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**An Overview of Reasons for Public-
Private Partnerships to Fund
Healthcare Systems**

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Reasons for Public-Private Partnerships

- **Goals, Objectives, and Perpetual Stresses**
- **The Environment**
 - **Economic Insights**
 - **Structural Constraints**
 - **Political Implications**
- **Plausible Alternative Futures**
- **Resolving the Dilemma: Is There a Preferred System?**

Healthcare Systems Goals and Objectives

Goal #1: COST

- **Equitable** - Fair financing of healthcare
- **Affordable** – Cost no barrier to access (society, individual)
- **Sufficient** – Adequate funding for healthcare resources

Goal #2: QUALITY

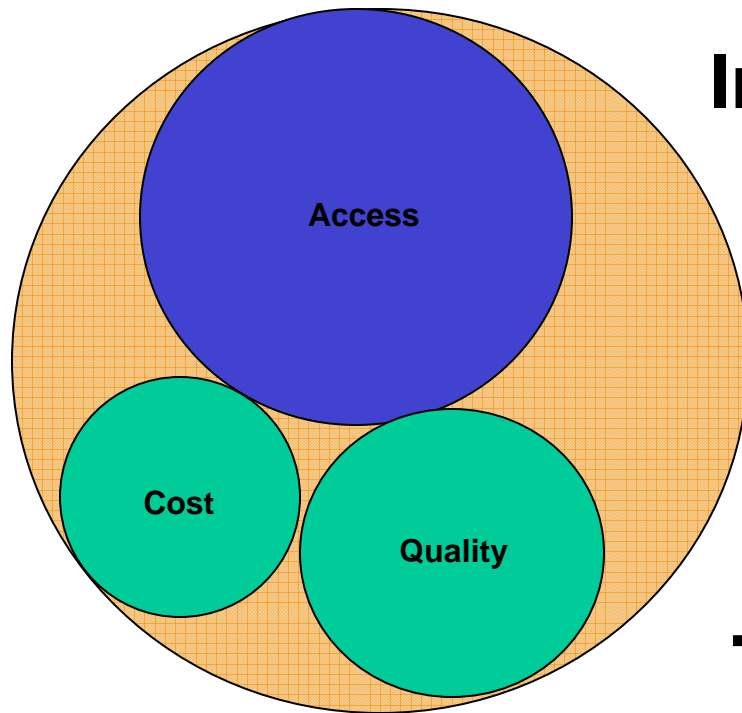
- **Effective** – Achieve attainable population health outcomes
- **Efficient** – Maximize use of scarce resources
- **Uniform** – No relatively disadvantaged groups
- **Autonomy** - Medical decisions made by patient & physician

Goal #3: ACCESS

- **Socially Acceptable** – Responsive to citizens “wants”
and/or “needs”
- **Universal** - Healthcare for all citizens



Healthcare Systems Goals and Objectives



Inherent Conflict Among Goals

1. Universal Access
2. High Quality
3. Cost Effective

...choose any two out of three

Healthcare Systems Perpetual Stresses

Stewardship

Create and manage a **balanced healthcare system** that addresses different needs, wants, interests, and perceptions of various stakeholders

- **Feasibility:** Achieve simultaneous balance among Cost-Quality-Access goals and objectives
- **Sustainability:** Provide financial and healthcare resources needed to maintain balance among Cost-Quality-Access goals and objectives over time
- **Satisfaction:** Fulfill stakeholders' expectations as healthcare and healthcare system evolves

Healthcare Systems Structural Options

Is There a Structure That is Best Able to Manage Perpetual Stresses and Minimize Dilemmas?

Public Systems

Universal health insurance program funded by payroll taxes and/or general government revenues

Private Systems

Health insurance products voluntarily purchased by businesses and individuals through health insurance sold by private insurers

Mixed Public – Private Systems

Public health insurance program covering healthcare needs of some/most/all citizens with uncovered citizens and/or uncovered healthcare expenses/services covered by private health insurance

- Public health insurance at base of system
- Private health insurance at base of system

