

The Business Case for Prevention: Reduction in Need and Demand for Medical Care

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Epidemiologic Transitions

- First, the era of acute infectious illness
- Second, the era of dominate chronic illness (Expansion of Morbidity)
- Third, the era of increasingly successful aging (Compression of Morbidity)
- The second era must be minimized to reduce the global burden of illness

Reduction in Need and Demand for Medical Care

- Healthier people need less medical care
- Health and economic solutions must reduce need for care rather than ration care
- Programs which improve health, reduce costs and can prove it will find a ready and very large market
- Such programs exist; we must understand why they do not yet flourish

Reduction of Need and Demand Questions Sometimes Asked

- Will healthier people actually cost more by living longer?
- What is the length of the lag period between reduction in health risks and positive health and cost benefits?
- If we save on medical costs, won't we still lose on pensions?

The Compression of Morbidity: Central Thesis

The age at first appearance of aging and chronic disease symptoms can increase more rapidly than life expectancy

Scenarios for Future Morbidity and Longevity

Morbidity

Death

Present Morbidity

55

77

I. Life Extension

55

81

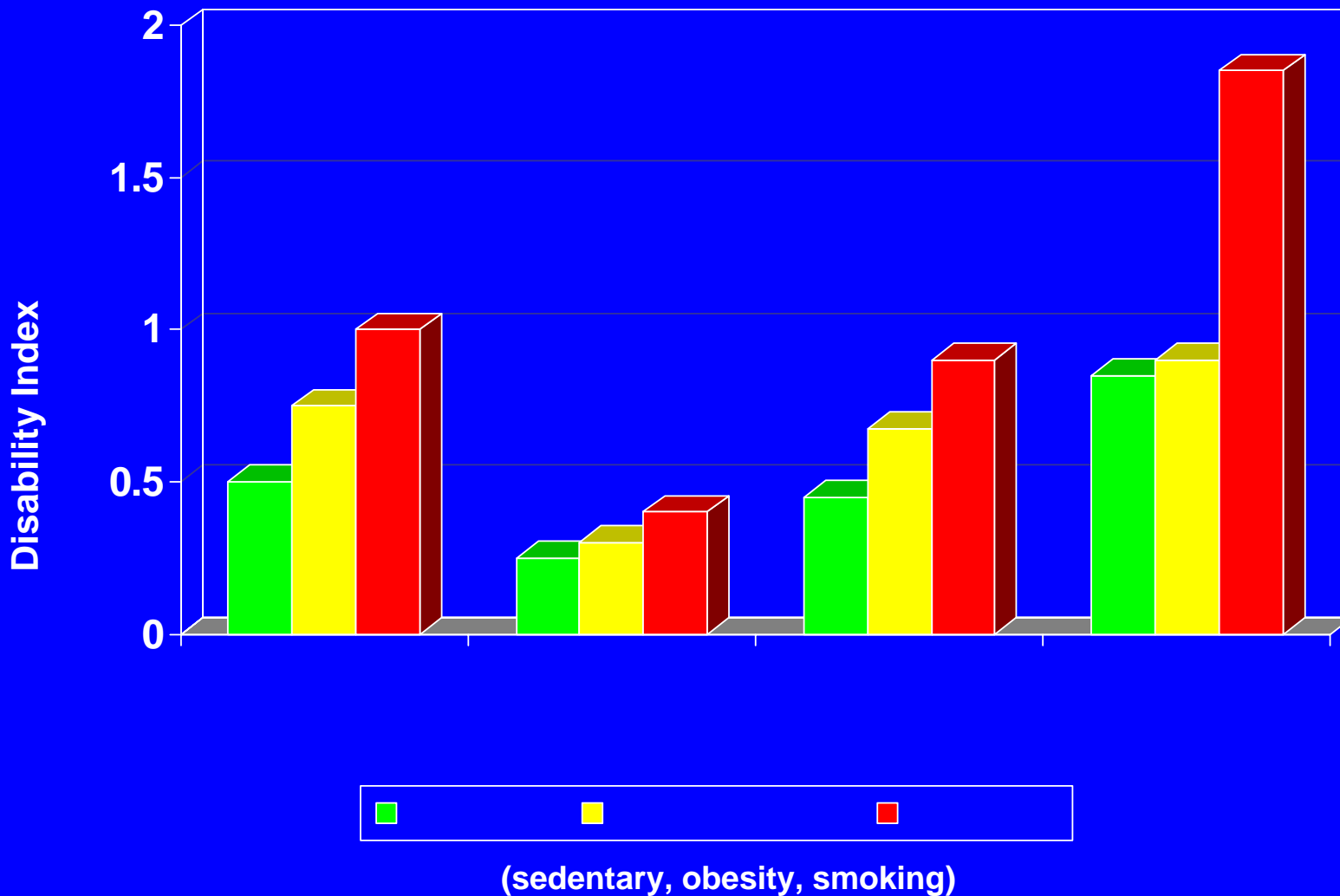
II. Compression of Morbidity

65

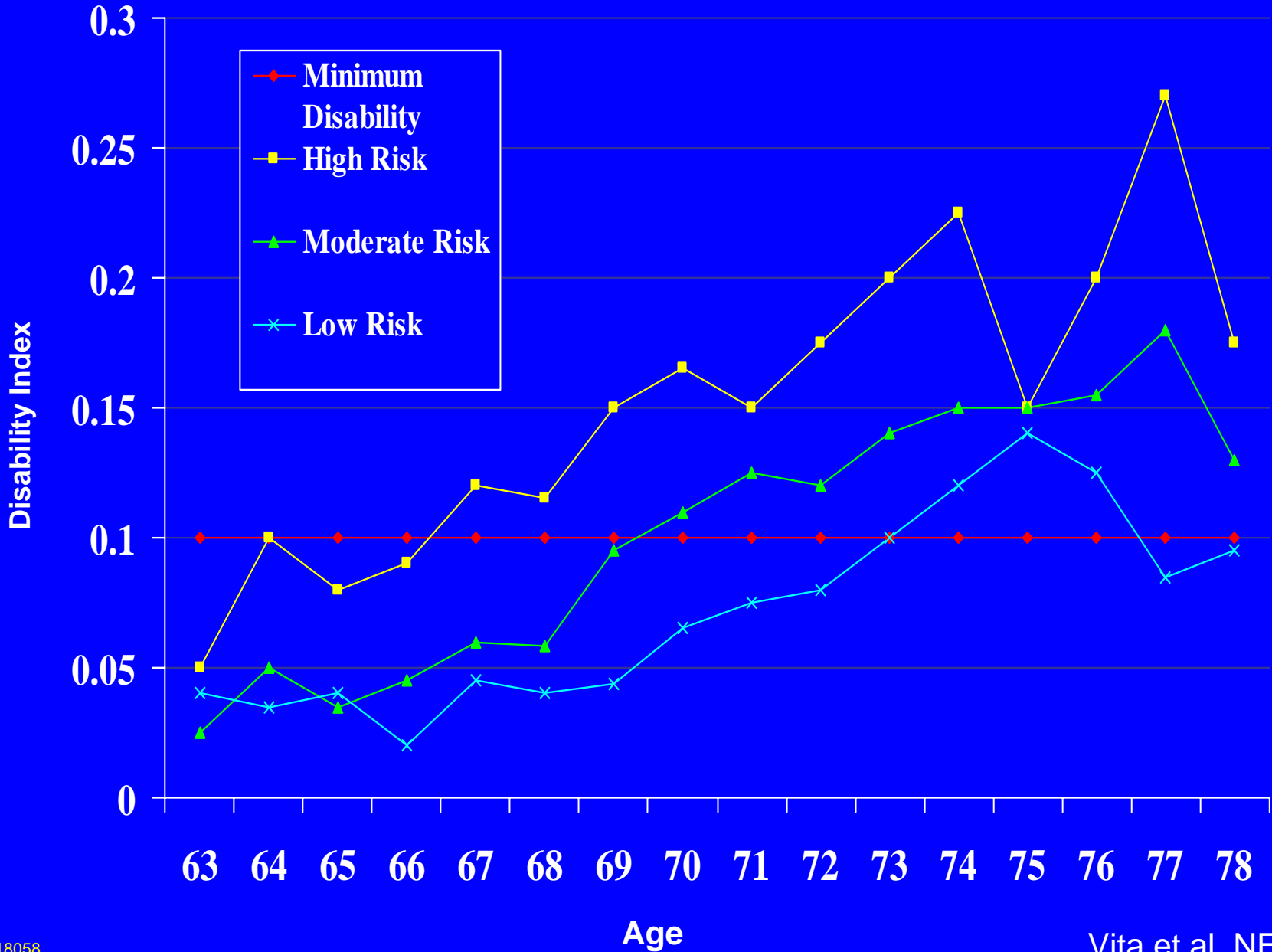
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Cumulative Disability, Mean Values

