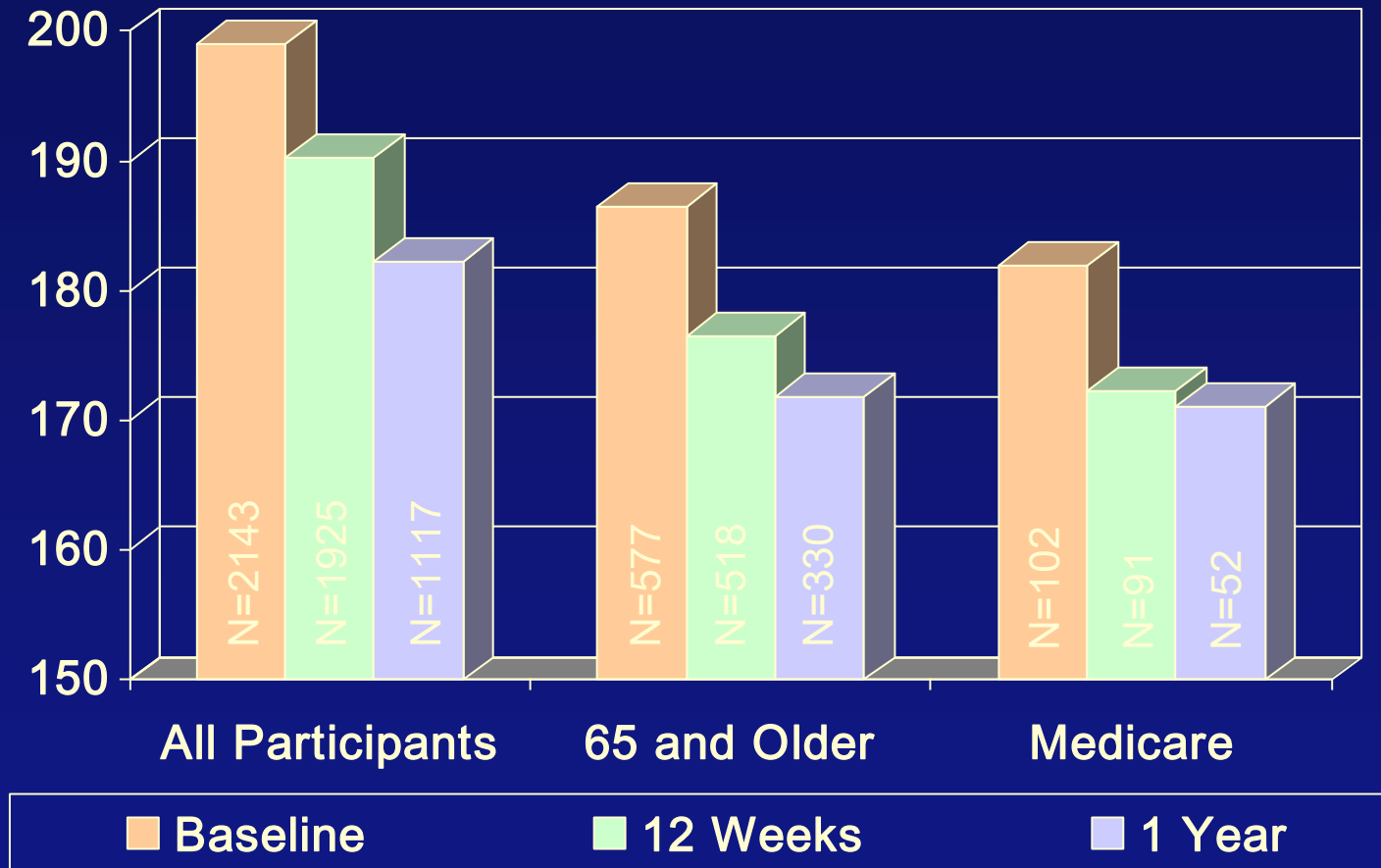
3. The Medicare Lifestyle Demonstration Project (MLMPD)

Thus, data from the MLMPD patients are comparable to the much larger sample of over 2,000 patients who participated in the two earlier demonstration projects as well as the randomized, controlled clinical trials

3. The Medicare Lifestyle Demonstration Project (MLMPD)

- The risks of revascularization (PTCA & CABG) increase with age but the benefits of comprehensive lifestyle changes are as great in older patients as in younger ones
- Therefore, comprehensive lifestyle changes are especially beneficial in Medicare patients

Body Weight (lbs.)

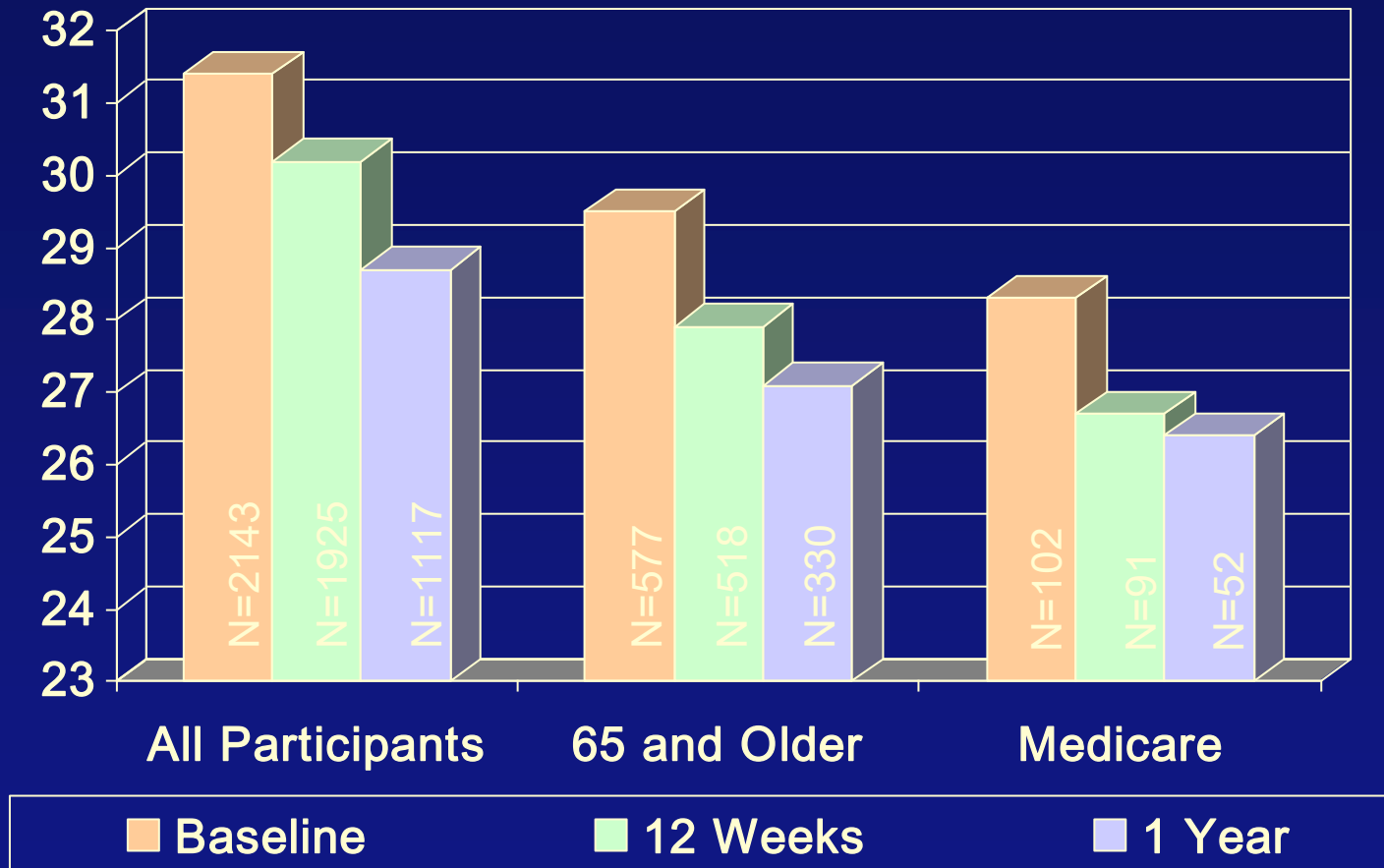


Data presented at AACVPR, 2004

All $p < .001$

N at 1 year is not comparable to baseline because many patients have not yet finished 1 year of intervention

BMI (kg/m²)

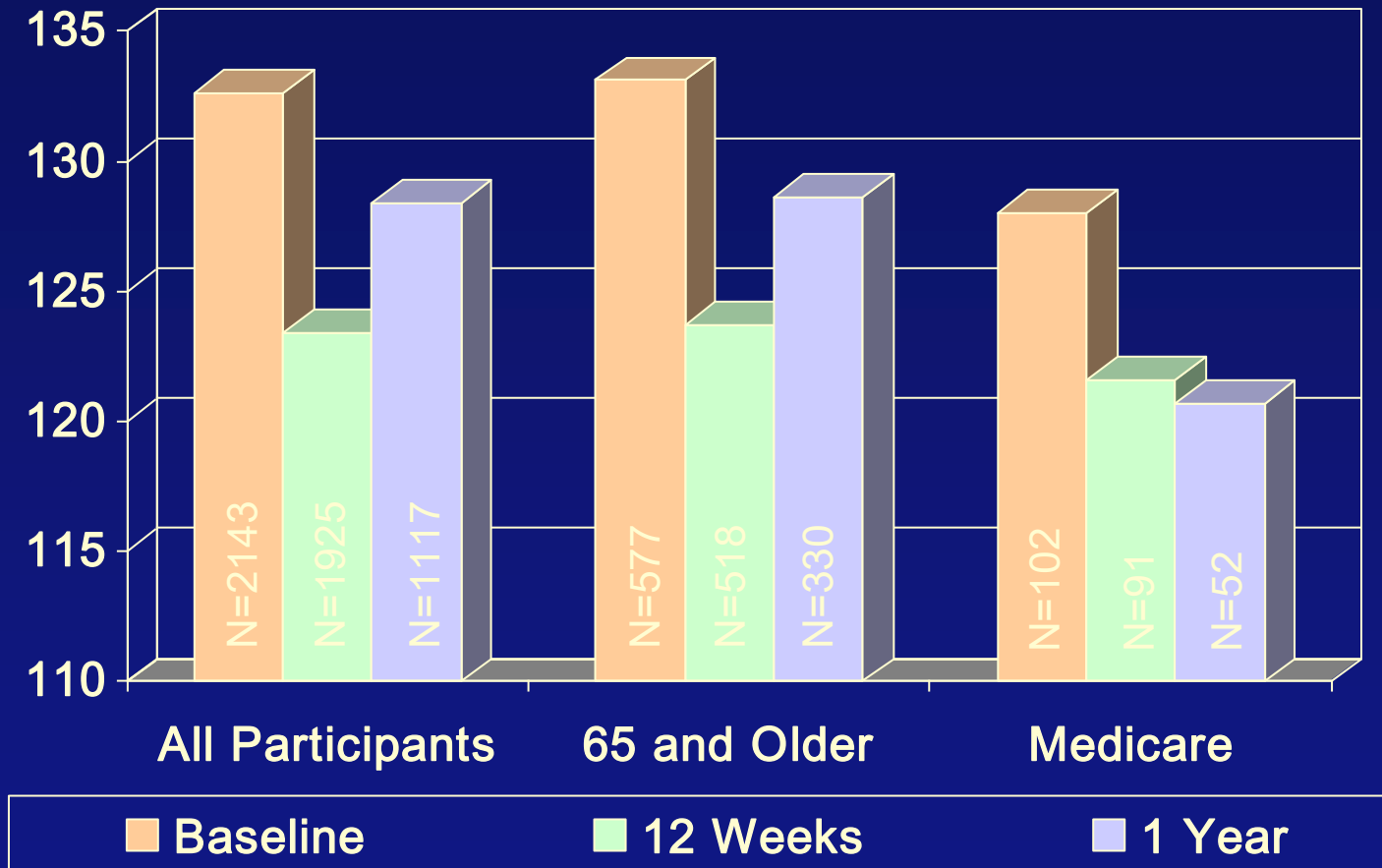


Data presented at AACVPR, 2004

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Systolic Blood Pressure (mm Hg)

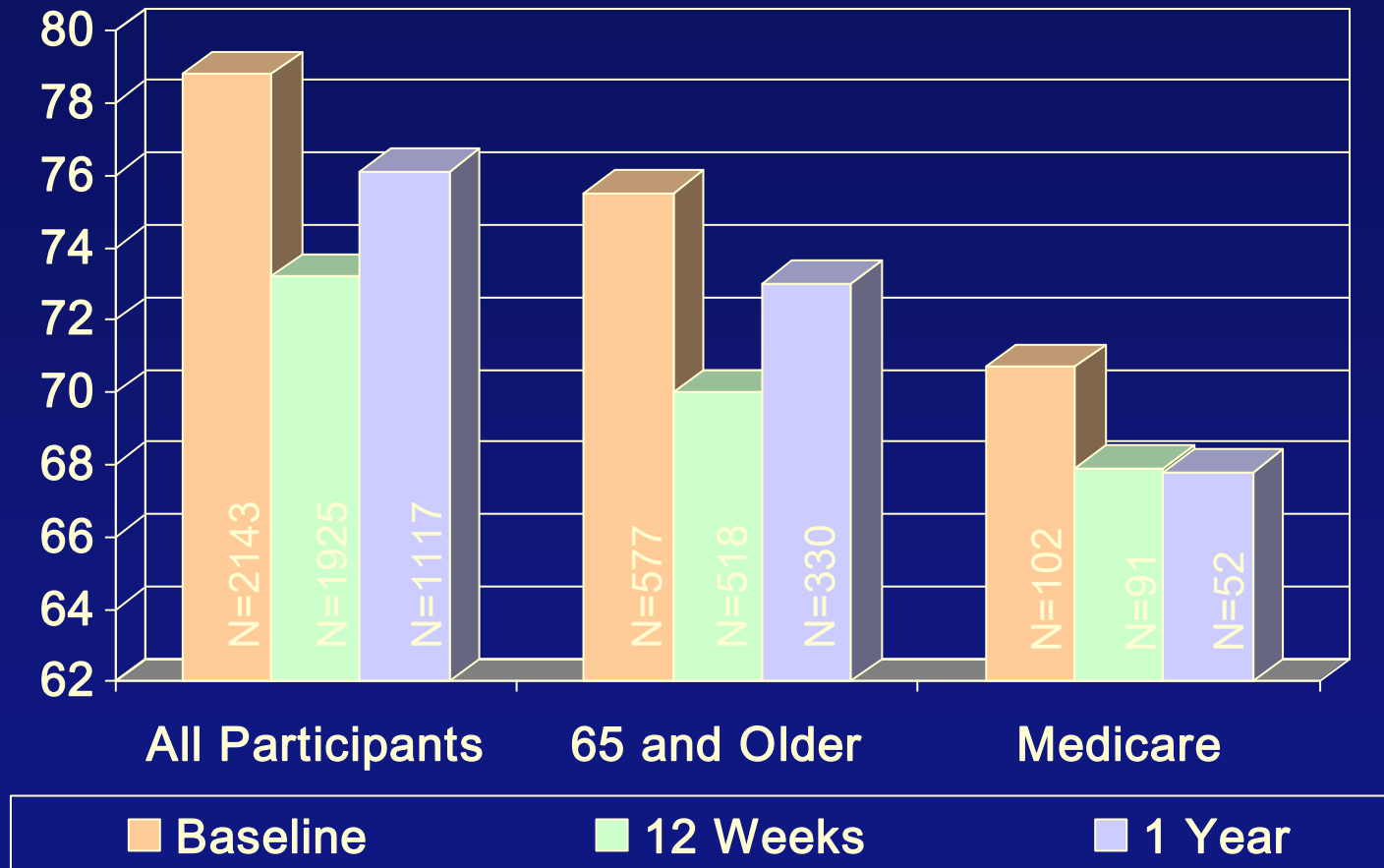


Data to be presented at SBM, 2005

All $p < .08$

N at 1 year is not comparable to baseline because many patients have not yet finished 1 year of intervention

Diastolic Blood Pressure (mm Hg)

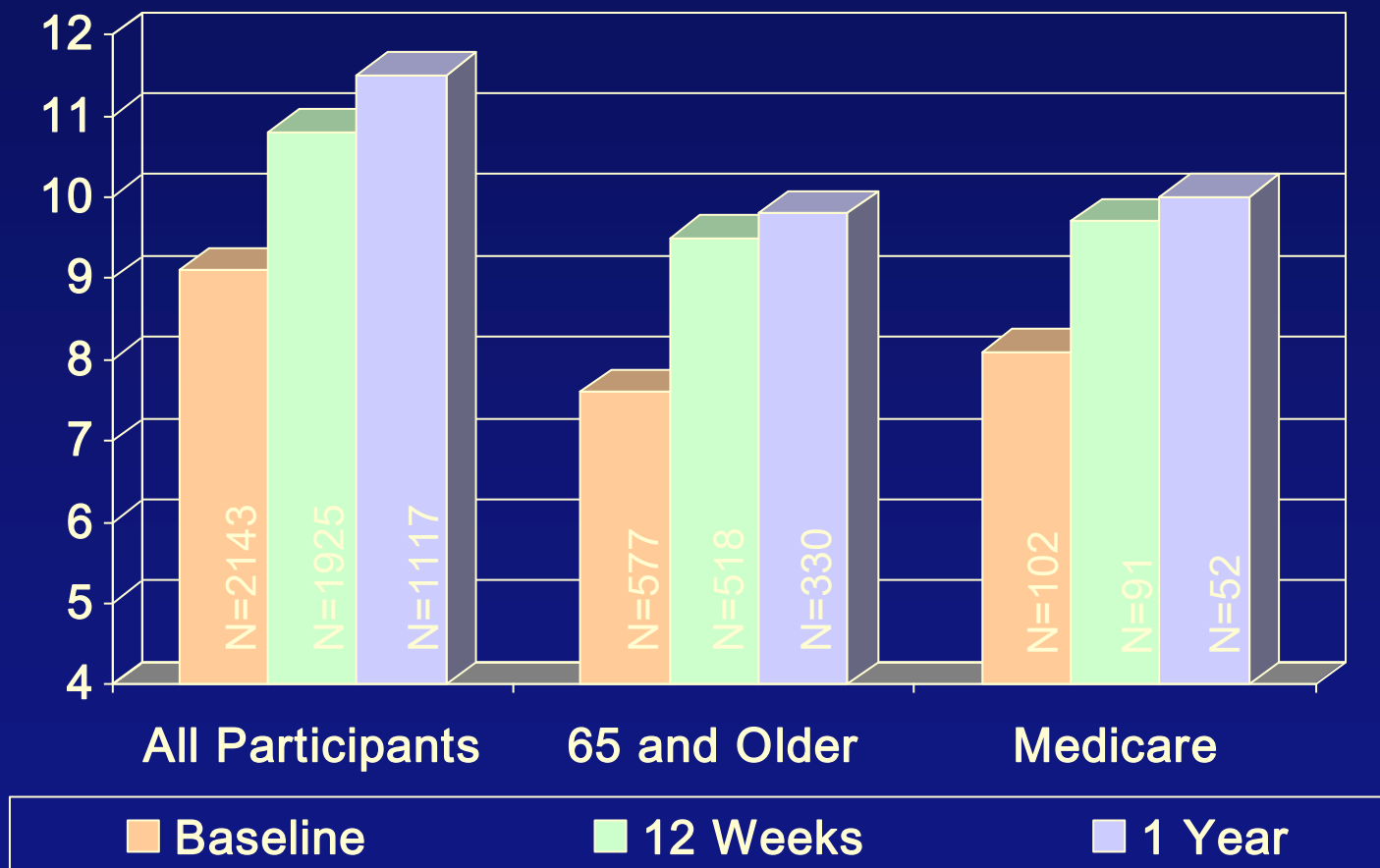


Data to be presented at SBM, 2005

All $p < .008$

N at 1 year is not comparable to baseline because many patients have not yet finished 1 year of intervention

Functional Capacity (METs)

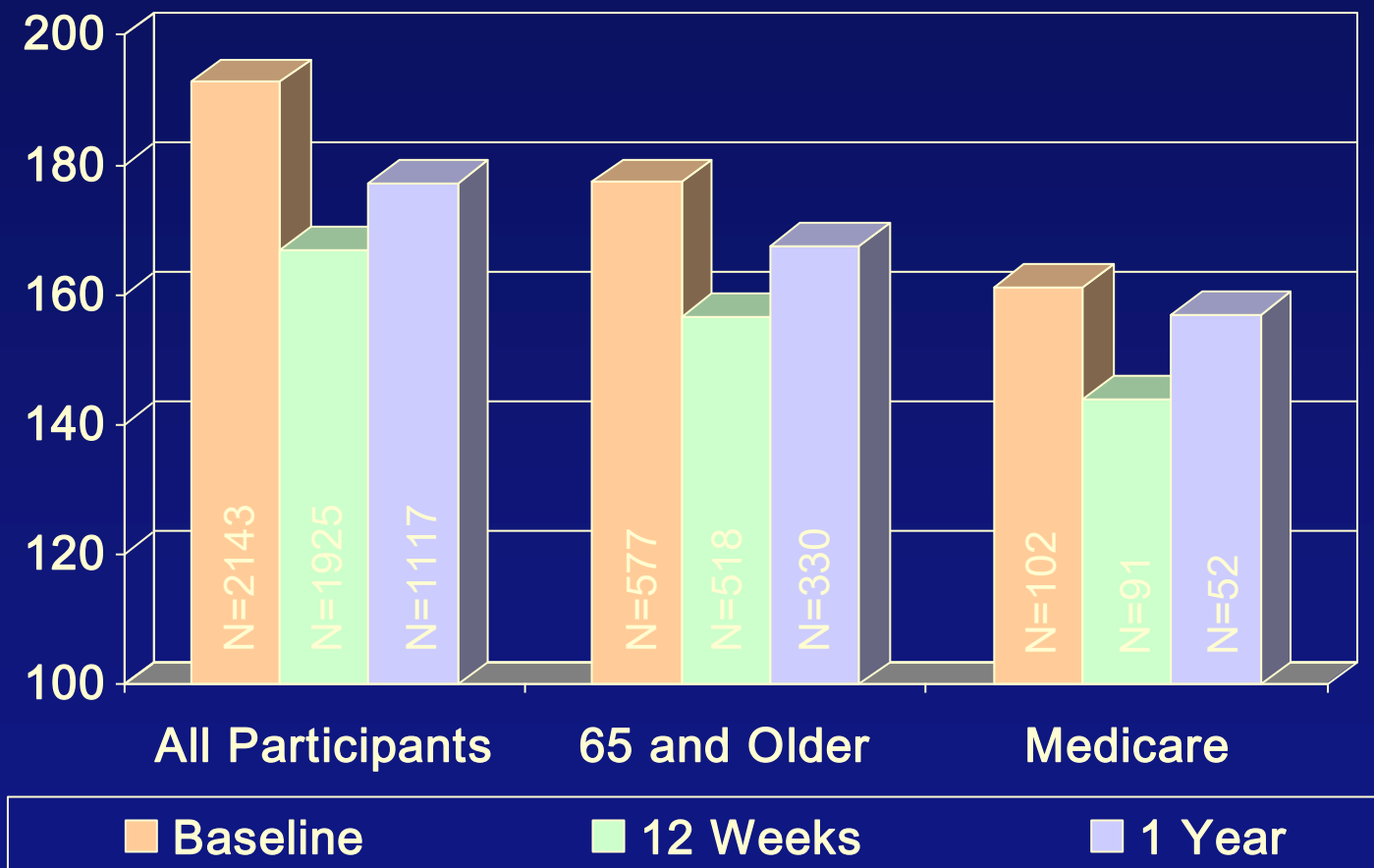


Data to be presented at SBM, 2005

All $p < .001$

N at 1 year is not comparable to baseline because many patients have not yet finished 1 year of intervention

Total Cholesterol (mg/dl)

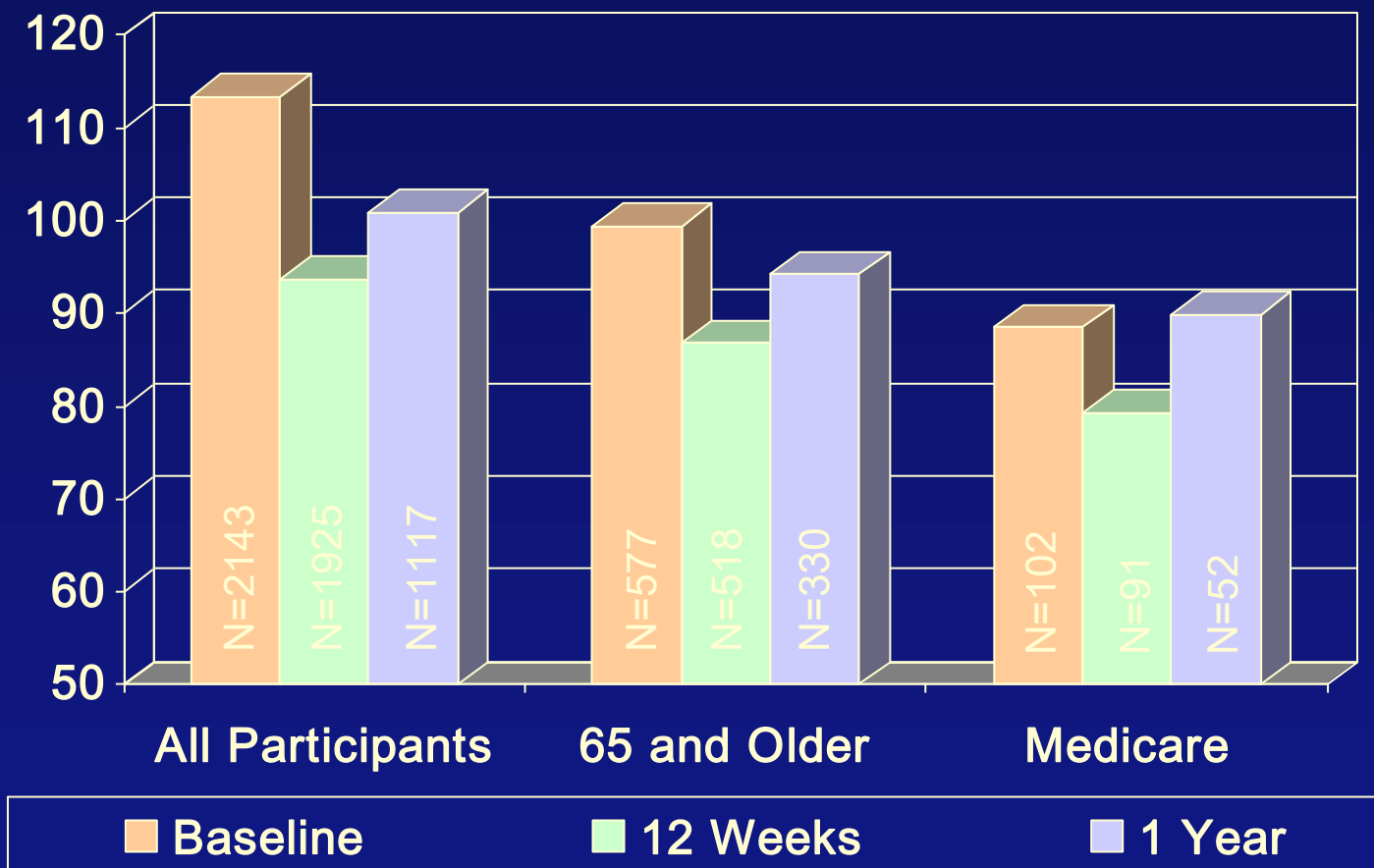


Data to be presented at SBM, 2005

All $p < .04$

Note: 62% of "All Participants," 70% of "65 and Older," and 87% of "Medicare" patients were taking lipid-lowering medications.

LDL (mg/dl)

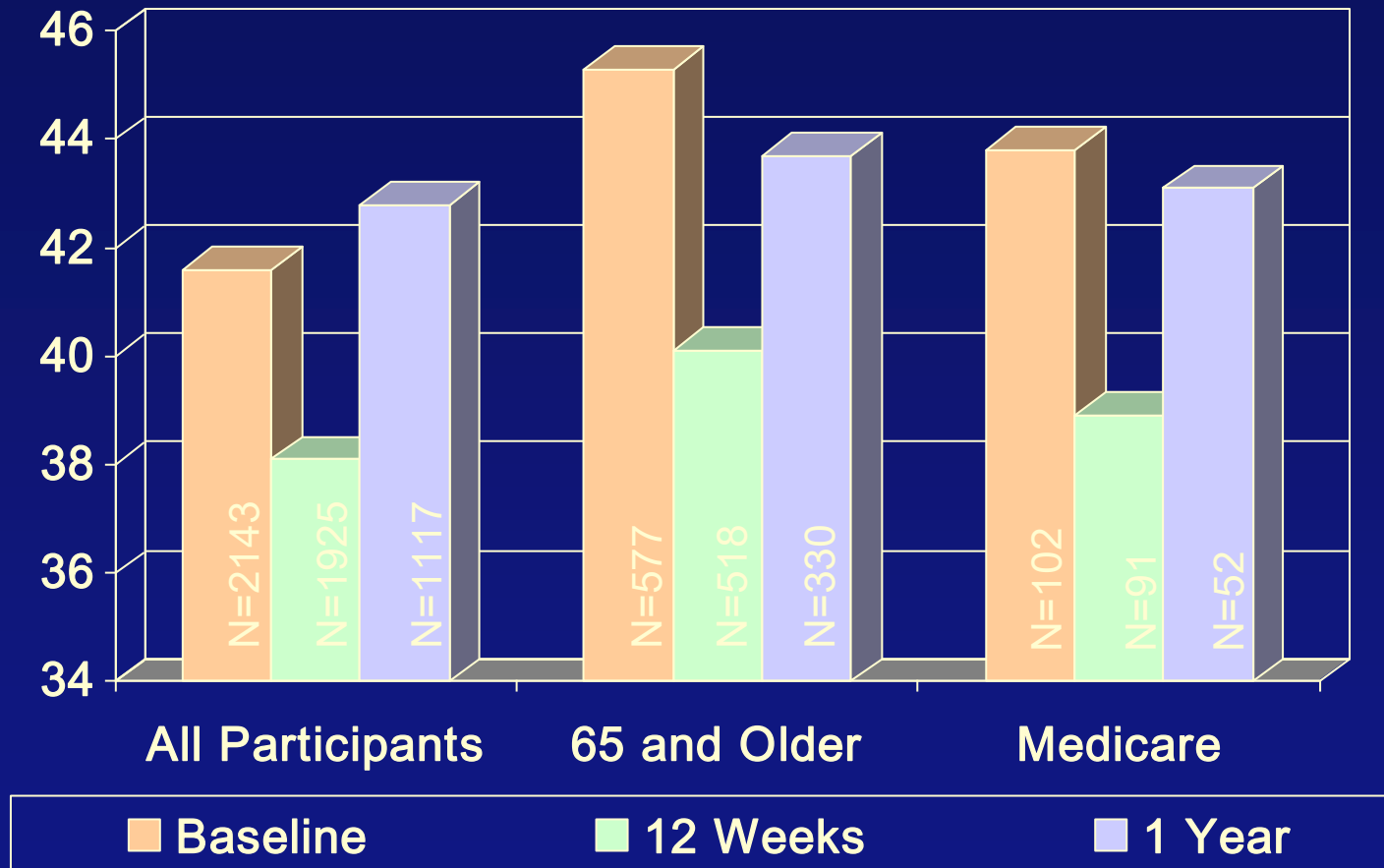


Data to be presented at SBM, 2005

Note: 62% of “All Participants,” 70% of “65 and Older,” and 87% of “Medicare” patients were taking lipid-lowering medications.

All $p < .01$, except Medicare at 1 year *NS*

HDL (mg/dl)

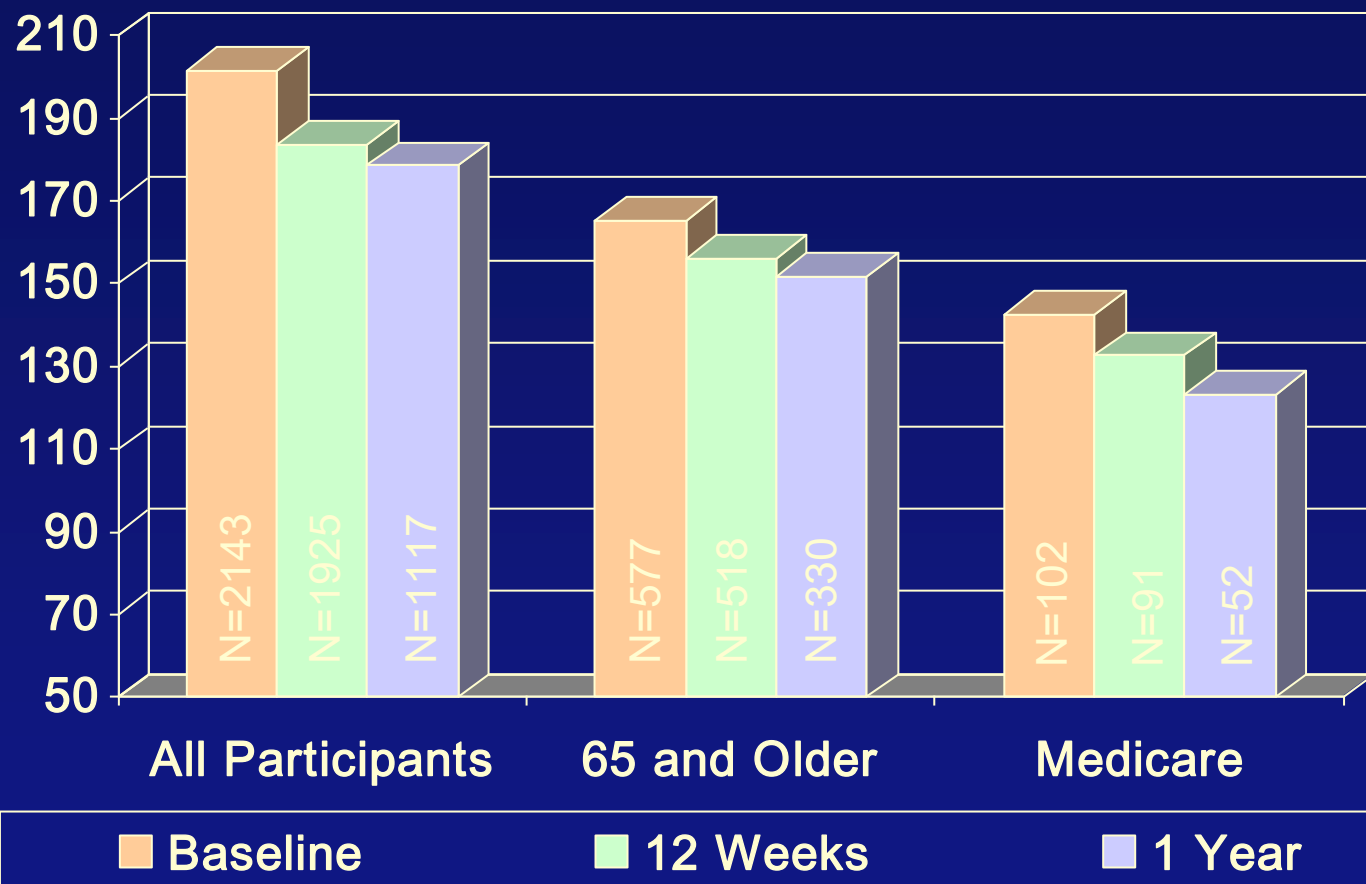


Data to be presented at SBM, 2005

Note: 62% of "All Participants," 70% of "65 and Older," and 87% of "Medicare" patients were taking lipid-lowering medications.

p < .001 at 12 weeks
p NS at 1 year

Triglycerides (mg/dl)

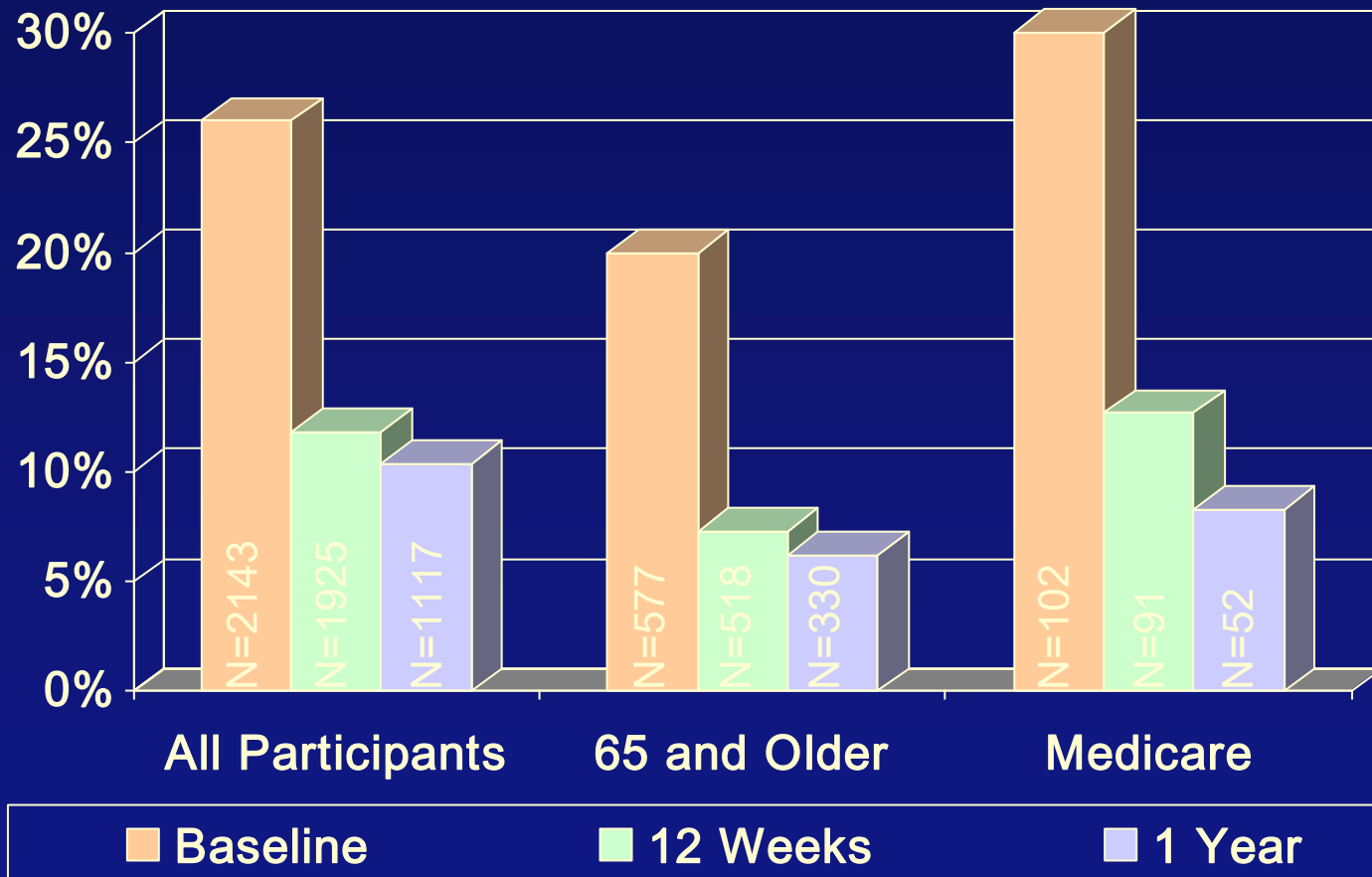


Data to be presented at SBM, 2005

Note: 62% of "All Participants," 70% of "65 and Older," and 87% of "Medicare" patients were taking lipid-lowering medications.