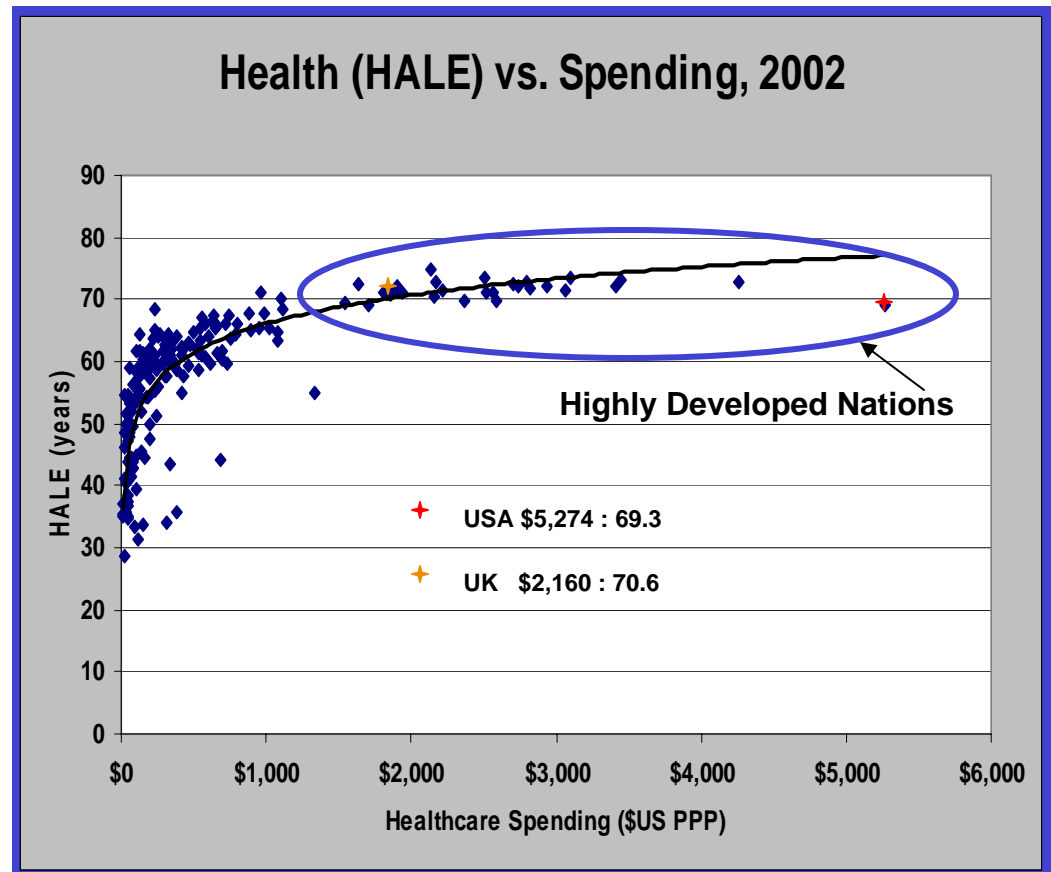


Financing Health Risks in the 21st Century

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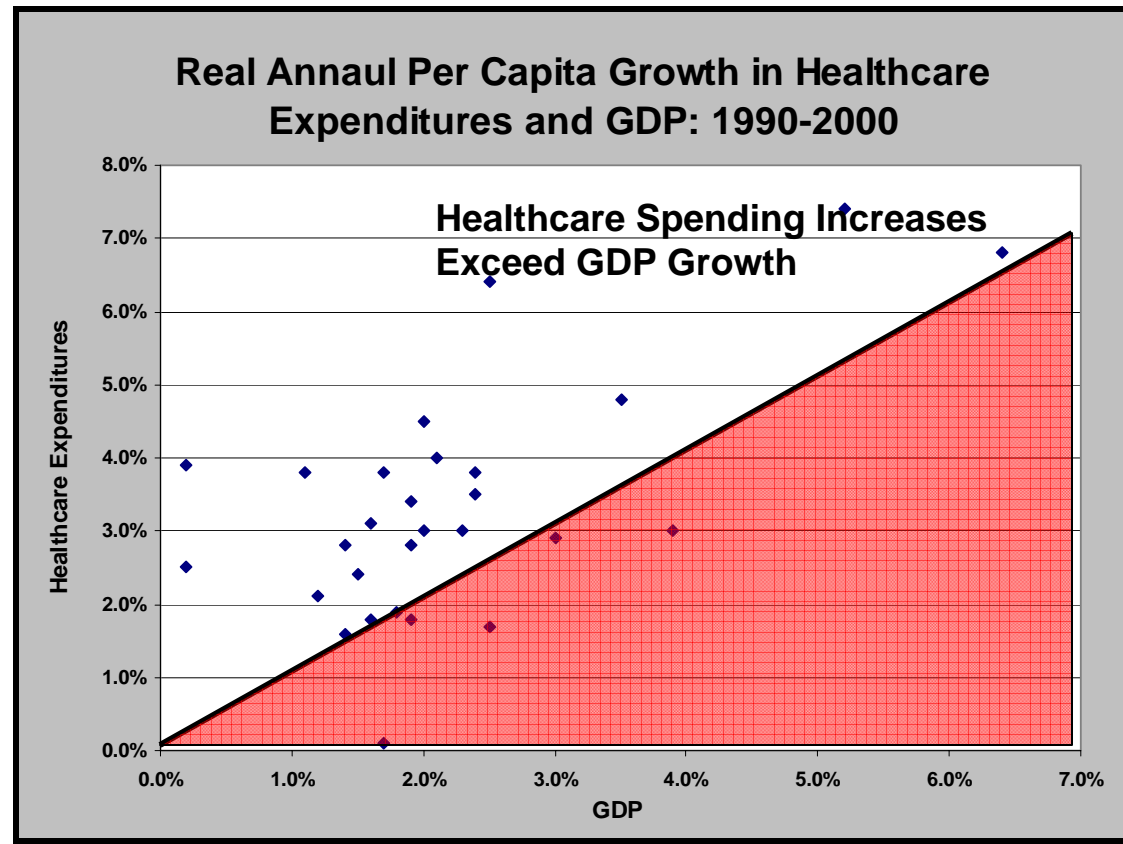
Quality Health Outcomes Are Costly