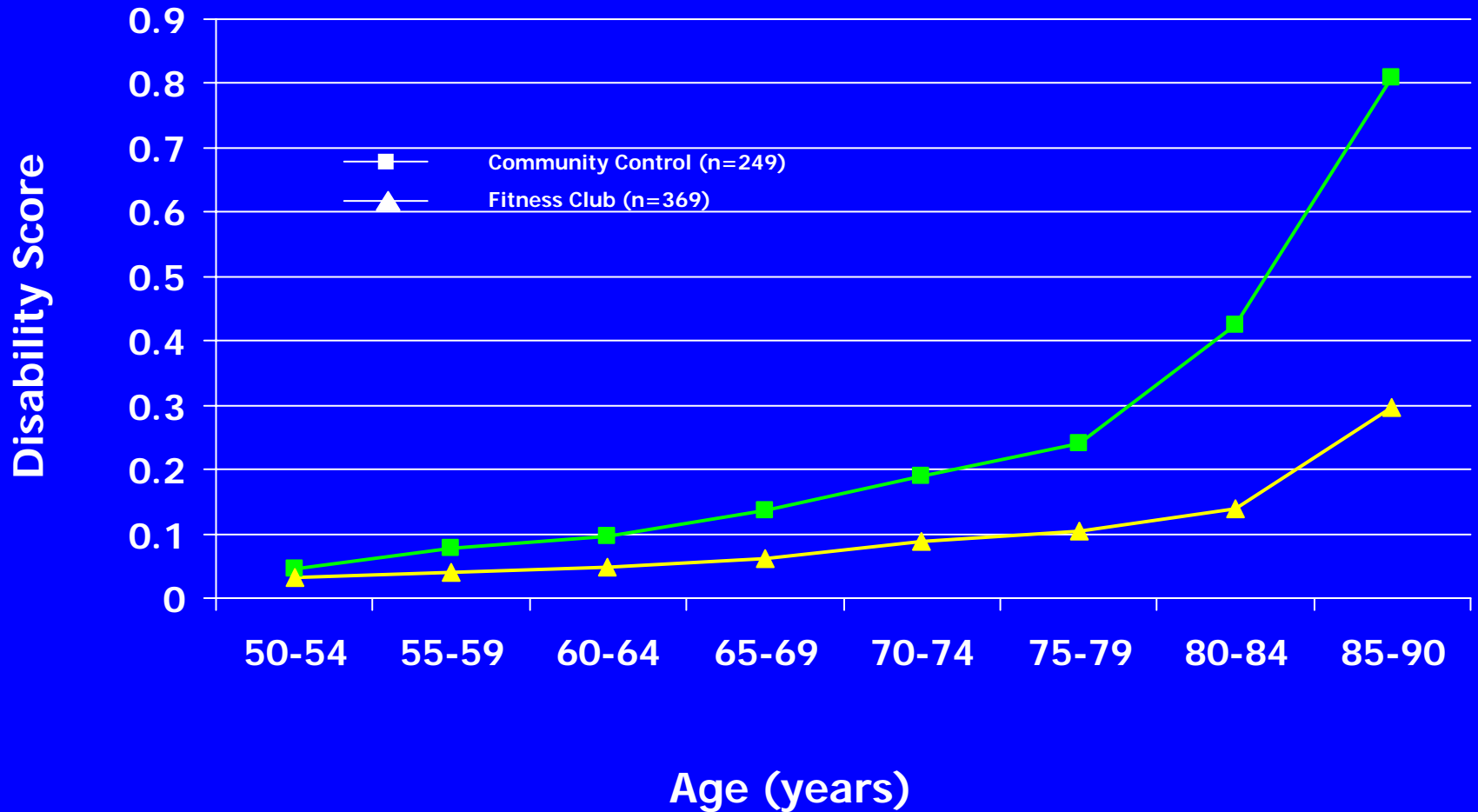
Bars Represent S.E. of the Mean

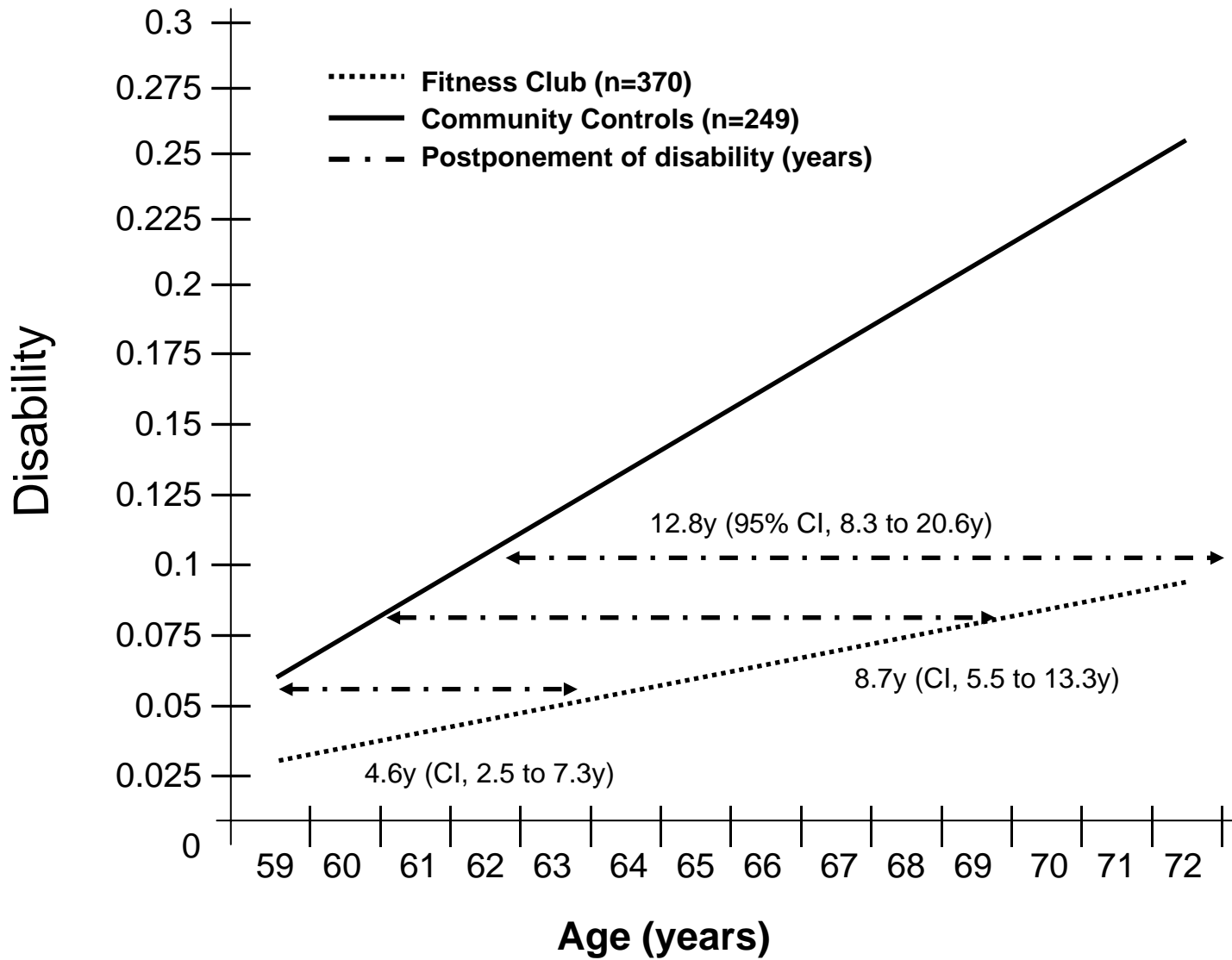


Disability Index by Age and Risk Factor Category



Disability by Age and Exercise Status

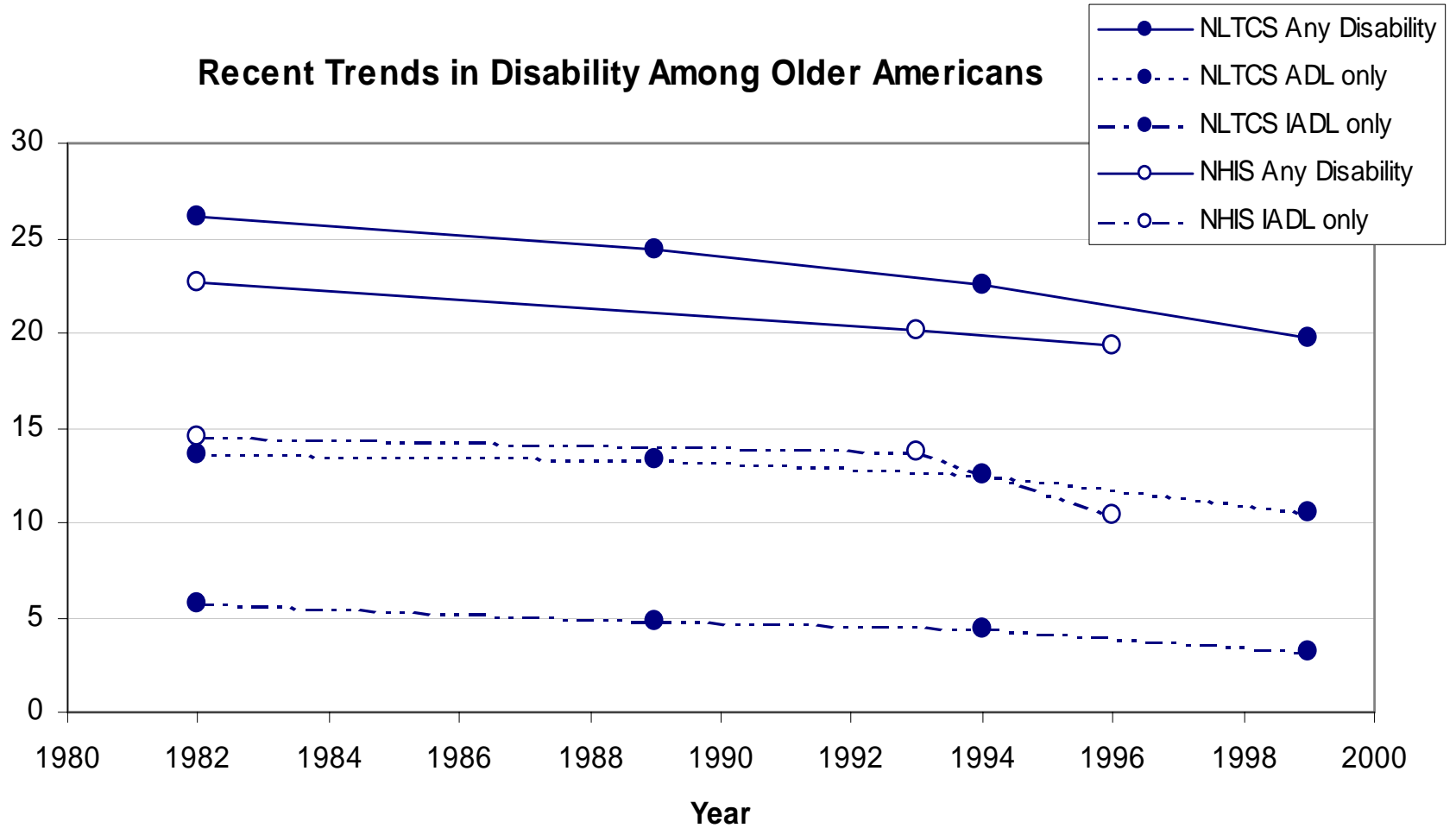




National Long-Term Care Surveys Over-65 Disability Distributions (%)

	<u>1982</u>	<u>1984</u>	<u>1989</u>	<u>1994</u>	<u>1999</u>
Disabled	26.2	24.8	24.4	22.5	19.7
Mild Disab (IADL)	5.7	6.2	4.8	4.4	3.2
Moderate Disab (1-2)	6.9	7.0	6.7	6.1	6.0
Severe Disab (3-6)	3.4	3.3	3.4	3.2	3.2
Institutionalized	6.8	6.6	6.1	5.7	4.2

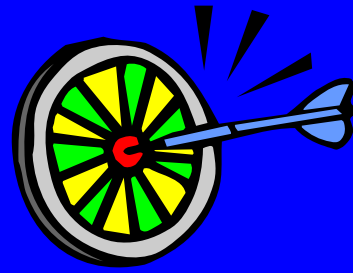
Recent Trends in Disability Among Older Americans