All $p < .05$, except Medicare at 12 weeks *NS*

Angina (% who experienced any angina during the preceding 30 days)

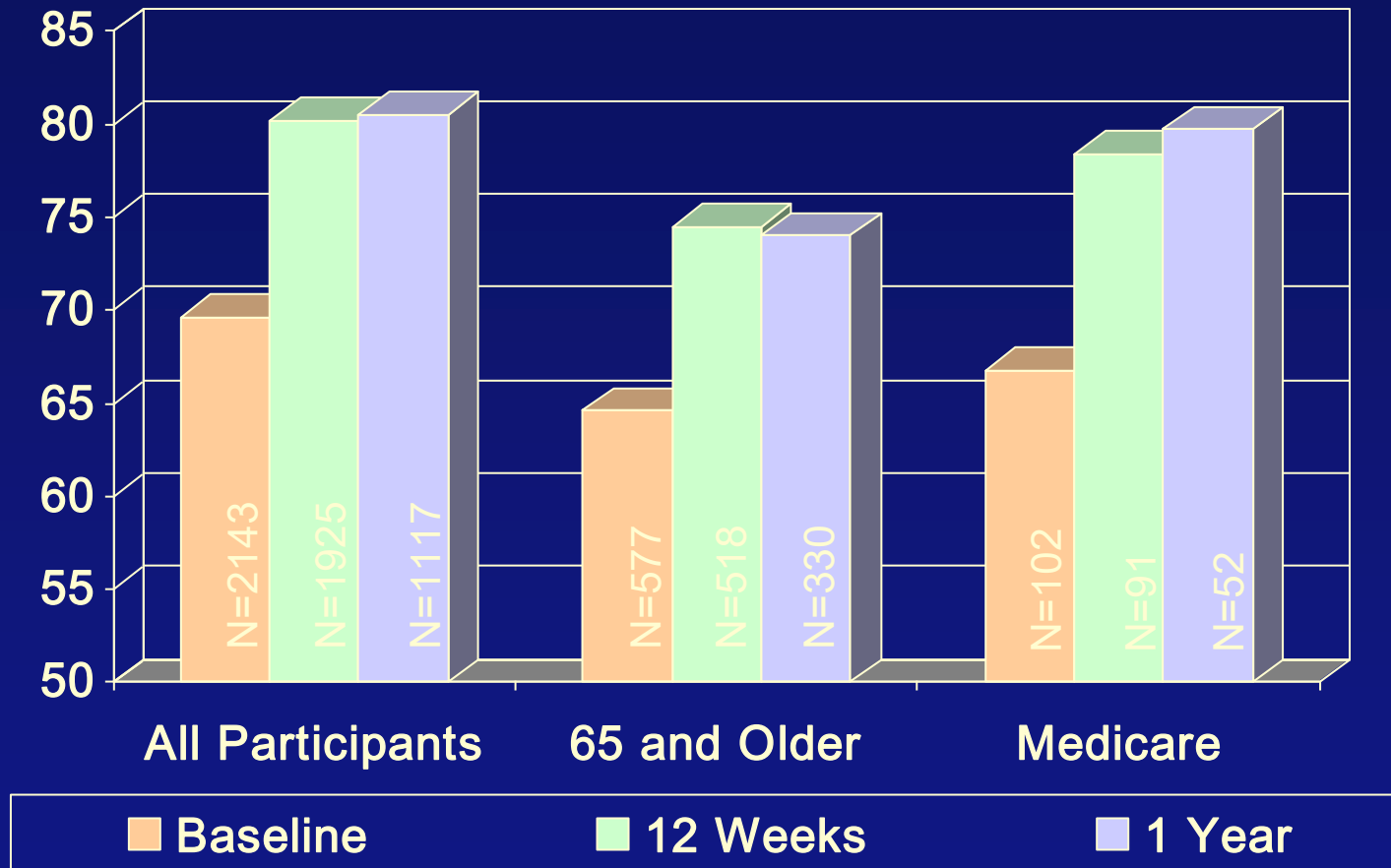


Data to be presented at SBM, 2005

All $p < .001$

N at 1 year is not comparable to baseline because many patients have not yet finished 1 year of intervention

Physical Function (SF-36) (higher score = better function)



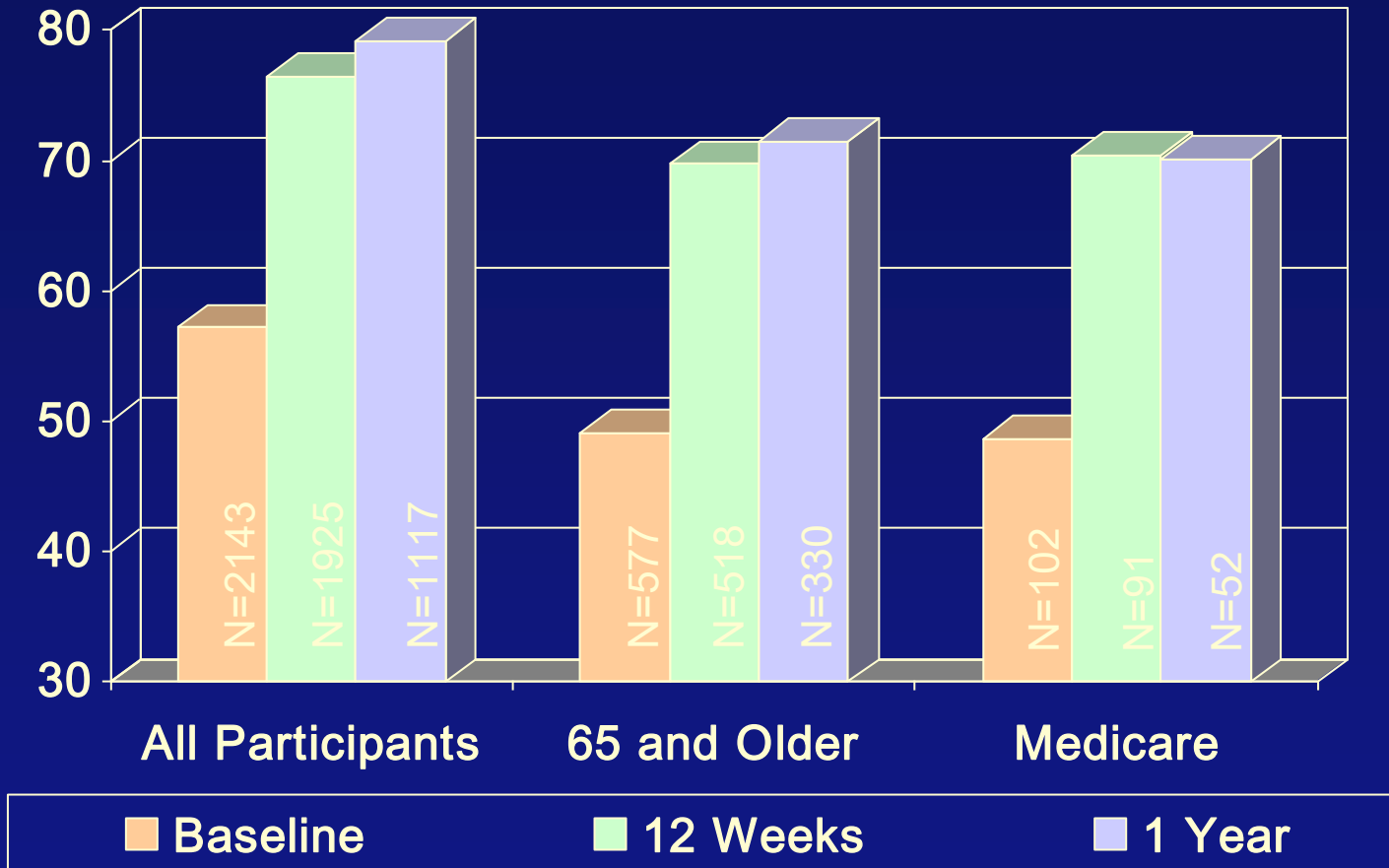
Data to be presented at SBM, 2005

All $p < .001$

N at 1 year is not comparable to baseline because many patients have not yet finished 1 year of intervention

Role Physical (SF-36)

(higher score = fewer limitations on activities due to physical health)



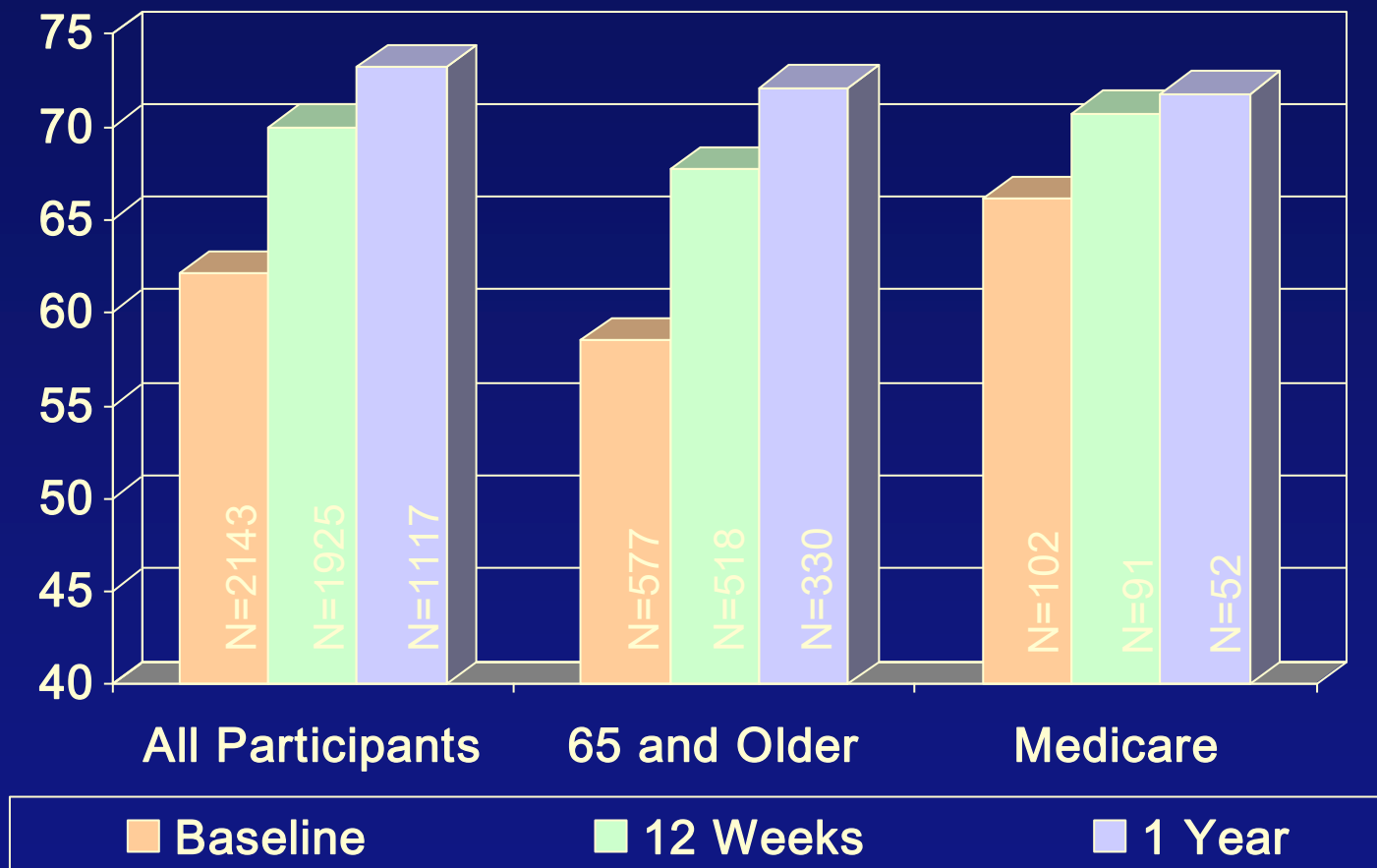
Data to be presented at SBM, 2005

All $p < .001$

N at 1 year is not comparable to baseline because many patients have not yet finished 1 year of intervention

Bodily Pain (SF-36)

(higher score = less pain interference in daily activities, including work)

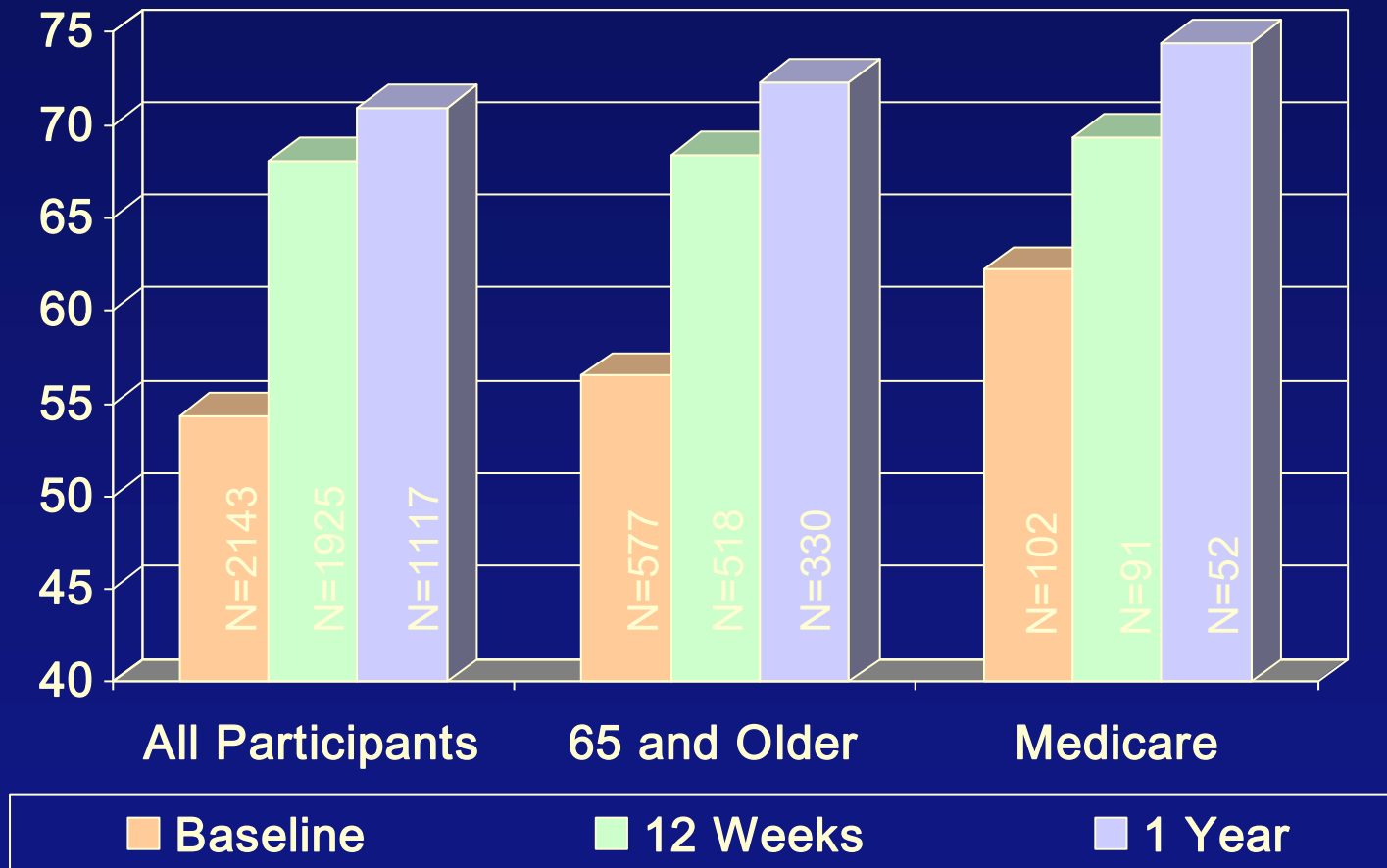


Data to be presented at SBM, 2005

All $p < .05$, except
Medicare at 1 year *NS*

N at 1 year is not comparable to baseline because many patients have not yet finished 1 year of intervention

General Health (SF-36)

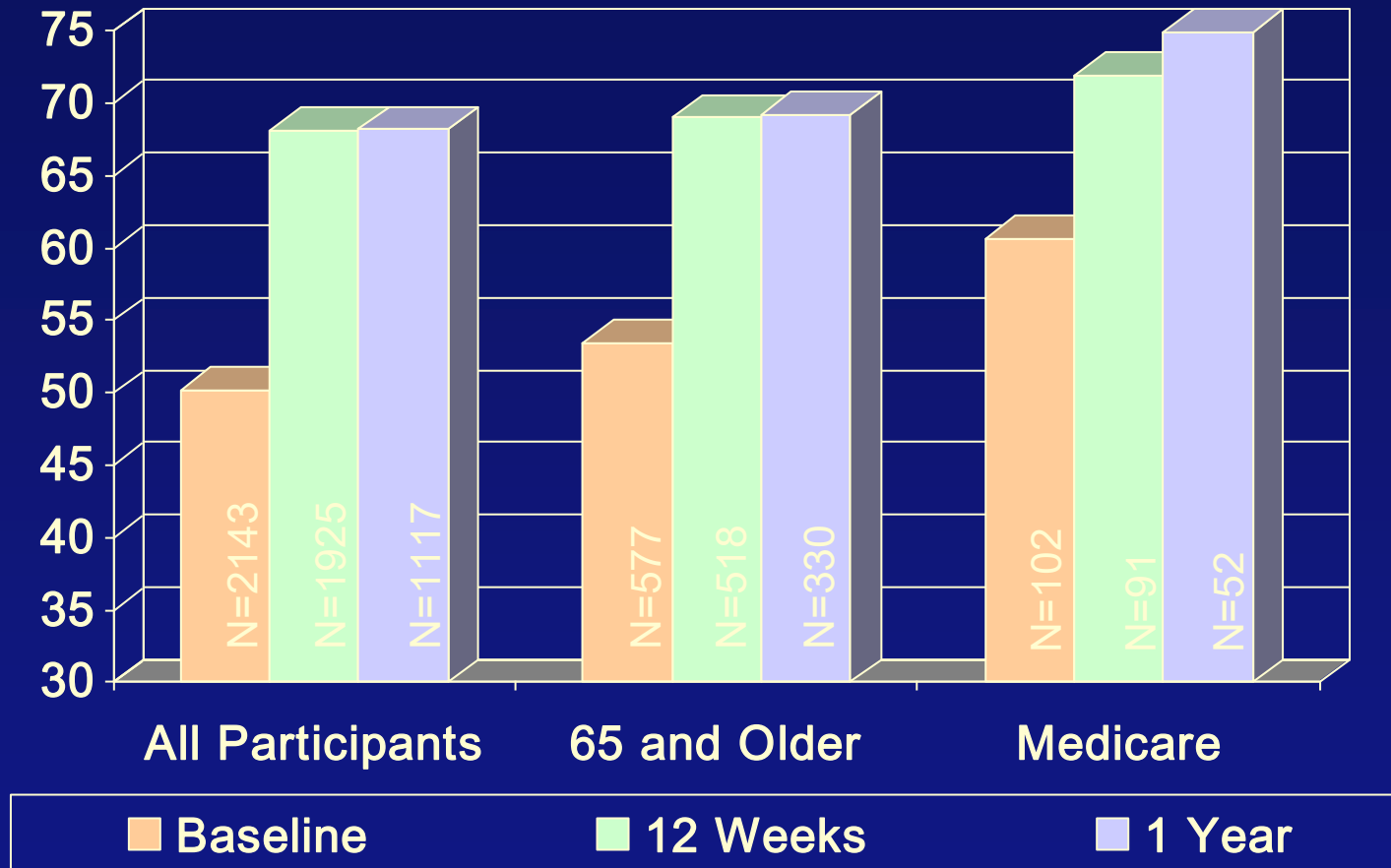


Data to be presented at SBM, 2005

All $p < .001$

N at 1 year is not comparable to baseline because many patients have not yet finished 1 year of intervention

Vitality (SF-36) (higher score = more perceived energy)



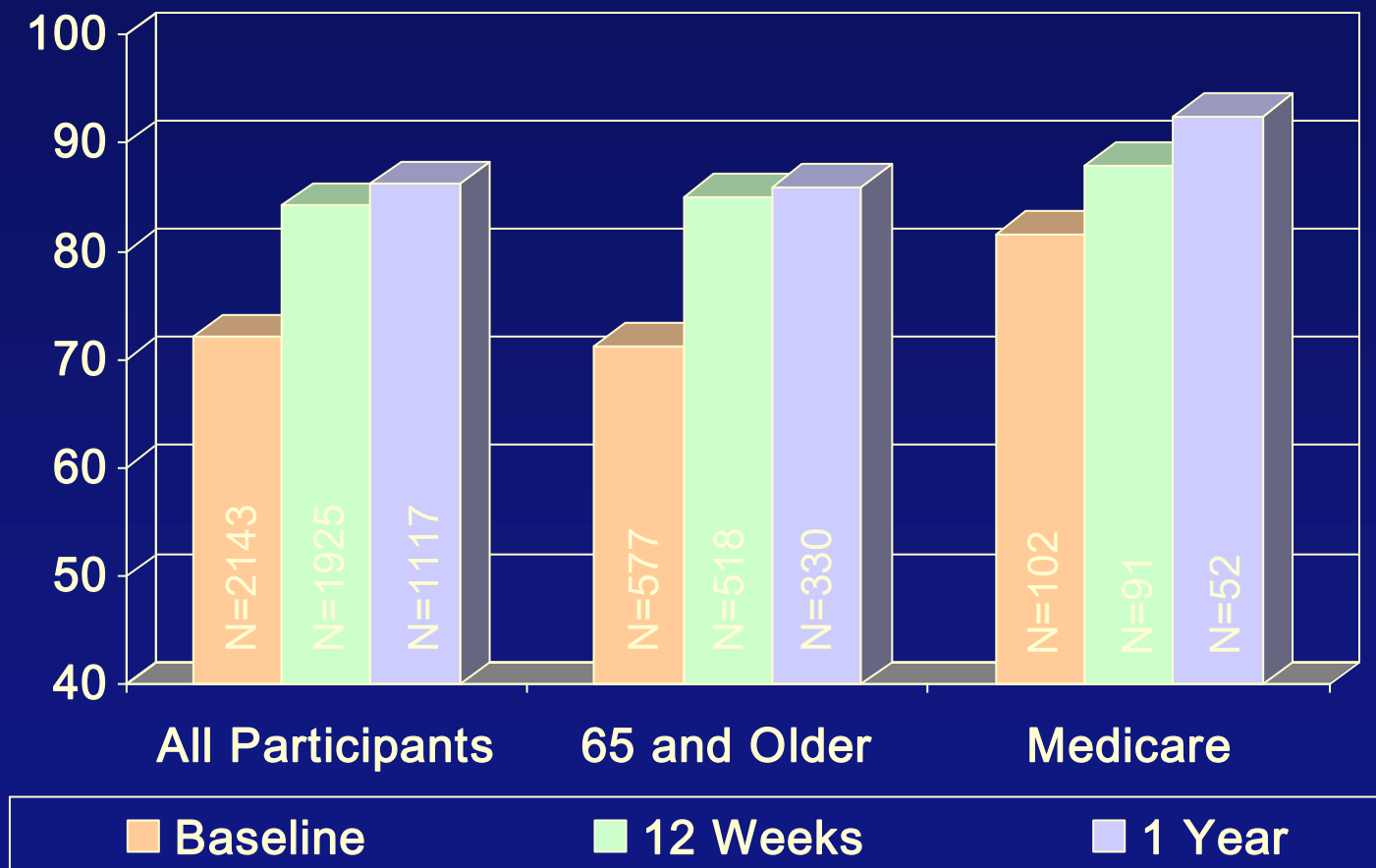
Data to be presented at SBM, 2005

All $p < .001$

N at 1 year is not comparable to baseline because many patients have not yet finished 1 year of intervention

Social Functioning (SF-36)

(higher score = fewer limitations due to health in normal social activities)



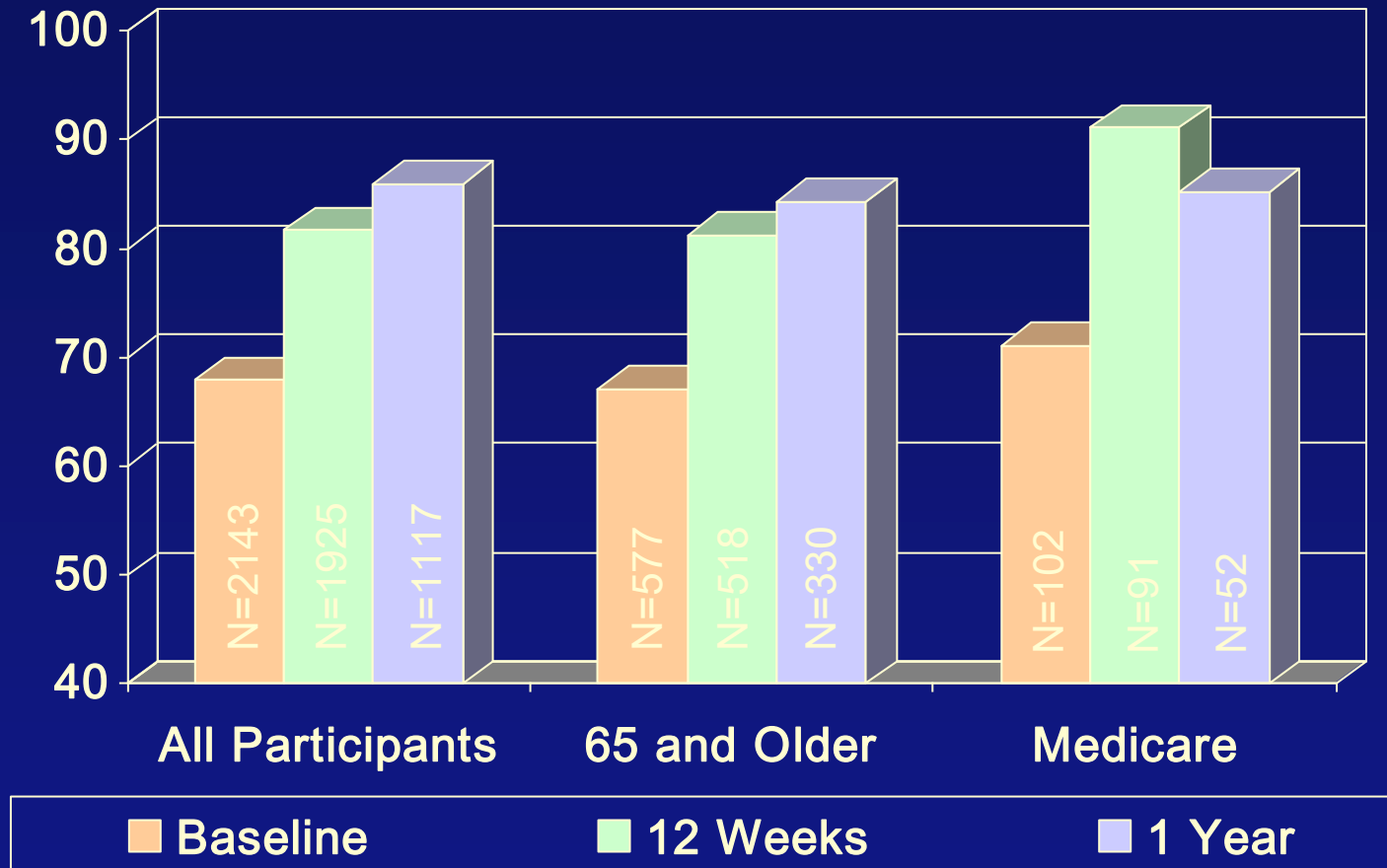
Data to be presented at SBM, 2005

All $p < .02$

N at 1 year is not comparable to baseline because many patients have not yet finished 1 year of intervention

Role Emotional (SF-36)

(higher score = fewer role limitations due to emotional health)



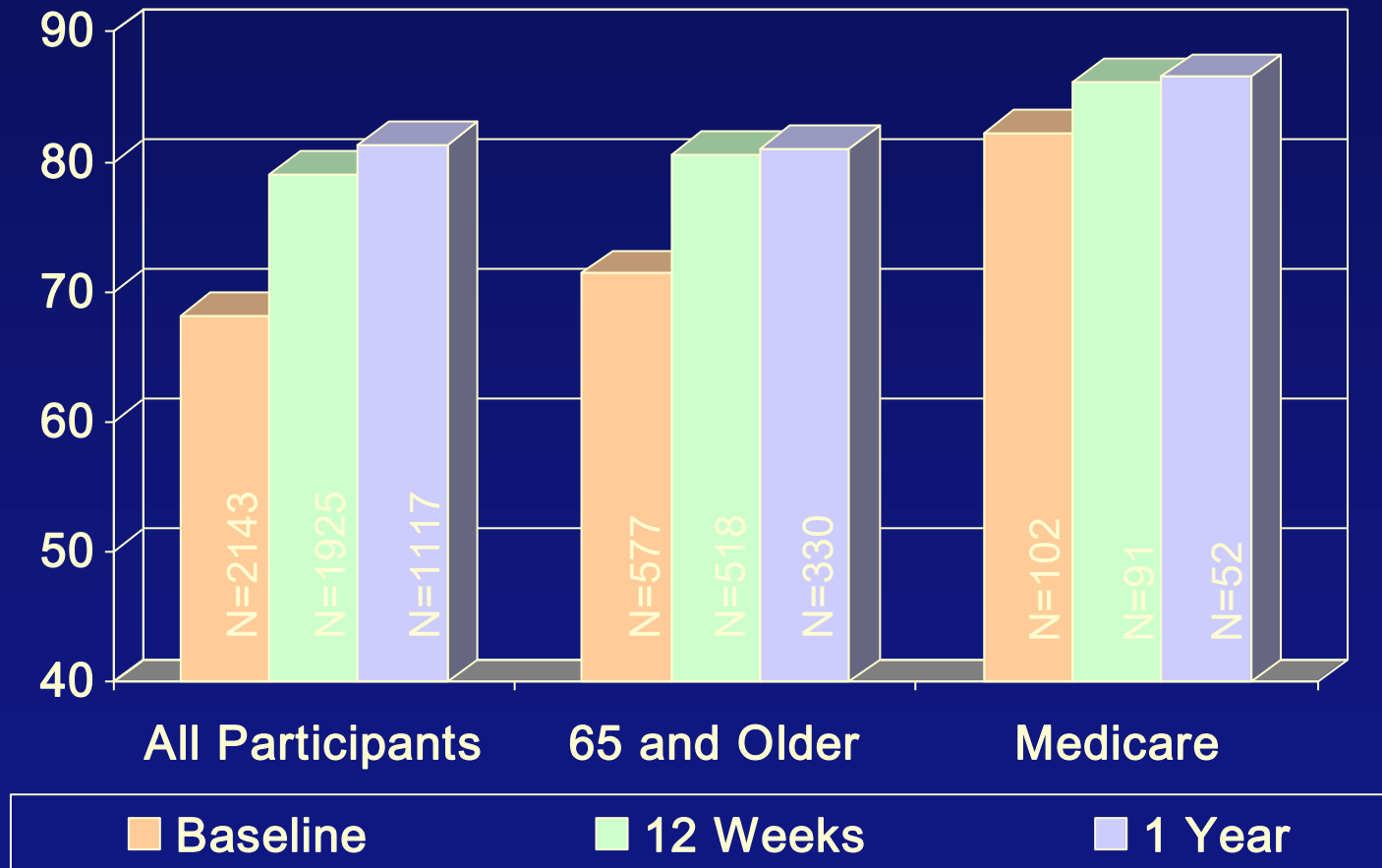
Data to be presented at SBM, 2005

All $p < .05$

N at 1 year is not comparable to baseline because many patients have not yet finished 1 year of intervention

Mental Health (SF-36)

(higher score = feeling happier, calmer, more peaceful)

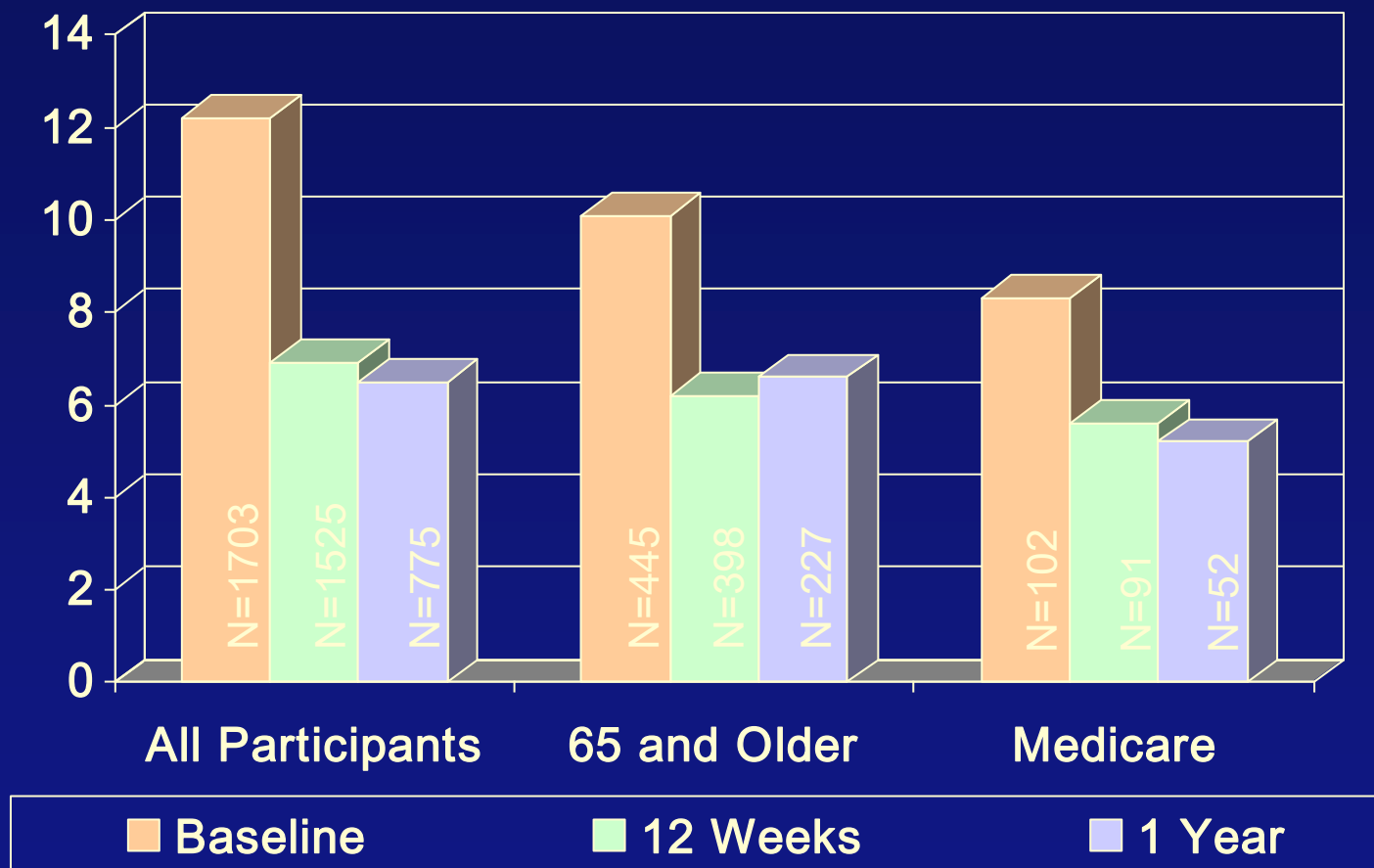


Data to be presented at SBM, 2005

All $p < .01$

N at 1 year is not comparable to baseline because many patients have not yet finished 1 year of intervention

CES-D (Depression)