- Population health (HALE) improves significantly with spending until reaching about \$US 1,500 (PPP)
- Population health does not appear to improve with greater spending. Additional spending satisfies healthcare “wants”
 - All medical care for everyone
 - Widespread access to newest technology
 - No waiting lists
 - Strong physician – patient relationship
 - “Comfort” care
 - Additional provider income



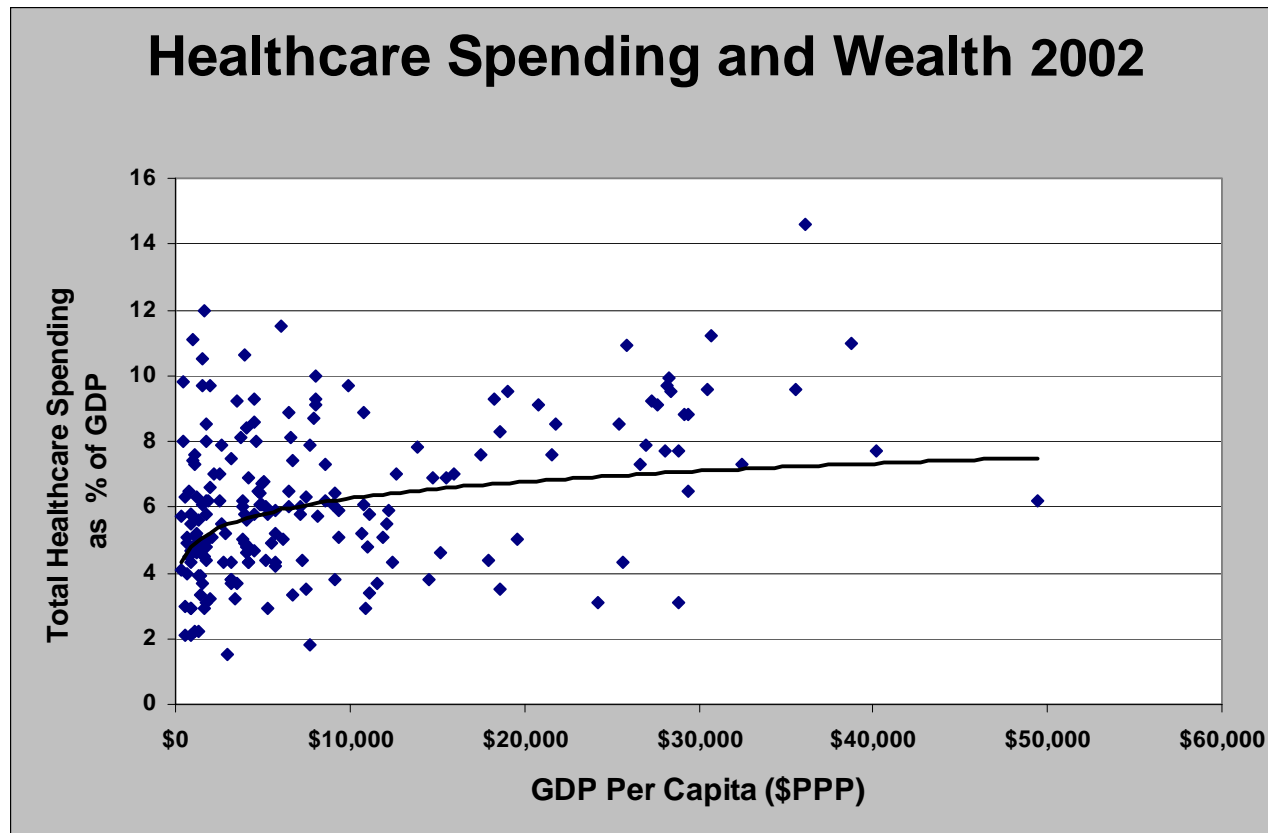
Source: World Health Reports (WHO) 2004 and 2005

Spending Outstrips Economic Growth



Developed Countries Experience Long-Term Increases in Healthcare Costs

Healthcare Spending Increases Faster Than Wealth



Developing Countries Face Extra Cost Pressures
As Their Citizens Become Wealthier

Healthcare Cost Drivers

Causes of Excess Growth

Growth in healthcare costs exceed growth in GDP due to:

