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Salient Facts Regarding Health Issues of Older Persons

- Number of older persons
 - c. 37 million in 2007
 - c. 72 million in 2030
- Life expectancy and maximum life span
 - c. 85, 100
- Persons with disability requiring assistance
 - 20%
- Living alone
 - Women 1/3rd, Men 15%
- Chronically disabled
 - 20%

Disease Prevention and Health Promotion for Older Persons

Health Issues for an Aging
Population

Lynda Burton, 2007

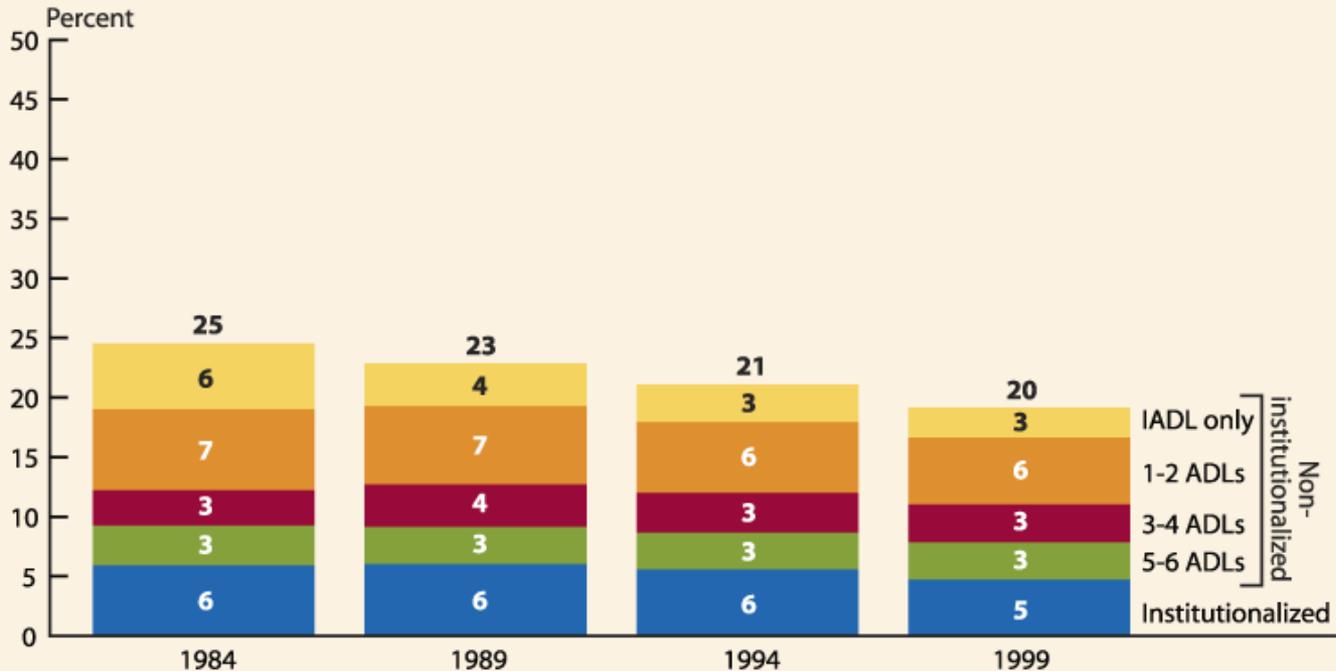
Aging, natural death and the compression of morbidity

Fries, NEJM, 1980

- Length of life is fixed
- Increasingly rectangular survival curve
- Chronic disease has superseded acute disease
- Importance of prevention of disease

Indicator 19 - Disability

Age-adjusted percentage of Medicare enrollees age 65 and over who are chronically disabled, by level and category of disability, 1984, 1989, 1994, and 1999



Note: Disabilities are grouped into two categories: limitations in activities of daily living (ADLs) and limitations in instrumental activities of daily living (IADLs). The six ADLs included are bathing, dressing, getting in or out of bed, getting around inside, toileting, and eating. The eight IADLs included are light housework, laundry, meal preparation, grocery shopping, getting around outside, managing money, taking medications, and telephoning. Individuals are considered to have an ADL disability if they report receiving help or supervision, or using equipment, to perform the activity, or not performing the activity at all. Individuals are considered to have an IADL disability if they report using equipment to perform the activity or not performing the activity at all because of their health or a disability. Individuals are considered to be chronically disabled if they have at least one ADL or one IADL limitation that is expected to last 90 days or longer, or they are institutionalized. Data for 1989 do not sum to the total because of rounding.