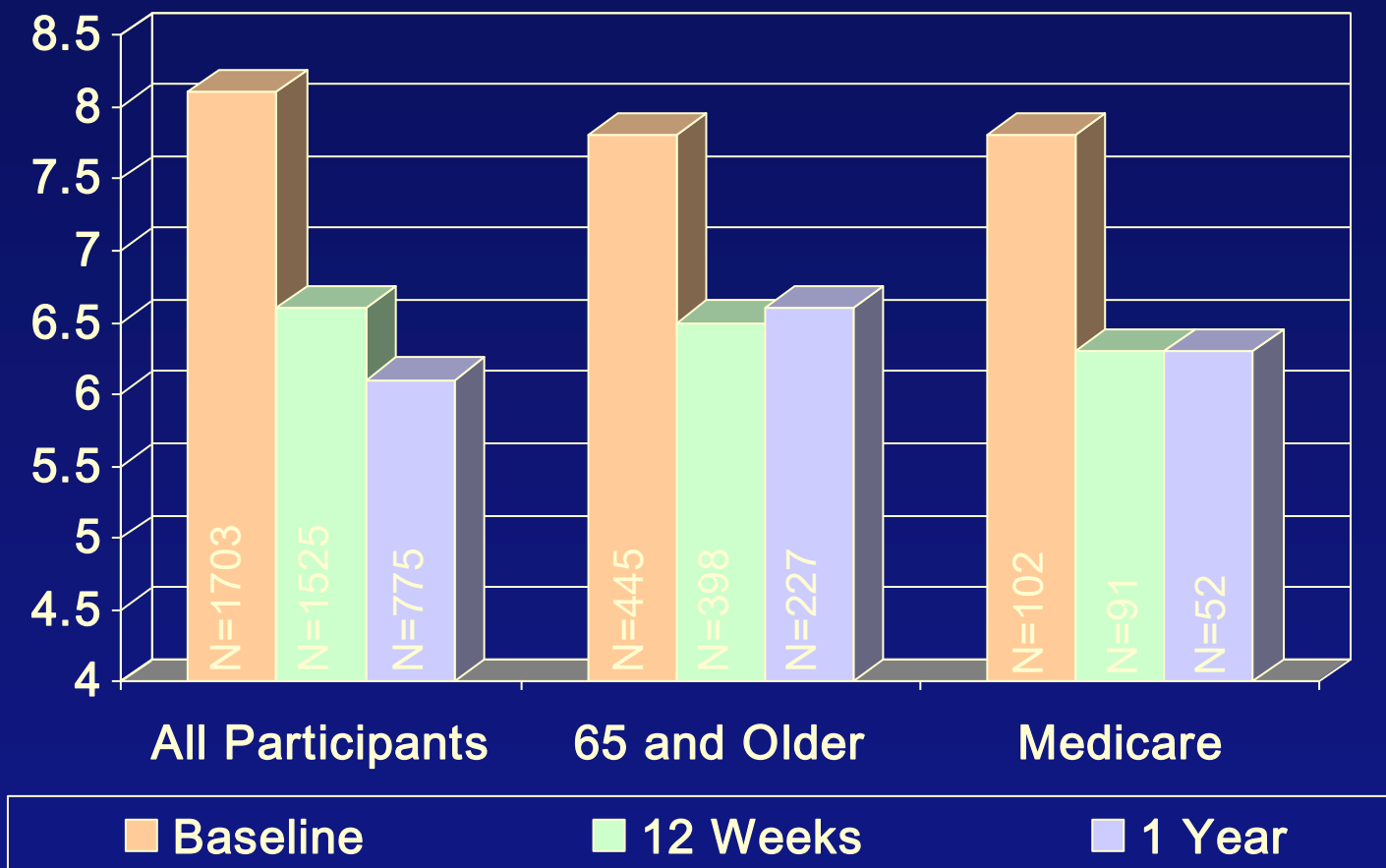


Data to be presented at SBM, 2005

All $p < .006$

N at 1 year is not comparable to baseline because many patients have not yet finished 1 year of intervention

Cook-Medley (Hostility)

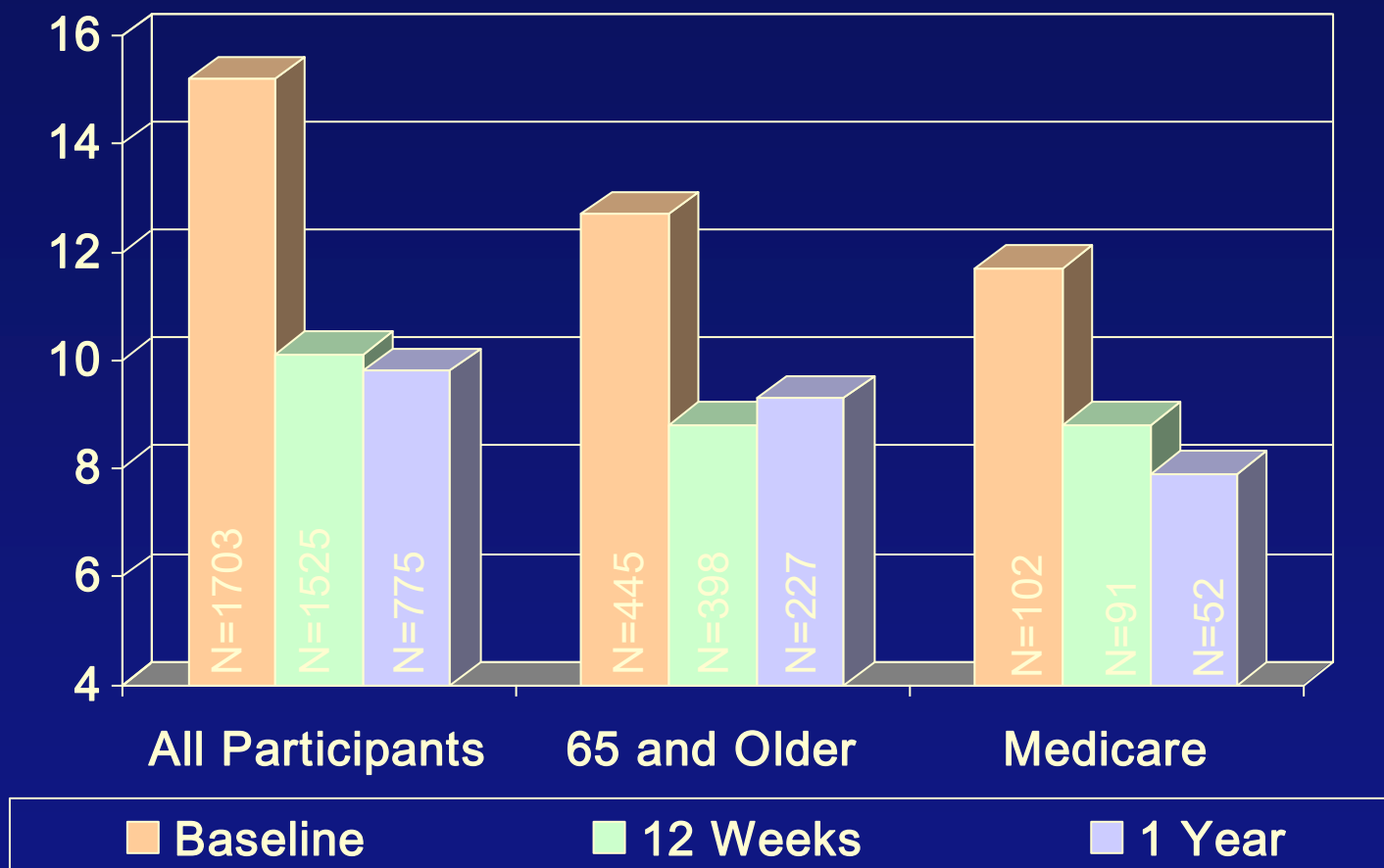


Data to be presented at SBM, 2005

All $p < .001$

N at 1 year is not comparable to baseline because many patients have not yet finished 1 year of intervention

Perceived Stress Scale

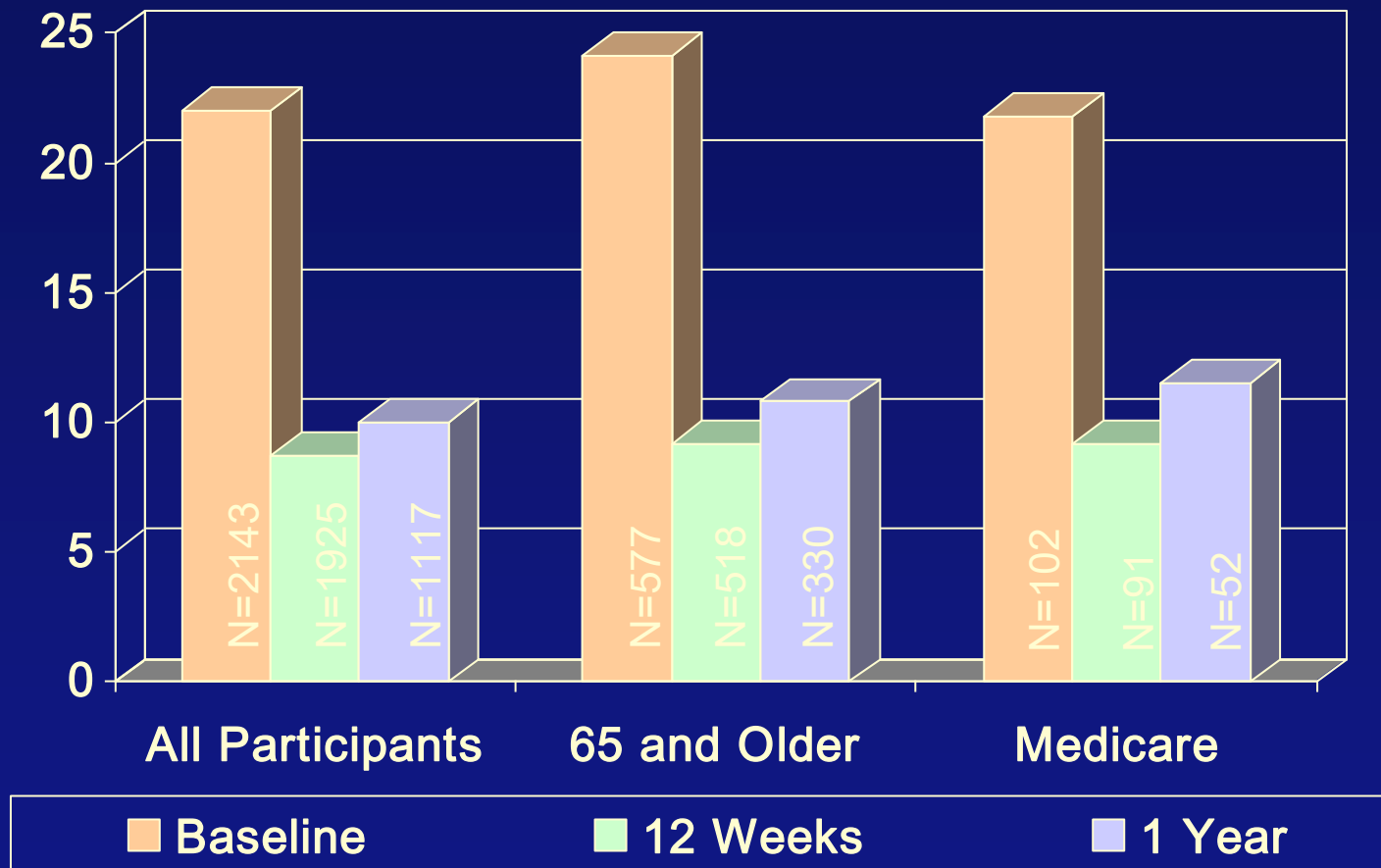


Data to be presented at SBM, 2005

All $p < .001$

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Dietary Fat (% of total calories)

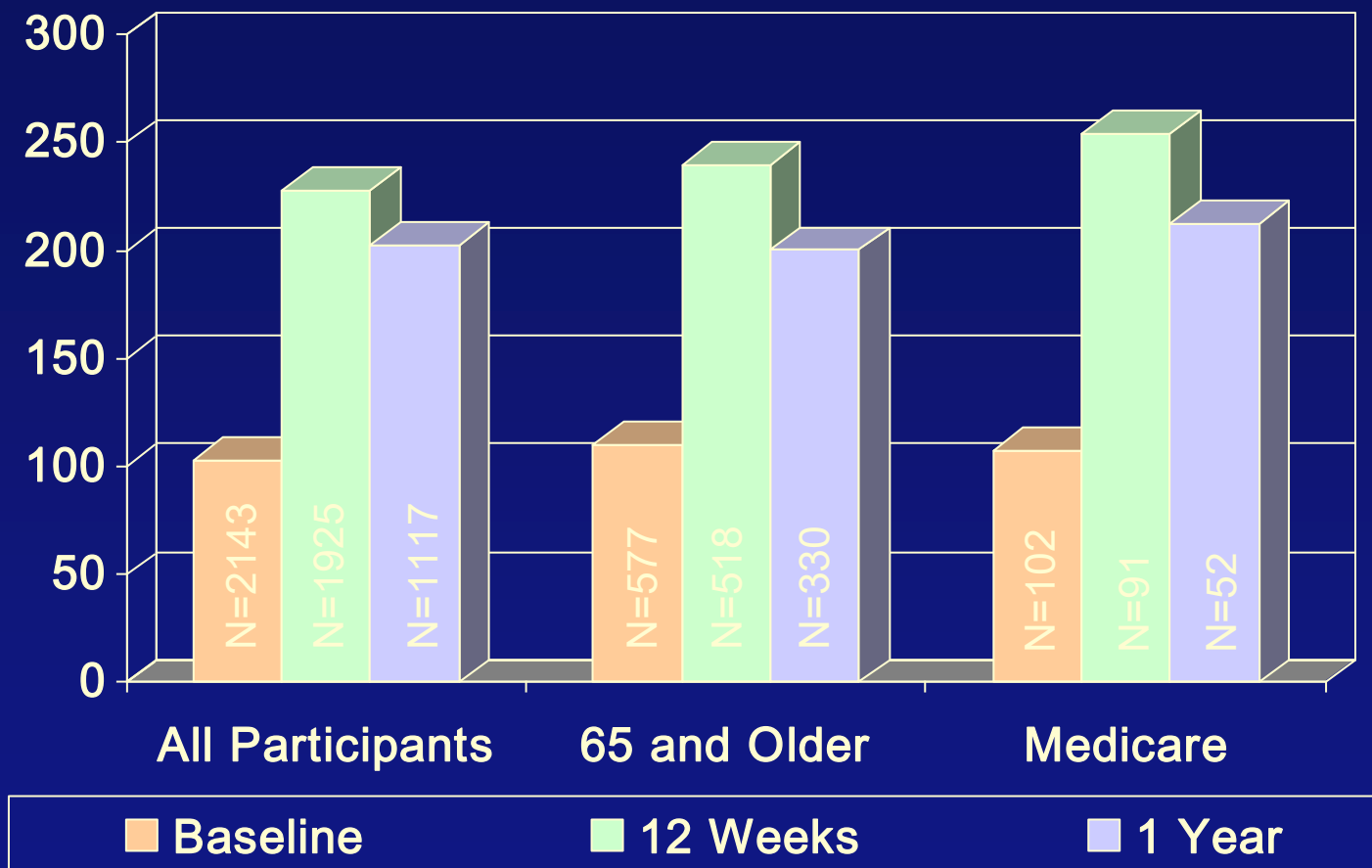


Data to be presented at SBM, 2005

All $p < .001$

N at 1 year is not comparable to baseline because many patients have not yet finished 1 year of intervention

Minutes of Exercise / Week

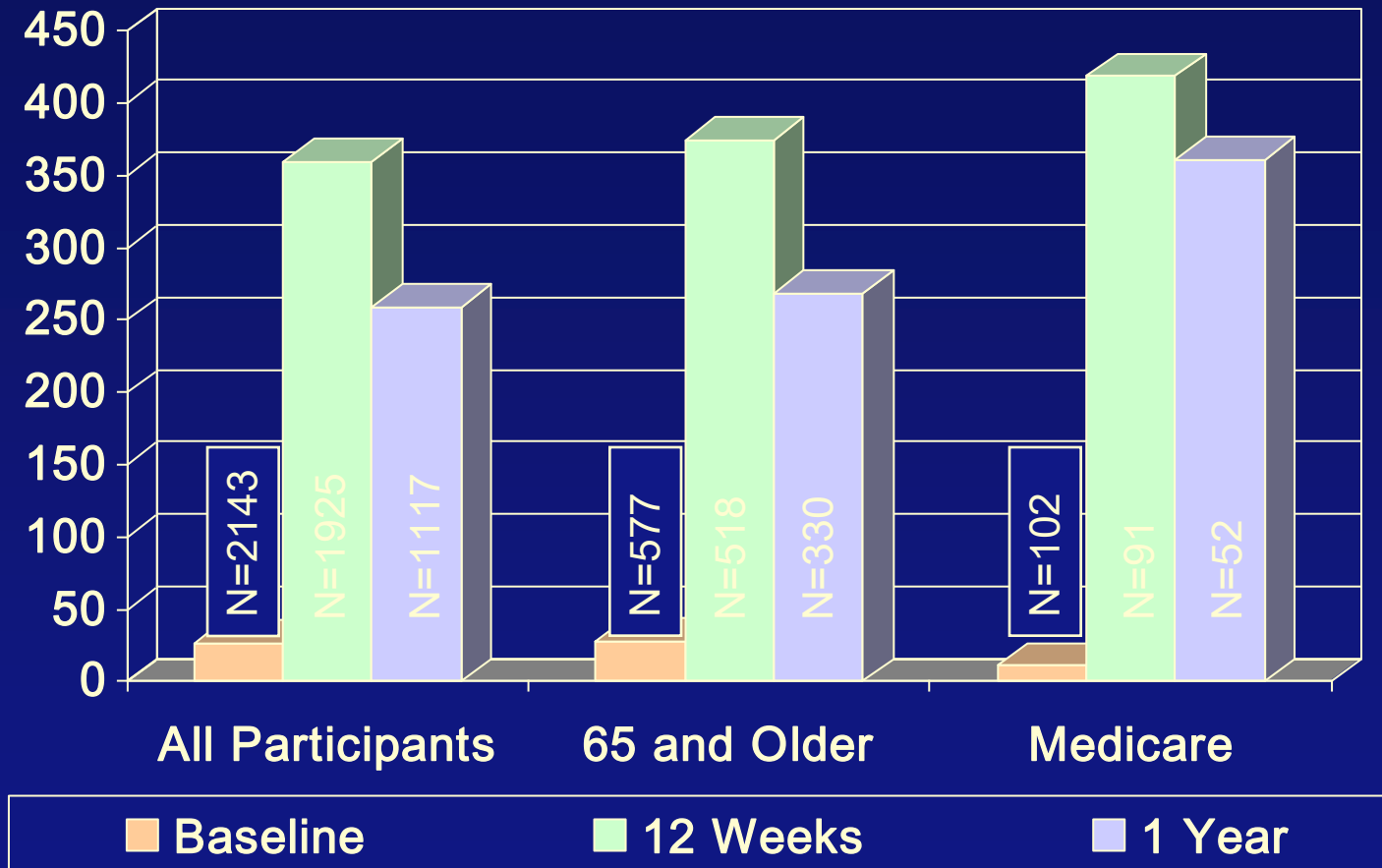


Data to be presented at SBM, 2005

All $p < .001$

N at 1 year is not comparable to baseline because many patients have not yet finished 1 year of intervention

Minutes of Stress Management / Week



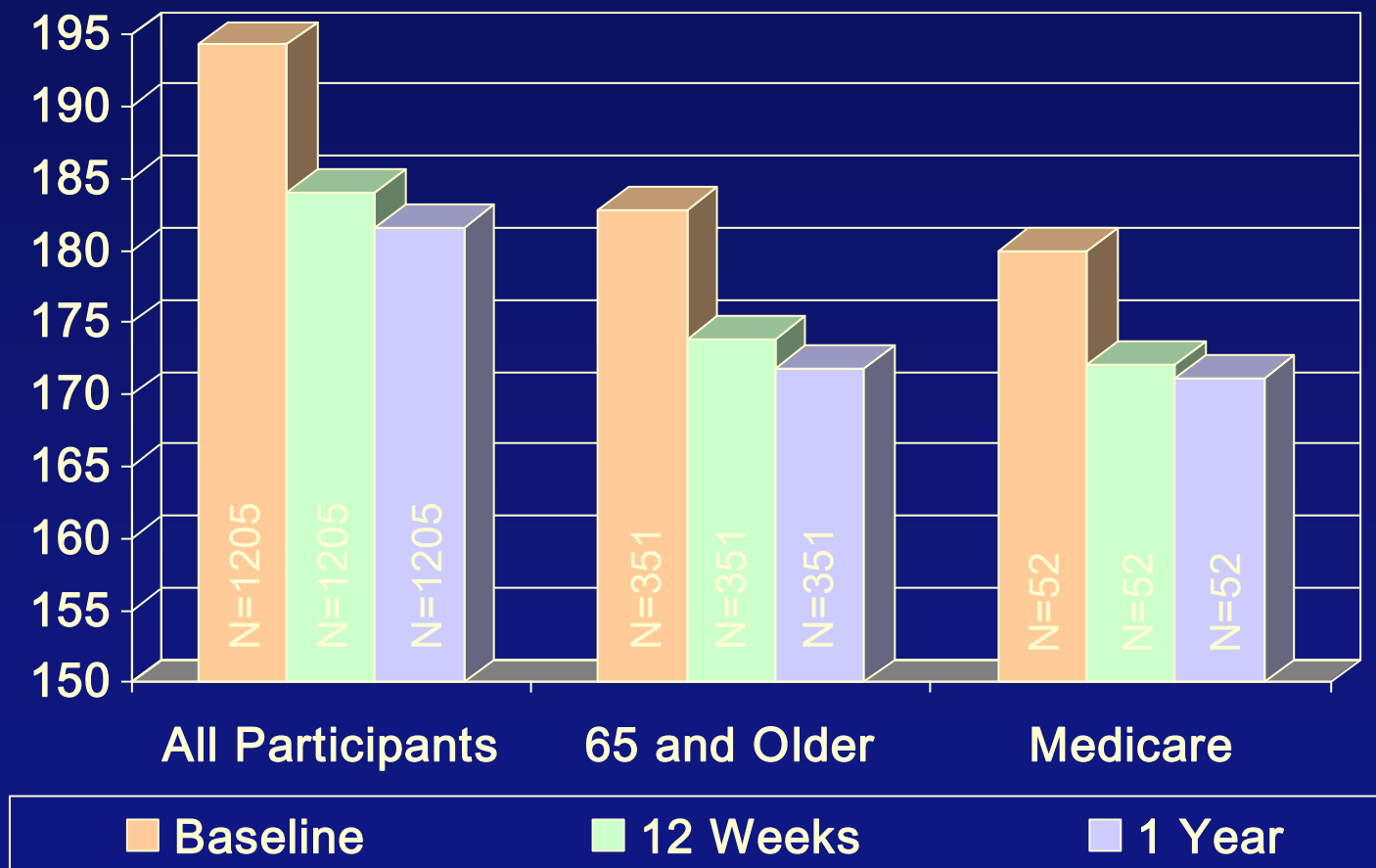
Data to be presented at SBM, 2005

All $p < .001$

N at 1 year is not comparable to baseline because many patients have not yet finished 1 year of intervention

Results for Patients Who Have Reached 1 Year

Body Weight (lbs.)

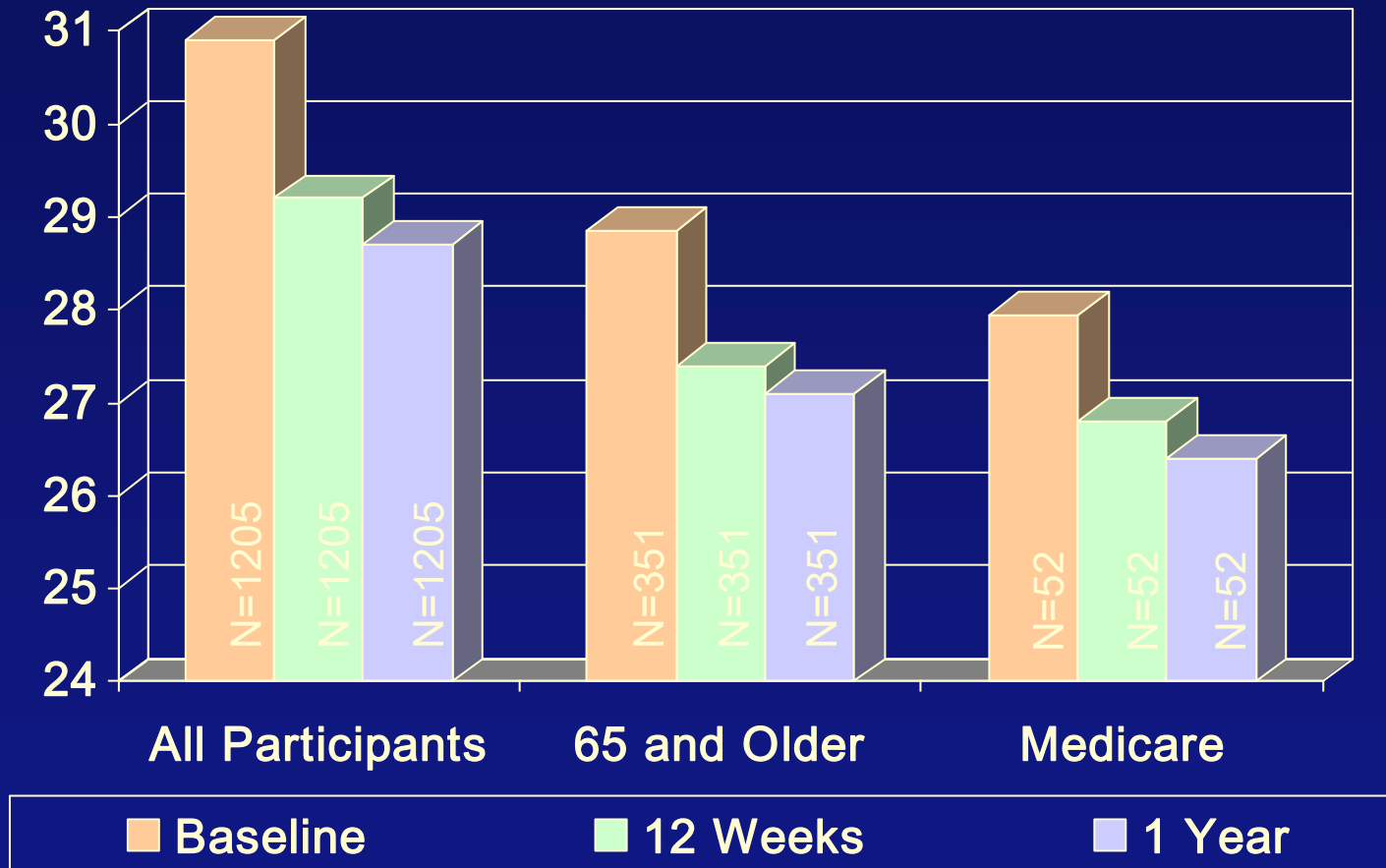


Data presented at AACVPR, 2004

All $p < .001$

Data for patients who have reached 1 year of testing

BMI (kg/m²)

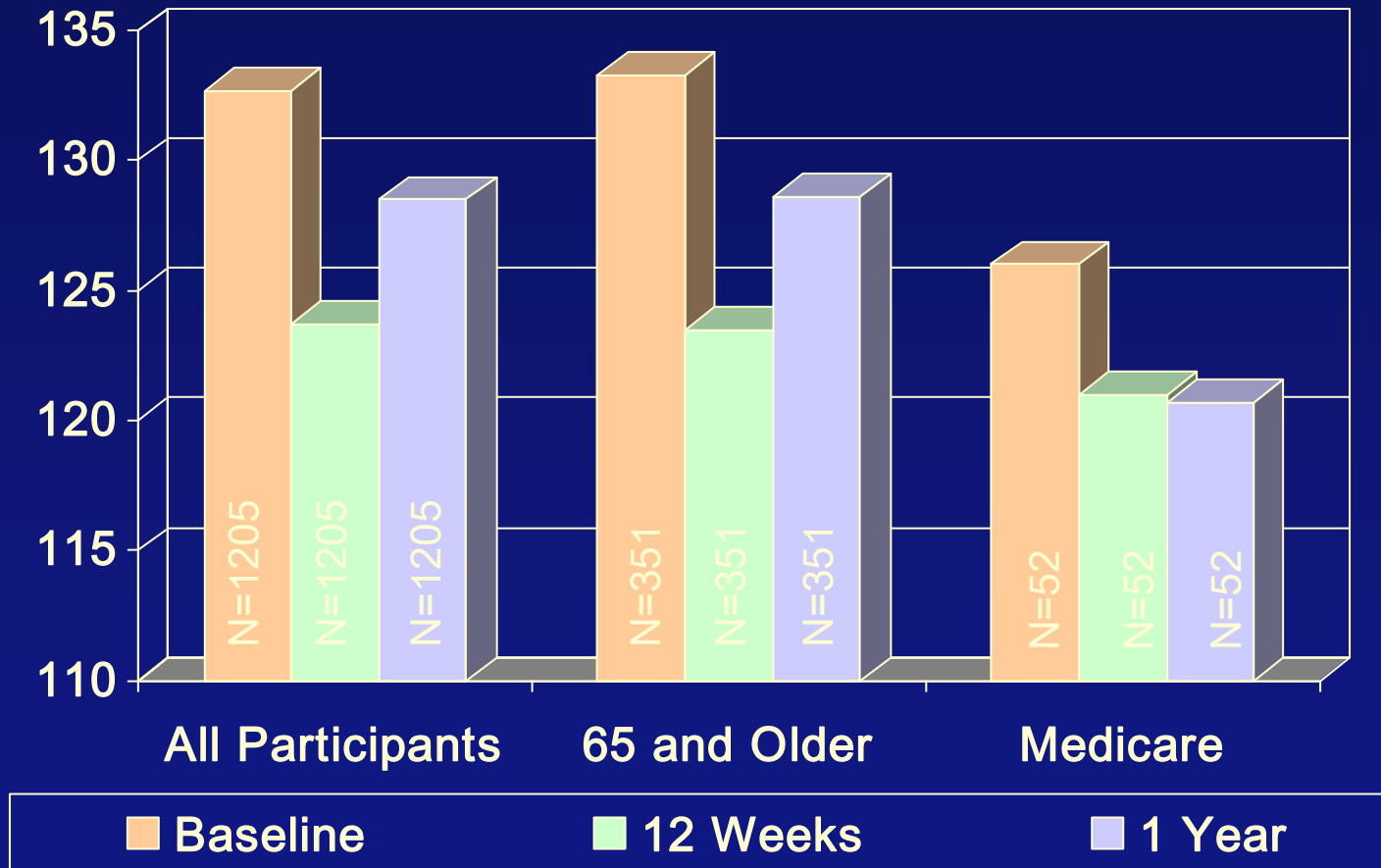


Data presented at AACVPR, 2004

All $p < .001$

Data for patients who have reached 1 year of testing

Systolic Blood Pressure (mm Hg)

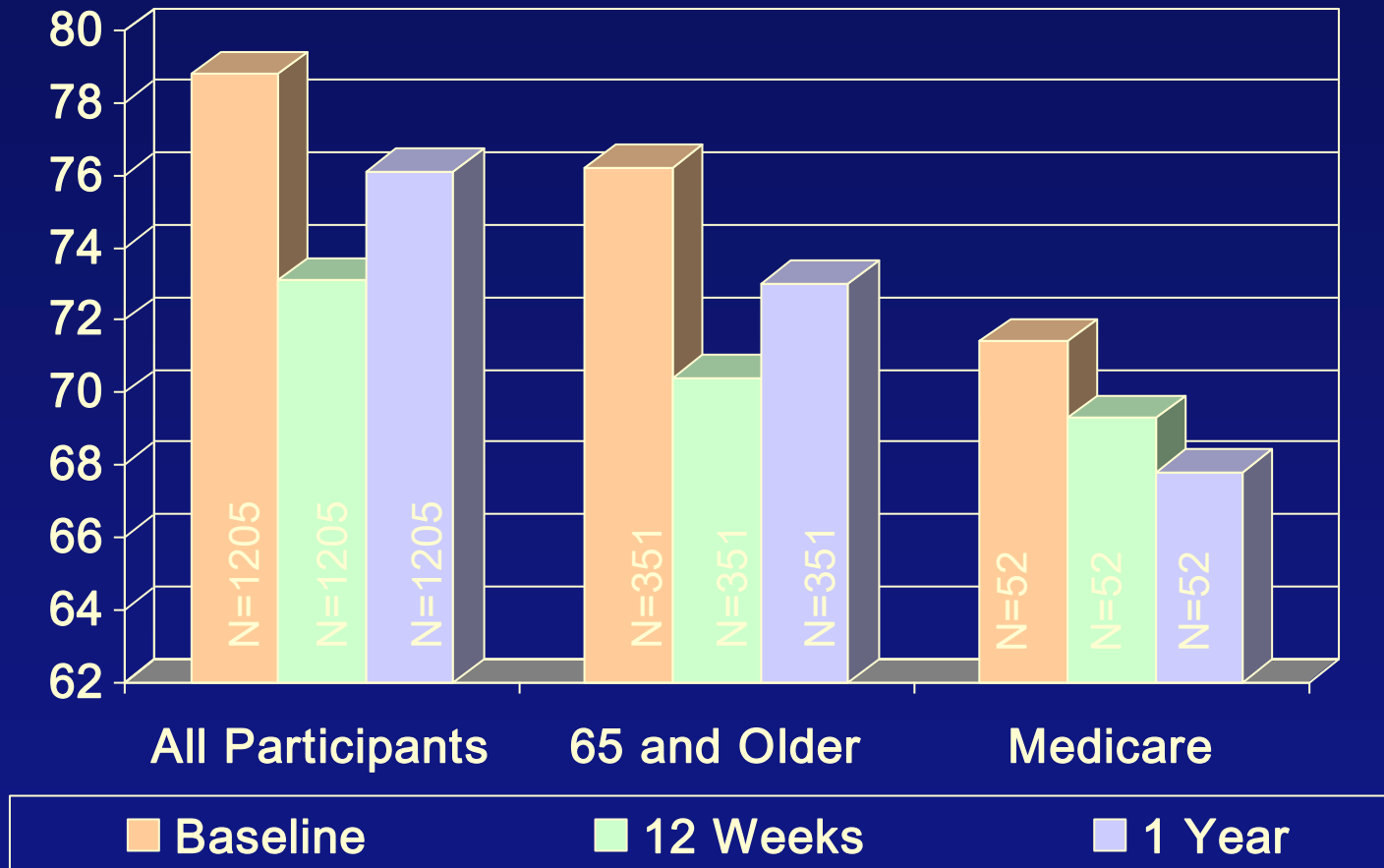


Data to be presented at SBM, 2005

All $p < .08$

Data for patients who have reached 1 year of testing

Diastolic Blood Pressure (mm Hg)

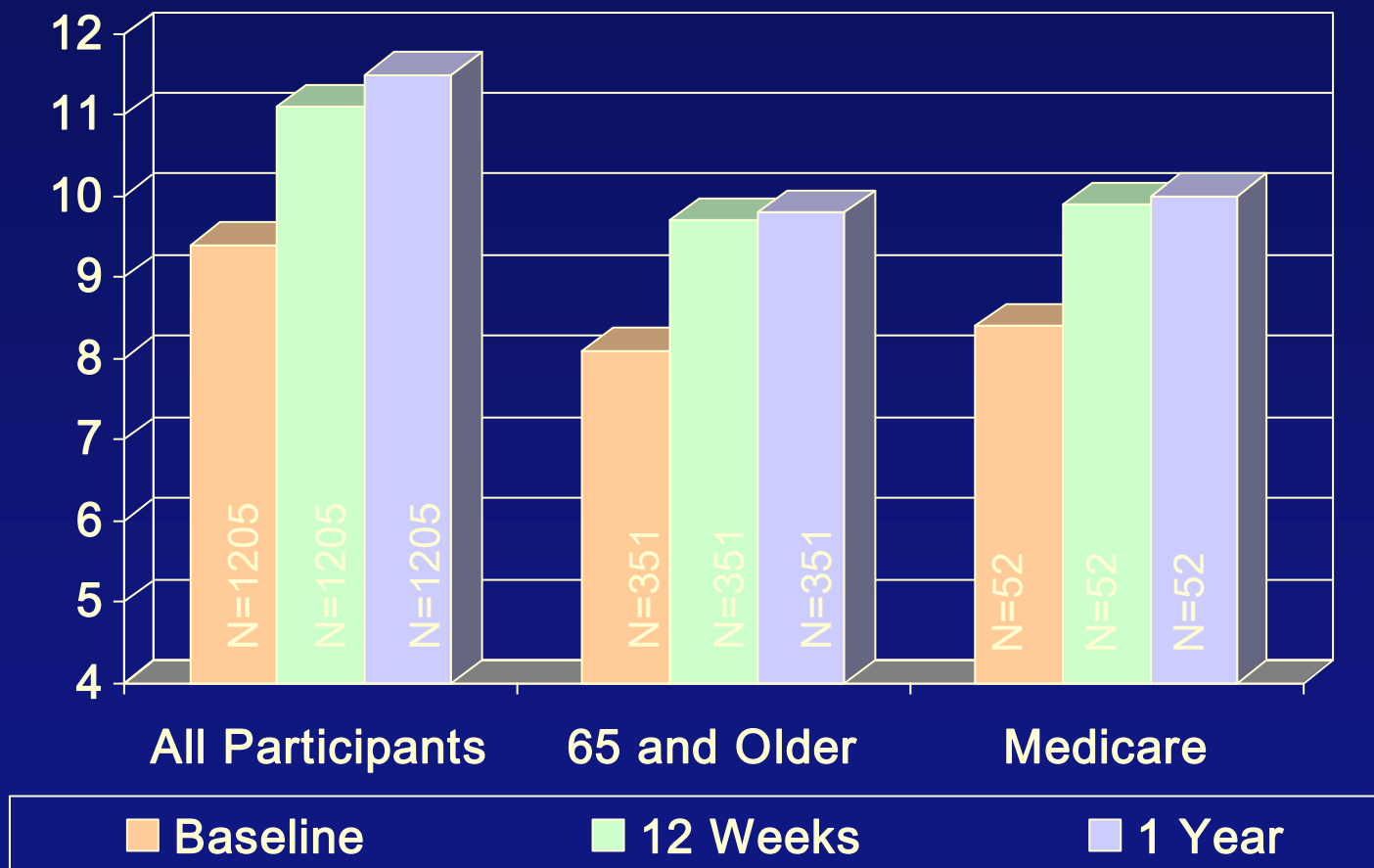


Data to be presented at SBM, 2005

All $p < .04$, except Medicare
at 12 weeks *ns*

Data for patients who have reached 1 year of testing

Functional Capacity (METs)