Demographic Changes

- Aging populations (7.2%)*

Demand for Healthcare

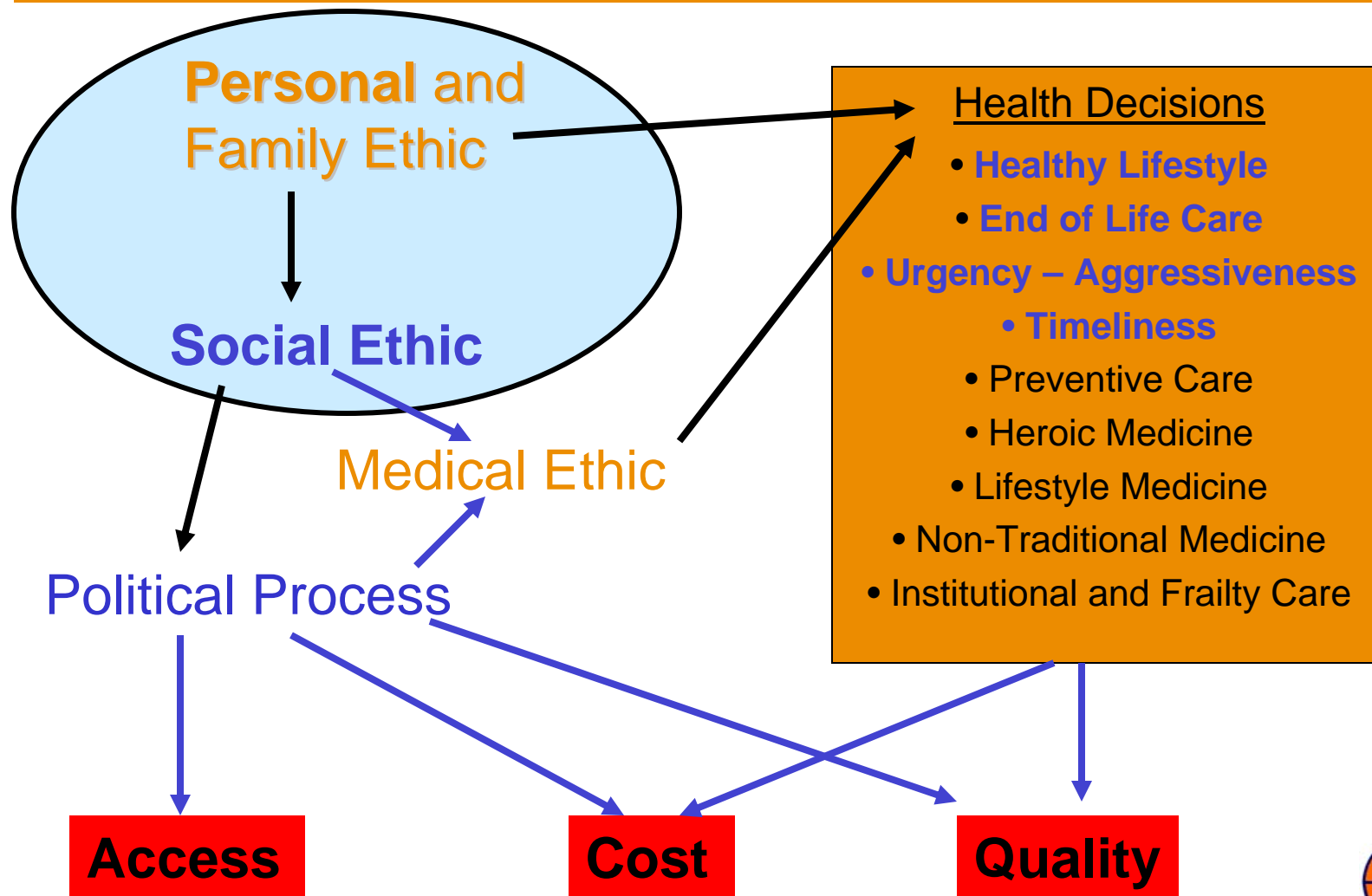
- Growing Wealth (17.6%)
 - Expanding Insurance (5.3%)
- (Note: Measurable Effects Only)

Supply of Healthcare

- New Technologies and Greater Resources (69.6%)