Reference population: These data refer to Medicare enrollees.

Source: National Long Term Care Survey.

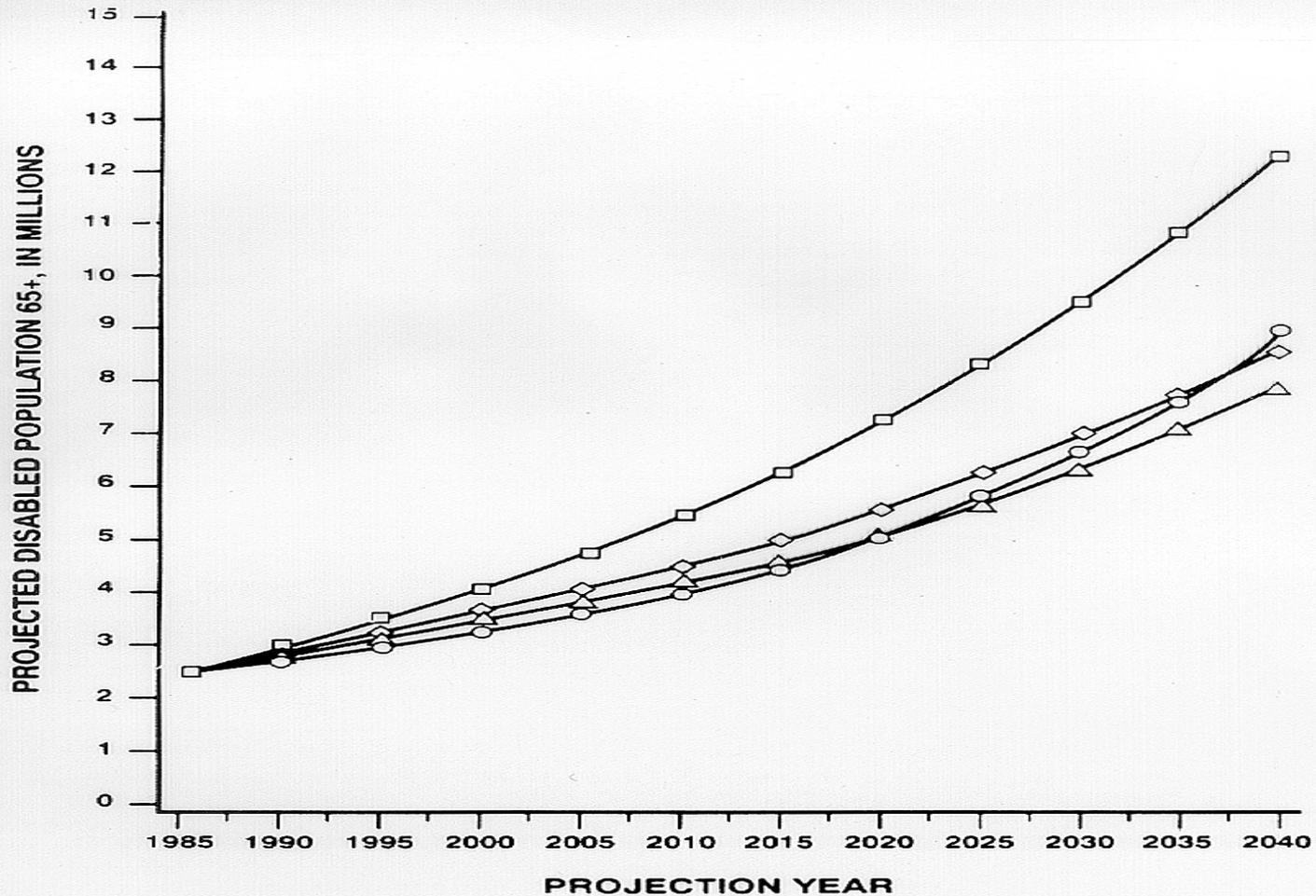
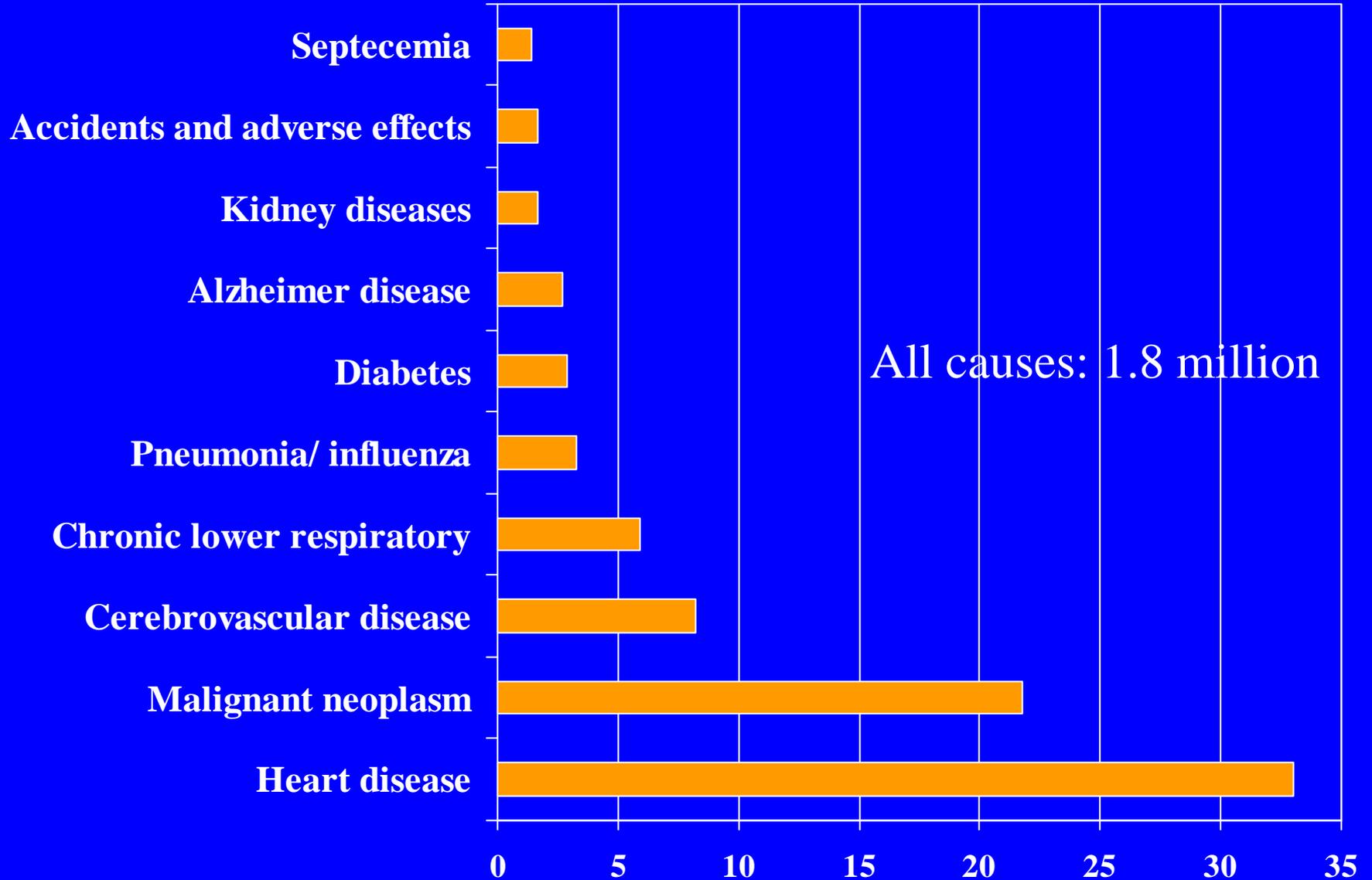