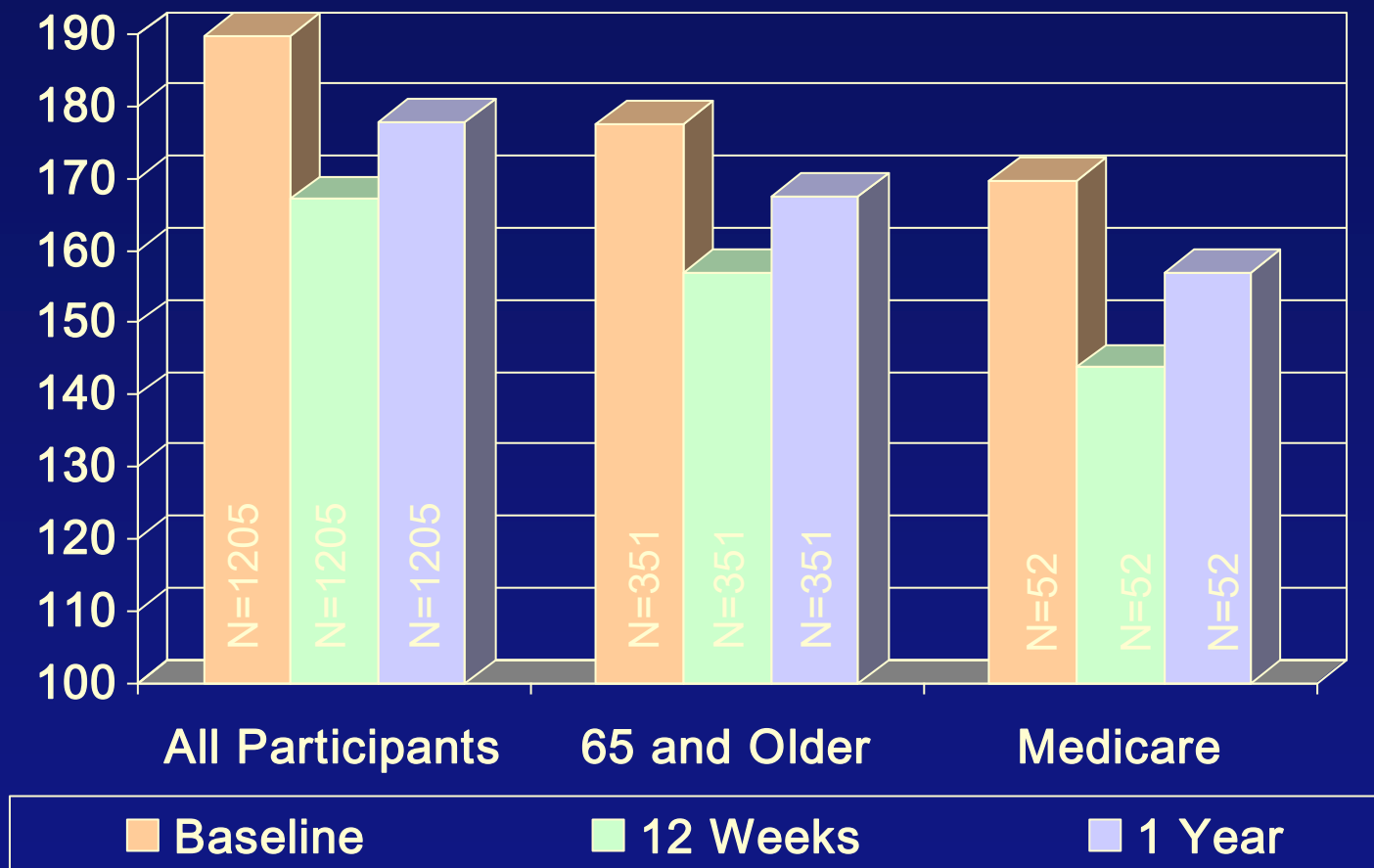


Data to be presented at SBM, 2005

All $p < .001$

Data for patients who have reached 1 year of testing

Total Cholesterol (mg/dl)

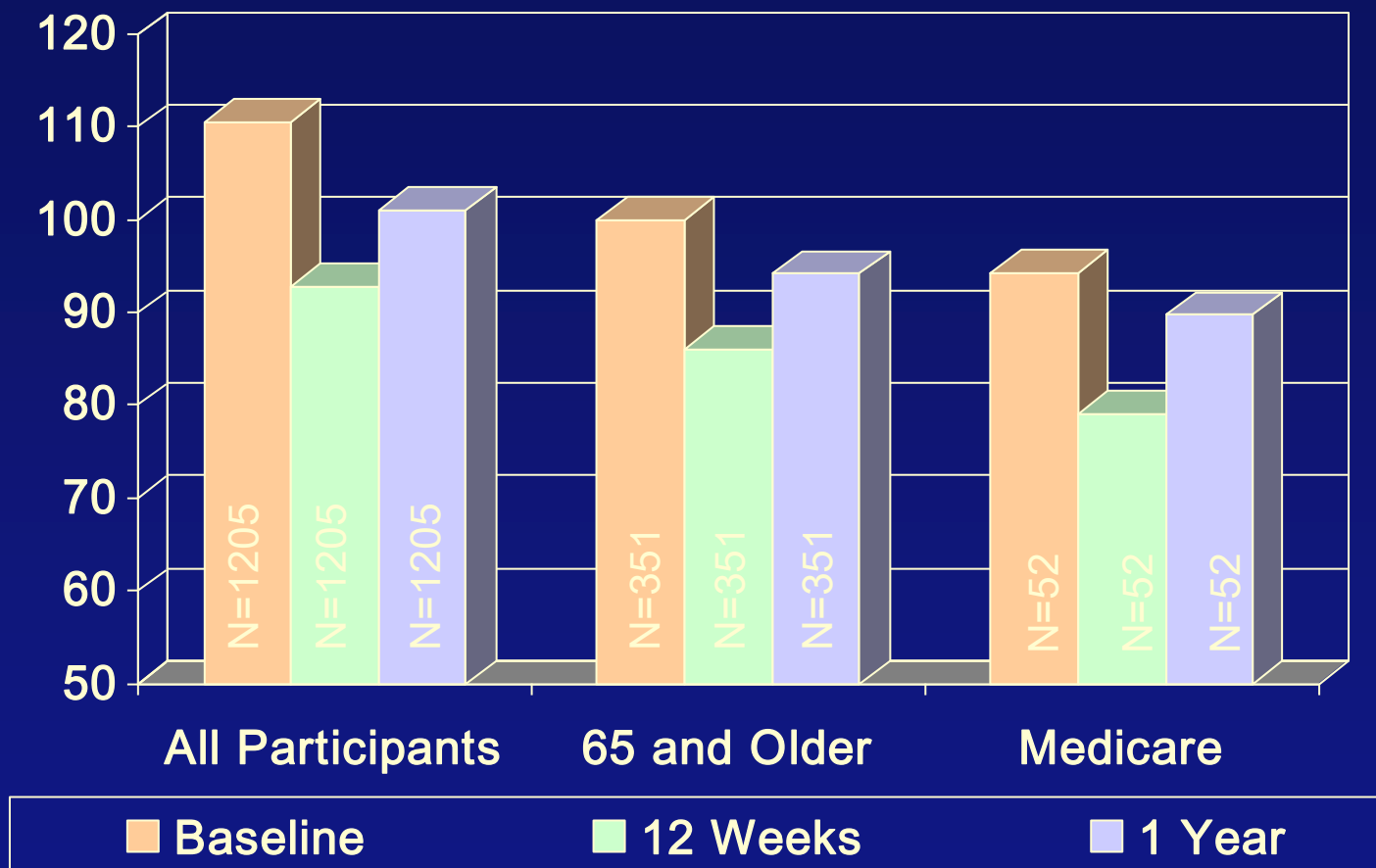


Data to be presented at SBM, 2005

All $p < .04$

Note: 62% of "All Participants," 70% of "65 and Older," and 87% of "Medicare" patients were taking lipid-lowering medications at baseline.

LDL (mg/dl)

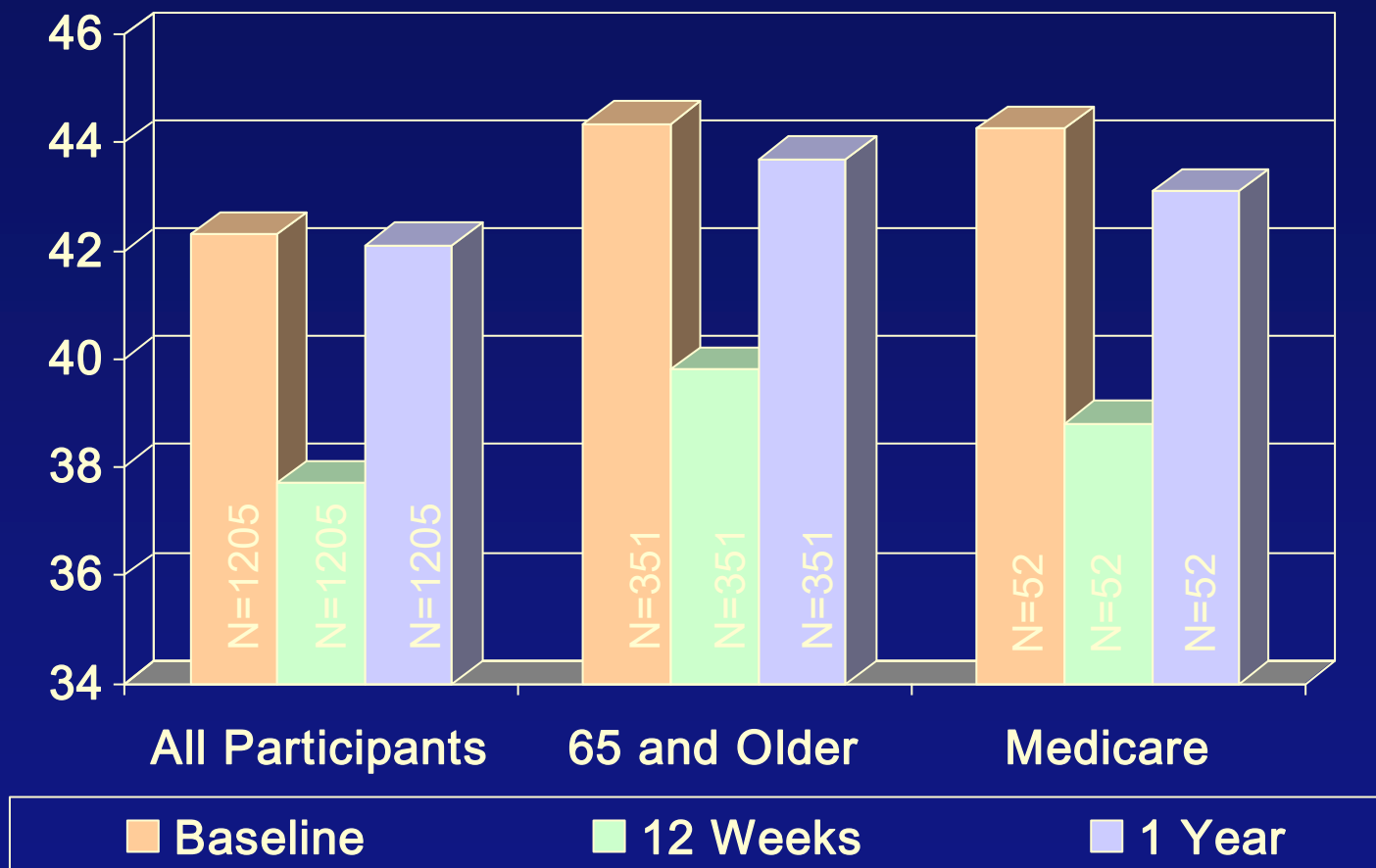


Data to be presented at SBM, 2005

All $p < .018$, except
Medicare *ns*

Note: 62% of "All Participants," 70% of "65 and Older," and 87% of "Medicare" patients were taking lipid-lowering medications at baseline.

HDL (mg/dl)

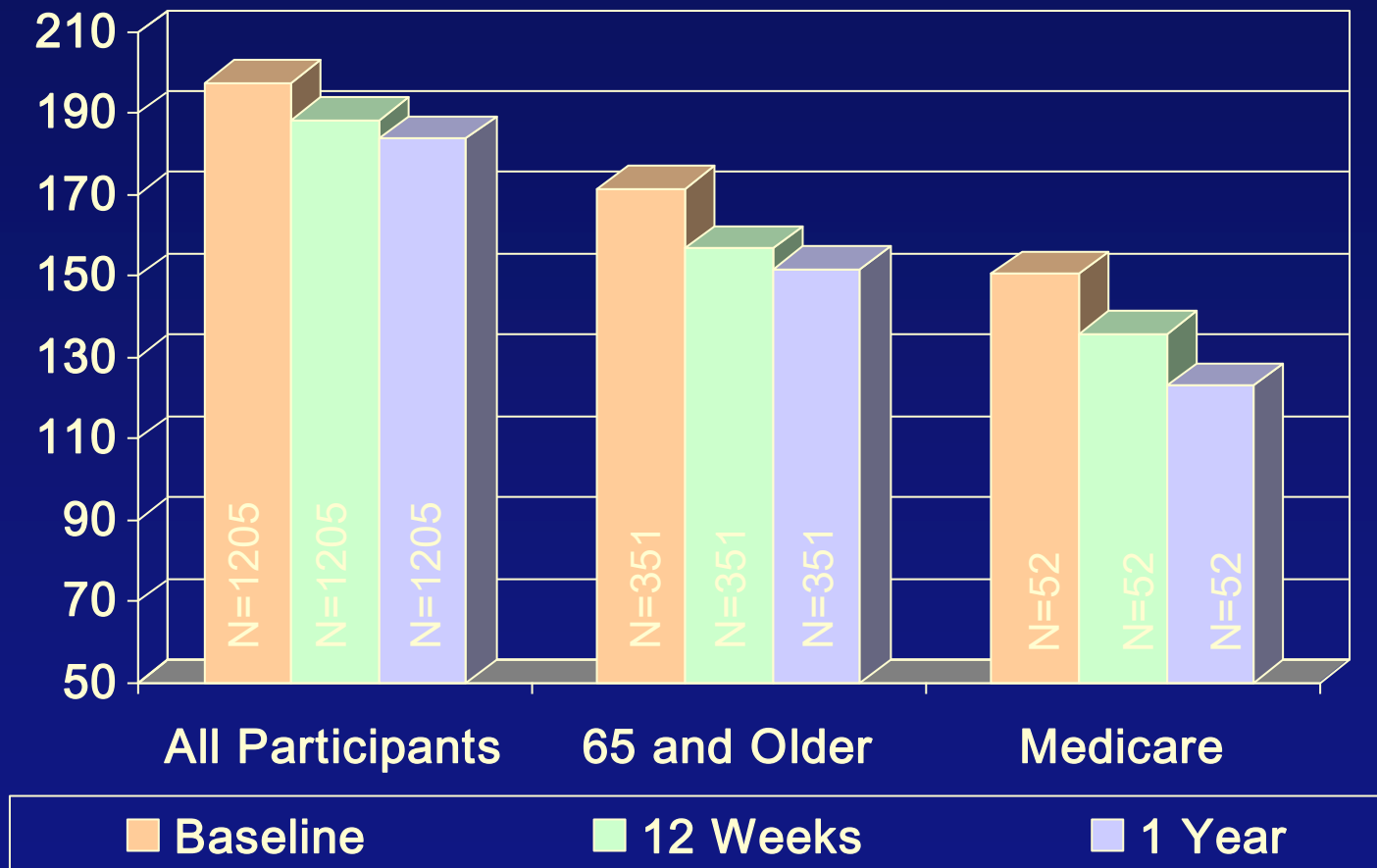


Data to be presented at SBM, 2005

$p < .001$ at 12 weeks
ps *ns* at 1 year

Note: 62% of "All Participants," 70% of "65 and Older," and 87% of "Medicare" patients were taking lipid-lowering medications at baseline.

Triglycerides (mg/dl)

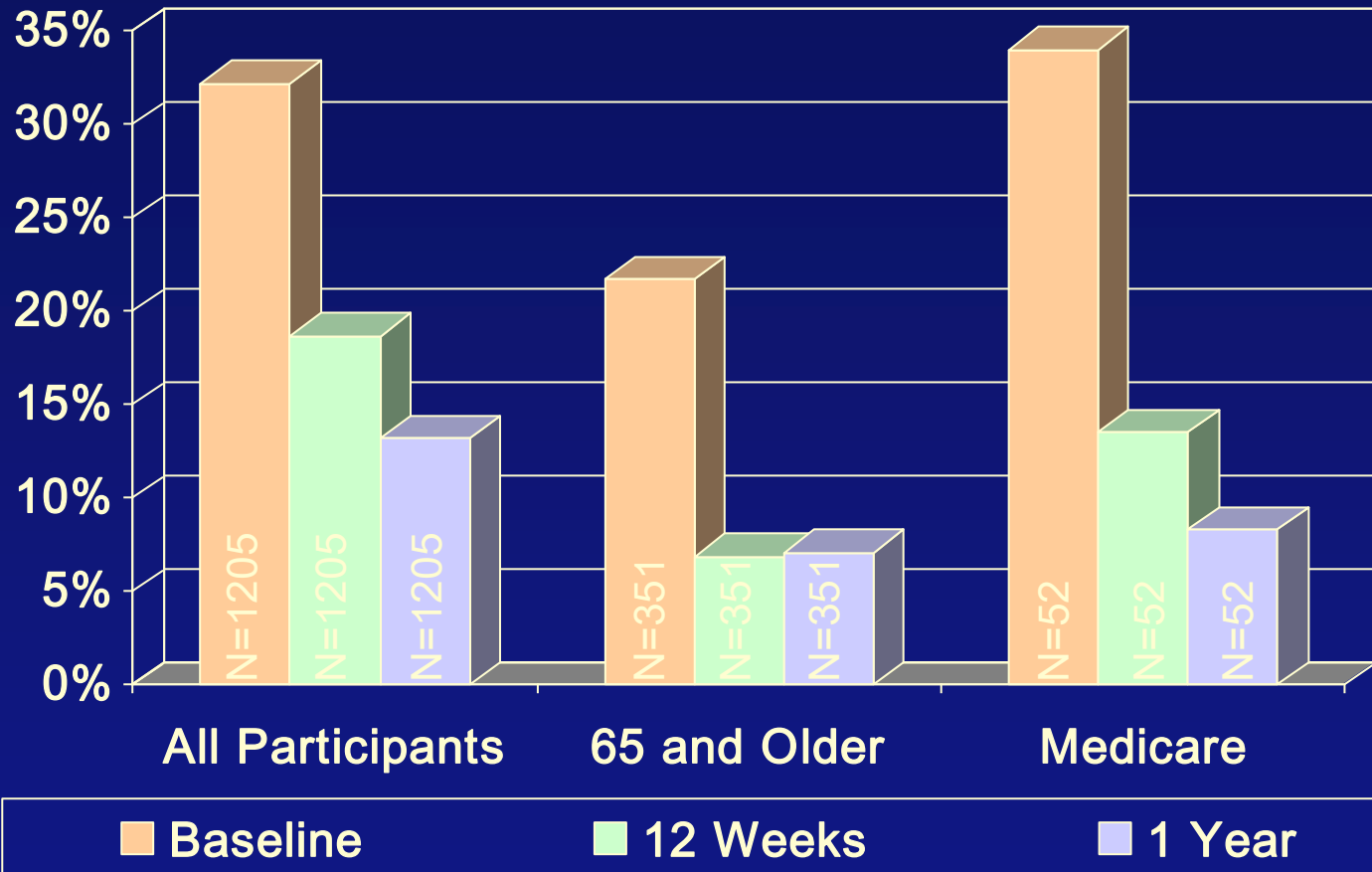


Data to be presented at SBM, 2005

All $p < .05$, except
Medicare at 12 weeks *ns*

Note: 62% of "All Participants," 70% of "65 and Older," and 87% of "Medicare" patients were taking lipid-lowering medications at baseline.

Angina (% who experienced in last 30 days)

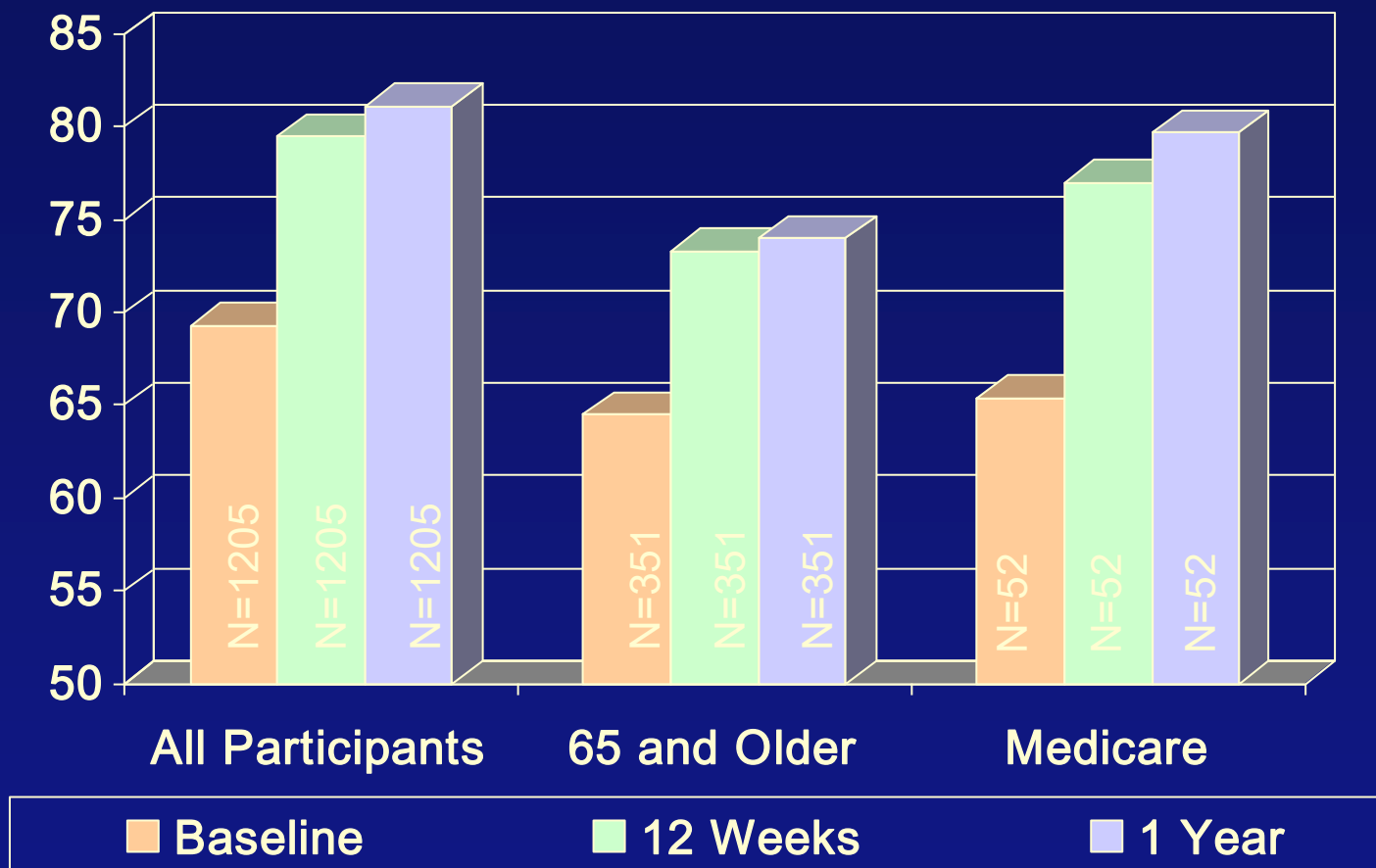


Data to be presented at SBM, 2005

All $p < .01$

Data for patients who have reached 1 year of testing

Physical Function (SF-36)

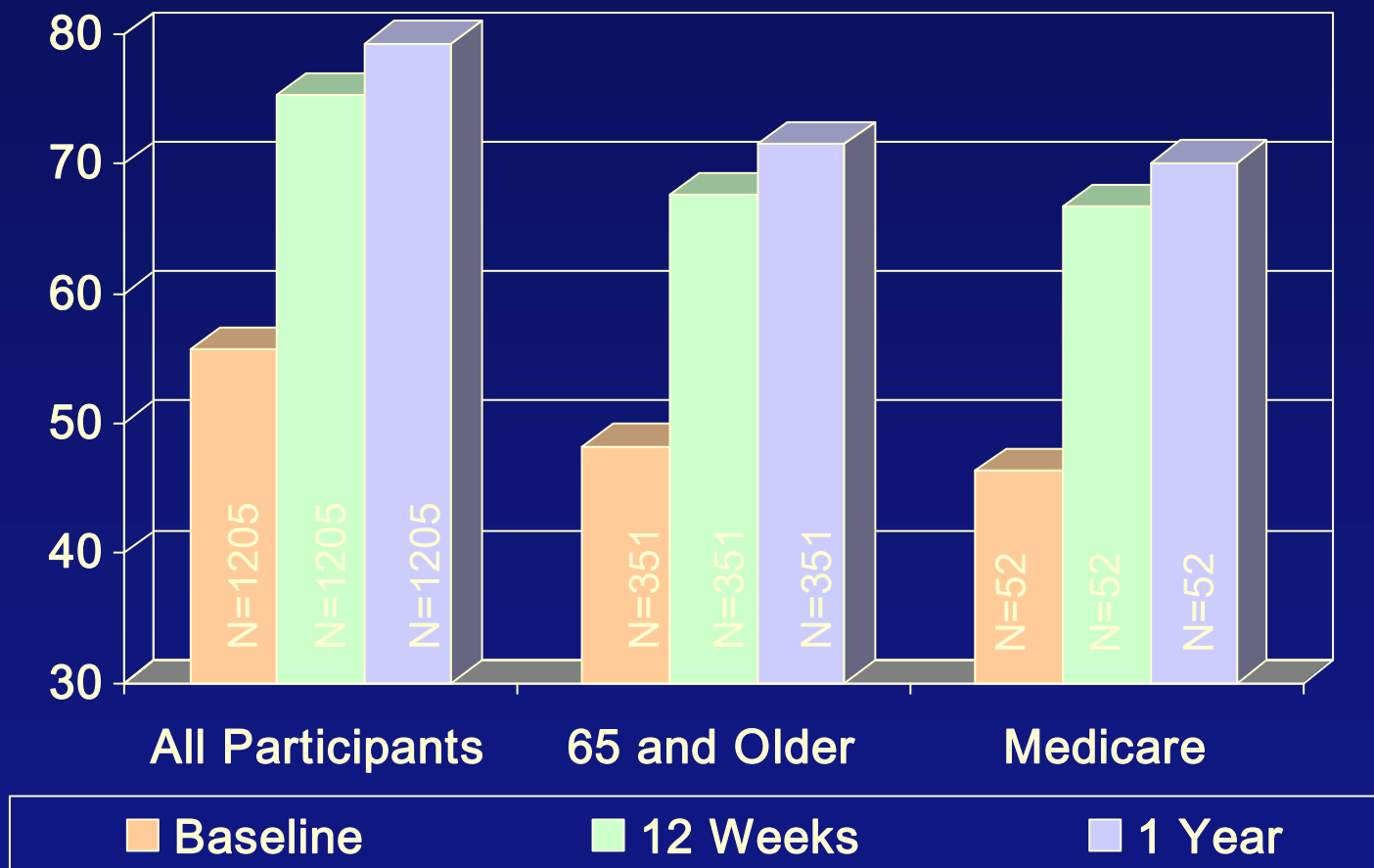


Data to be presented at SBM, 2005

All $p < .001$

Data for patients who have reached 1 year of testing

Role Physical (SF-36)

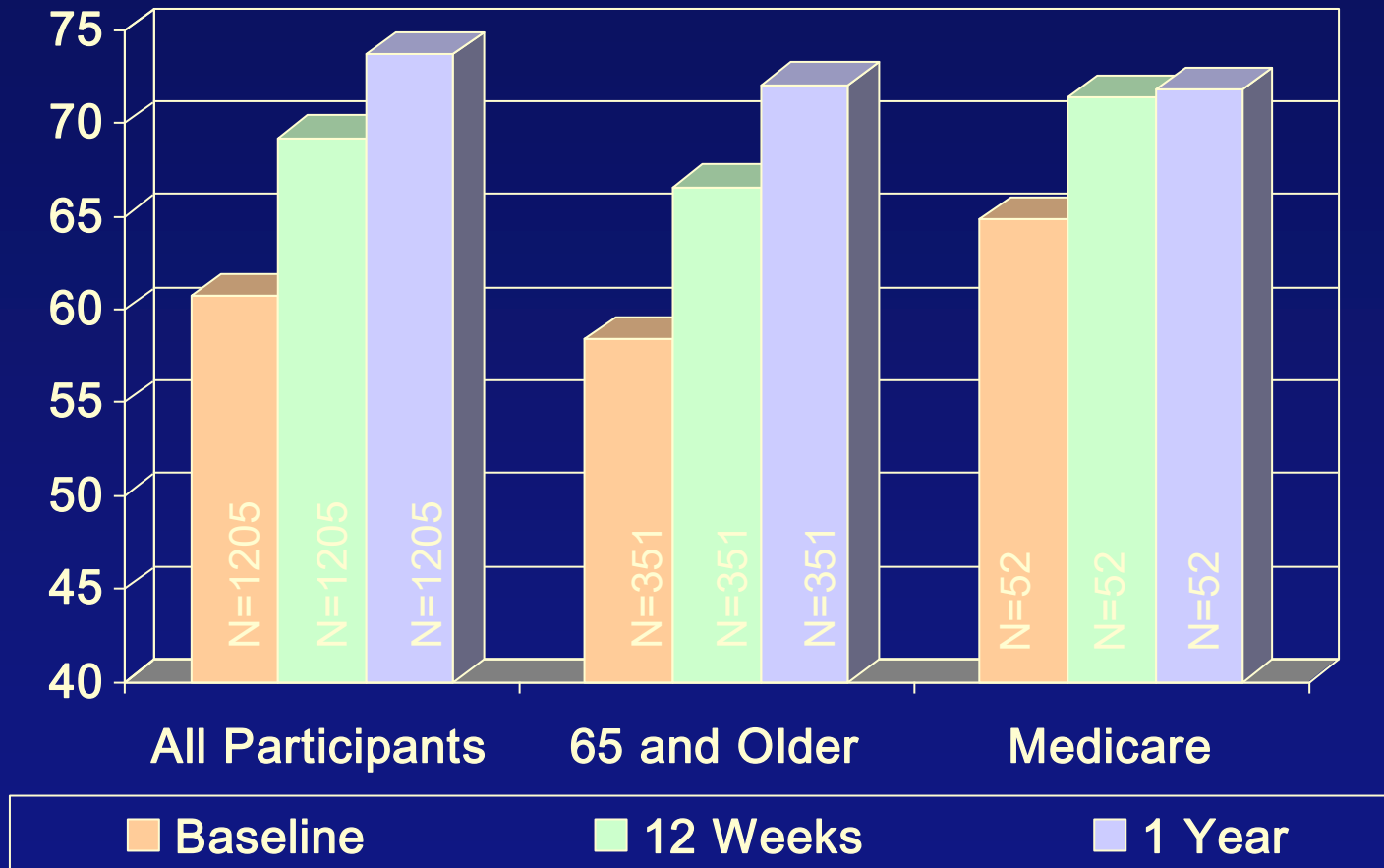


Data to be presented at SBM, 2005

All $p < .005$

Data for patients who have reached 1 year of testing

Bodily Pain (SF-36)

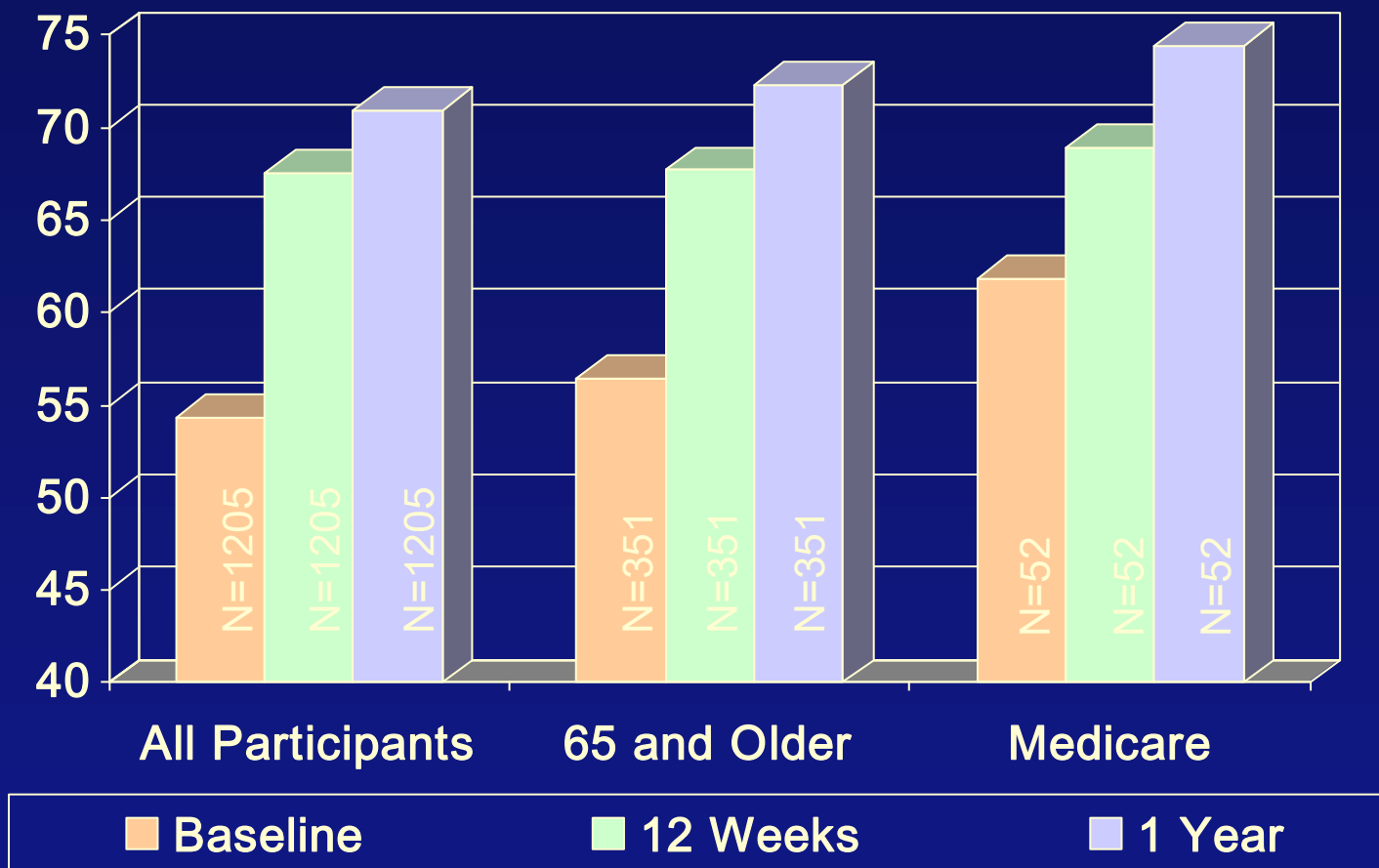


Data to be presented at SBM, 2005

All $p < .05$, except
Medicare at 1 year *ns*

Data for patients who have reached 1 year of testing

General Health (SF-36)

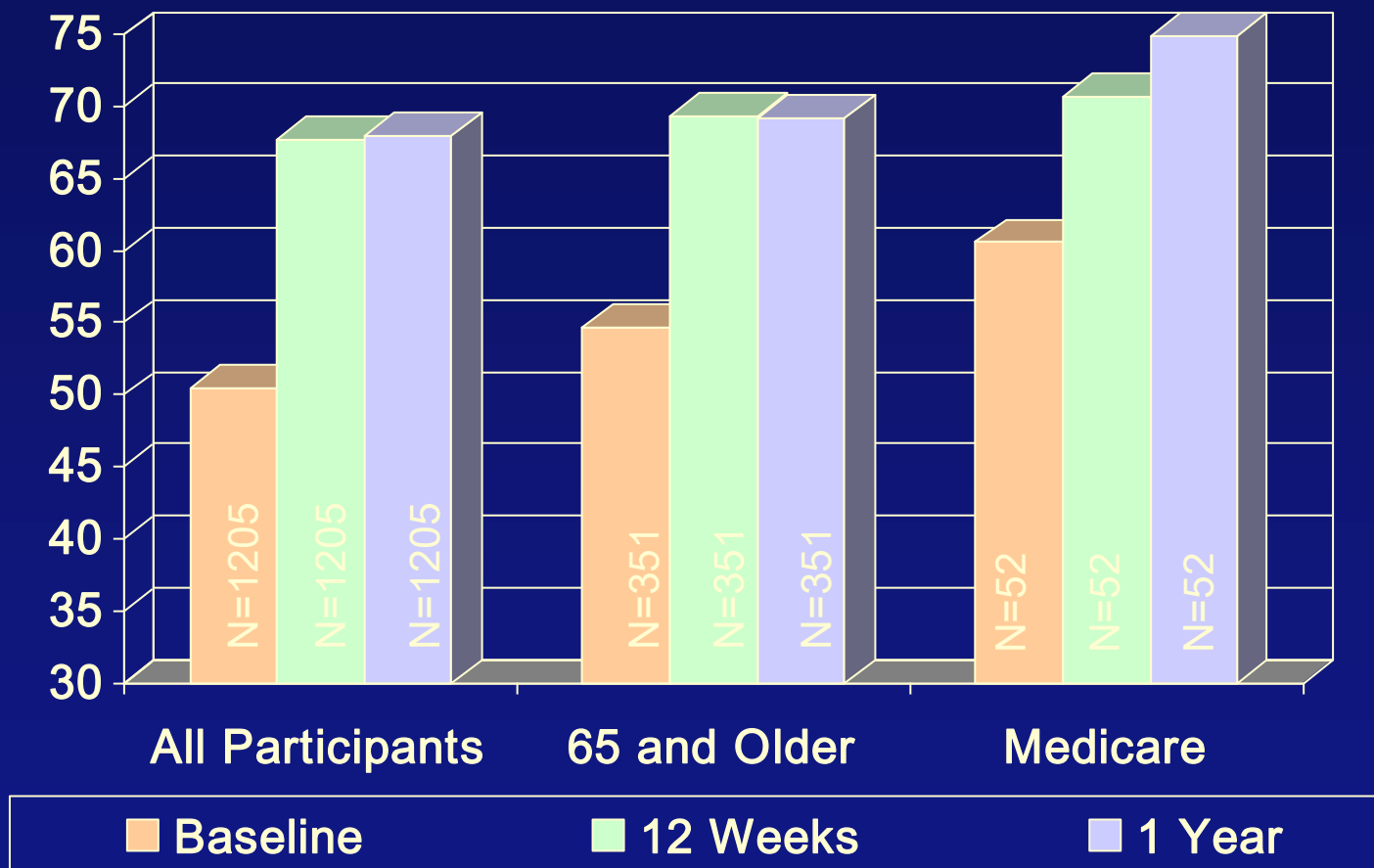


Data to be presented at SBM, 2005

All $p < .01$

Data for patients who have reached 1 year of testing

Vitality (SF-36)