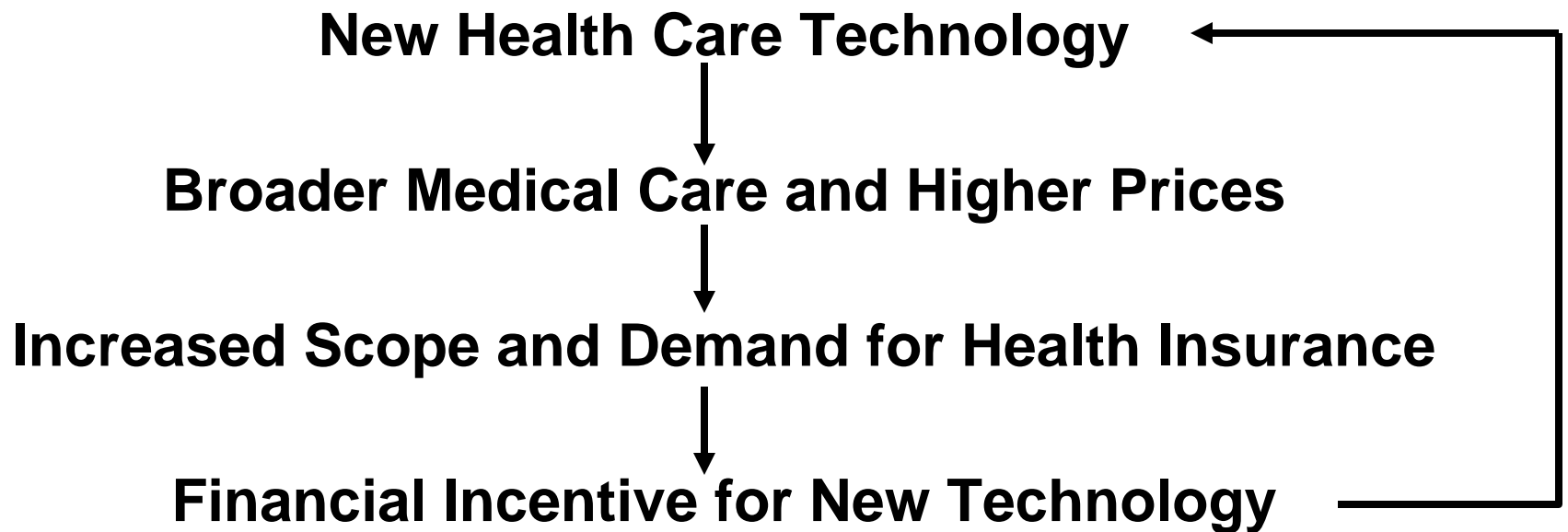
* % of U.S. medical care growth in real spending attributable to each factor: 1960 - 1993

Healthcare Cost Drivers - Demand



Healthcare Cost Drivers - Technology

Healthcare “Quadrillema”



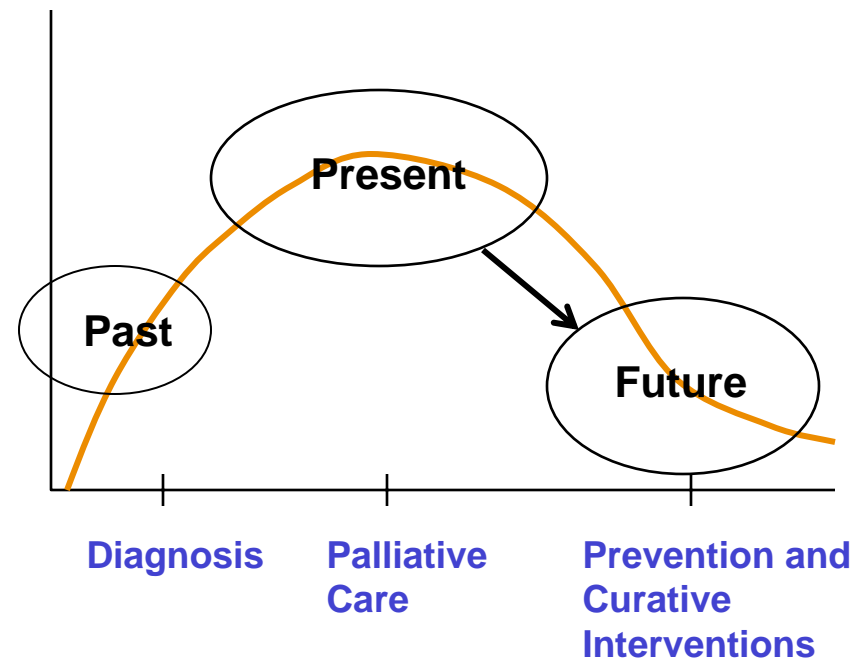
Source: Weisbrod, Journal of Economic Literature, June 1991

Cost Saving Medical Technology?

- Today's technological advances generally increase costs
- Medical research holds out long term (30 – 50 years) hope for inexpensive curative medical interventions
- **Health care in 2050 might be significantly different and less costly as a % of GDP than today**