Figure 1. Total projected population 65 and older with severe disability (in millions), 1986 to 2040. Key to different mortality and disability assumptions: Δ Constant; ○ Longer life, less disability; □ Longer life, higher disability; ◇ Moderately longer life, moderately higher disability.

Top 10 causes of death for people aged 65 and over: 2000



Data Source: National Center for Health Statistics, 2003a, Table 33.

Types of Prevention

- Primary Prevention
 - refers to efforts to eliminate health or functional problems at their source, and reduce the incidence of a disease
 - Immunizations
 - Healthy life style

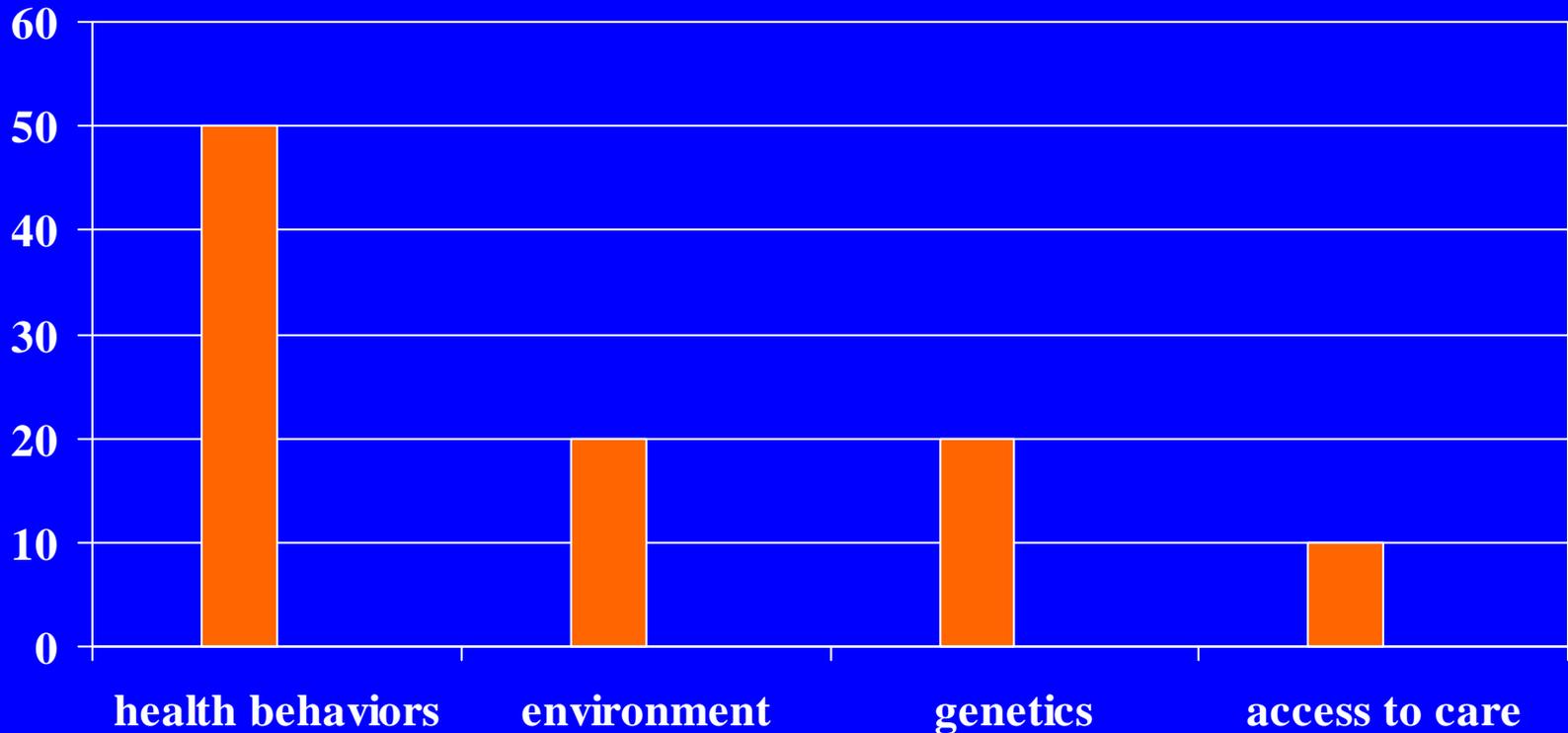
Types of Prevention

- Secondary Prevention
 - Involves efforts to detect adverse health conditions early in their course and to intervene promptly and effectively
 - Screening for cancer
 - Screening for genetic disorders

Types of Prevention

- Tertiary Prevention
 - Aims to reduce the duration and severity of potentially disabling sequelae of disease and disability, to reduce complications of disease once established, to minimize suffering and to assist the individual in adjusting to irremediable conditions
 - good primary care, management of disease

Determinants of Health



Data Source: Centers for Disease Control and Prevention

Barriers to Prevention

- Medical System oriented to diagnose, treat, cure: little time to track prevention
- Prevention usually taken to mean primary prevention
- Lack of rigorous scientific base for secondary prevention
- Preventive services under-reimbursed in Medicare
- Physician buy-in variable
- Difficulties of behavior change

Policy questions related to health promotion and disease prevention

How to allocate resources to:

- increase knowledge base
- provide health education for asymptomatic older persons
- modify health behavior of symptomatic older persons
- train personnel in health promotion