Need and Demand Reduction Randomized Trials in Seniors

	n	time	health risk score	cost per person	savings per person	ROI
Bank of America	4,712	12 months	-12%	\$29	\$179	6.1
CALPers	57,268	12 months	-10%	\$59	\$300	5.1
Arthritis	809	6 months	-7%	\$50	\$260	5.2
Parkinson's	290	6 months	-10%	\$100	\$570	5.7
Take Care of Yourself	2,833	12 months	-17%	\$6	\$20	3.5

The *Key Targets*



for First Year Health Improvement and Cost Reduction

- Perceived Self-Efficacy
- Self-Management Skills
- High-Risk Persons
- Chronic Disease Patients
- Last Year of Life
- Low Birthweight Babies
- Absenteeism
- Productivity
- Tailoring of Messages
- Population Health
- Computer and Internet-Based

Conclusions

Theory, Longitudinal Studies, and Scientific Trials document that:

- We can improve health and at the same time reduce medical care costs
- Illness, infirmity, and frailty in populations may be postponed by at least 8 to 12 years
- Disability is decreasing by 2% or more per year in multiple countries. Mortality is decreasing at only 1% a year, documenting Compression of Morbidity
- Continued Compression of Morbidity is feasible, both in the developed and developing world
- The second epidemiologic stage, Expansion of Morbidity, decreases health and must be reduced or avoided