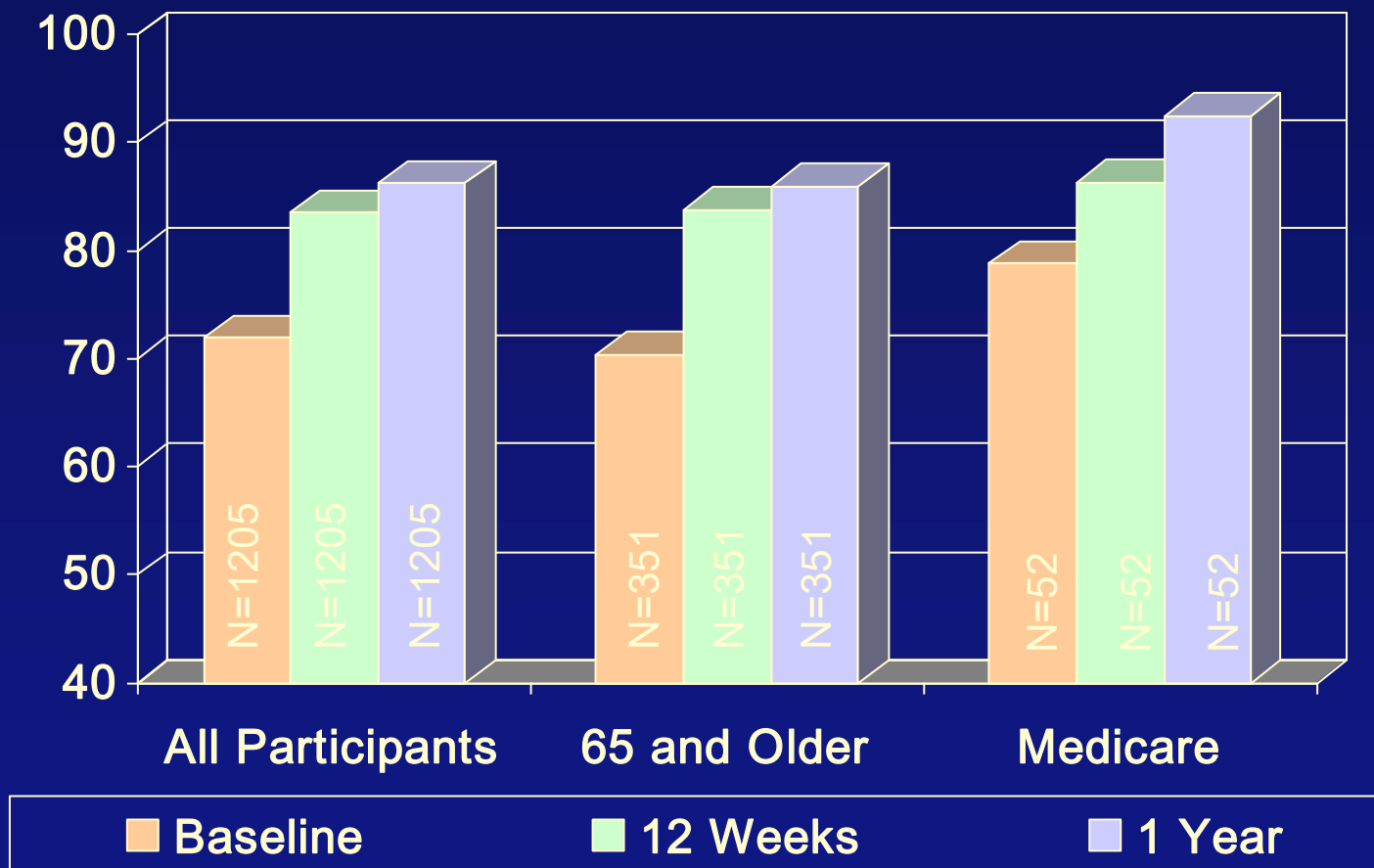


Data to be presented at SBM, 2005

All $p < .007$

Data for patients who have reached 1 year of testing

Social Functioning (SF-36)

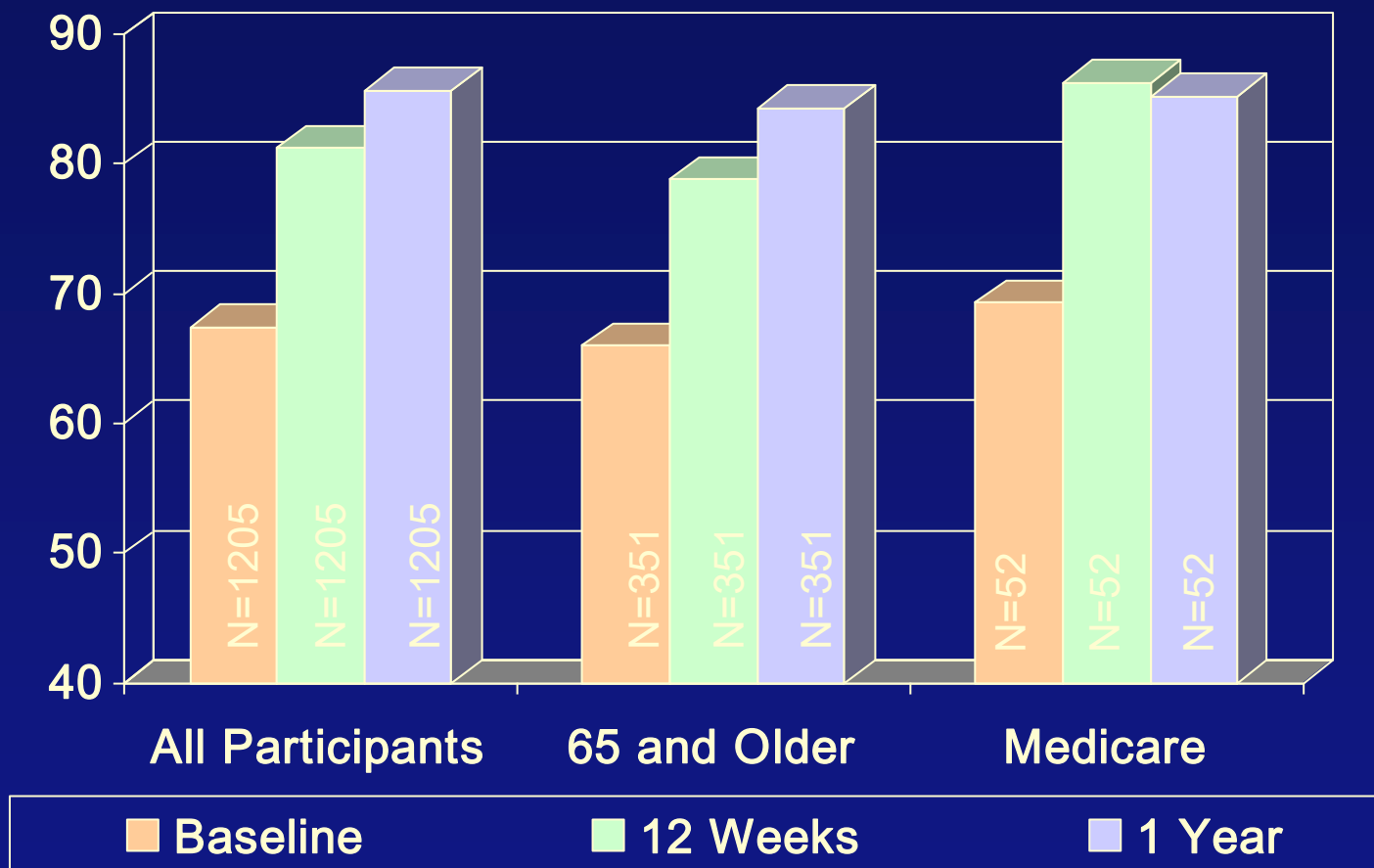


Data to be presented at SBM, 2005

All $p < .05$

Data for patients who have reached 1 year of testing

Role Emotional (SF-36)

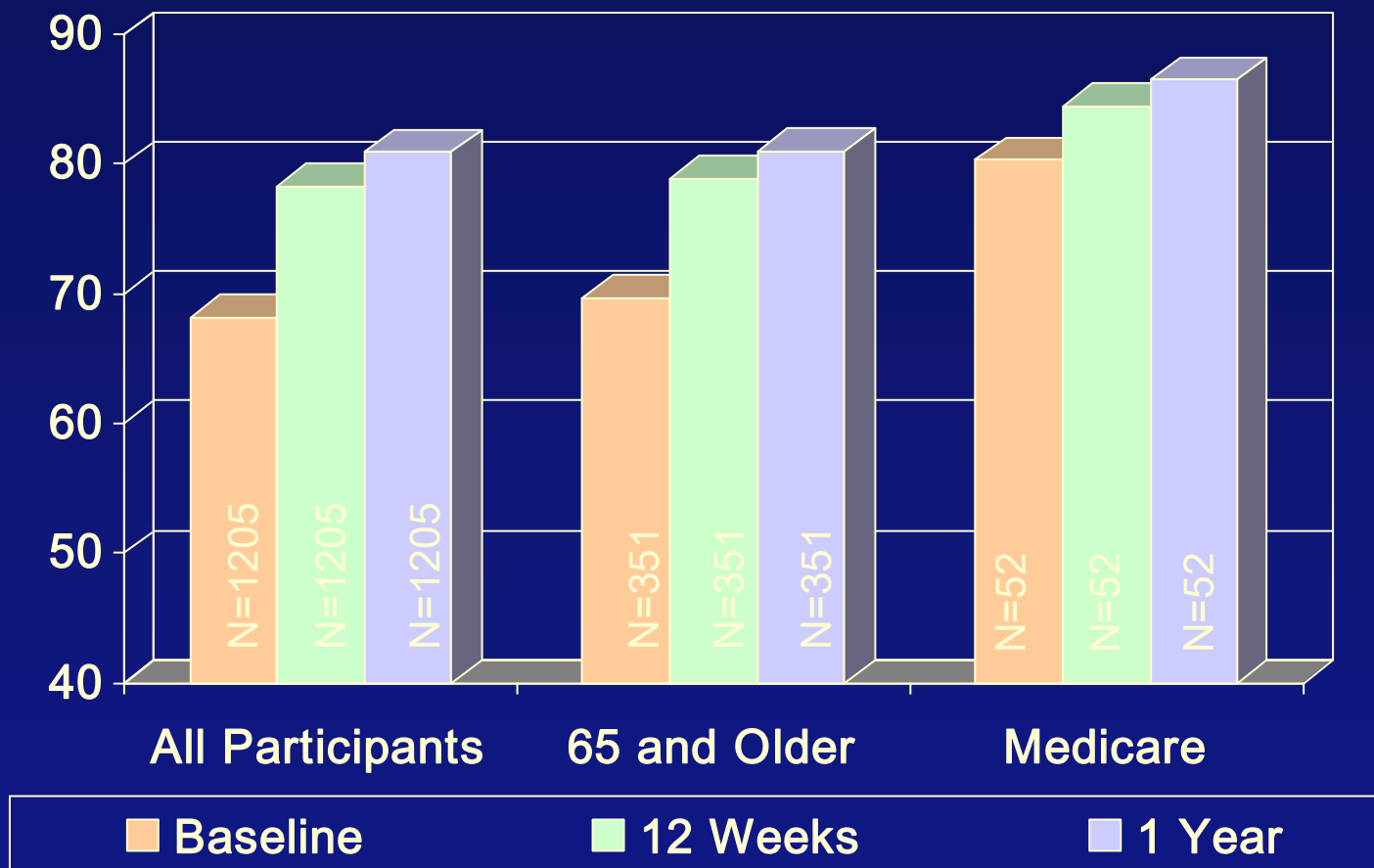


Data to be presented at SBM, 2005

All $p < .05$

Data for patients who have reached 1 year of testing

Mental Health (SF-36)

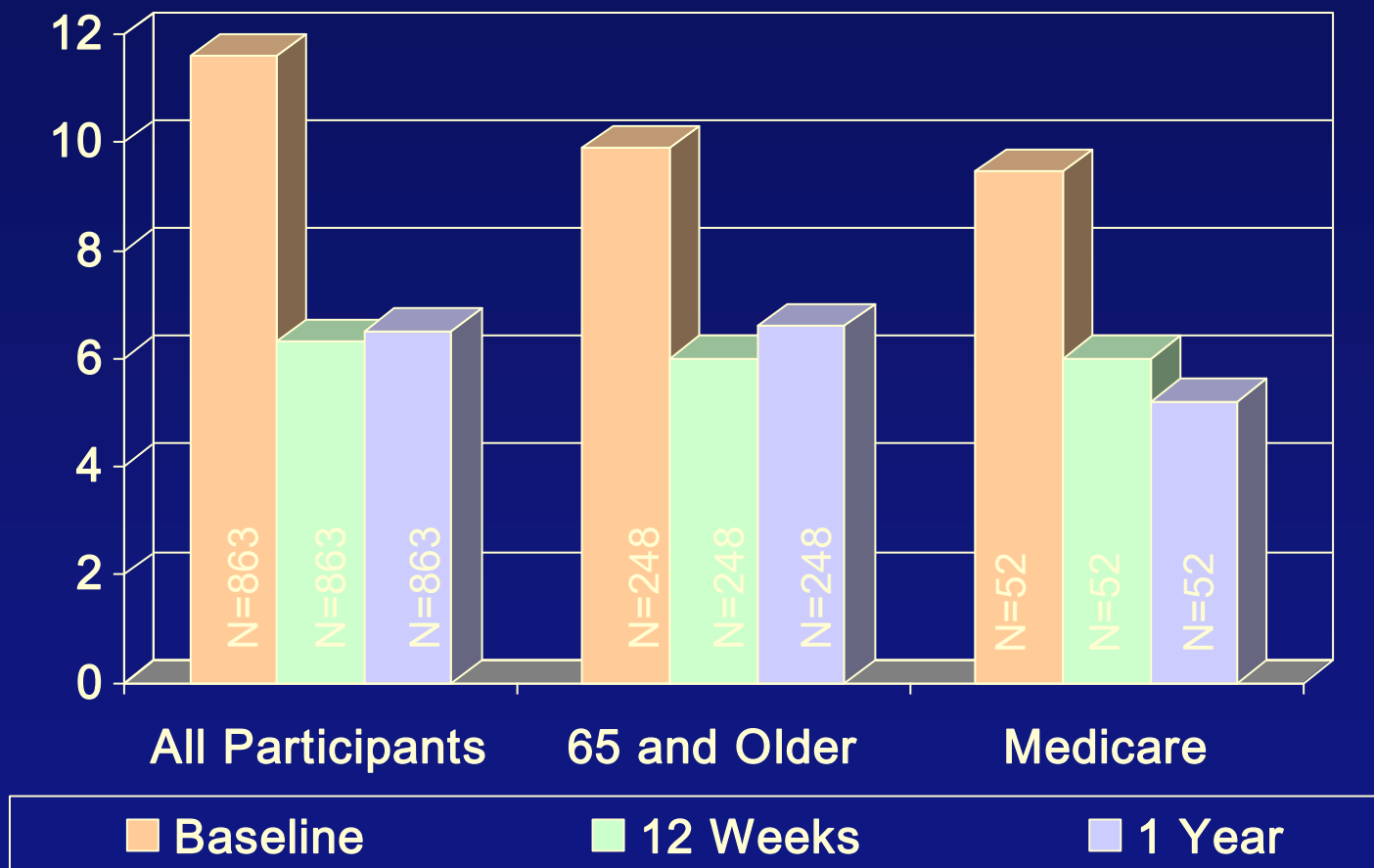


Data to be presented at SBM, 2005

All $p < .001$, except
Medicare, all $p < .09$

Data for patients who have reached 1 year of testing

CES-D (Depression)

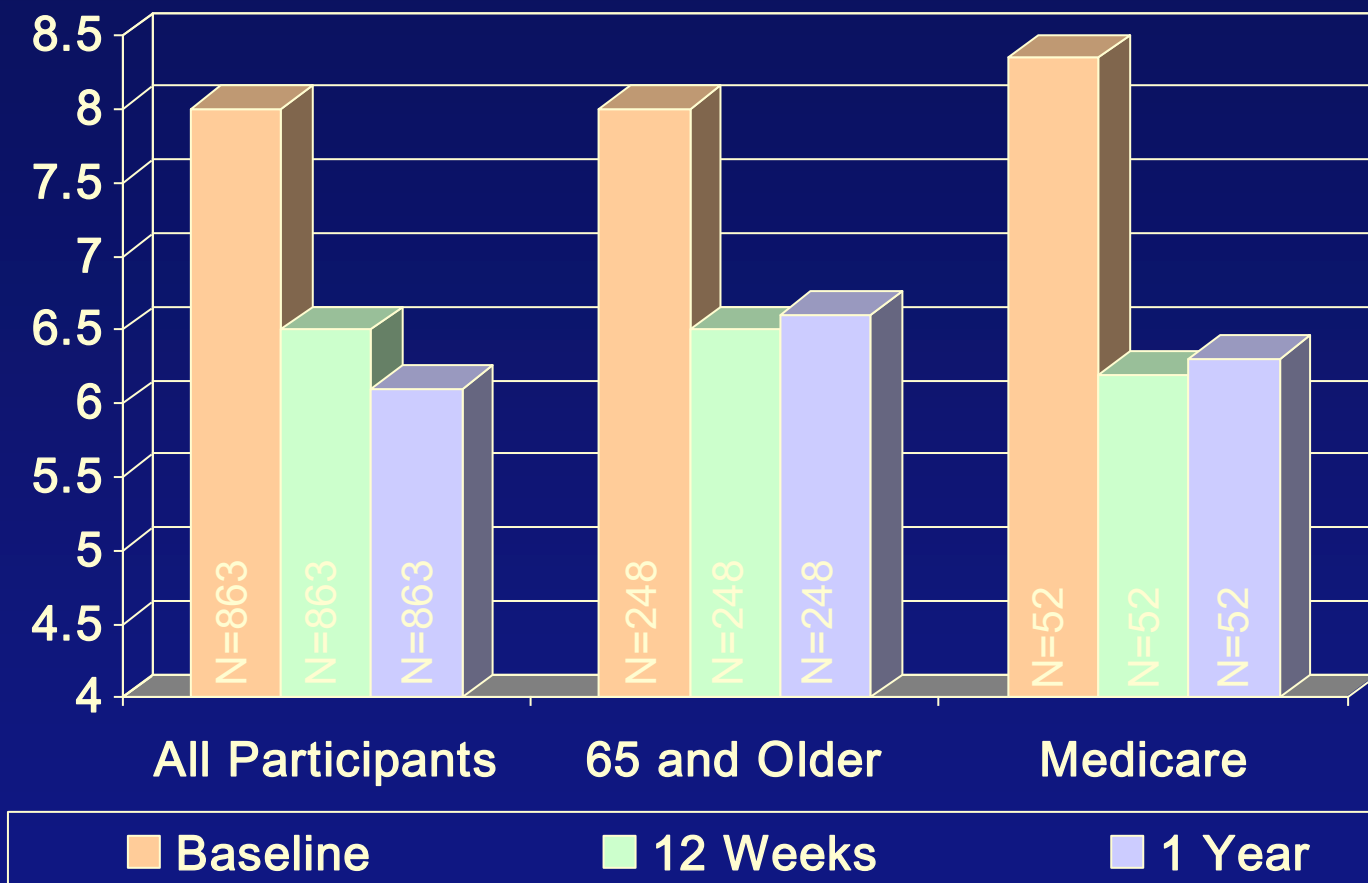


Data to be presented at SBM, 2005

All $p < .03$

Data for patients who have reached 1 year of testing

Cook-Medley (Hostility)

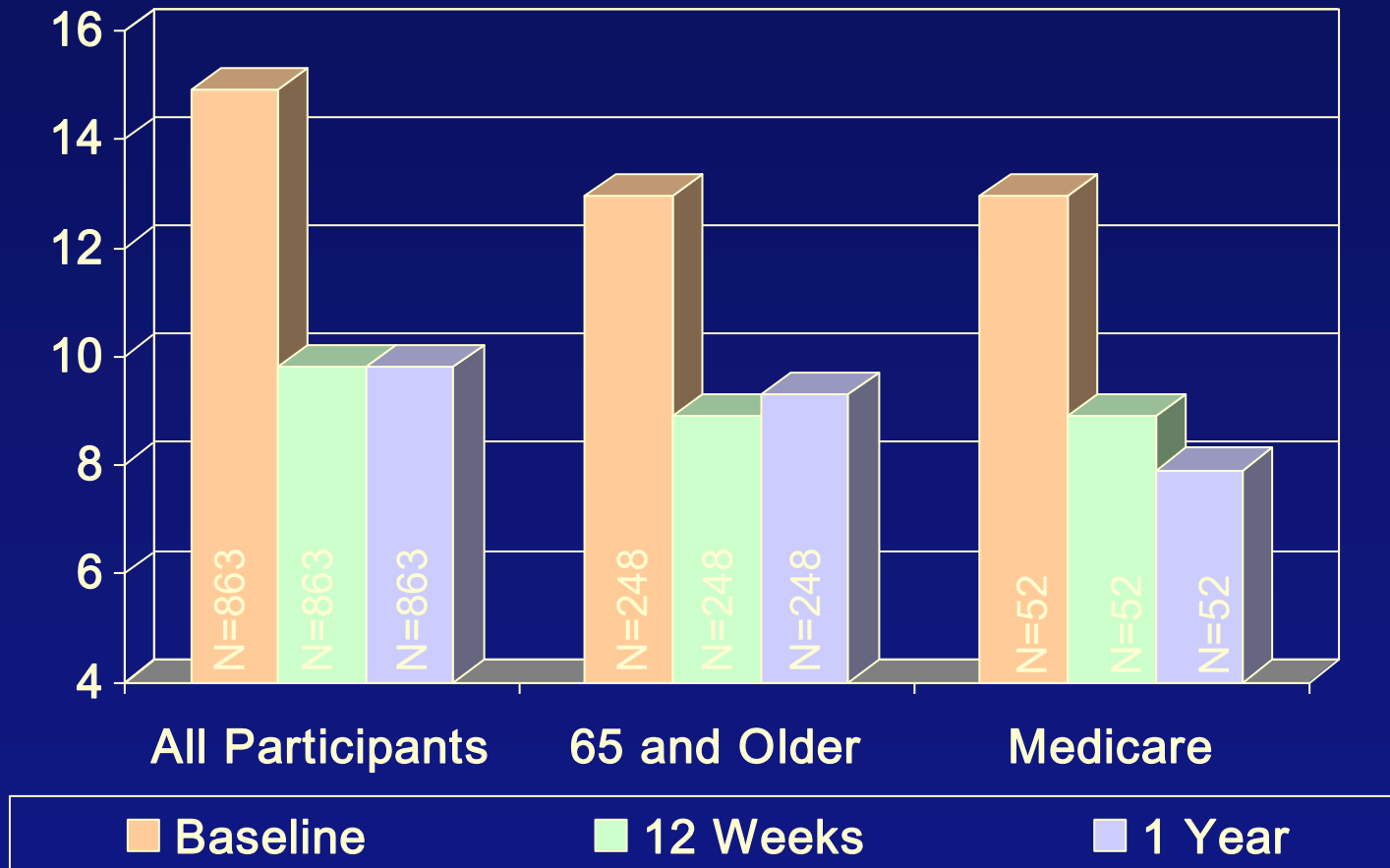


Data to be presented at SBM, 2005

All $p < .003$

Data for patients who have reached 1 year of testing

Perceived Stress Scale

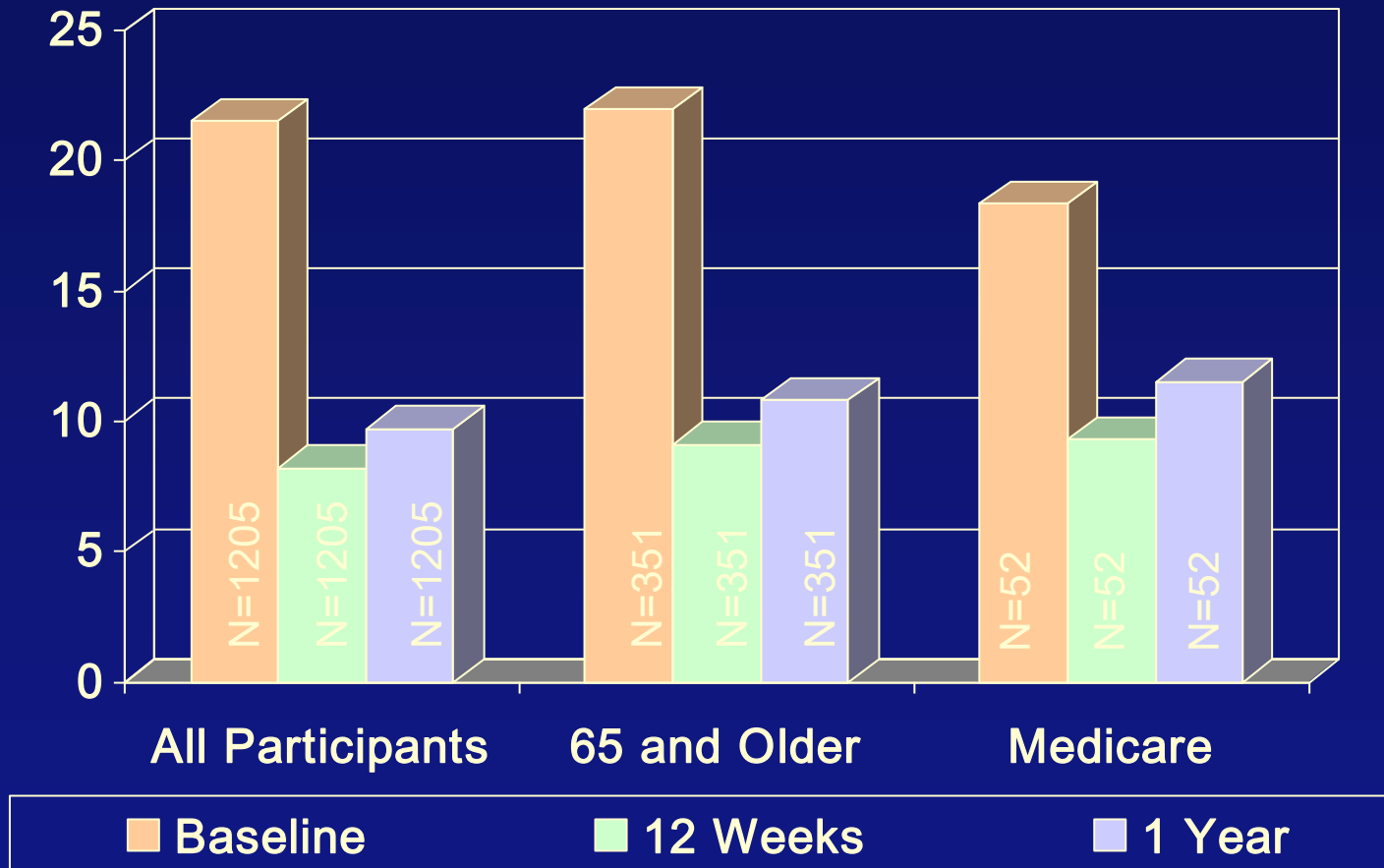


Data to be presented at SBM, 2005

All $p < .001$

Data for patients who have reached 1 year of testing

Dietary Fat (% of total calories)

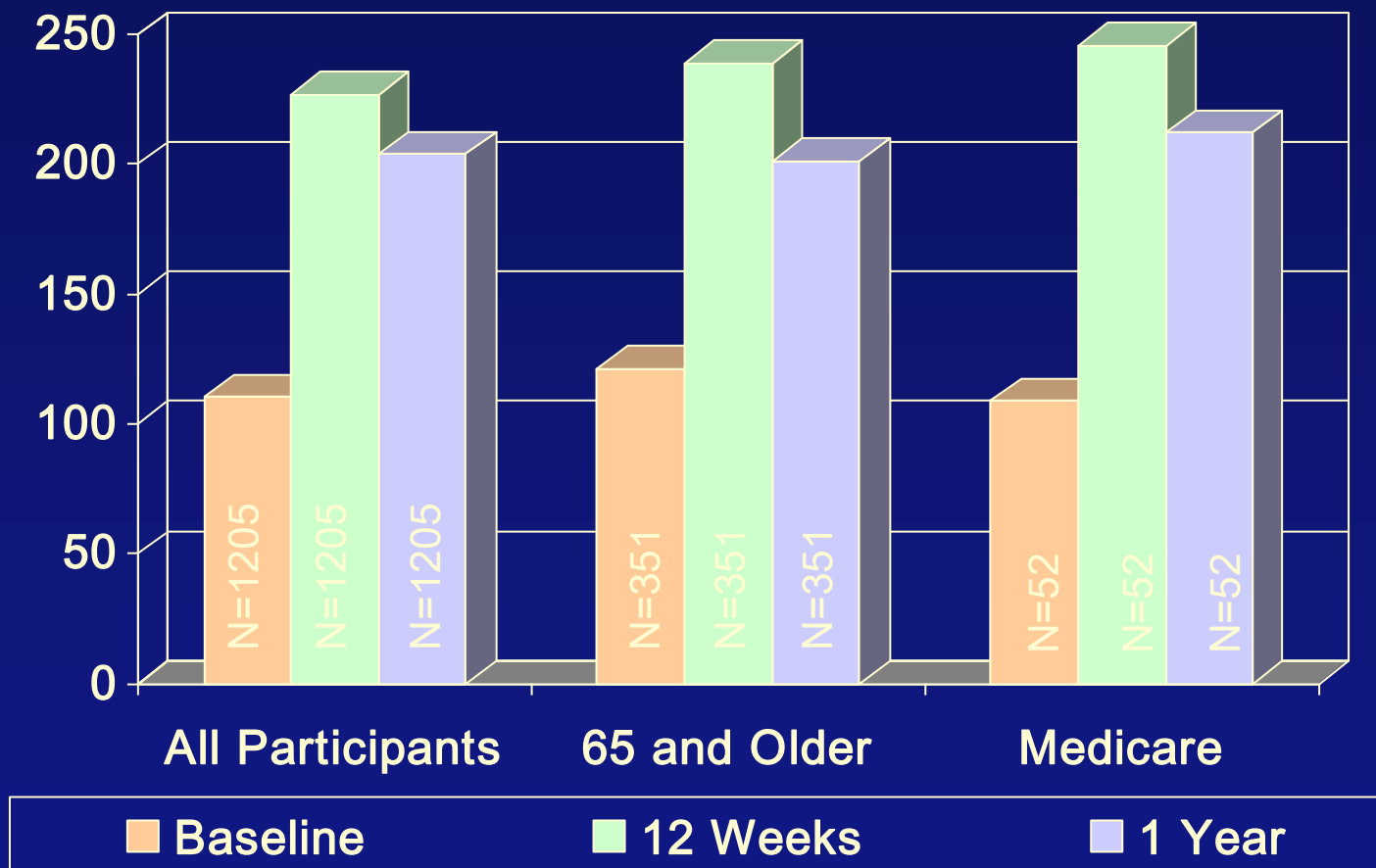


Data to be presented at SBM, 2005

All $p < .001$

Data for patients who have reached 1 year of testing

Minutes of Exercise / Week

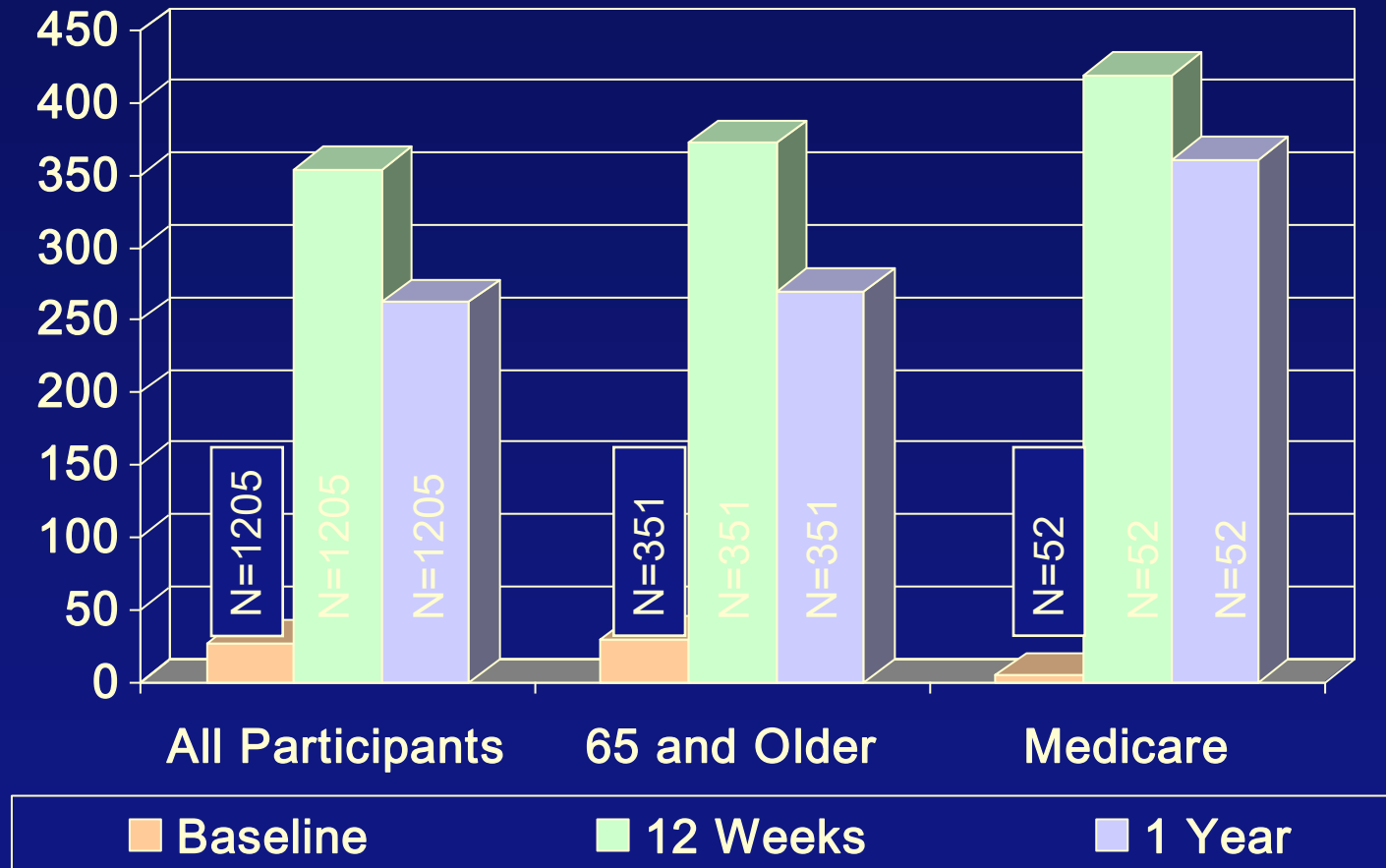


Data to be presented at SBM, 2005

All $p < .001$

Data for patients who have reached 1 year of testing

Minutes of Stress Management / Week

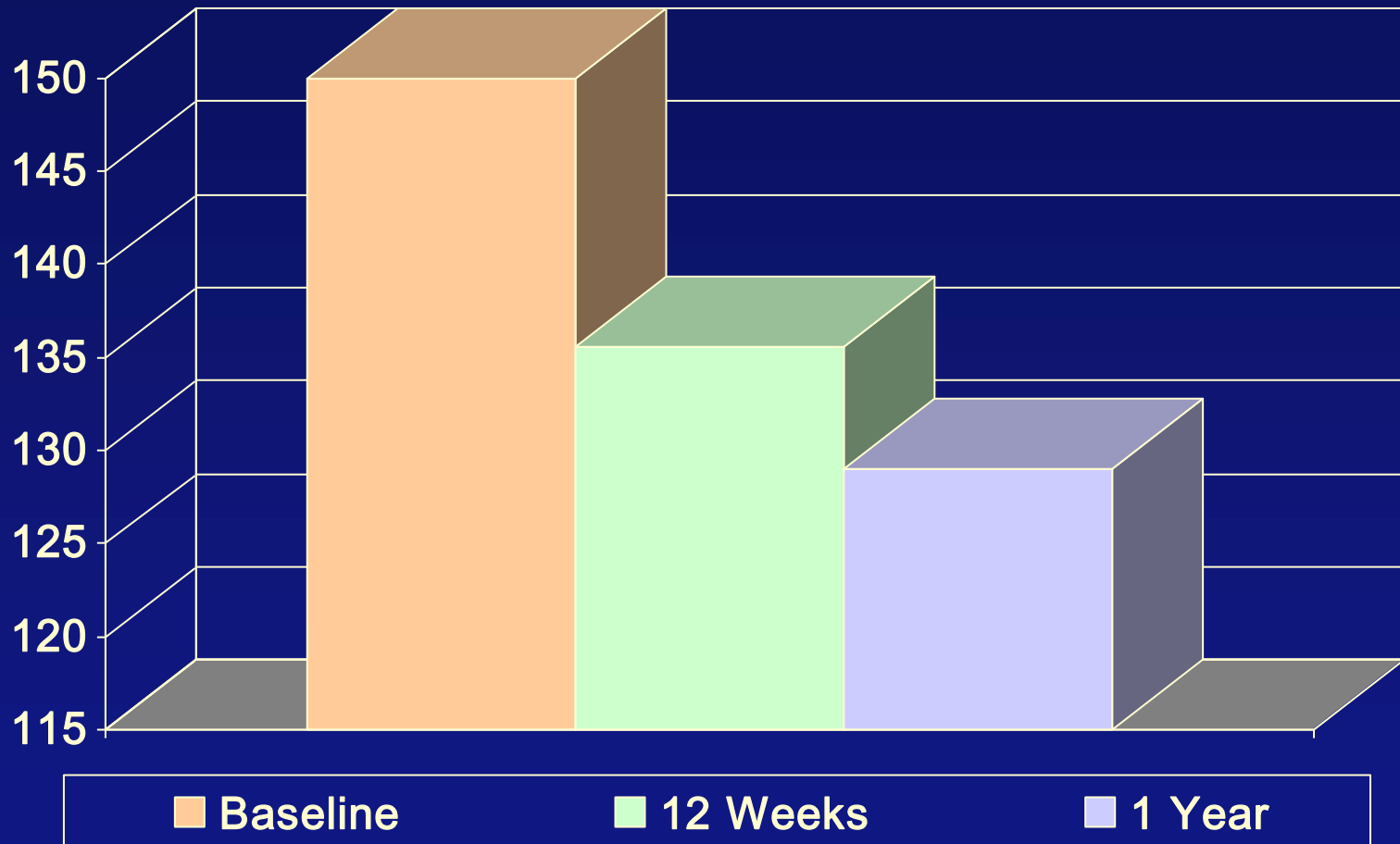


Data to be presented at SBM, 2005

All $p < .001$

Data for patients who have reached 1 year of testing

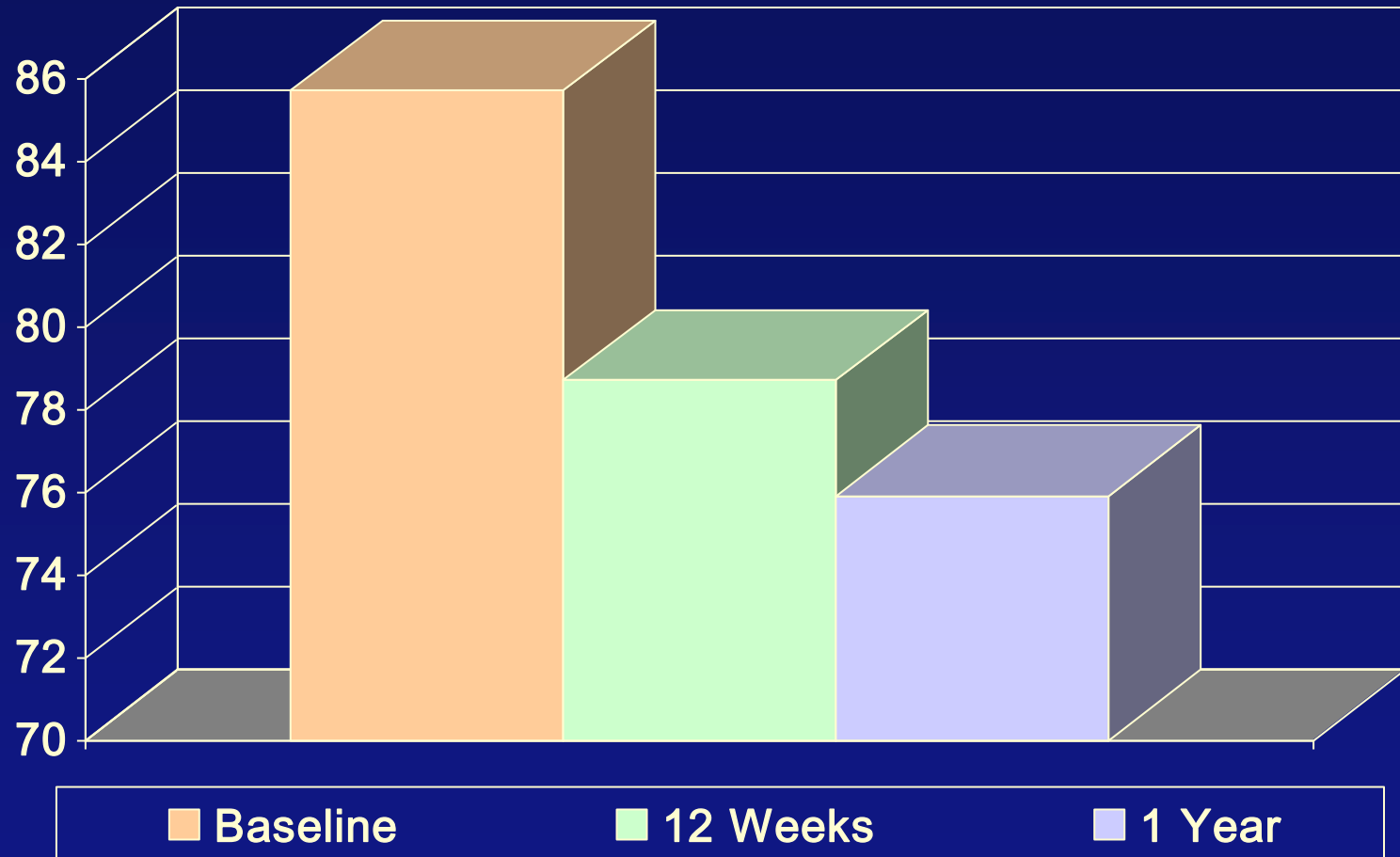
Hypertensives – Systolic BP (mm Hg)