Question of who should pay for preventive services

- Private versus public health insurance
- Public incentives to support private payment
- Problem for Health Maintenance Organizations under Medicare
 - rapid disenrollment
- Cost-effectiveness of prevention difficult to prove

Medicare preventive services benefit

- One time only physical exam
- Cardiovascular screening
- Tests for breast, cervical, vaginal, colorectal, and prostate cancer;
- Bone mass measurements
- Diabetes screening, monitoring and self-management;
- Flu, pneumonia and Hepatitis B shots

U. S. Preventive Services Task Force: Methodology

- Intent: to provide clinicians with current and scientifically defensible information about
 - relative effectiveness of different preventive services
 - quality of evidence on which conclusions are based
- Selection of target conditions
- Selection of preventive services

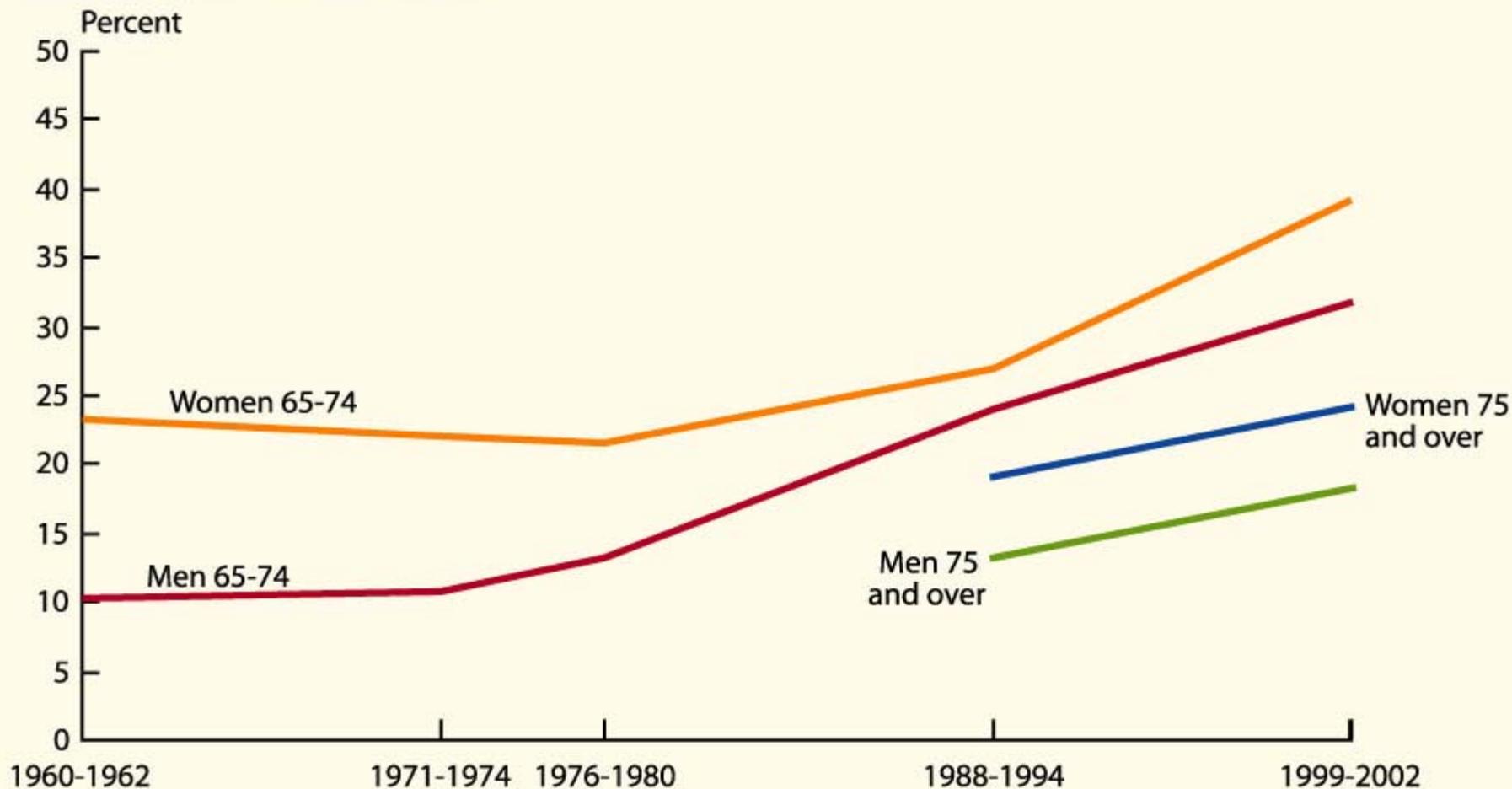
USPSTF Criteria for Determining Effectiveness