Polio Paradigm

Per Capita Healthcare Costs

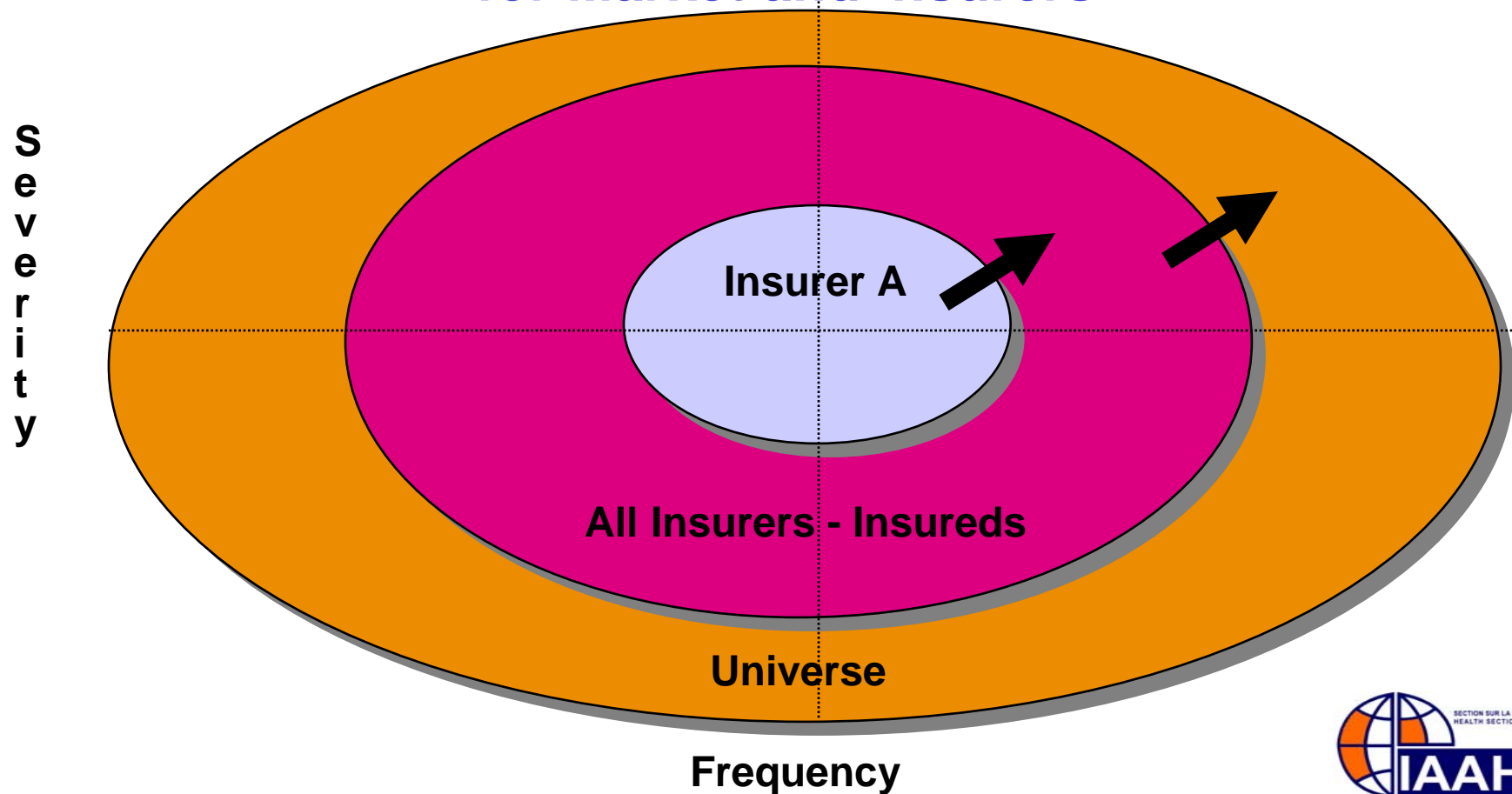


Reasons for Public-Private Partnerships

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Private Health Insurance Systems

Private Markets: Choice, Competition Causes Uncertainty for Market and Insurers



Structural Constraints

Insurance Market Failure Problem

“Economists generally prescribe competition as a solution for markets that do not work well Insurance markets differ from most other markets because in insurance markets *competition can destroy the market* rather than make it work better.”

Michael Rothschild and Joseph Stiglitz: The Geneva Papers on Risk and Insurance Theory, Vol. 22 (1997)

Feasibility Problems

- Inadequate Information
- Social (Systematic) Risks
- Risk Classification – Risk Rating
- Capital Adequacy

Behavioral Problems

- Moral Hazard
- Adverse Selection

Market Dynamics in Private Health Insurance Systems

Insurance Market Dynamics

Behavioral Problems

- ✓ Adverse selection and moral hazard both exist

Feasibility Problems

- ✓ Competition among insurers and individuals' pursuit of their own individual equity (preferences) create feasibility problems

Insurers must develop adequate Risk Management Tools to compensate for behavioral and feasibility problems