All $p < .001$

N at 1 year is not comparable to baseline because many patients have not yet finished 1 year of intervention

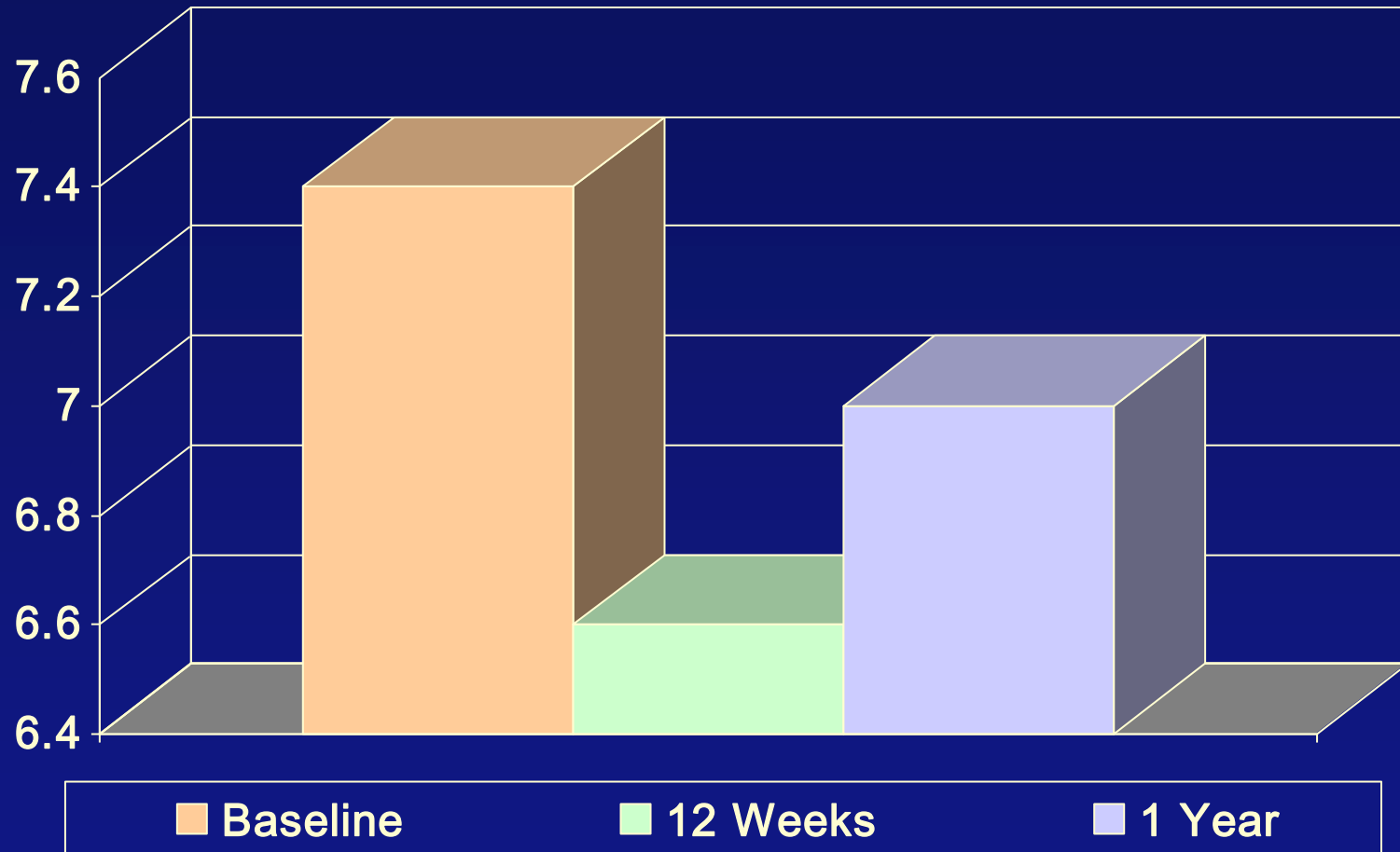
Hypertensives – Diastolic BP (mm Hg)



All $p < .001$

N at 1 year is not comparable to baseline because many patients have not yet finished 1 year of intervention

Diabetics - HbA1c (%)

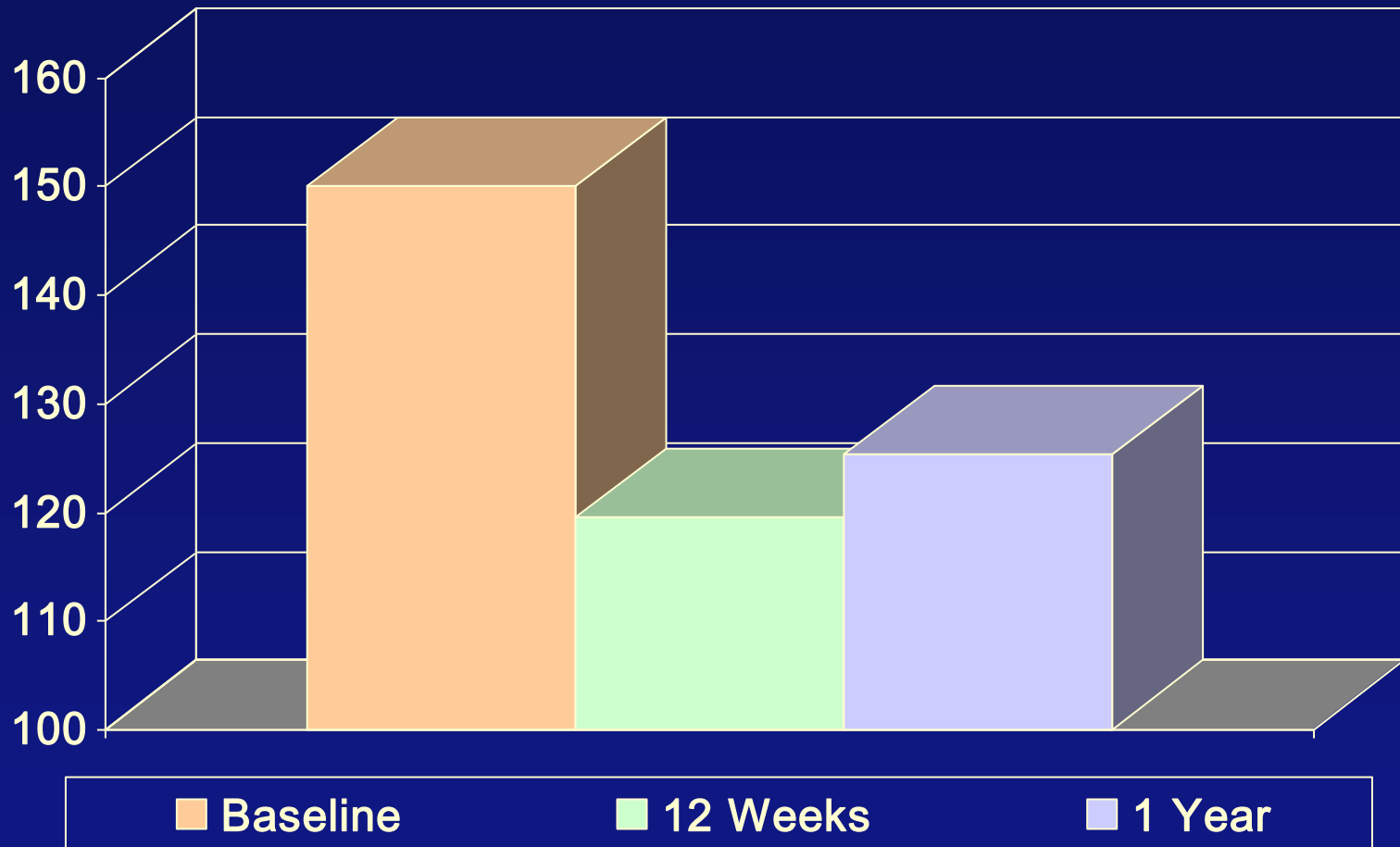


Data to be presented at APS, 2005

All $p < .001$

Data for patients who have reached 1 year of testing

Diabetics - Fasting Glucose (mg/dl)



Data to be presented at APS, 2005

All $p < .001$

Data for patients who have reached 1 year of testing

3. The Medicare Lifestyle Demonstration Project (MLMPD)

Thus, keeping the sample size the same at baseline, 12 weeks, and one year reveals that improvements in these Medicare patients were real, not an artifact of patients dropping out who did not respond well.

Accepted for oral presentation at the Society of Behavioral
Medicine (SBM) 2005 Annual Meeting and Scientific Sessions
Boston, MA

Do Older Patients Improve as Much as Younger Patients by Changing Diet and Lifestyle?: Results from the Multisite Cardiac Lifestyle Intervention Program

Michael D Sumner, PhD, Gerdi Weidner, PhD, Terri Merritt-Worden, MS,
Joli Studley, MS and Dean Ornish, MD, Preventive Medicine Research
Institute and Highmark Blue Cross Blue Shield

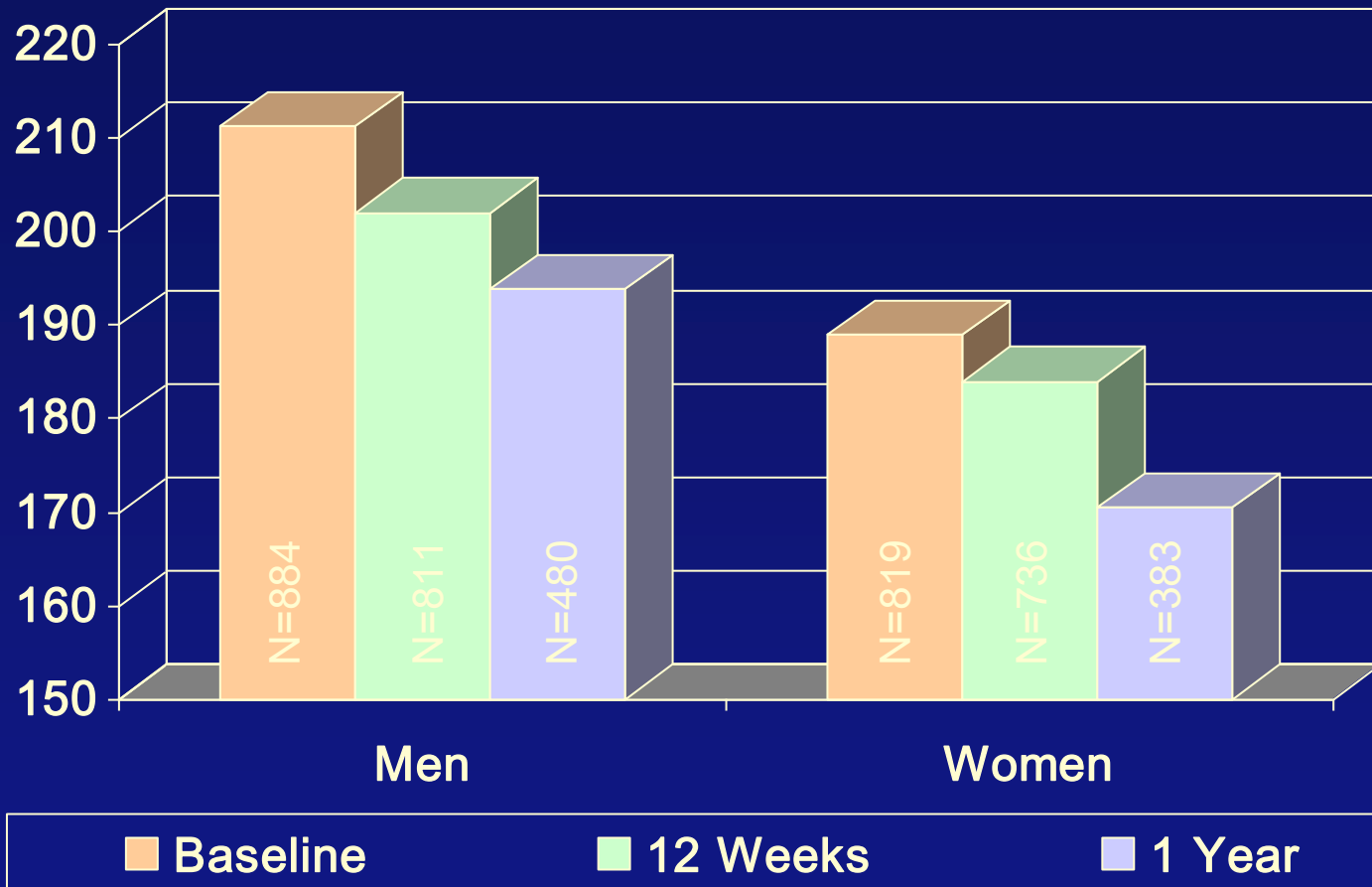
Results and Conclusions

- ANOVAs with repeated measures demonstrated that patients in all 4 groups (older and younger men, older and younger women) had excellent adherence and showed similar, significant improvements in medical and psychosocial risk factors.
- These results suggest that both younger and older patients of both genders can make comprehensive lifestyle changes with clinically and statistically significant improvements in medical and psychosocial status.

**Society of Behavioral Medicine 2005 Annual Scientific Sessions,
Boston, MA**

**Do Women Improve
as Much as Men?
Data by Gender**

Body Weight (lbs.)

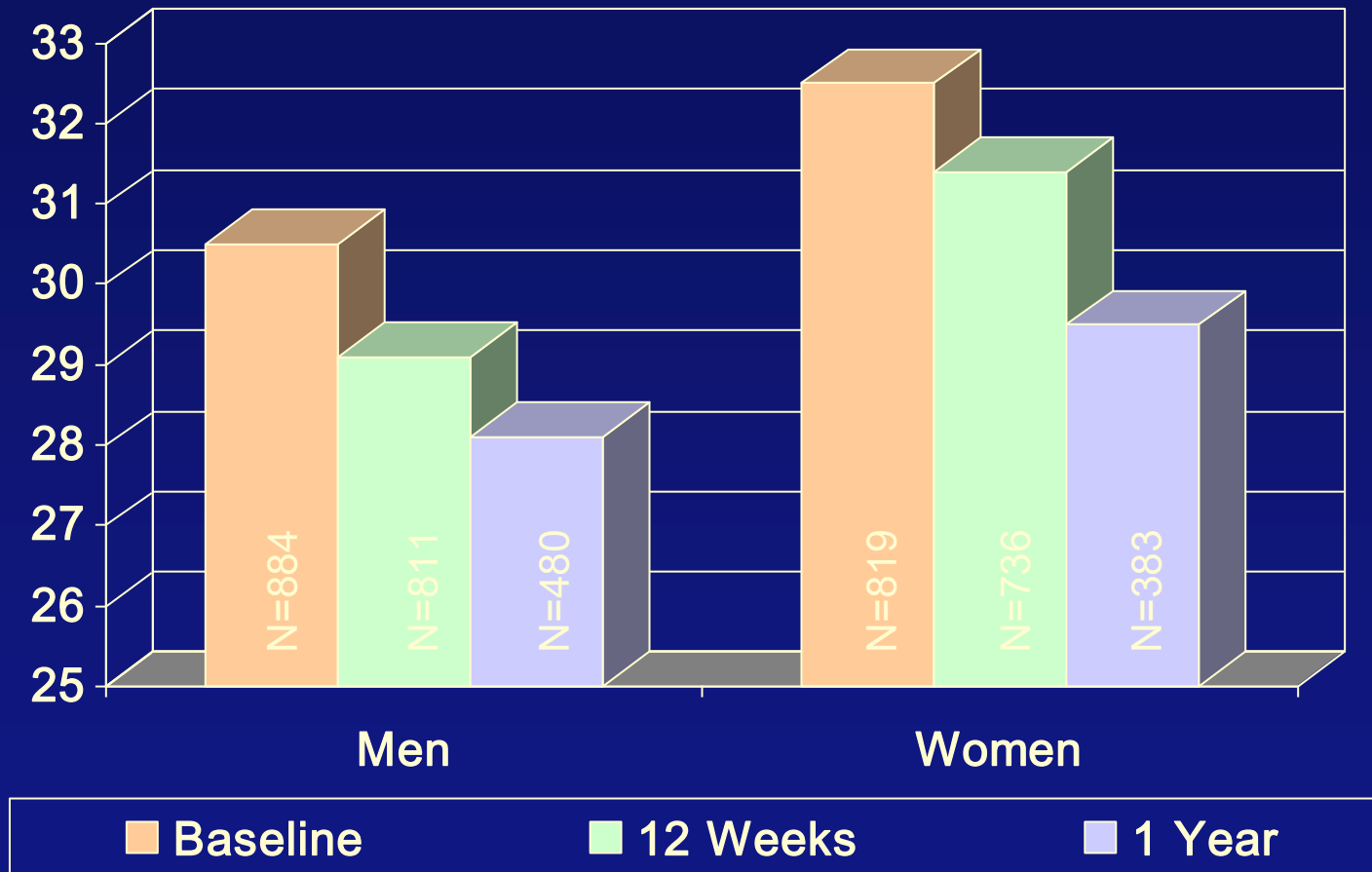


Data presented at AACVPR, 2004

All $p < .001$

N at 1 year is not comparable to baseline because many patients have not yet finished 1 year of intervention

BMI (kg/m²)

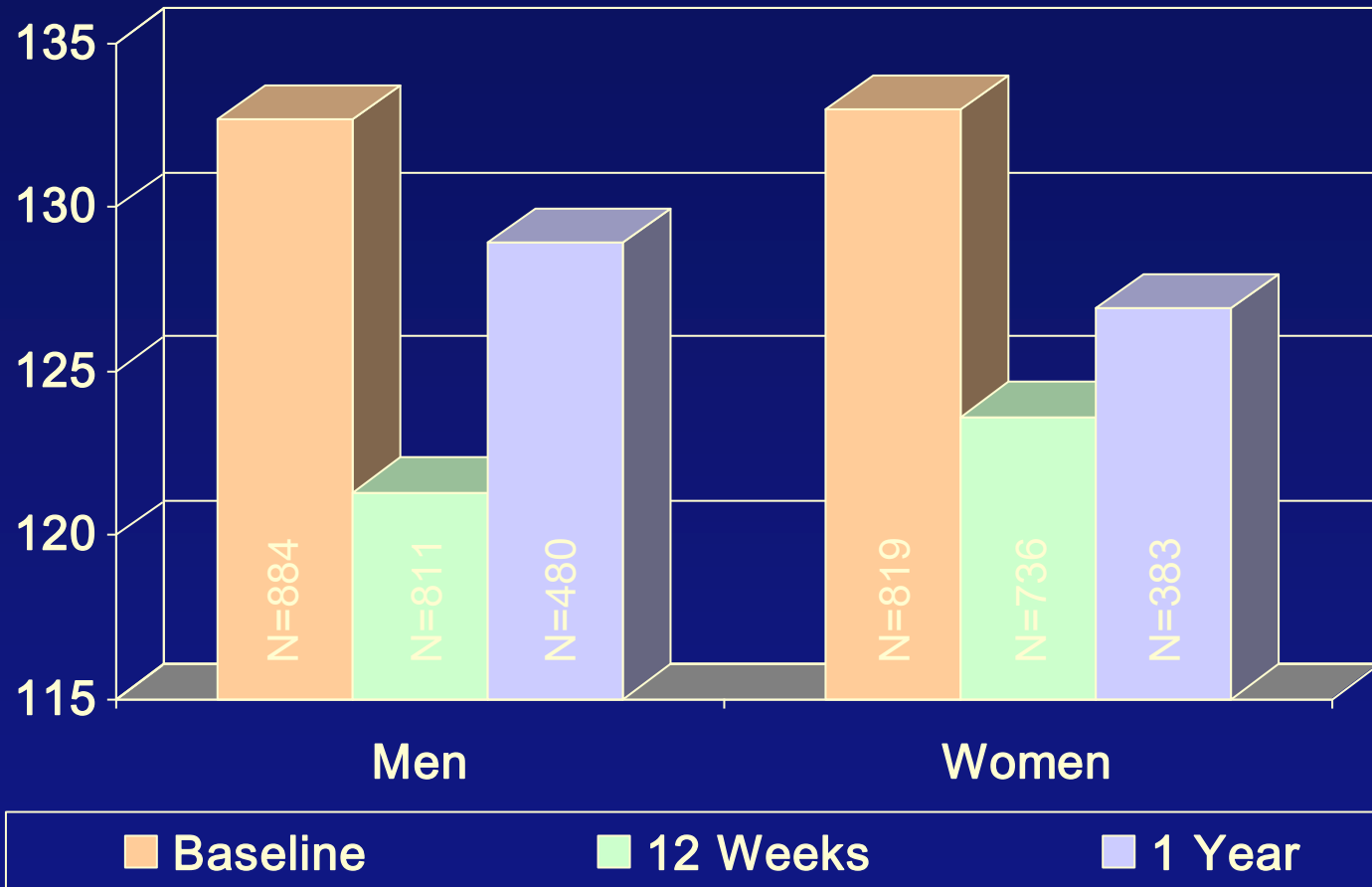


Data presented at AACVPR, 2004

All $p < .001$

N at 1 year is not comparable to baseline because many patients have not yet finished 1 year of intervention

Systolic Blood Pressure (mm Hg)

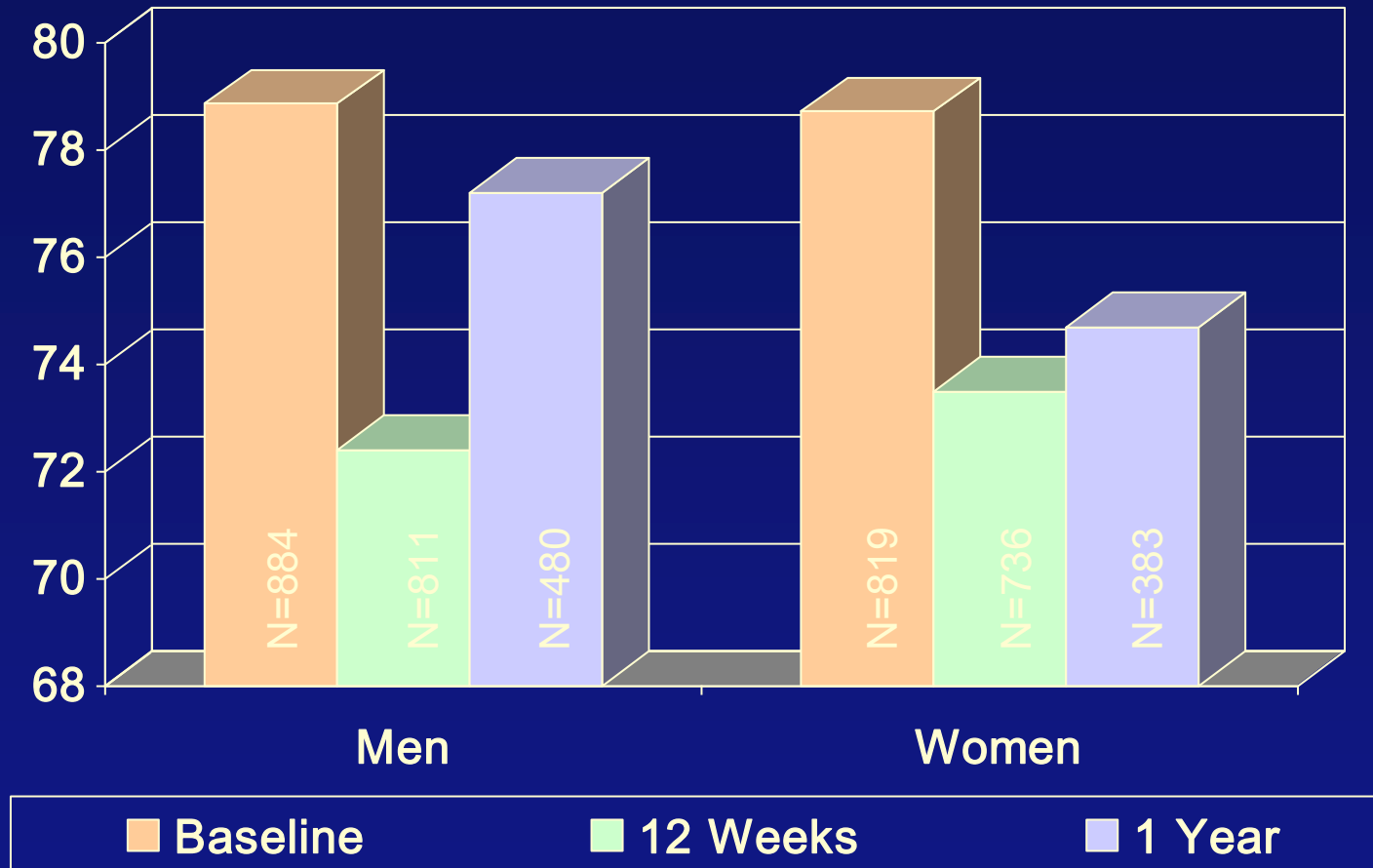


Data to be presented at SBM, 2005

All $p < .001$

N at 1 year is not comparable to baseline because many patients have not yet finished 1 year of intervention

Diastolic Blood Pressure (mm Hg)

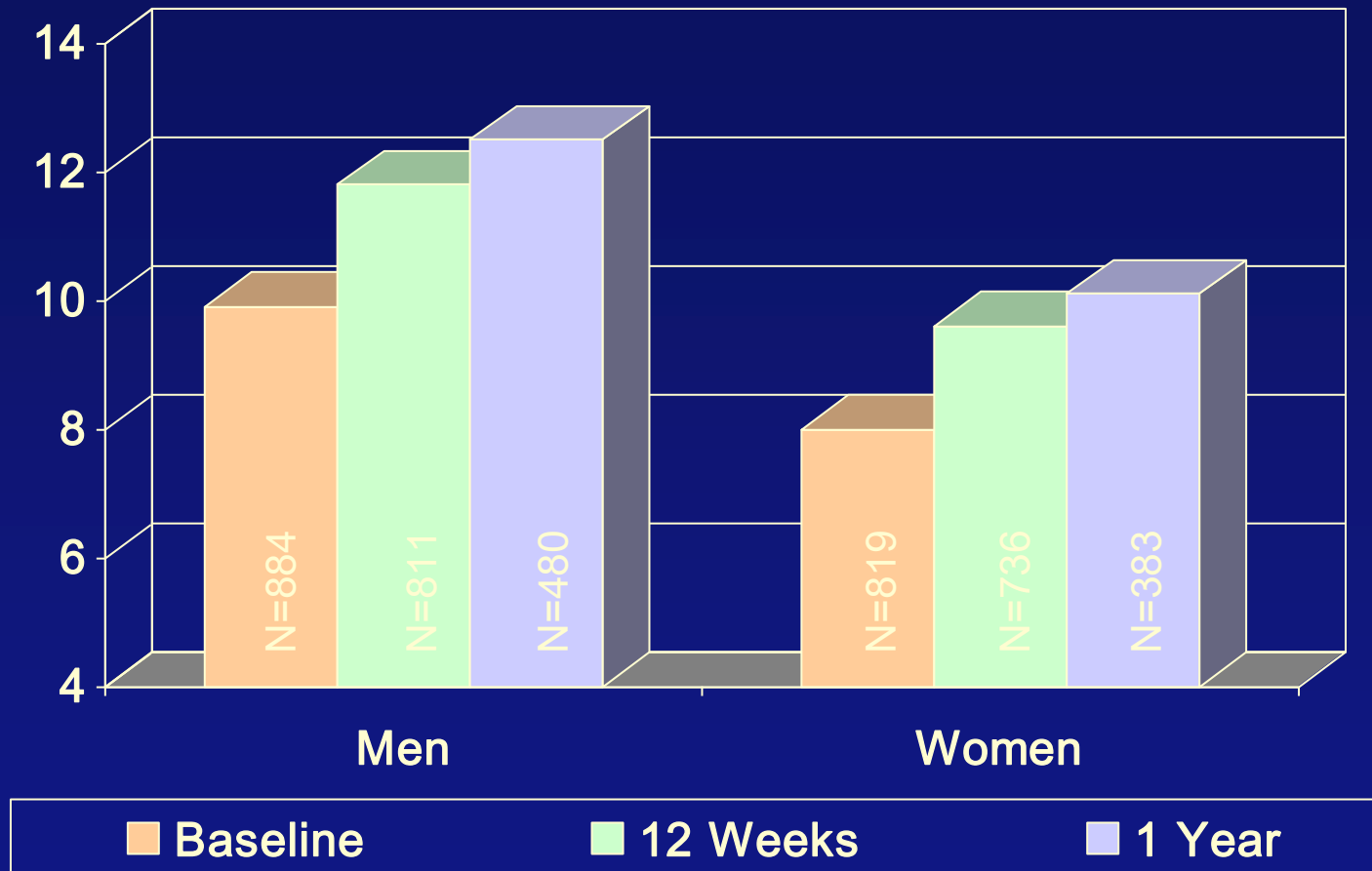


Data to be presented at SBM, 2005

All $p < .001$

N at 1 year is not comparable to baseline because many patients have not yet finished 1 year of intervention

Functional Capacity (METs)

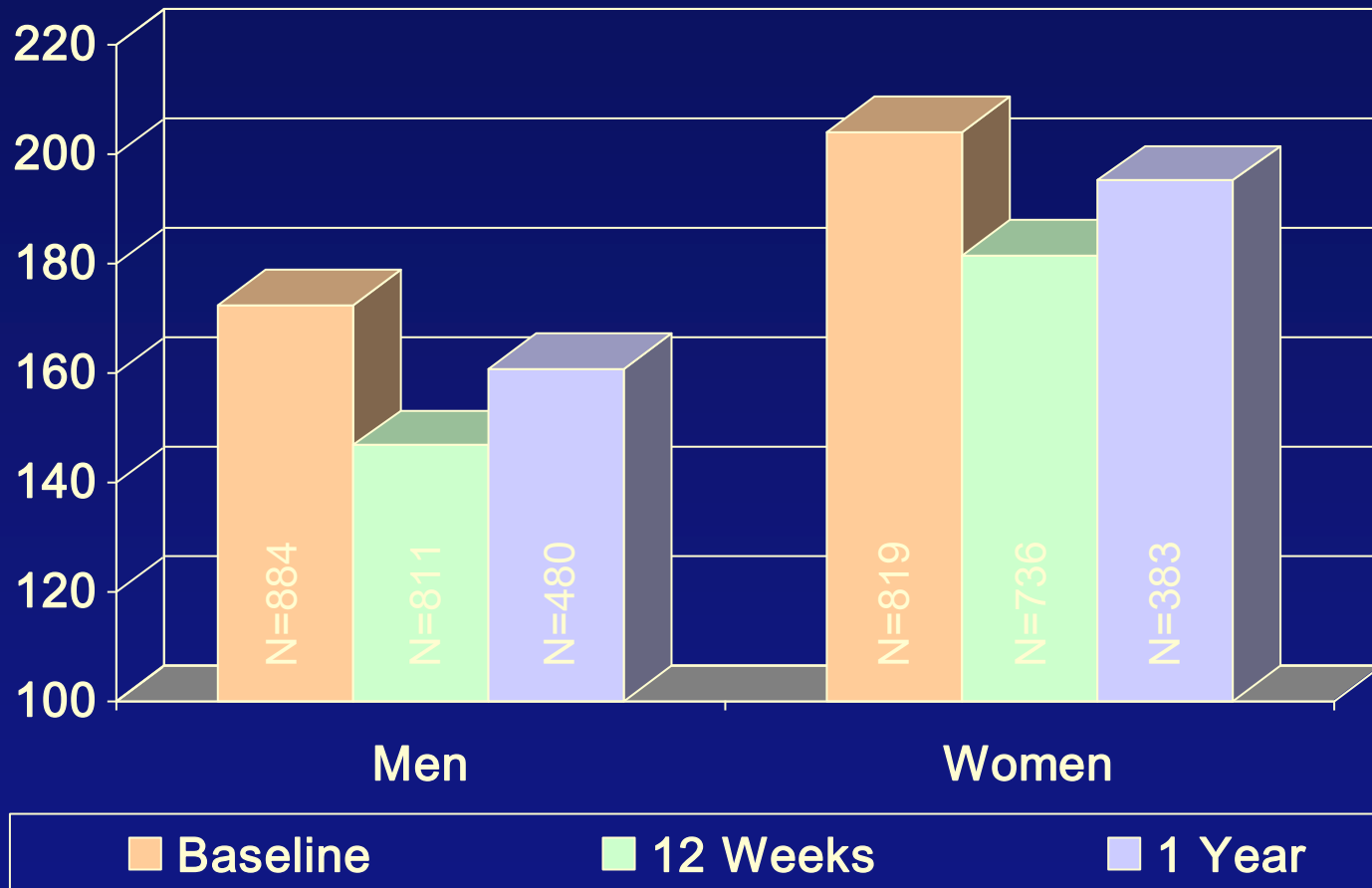


Data to be presented at SBM, 2005

All $p < .001$

N at 1 year is not comparable to baseline because many patients have not yet finished 1 year of intervention

Total Cholesterol (mg/dl)

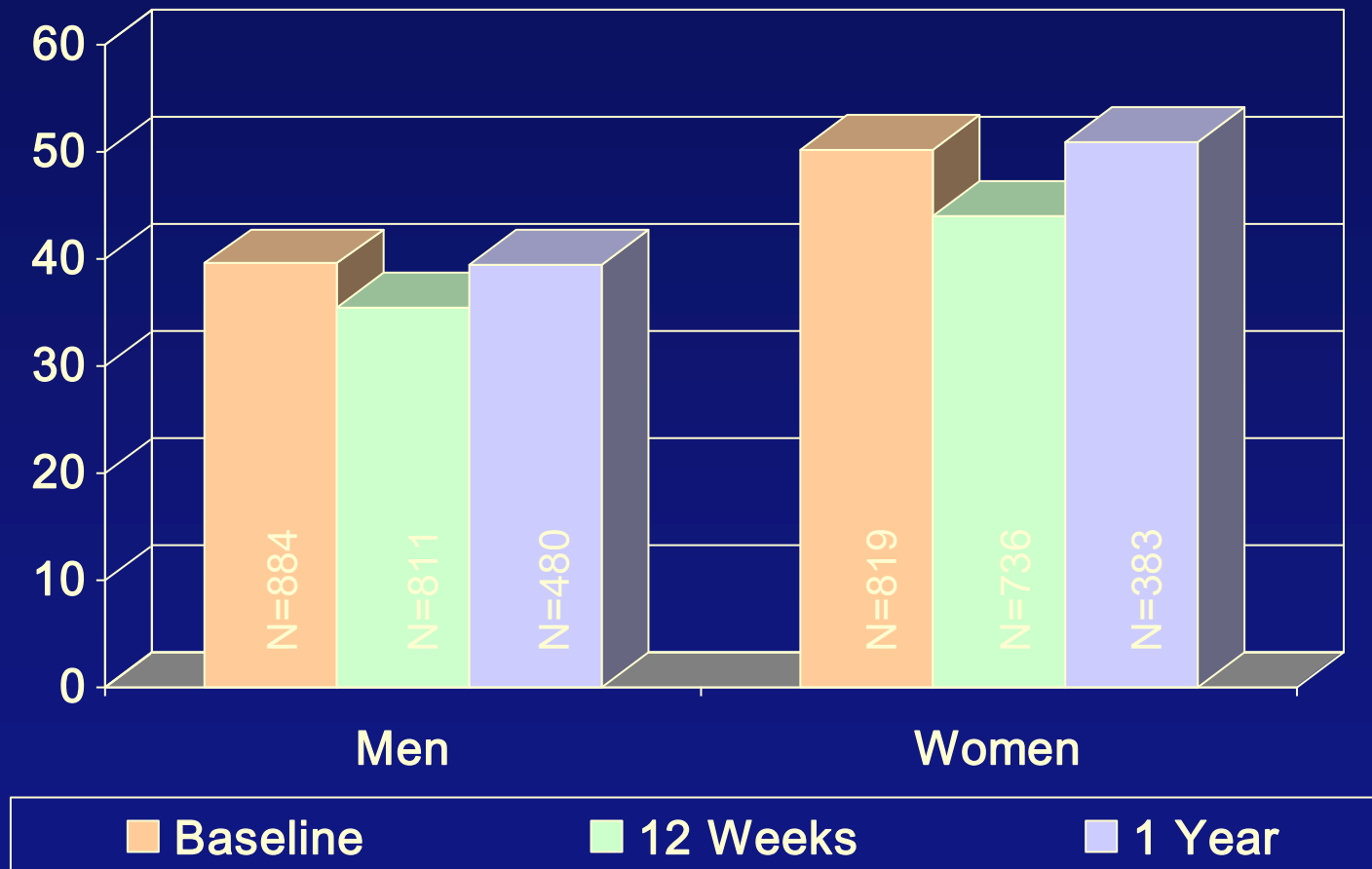


Data to be presented at SBM, 2005

All $p < .001$

Note: 75% of Men and 53% of Women patients were taking lipid-lowering medications.