- Screening test
 - Accuracy of screening tests
 - Effectiveness of early detection
- Counseling interventions
 - Efficacy of risk reduction
 - Effectiveness of counseling
- Immunizations
 - Efficacy of vaccine
- Chemoprophylaxis
 - Efficacy of chemoprophylaxis
 - Effectiveness of counseling

Recommendation made if:

- Procedure results in more good than harm
- When evidence is adequate
- Time interval is given if information is adequate
- Potential adverse effects are not of clinical concern
- When there is no concern about feasibility and compliance

Percentage of people age 65 and over who are obese, by sex and age group, selected years 1960-2002



Reference population: These data refer to the civilian noninstitutionalized population.

Source: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health and Nutrition Examination Survey.

Screening and Interventions to Prevent Obesity in Adults

- The USPSTF recommends that clinicians screen all adult patients for obesity and offer intensive counseling and behavioral interventions to promote sustained weight loss for obese adults. Rating: **B Recommendation**.
- The USPSTF concludes that the evidence is insufficient to recommend for or against the use of moderate- or low-intensity counseling together with behavioral interventions to promote sustained weight loss in obese adults. Rating: **I Recommend**.
- The USPSTF concludes that the evidence is insufficient to recommend for or against the use of counseling of any intensity and behavioral interventions to promote sustained weight loss in overweight adults. Rating: **I Recommend**.

Screening for Prostate Cancer: Summary of Recommendations

- **The U.S. Preventive Services Task Force (USPSTF) concludes that the evidence is insufficient to recommend for or against routine screening for prostate cancer using prostate specific antigen (PSA) testing or digital rectal examination (DRE).**
- **Rating: I recommendation.**

Screening for Osteoporosis (9/02)

Summary of Recommendations

- **The U.S. Preventive Services Task Force (USPSTF) recommends that women aged 65 and older be screened routinely for osteoporosis. The USPSTF recommends that routine screening begin at age 60 for women at increased risk for osteoporotic fractures**

Rating: B Recommendation.

Rationale: The USPSTF found good evidence that the risk for osteoporosis and fracture increases with age and other factors, that bone density measurements accurately predict the risk for fractures in the short-term, and that treating asymptomatic women with osteoporosis reduces their risk for fracture. The USPSTF concludes that the benefits of screening and treatment are of at least moderate magnitude for women at increased risk by virtue of age or presence of other risk factors.

Summary of Recommendations

- The USPSTF makes no recommendation for or against routine osteoporosis screening in postmenopausal women who are younger than 60 or in women aged 60-64 who are not at increased risk for osteoporotic fractures.

Rating: **C Recommendation.**

Rationale: The USPSTF found fair evidence that screening women at lower risk for osteoporosis or fracture can identify additional women who may be eligible for treatment for osteoporosis, but it would prevent a small number of fractures. The USPSTF concludes that the balance of benefits and harms of screening and treatment is too close to make a general recommendation for this age group

Economic Incentives for Preventive Care

In collaboration with AHRQ, the key research questions identified were:

- **Key Question 1:** How have “preventive care” and “economic incentive” been defined in the literature?
- **Key Question 2:** Do incentives work?
- **Key Question 3:** Is there evidence of a dose/response curve?
- **Key Question 4:** What is the evidence for cost-effectiveness of economic incentive interventions?

Issues in studying effects of prevention

- **Efficacy of service:** accuracy and reliability
- **Effectiveness:** will patients/providers accept and use this service?
- **Lead-time bias:** survival can appear to be lengthened when screening simply advances the time of diagnosis, lengthening the period of time between diagnosis and death without any true prolongation of life
- **Length bias:** tendency of screening to detect a disproportionate number of cases of slowly progressive diseases and to miss aggressive cases that, by virtue of rapid progression, are present in the population only briefly

General Findings of Task Force

- 1 Most effective interventions...address personal health practices of patients.
- 2 Providers need to use greater selectivity in ordering tests and providing preventive services.
- 3 Conventional clinical activities may be of less value than activities such as counseling and patient education.

