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The Burden and Future Implications of Adult Visual Disorders in the United States

Presented by

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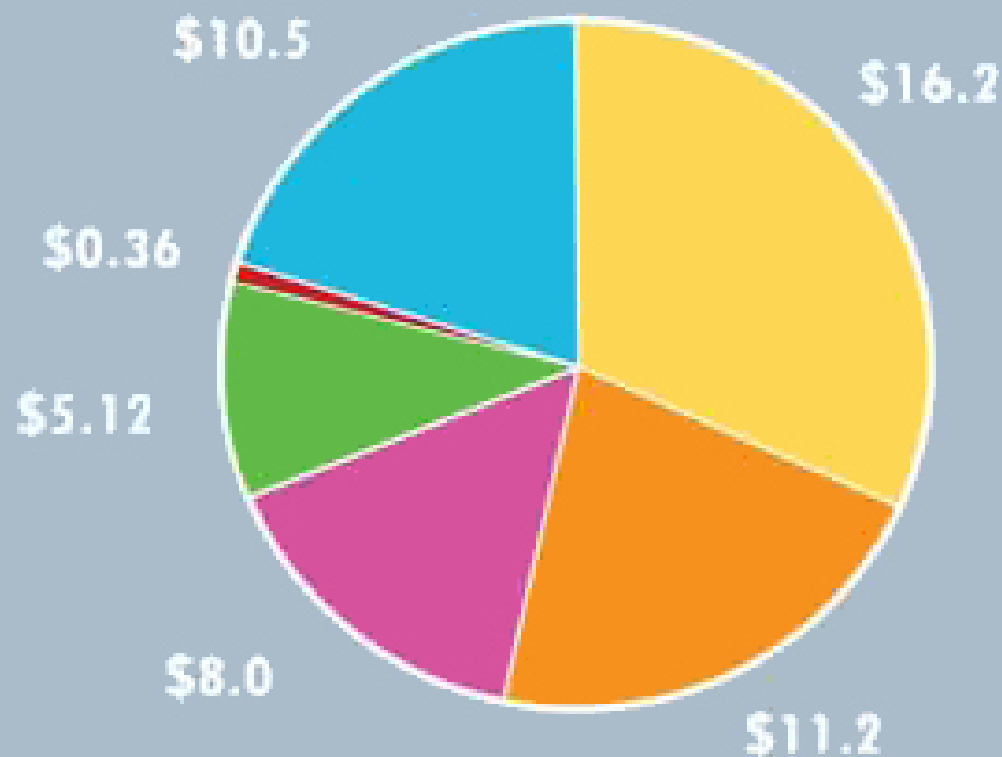
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Burden of Adult Visual Conditions in the United States