HDL (mg/dl)

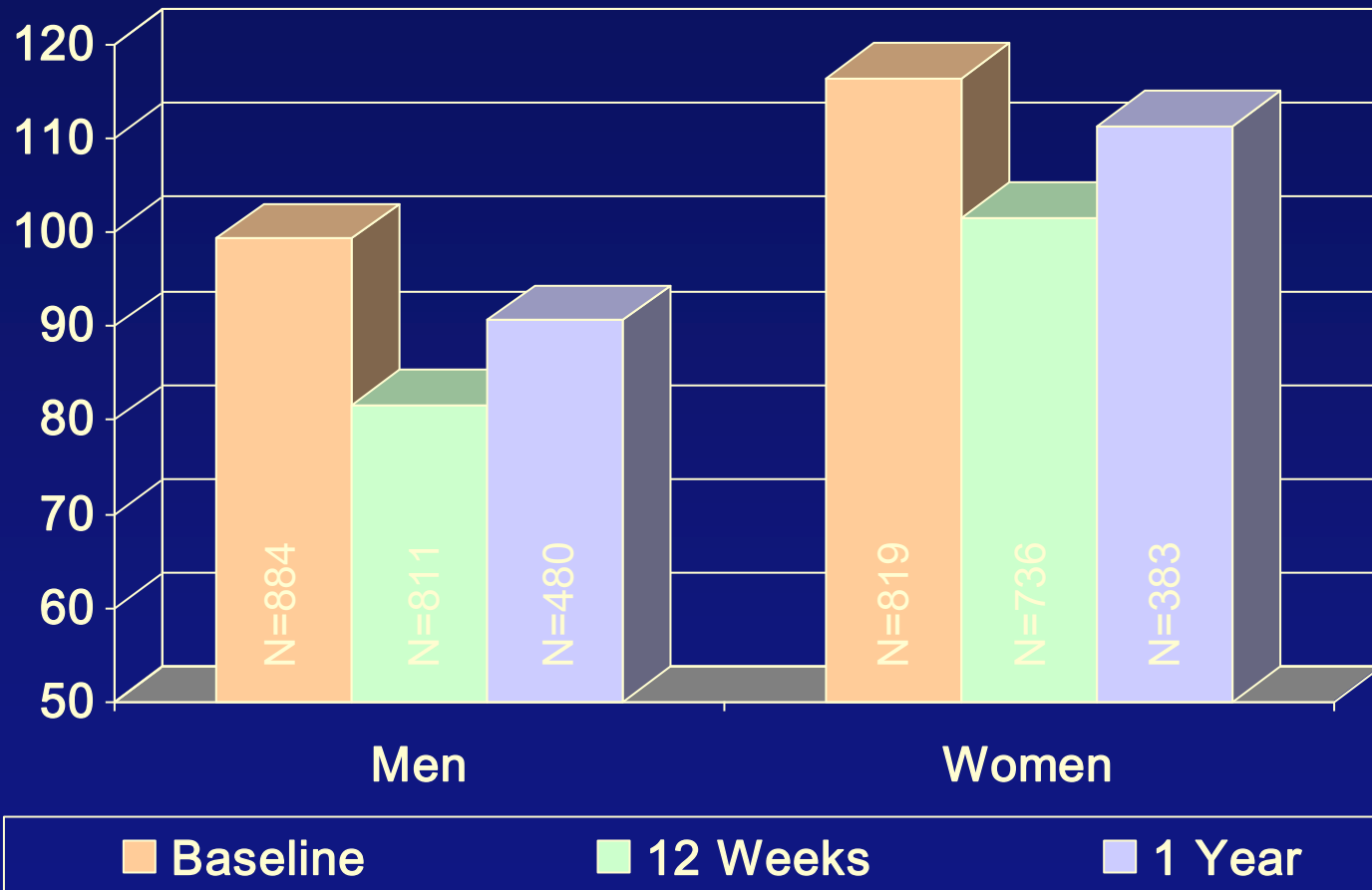


Data to be presented at SBM, 2005

$p < .001$ at 12 weeks
ps *ns* at 1 year

Note: 75% of Men and 53% of Women patients were taking lipid-lowering medications.

LDL (mg/dl)

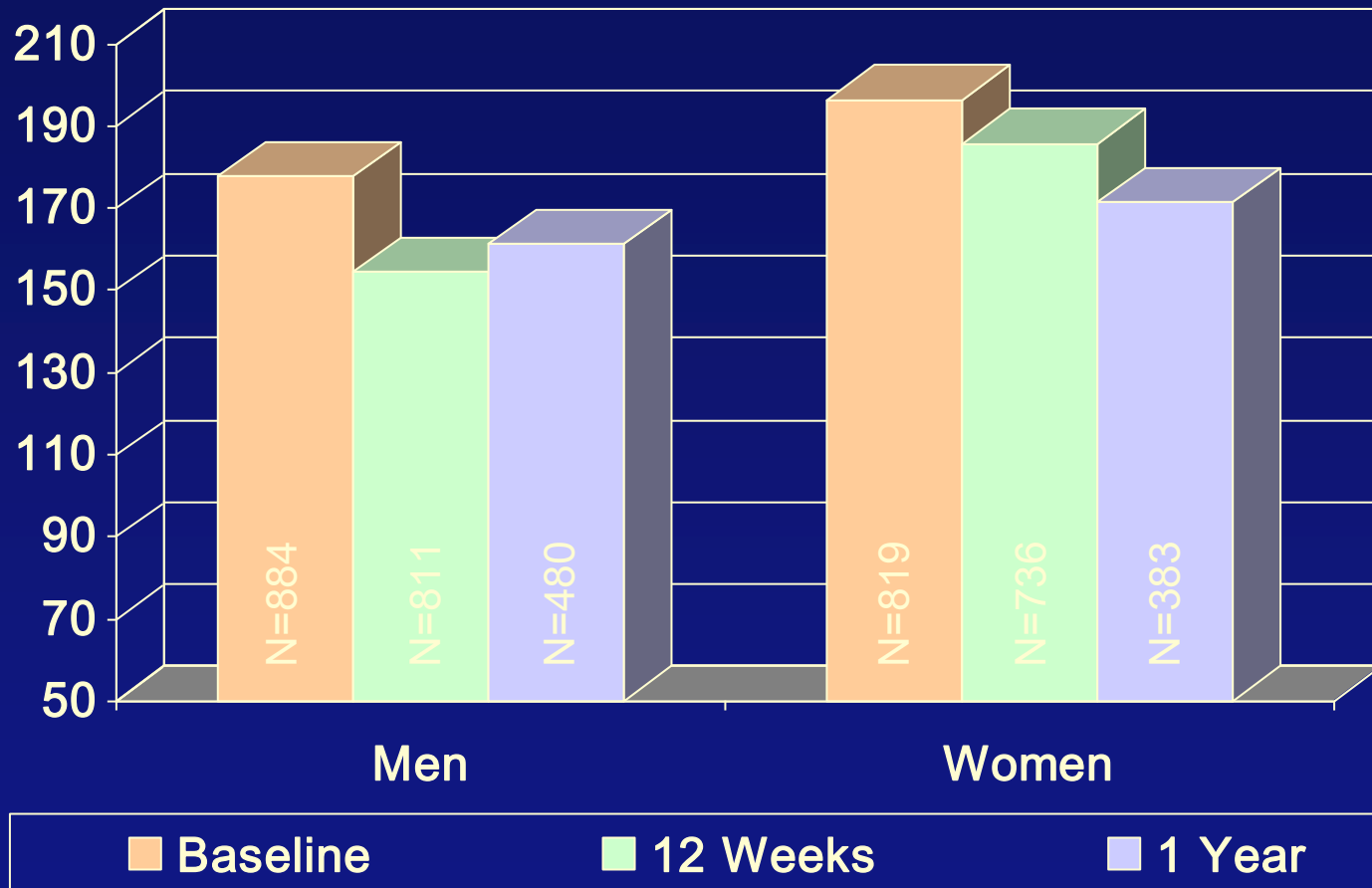


Data to be presented at SBM, 2005

All $p < .001$, except $p < .08$
for women at 1 year

Note: 75% of Men and 53% of Women patients were taking lipid-lowering medications.

Triglycerides (mg/dl)

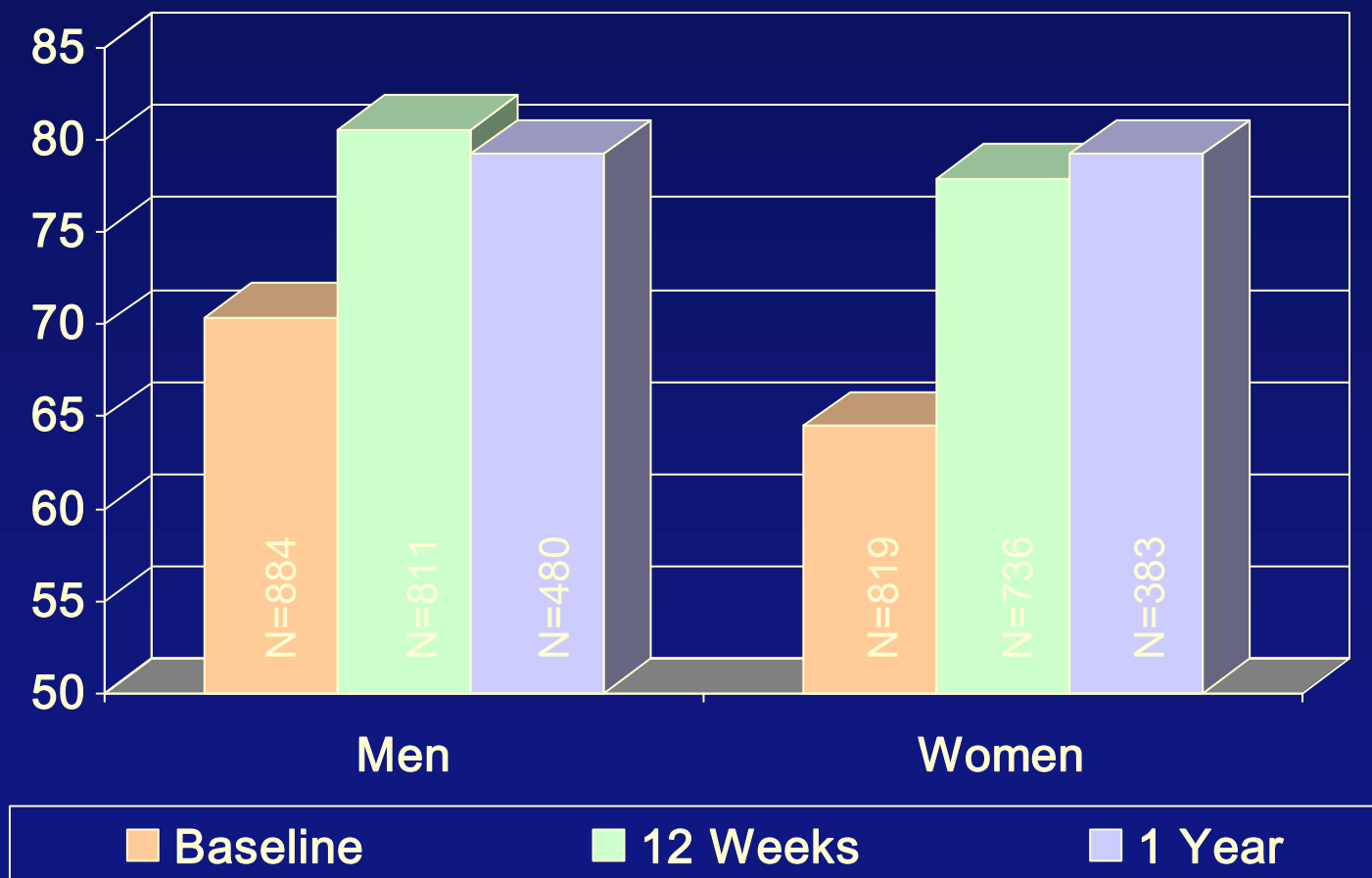


Data to be presented at SBM, 2005

All $p < .001$

Note: 75% of Men and 53% of Women patients were taking lipid-lowering medications.

Physical Function (SF-36)

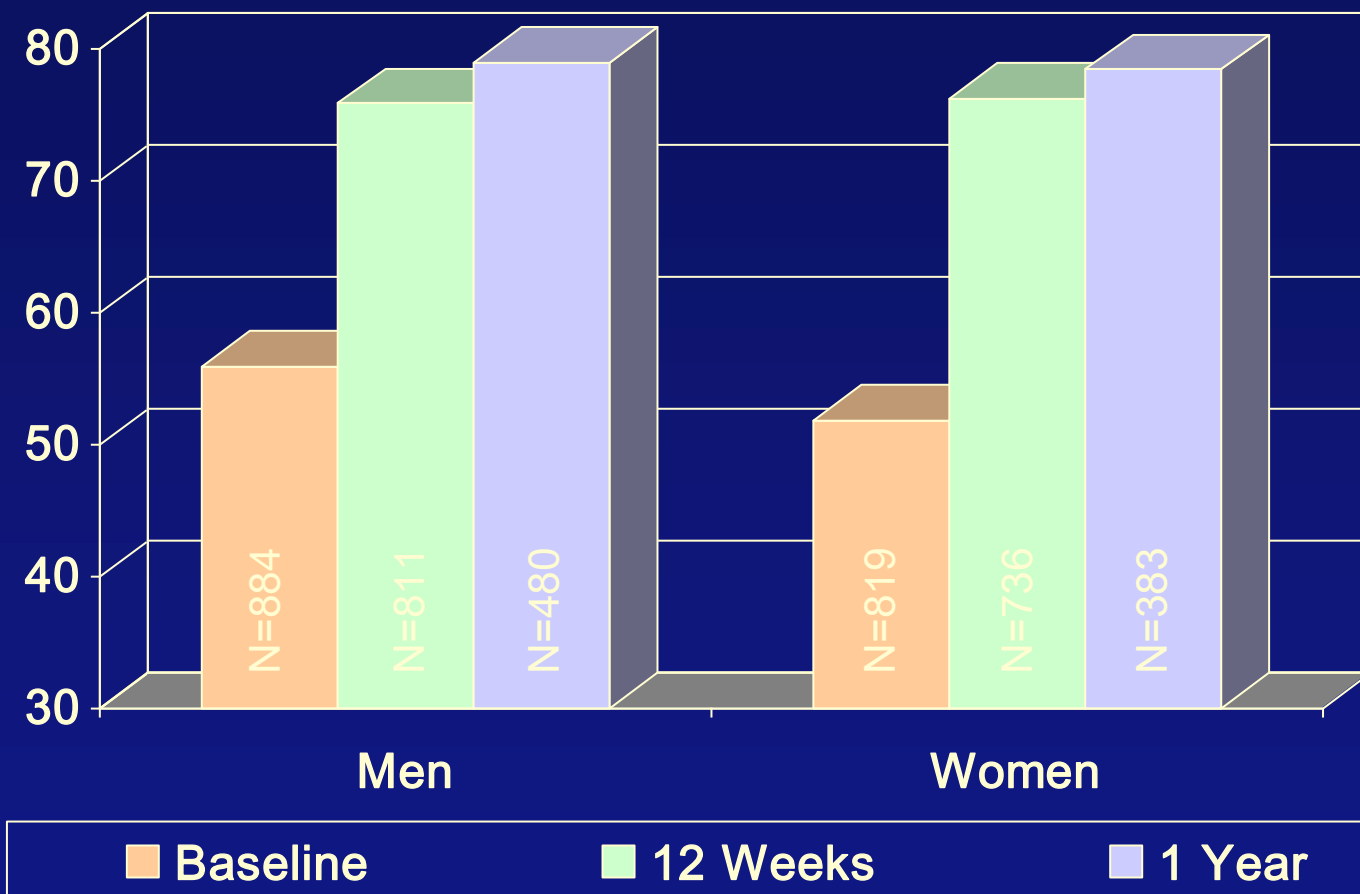


Data to be presented at SBM, 2005

All $p < .001$

N at 1 year is not comparable to baseline because many patients have not yet finished 1 year of intervention

Role Physical (SF-36)

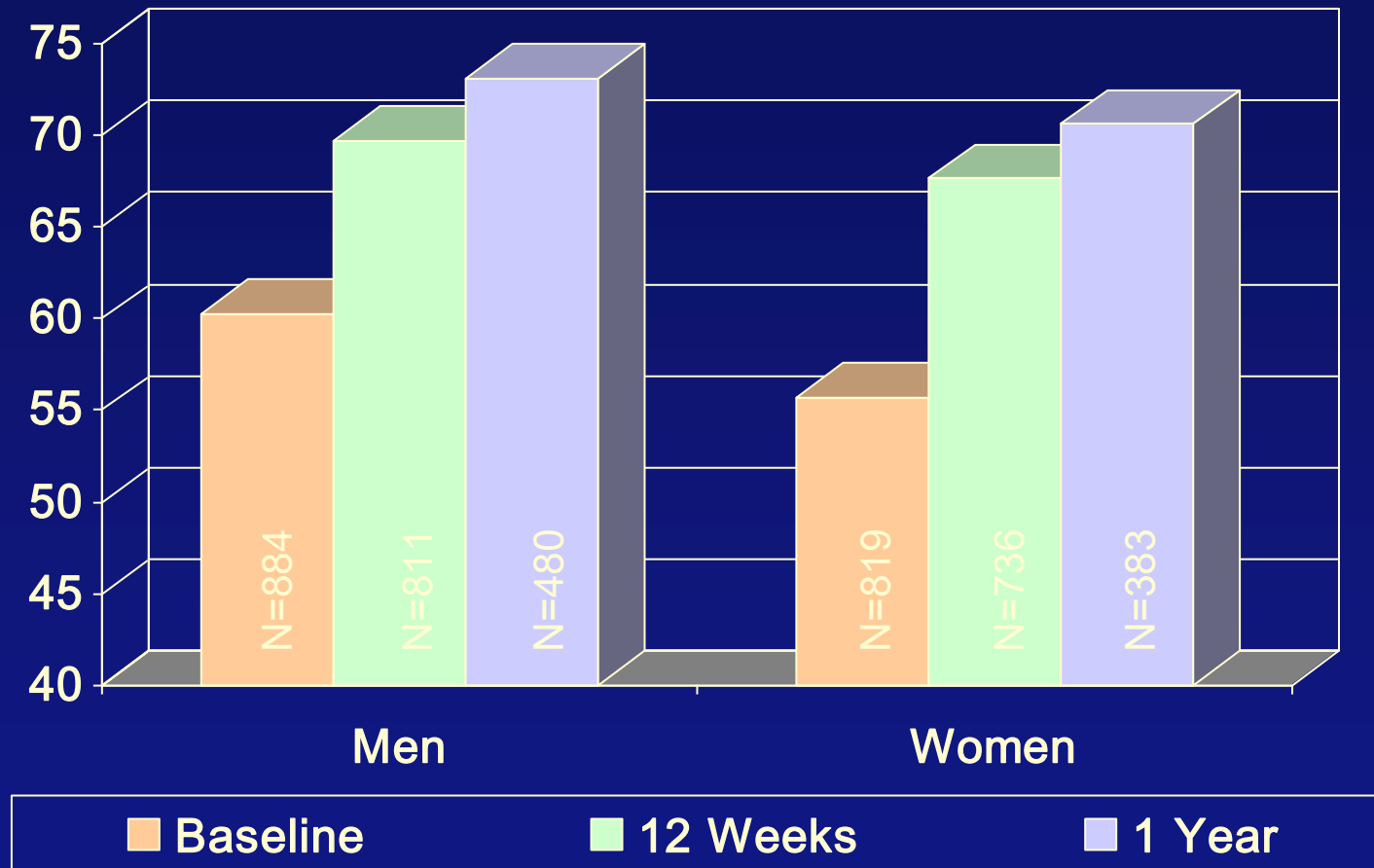


Data to be presented at SBM, 2005

All $p < .001$

N at 1 year is not comparable to baseline because many patients have not yet finished 1 year of intervention

Bodily Pain (SF-36)_(Higher scores=less pain)

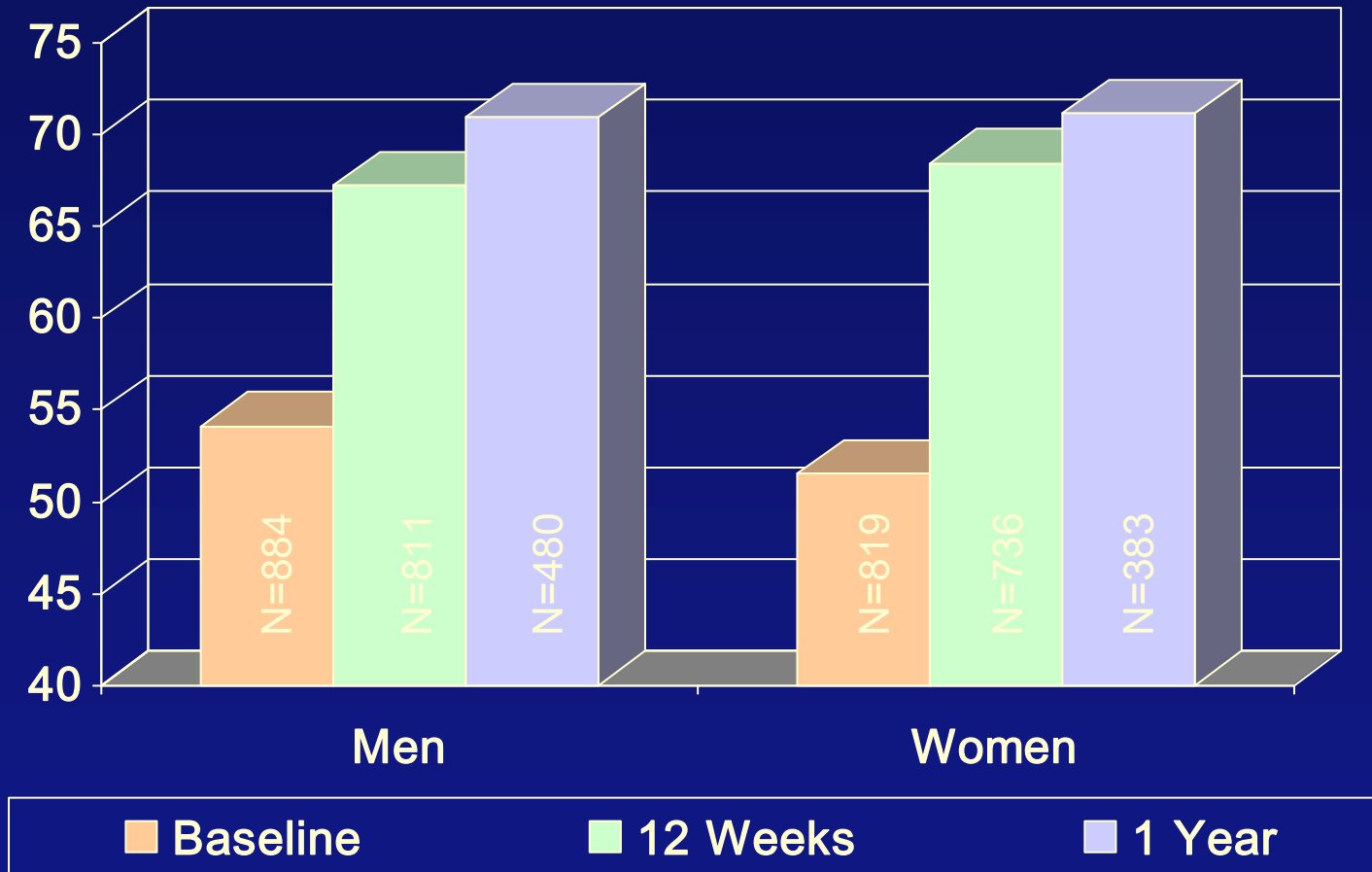


Data to be presented at SBM, 2005

All $p < .001$

N at 1 year is not comparable to baseline because many patients have not yet finished 1 year of intervention

General Health (SF-36)

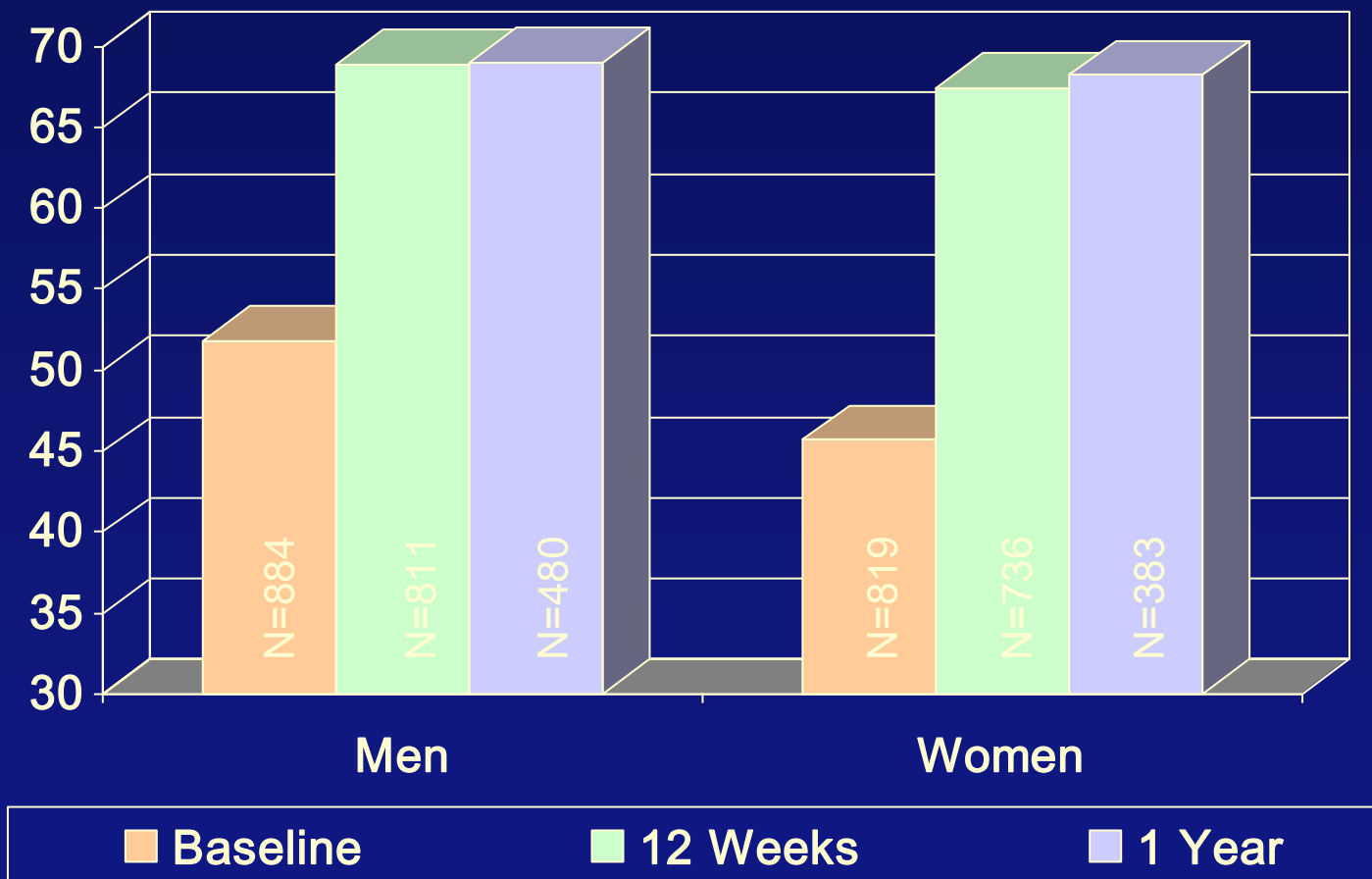


Data to be presented at SBM, 2005

All $p < .001$

N at 1 year is not comparable to baseline because many patients have not yet finished 1 year of intervention

Vitality (SF-36)

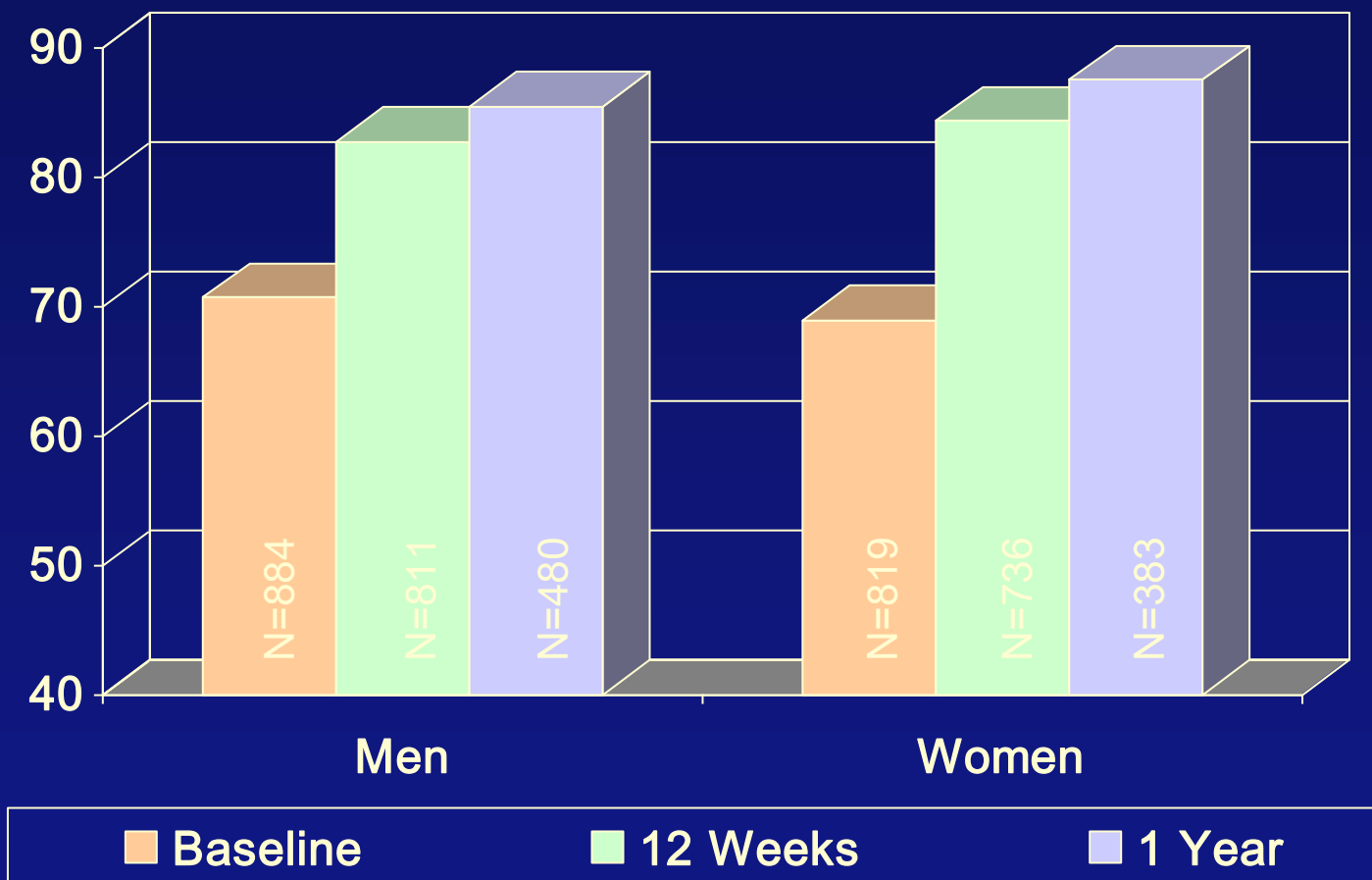


Data to be presented at SBM, 2005

All $p < .001$

N at 1 year is not comparable to baseline because many patients have not yet finished 1 year of intervention

Social Functioning (SF-36)

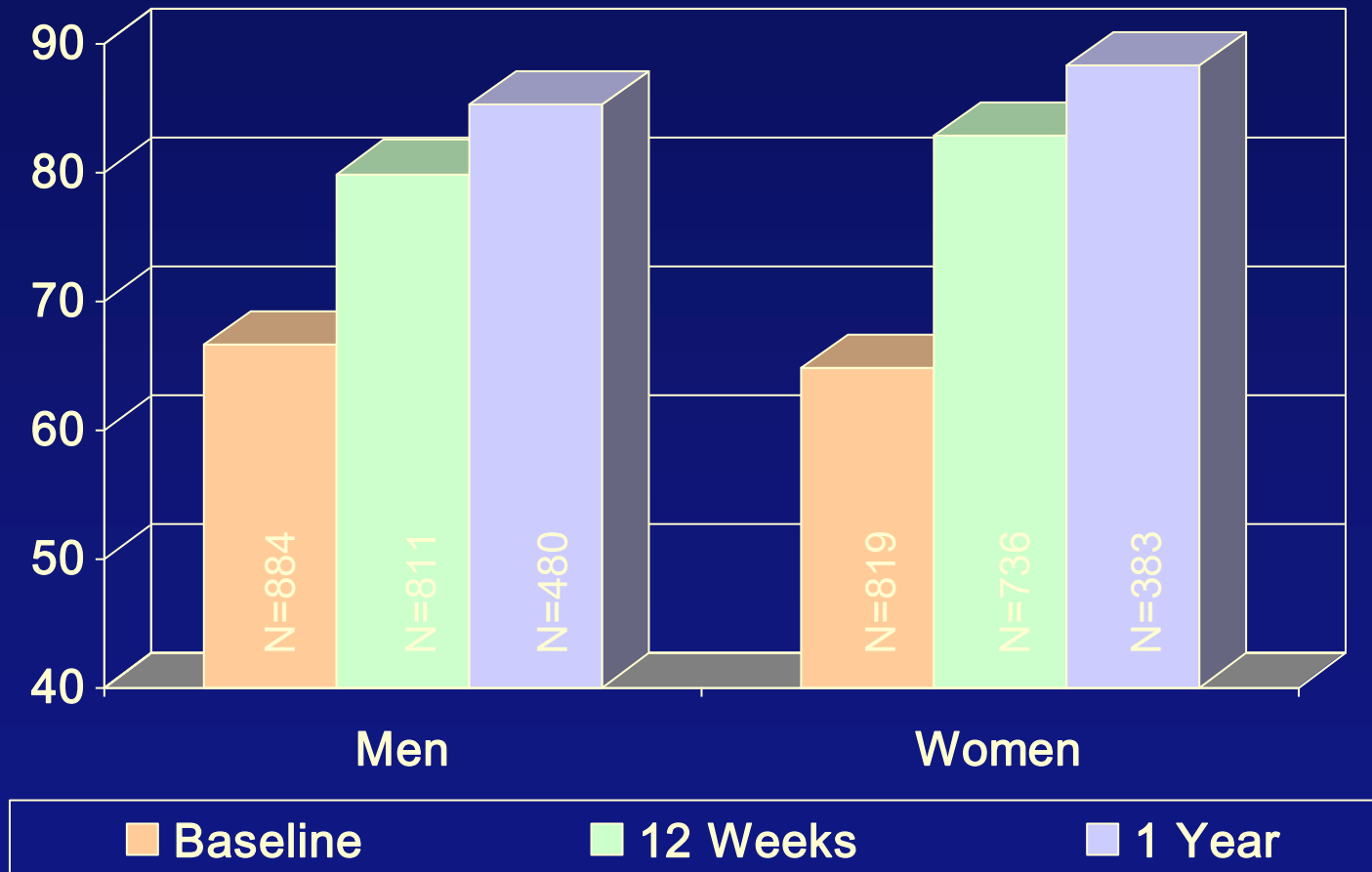


Data to be presented at SBM, 2005

All $p < .001$

N at 1 year is not comparable to baseline because many patients have not yet finished 1 year of intervention