General Findings of Task Force, continued

- 4 Patients must assume a greater role in maintaining their health.
- 5 Preventive services need not be delivered exclusively during visits devoted entirely to prevention.
- 6 Clinicians must take every opportunity to delivery preventives services
- 7 Clinicians and patients should share decision-making

Medicare Preventive Services Demonstration

Will a free voucher for a yearly preventive visits to the primary care doctor result in:

- preventive visits being made?
- improved health and functional status ?
- better health behaviors?
- use of preventive services?
- lower costs to Medicare?

See citations in reading list

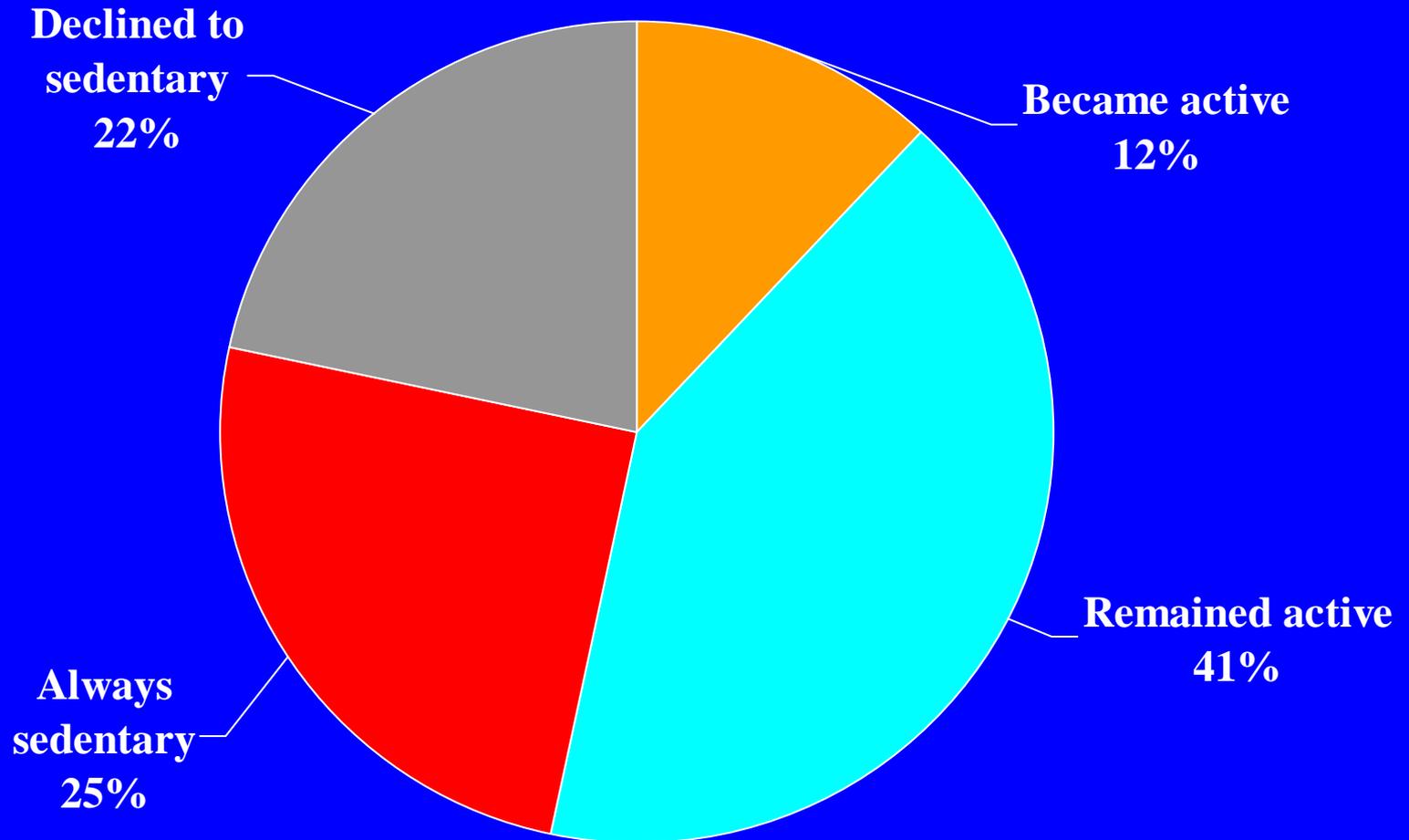
Methods

- randomized trial
- 4,200 participants
- baseline assessment and 2 and 4 year follow up
- telephone interviews with participants
- review of Medicare claims data to determine costs of care and utilization