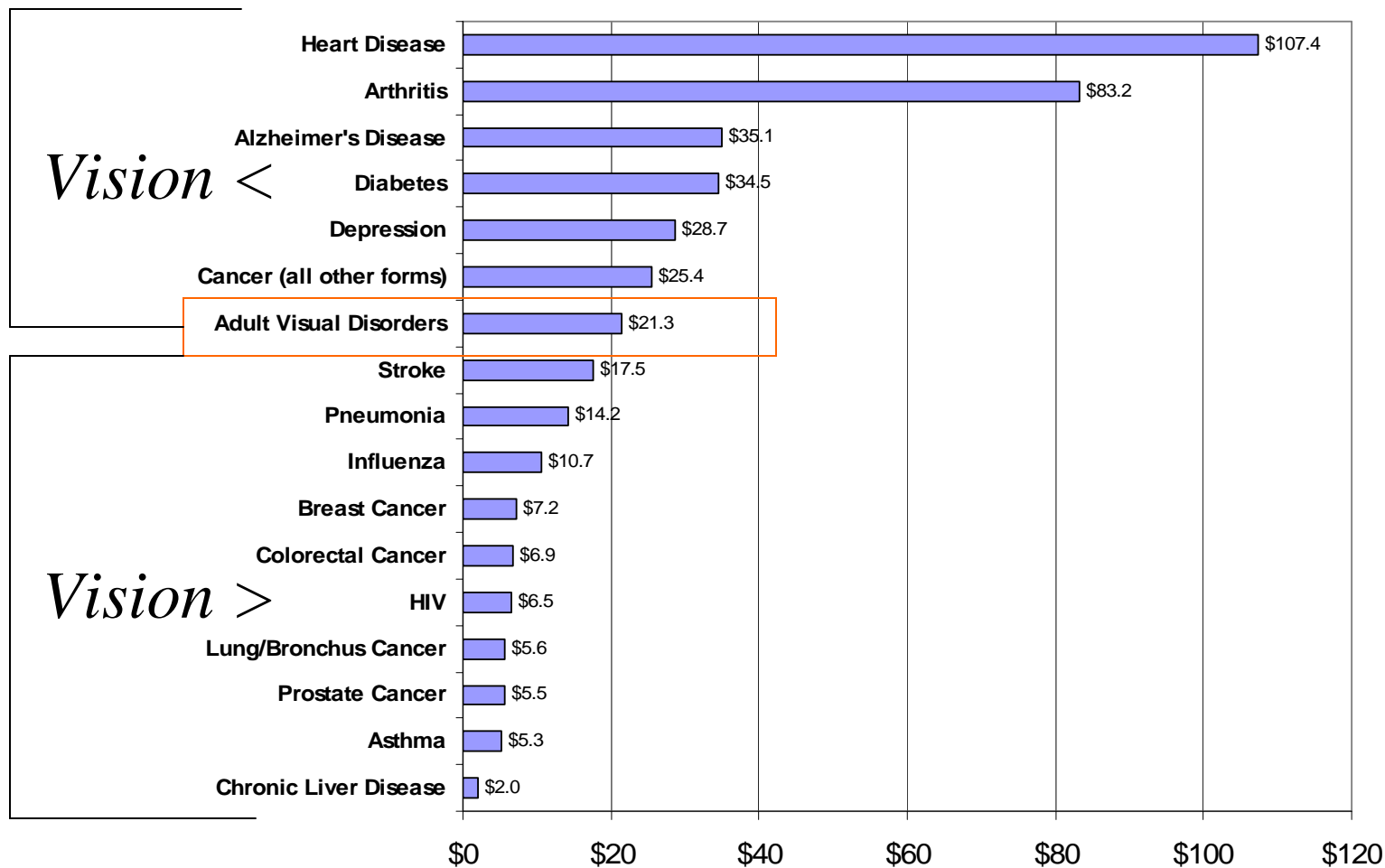
Total: **\$51.4** billion

Costs (in billions)

- Direct medical costs (\$16.2)
- Other direct costs (\$11.2)
- Lost productivity (\$8.0)
- Medical care expenditures (\$5.12)
- Informal care costs (\$0.36)
- Health utility costs (\$10.5)



Direct Medical Costs Compared to Other Diseases (\$2004, billions)



Future Trends

- Costs are likely to increase
 - Trends that increase cases
 - ◆ Demographics
 - Trends that increase utilization
 - ◆ Coverage
 - ◆ Screening
 - Trends that increase medical costs per case
 - ◆ New treatment technologies
 - Trends that increase the costs of the impacts of blindness
 - ◆ Productivity
 - ◆ Family size, family mobility

Trends that Increase Cases

- Demographics

- The aging population = The Elephant in the Bedroom

	2005	2020	Change
AMD	1.8	2.9	61%
Cataracts	20.5	30.1	47%
Diabetic Retinopathy	4.1	7.2	76%
Glaucoma	2.2	3.3	50%

Source: NEI - Eye Disease Prevalence Research Group, Archives of Ophthalmology, 2004