Role Emotional (SF-36)

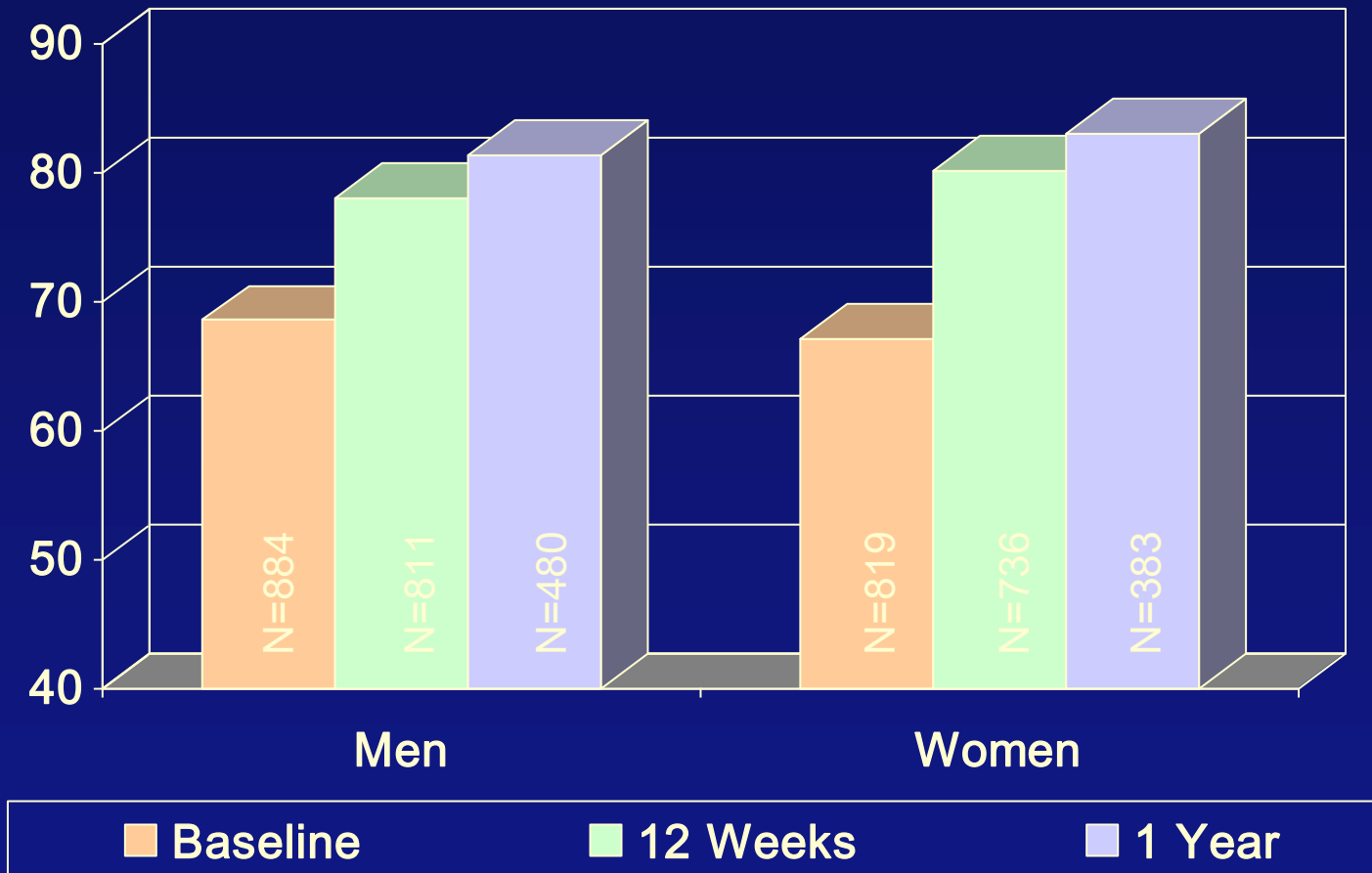


Data to be presented at SBM, 2005

All $p < .001$

N at 1 year is not comparable to baseline because many patients have not yet finished 1 year of intervention

Mental Health (SF-36)

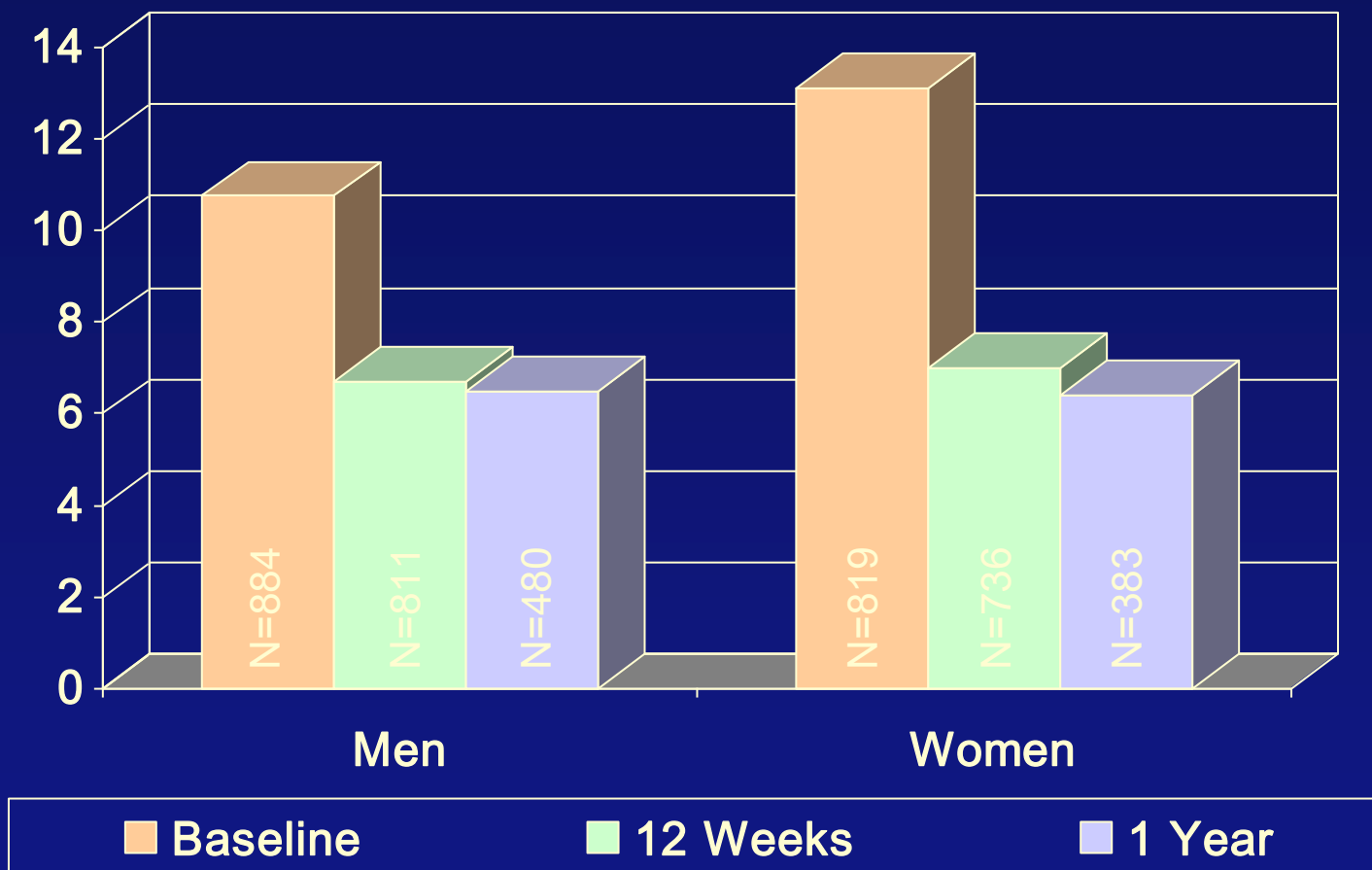


Data to be presented at SBM, 2005

All $p < .001$

N at 1 year is not comparable to baseline because many patients have not yet finished 1 year of intervention

CES-D (Depression)

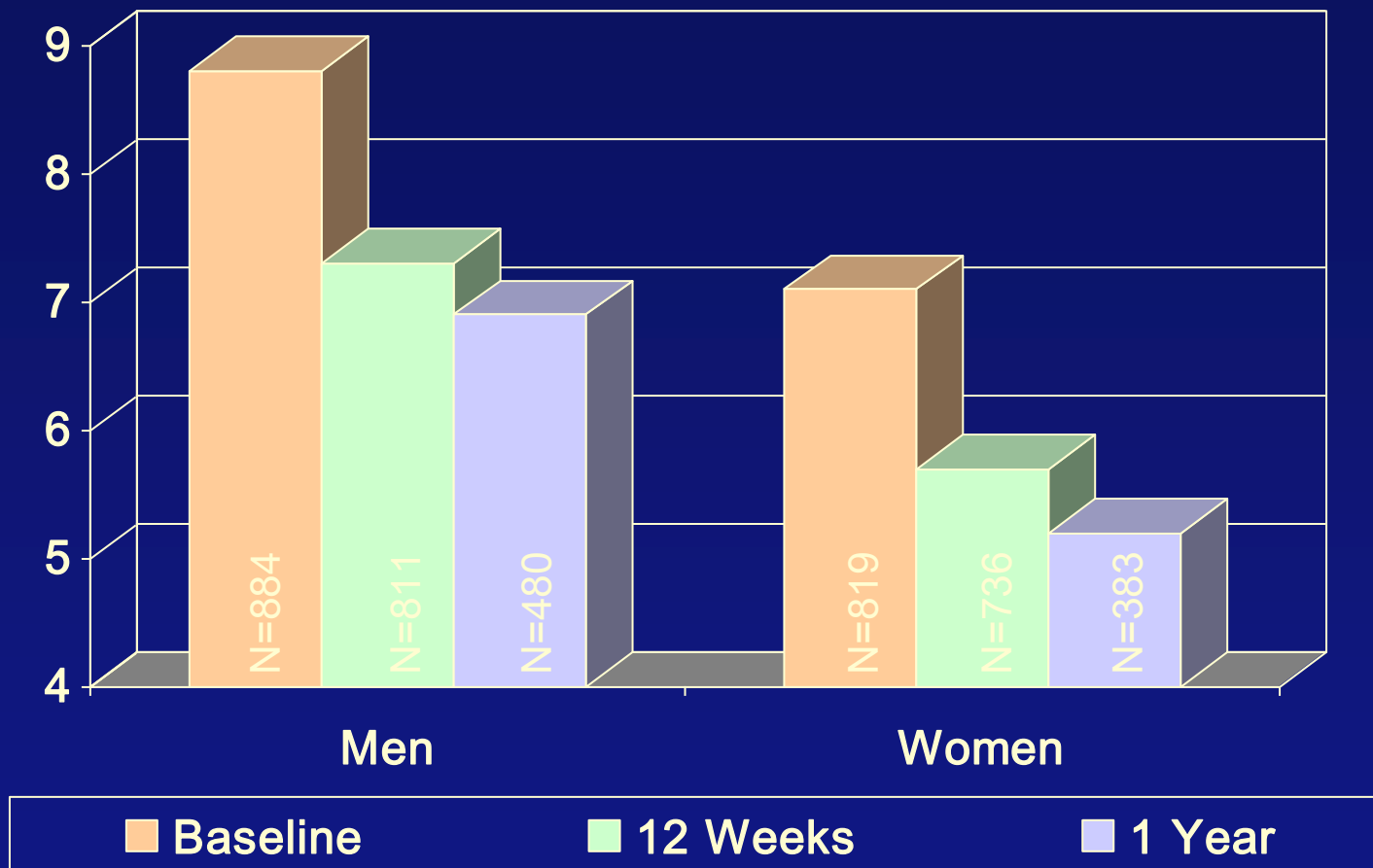


Data to be presented at SBM, 2005

All $p < .001$

N at 1 year is not comparable to baseline because many patients have not yet finished 1 year of intervention

Cook-Medley (Hostility)

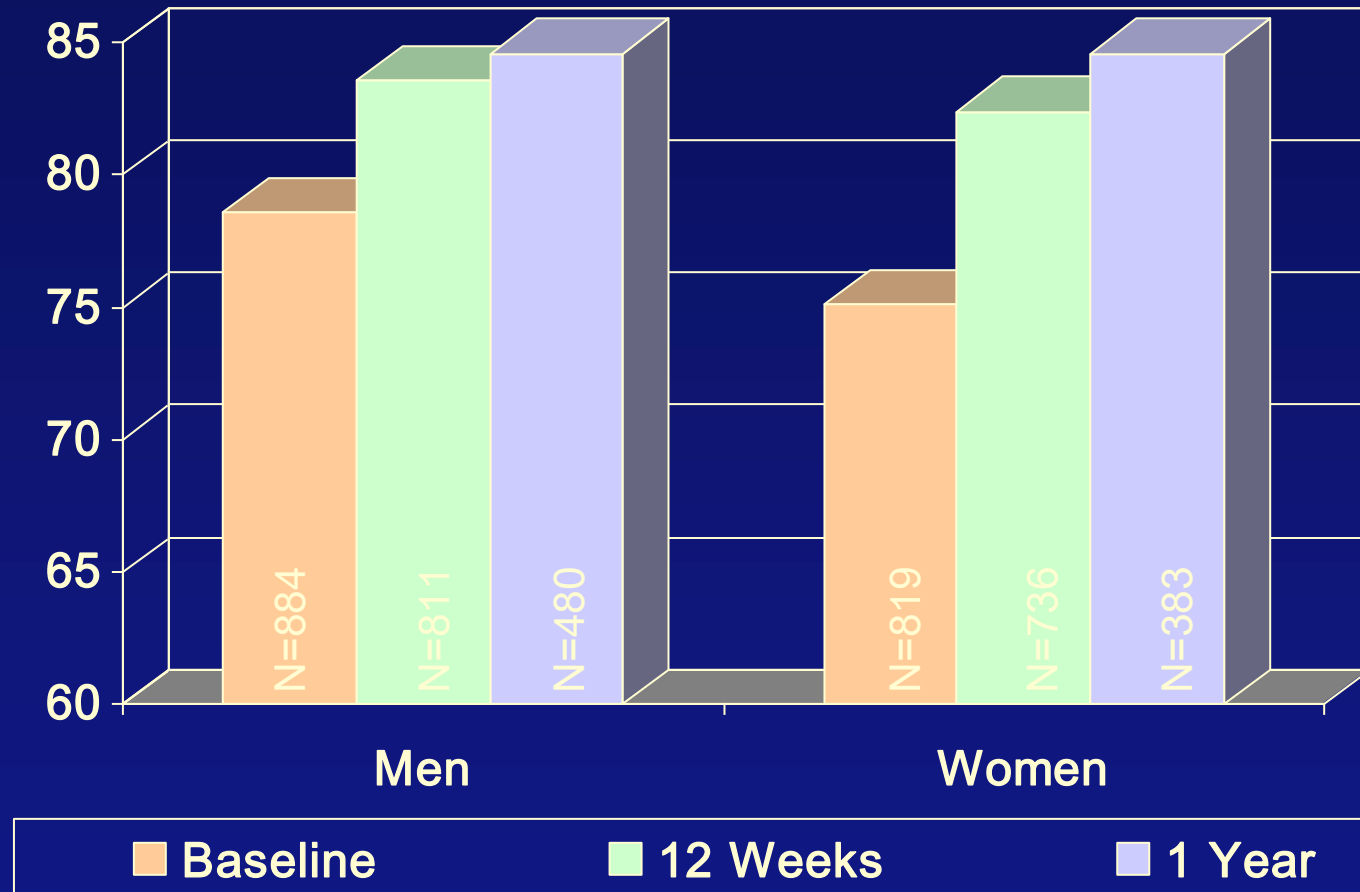


Data to be presented at SBM, 2005

All $p < .001$

N at 1 year is not comparable to baseline because many patients have not yet finished 1 year of intervention

Preferred Support Profile

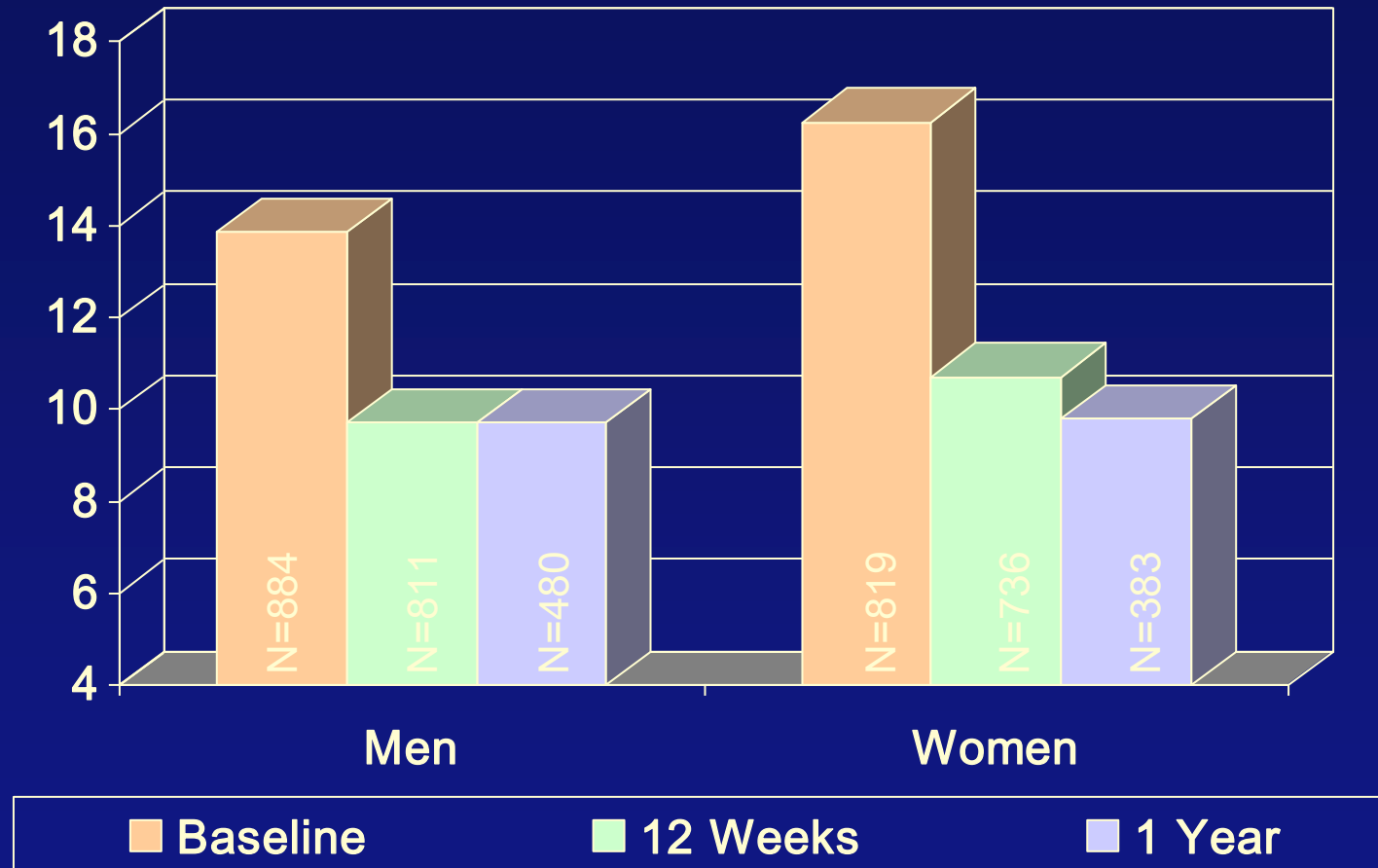


Data to be presented at SBM, 2005

All $p < .001$

N at 1 year is not comparable to baseline because many patients have not yet finished 1 year of intervention

Perceived Stress Scale

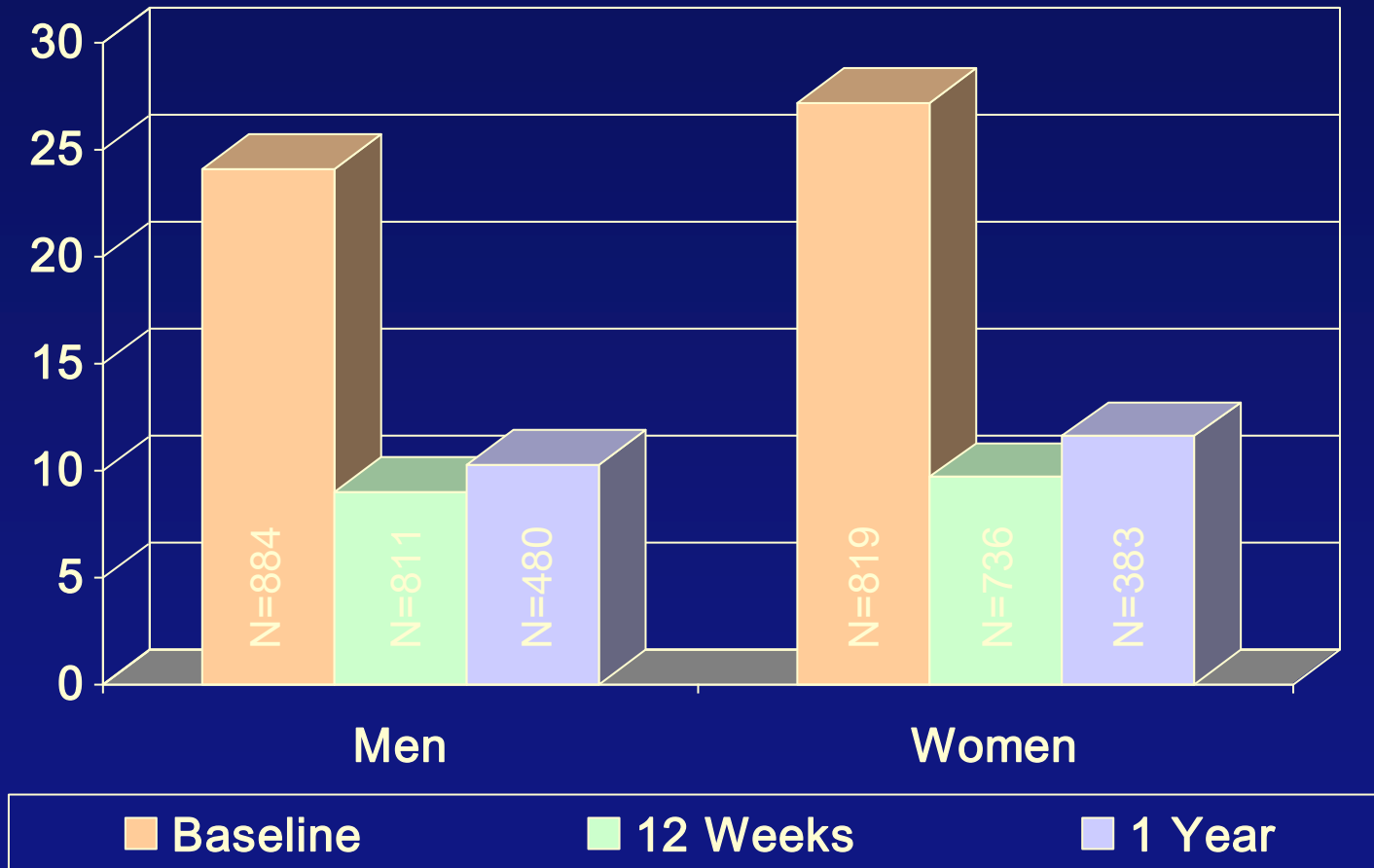


Data to be presented at SBM, 2005

All $p < .001$

N at 1 year is not comparable to baseline because many patients have not yet finished 1 year of intervention

Dietary Fat (% of total calories)

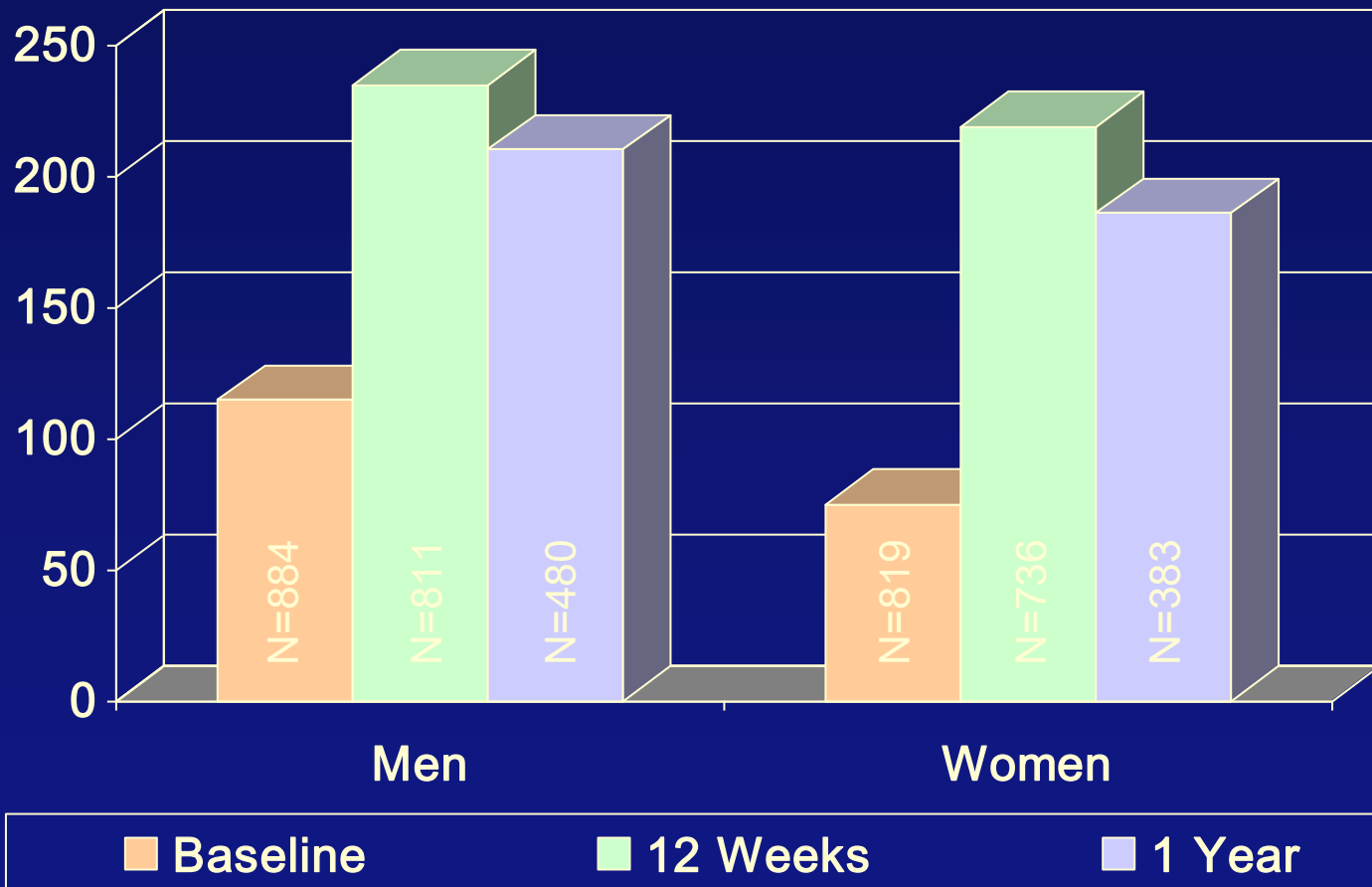


Data to be presented at SBM, 2005

All $p < .001$

N at 1 year is not comparable to baseline because many patients have not yet finished 1 year of intervention

Minutes of Exercise / Week

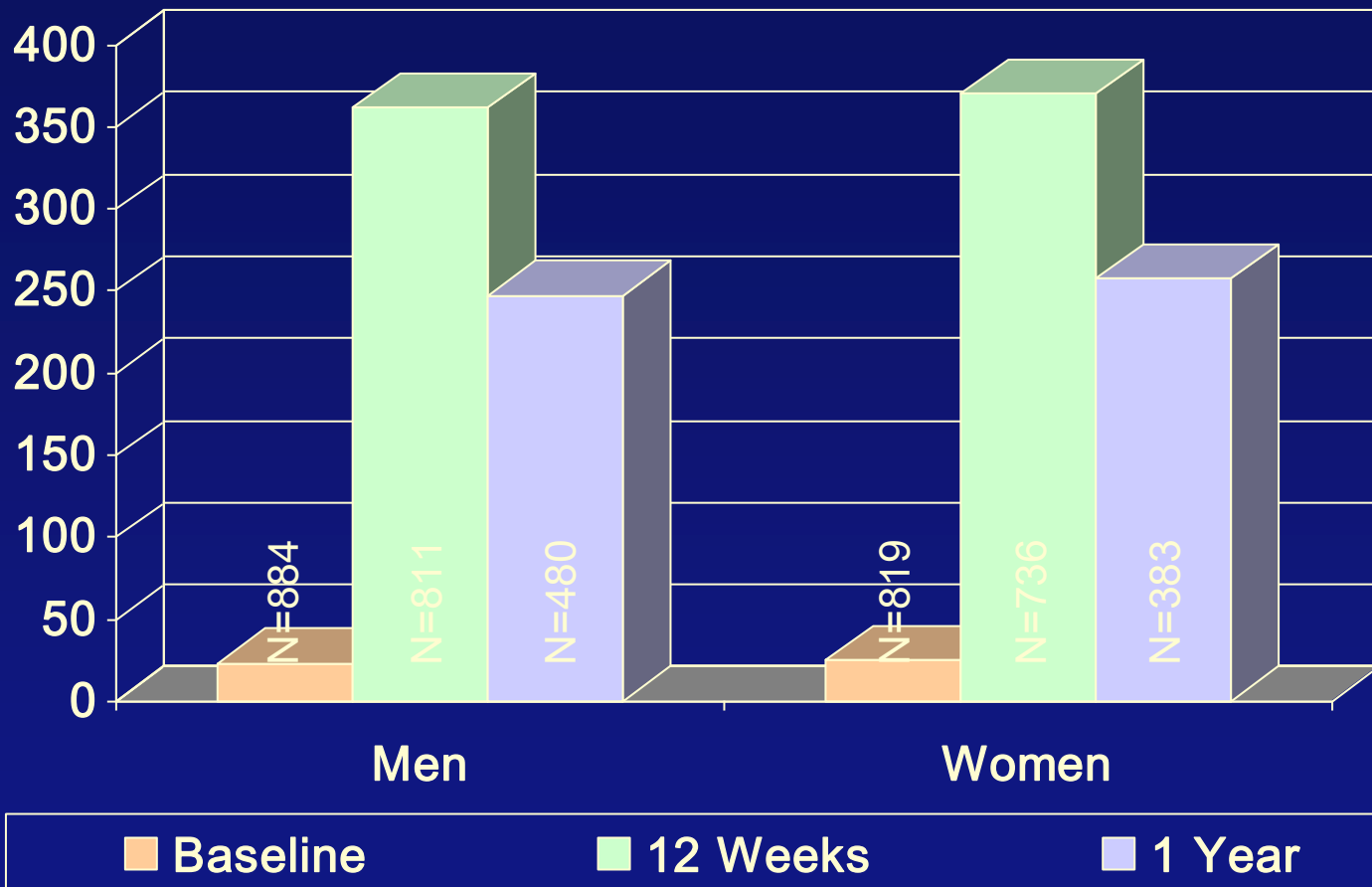


Data to be presented at SBM, 2005

All $p < .001$

N at 1 year is not comparable to baseline because many patients have not yet finished 1 year of intervention

Minutes of Stress Management / Week



Data to be presented at SBM, 2005

All $p < .001$

N at 1 year is not comparable to baseline because many patients have not yet finished 1 year of intervention

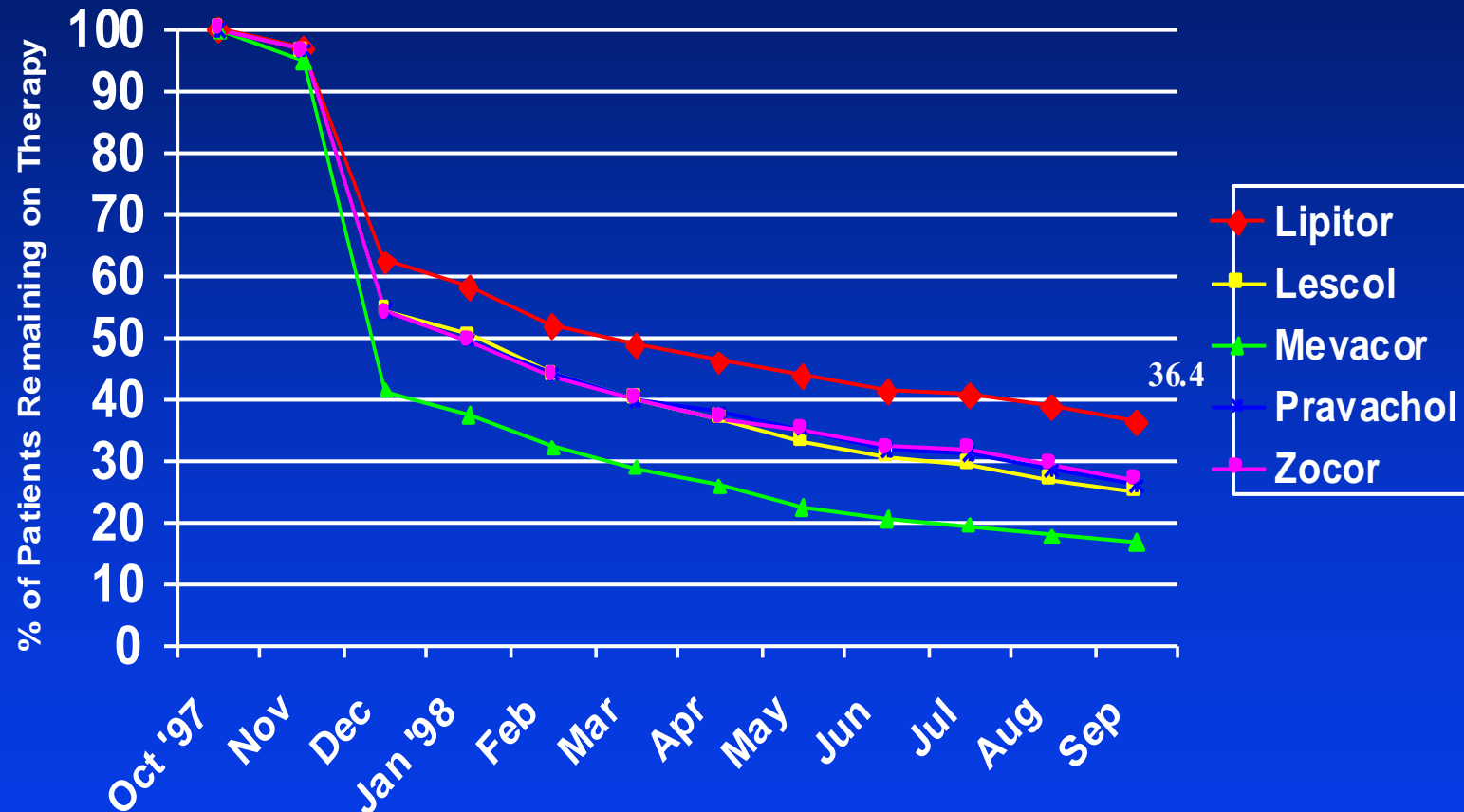
3. The Medicare Lifestyle Demonstration Project (MLMPD)

Thus, women adhered as well as men to the comprehensive lifestyle intervention and showed comparable improvements as men in each of these measures.

Myth: "Adherence to statins is easy but adherence to comprehensive lifestyle changes is very difficult if not impossible. Small, gradual changes in diet and lifestyle are easier than big, rapid changes."

Persistence with Statin Therapy


% of 37,000 New-to-Statin Patients Remaining on Therapy



Source : NDC Health Information Services, 1998

What Motivates Patients to Make & Maintain Changes in Diet and Lifestyle

When people make comprehensive changes in diet and lifestyle, they often feel so much better, so quickly, that it reframes the reason for change from risk factor reduction and prevention to improving quality of life: joy of living rather than fear of dying.

A black and white cartoon illustration. On the left, a fortune teller with a large nose, wearing a patterned headscarf, a large earring, and a beaded necklace, sits in an ornate chair. They are looking at a glowing crystal ball on a table. On the table, there is also a lit candle and a small sign that reads "YOUR FUTURE TOLD". The table is covered with a cloth featuring a star pattern. On the right, a customer with a long, thin neck and a cigarette in their mouth stands leaning over the table. A large speech bubble from the customer contains the text: "I GIVE SMOKERS A DISCOUNT BECAUSE THERE'S NOT AS MUCH TO TELL...".

I GIVE SMOKERS
A DISCOUNT BECAUSE
THERE'S NOT AS MUCH
TO TELL...

YOUR
FUTURE
TOLD

What Motivates Patients to Make & Maintain Changes in Diet and Lifestyle

Improved quality of life:

- Reduced angina
- Improved well-being and vitality
- Better sexual function/less ED
- Decreased depression
- Increased exercise capacity and ability to work