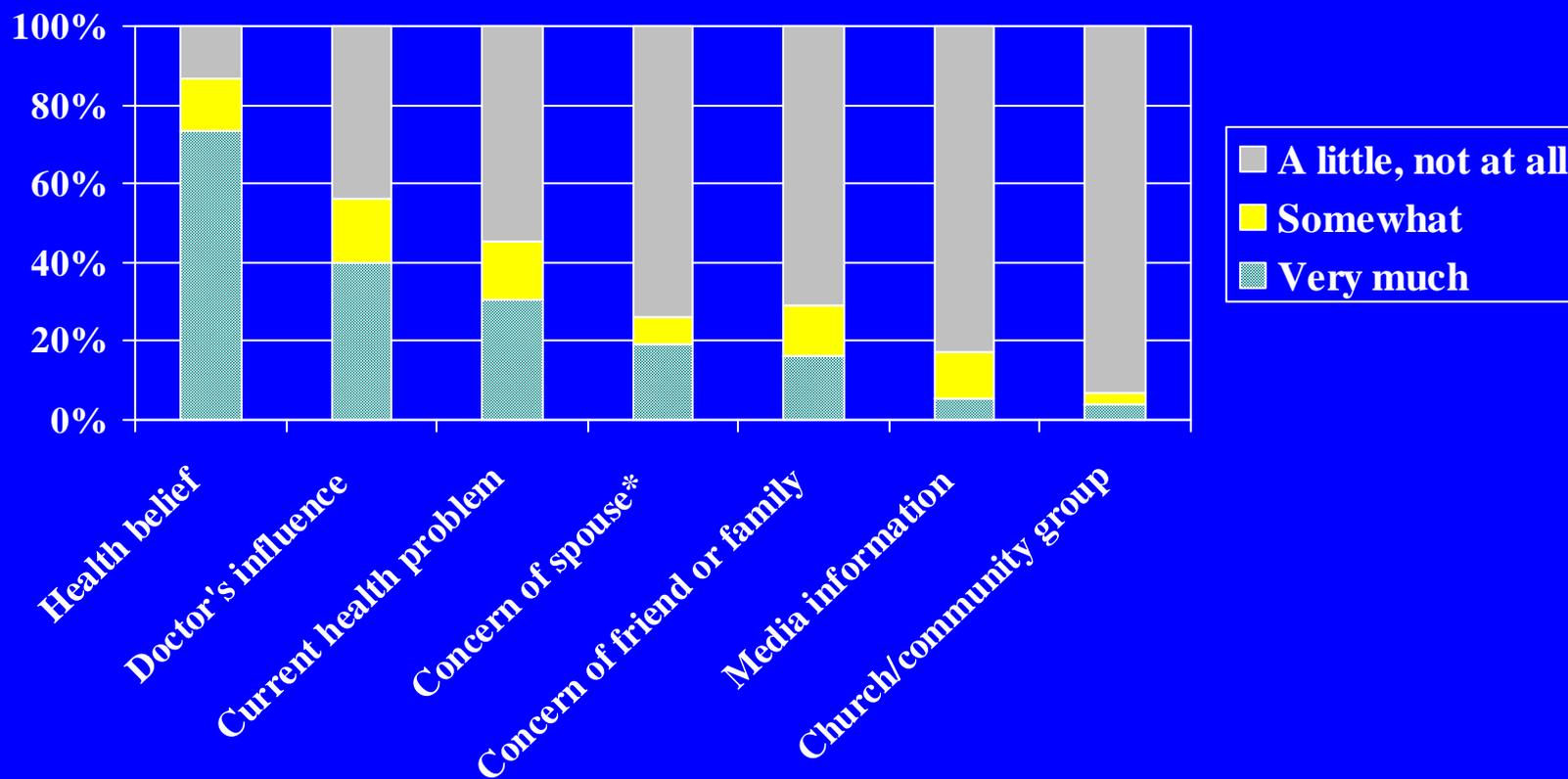
Findings

- About 2/3s made a visit
- Slightly better health status among intervention group
- More use of services (those offered in the intervention)
- No differences in health behaviors
- Change in health behaviors unrelated to intervention

Transitions in Physical Activity of Older Community-dwelling Persons Over a 4 Year Period



Importance of Selected Factors in Decision of Older Persons to Become Physically Active



N= 301 persons who initiated physical activity

*243 responses

Motivation to move from sedentary to active lifestyle

- About 300 persons improved
- They cite their health belief and advice of their doctor
- They deny influence from family, media
- For total group, (those who improved and those who declined), negative association with having had a discussion with their doctor