Trends that Increase Utilization

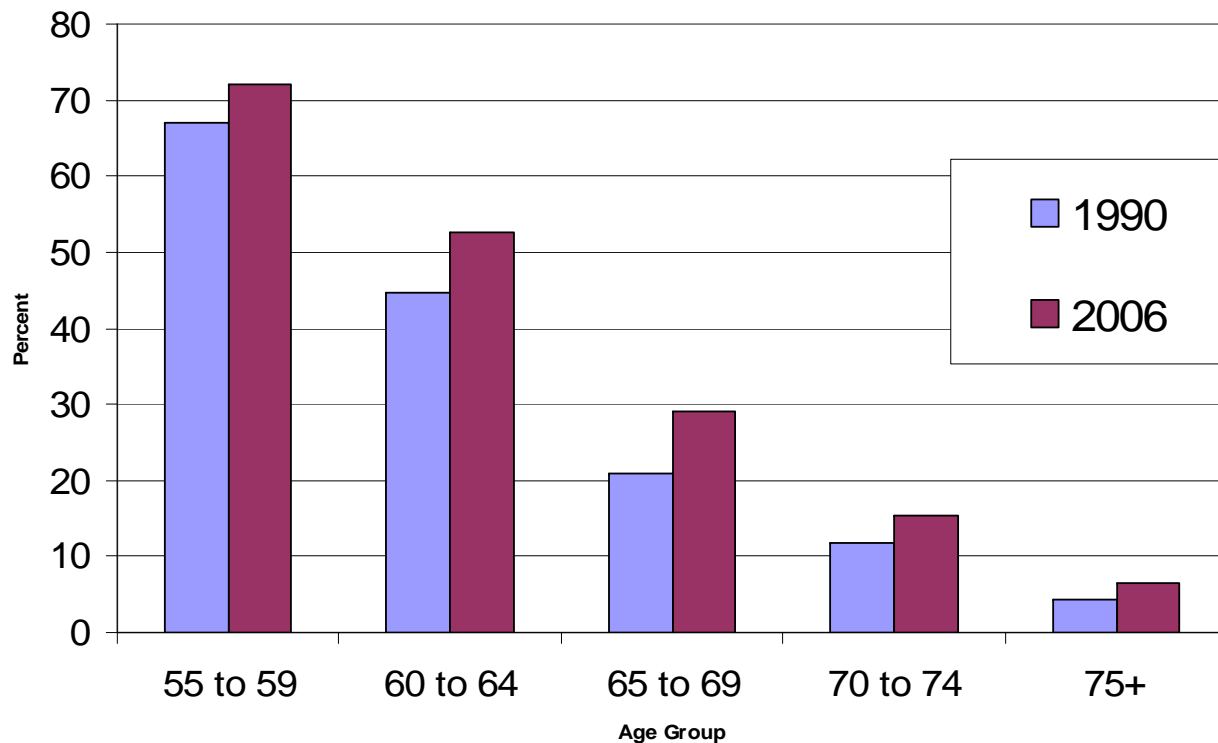
- Coverage
 - Medicare Part D
 - ◆ Effectively creates new utilization to millions of additional glaucoma patients
 - Future expansions to cover the uninsured
- Additional public health screening
 - Medicare (Welcome to Medicare, HEDIS glaucoma screening)
 - Community programs
 - ◆ Uncorrected refractive error
 - ◆ Undiagnosed eye disease

Trends that Increase \$/Case

- Medical technologies
 - Anti-VEGF AMD therapies
 - Antioxidant vitamins
 - Corrective IOL's
 - New generation glaucoma medications
 - New diagnostic equipment
 - Future developments
- New technologies generally increase welfare but at a cost

Trends that Increase The Costs of Visual Impairment and Blindness: Productivity

Labor Force Participation Rate by Age: 1990 and 2006



Trends that Increase The Costs of Visual Impairment and Blindness

- Household Characteristics
 - Shrinking number of people per household (2.6 in 2006)
 - ◆ Elderly more likely to live alone
 - Fewer children per family
 - ◆ Fewer family members to care for elderly
 - Suburbanization of the elderly
 - ◆ Americans live farther from walkable urban centers that can be more easily negotiated by the visually impaired and blind
- Net effect – increasing burden on state and federal government
 - Greater need for home and community based services
 - Higher rate of nursing home placement

Conclusions

- The current Economic Burden of Adult Visual Disorders
 - \$51.4 billion
 - Substantial in its own right
 - In excess of many other diseases
- With near certainty, this burden will increase substantially in the next 15 years

What Can Help

- Research on cost-effective interventions to identify and treat disease, and to help integrate visually impaired and blind individuals into the community.
 - CDC's National Vision Initiative
 - ◆ Burden of visual disorders
 - ◆ RTI Multiple Eye Disease Simulation Models
 - ◆ NHANES prevalence data
 - NEI – Extramural Research Programs
 - VA – Innovative initiatives in screening, treatment, rehabilitation and coordination of care