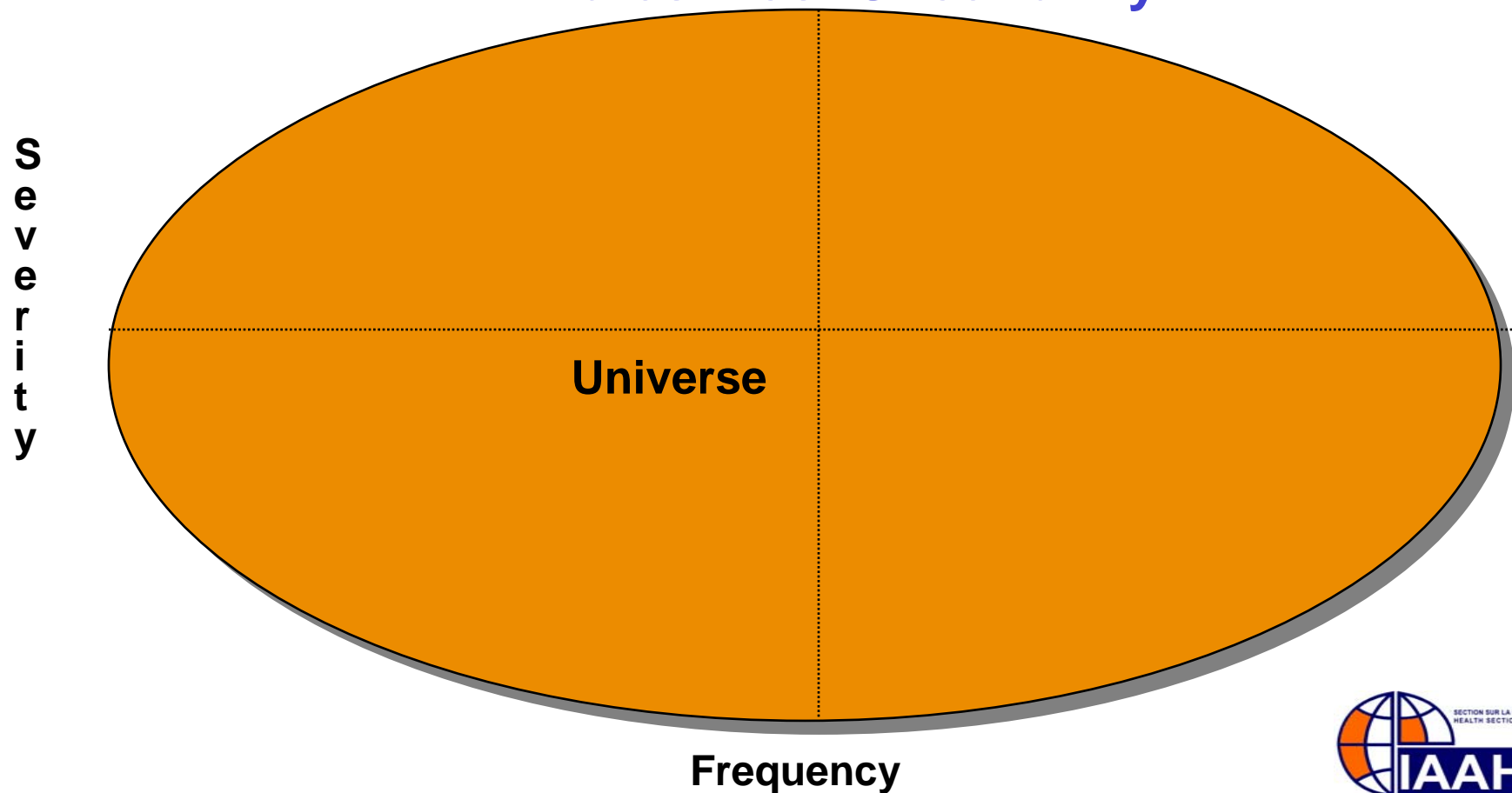
Implications for Perpetual Stresses

- ✓ *Risk Management Tools create access and affordability problems, particularly for vulnerable segments of the population*
- ✓ *Universal access is impossible*
- ✓ Insurers compete to satisfy buyers' "needs" and "wants", provide product variety and rapid access to new technology
- ✓ Cost control relatively difficult in private contracts
- ✓ No unpopular constraints, mandates, or cross-subsidies



Public Healthcare Financing Systems

**Public Insurance Markets: No Choice, No Competition
Eliminates Most Uncertainty**



Market Dynamics in Public Healthcare Financing Systems

Insurance Market Dynamics

Behavioral Problems

- ✓ No adverse selection
- ✓ Moral hazard not solved

Feasibility Problems

- ✓ Eliminated through public guarantee of adequate funding

Public funding redistributes costs across generations, income levels and health status

Implications for Perpetual Stresses

- ✓ *Benefits are “needs” oriented, not “wants” oriented*
- ✓ *Unpopular constraints on patient access, provider fees, technology*
- ✓ Individuals’ pursuit of their own preferences largely eliminated
- ✓ Transparency in stewardship of healthcare system
- ✓ Protective of needs of disadvantaged citizens
- ✓ Relative advantage to control costs



Fulfilling Goals & Objectives

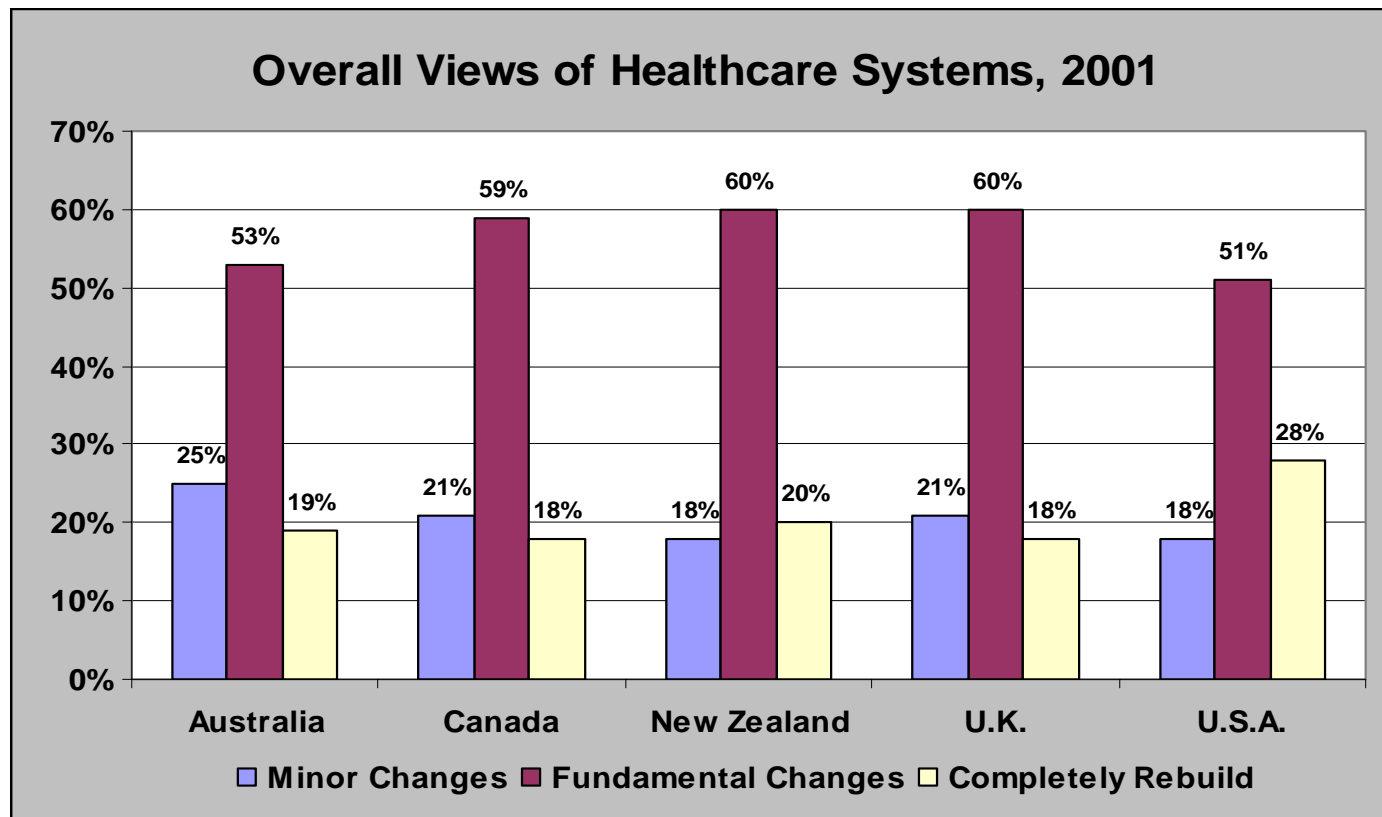
	Social Solidarity (Public System)	Individual Equity (Private Systems)
Cost	<p><i>Risk and Income Solidarity:</i> Progressive (tax or income) financing, not related to risk</p> <p>Compromise</p> <p><i>Cost Constraints:</i> Available financial and healthcare resources (supply side)</p>	<p><i>Actuarial Fairness:</i> Risk-based financing, with necessary regulatory constraints</p> <p>Compromise</p> <p><i>Cost Constraints:</i> Managed care (supply side) and cost sharing (demand side)</p>
Quality	<p><i>Scope:</i> Essential care (needs) as defined by government</p> <p>Compromise</p>	<p><i>Scope:</i> Timely, highly responsive access to effective and autonomous care as determined by patient and physician (needs & wants)</p>
Access	<p><i>Membership:</i> Universal access regardless of age, income, or health (right of citizenship)</p> <p><i>Entitlement:</i> All available essential healthcare services</p>	<p><i>Membership:</i> Private decision to buy insurance or to pay out-of-pocket</p> <p>Compromise</p> <p><i>Entitlement:</i> None- healthcare agreed to by private contract</p>

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Political Implications

All Healthcare Systems Receive Strong Criticism



Source: Blendon, R.J., et. al., Health Affairs, May/June 2002



Political Implications

Path-Dependency makes it very difficult to make major changes in a nation's healthcare system

“There is nothing more difficult to manage, more dubious to accomplish, nor more doubtful of success ... than to initiate a new order of things. The reformer has enemies in all those who profit from the old order and only lukewarm defenders in all those who would profit from the new order.”

Niccolo Machiavelli, The Prince



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Future Healthcare Cost Increases

Future of health, healthcare and healthcare costs are driven by interrelated variables:

- **Life Expectancy** - Population Size, Age Distribution
Natural Aging – or – Delayed Death
- **Biological Morbidity** - Burden of Disease
Compression or Expansion of Morbidity
- **Economic Morbidity** - Scope, Intensity, Cost of Services
Compression or Expansion of Care

Changes in Life Expectancy, Biological Morbidity, and Economic Morbidity

Life Expectancy

Expanded Life Expectancy (Natural Aging or Delayed Death)

Economic Morbidity

Equilibrium of Care

Expansion of Care

Compression of Care

Biological Morbidity

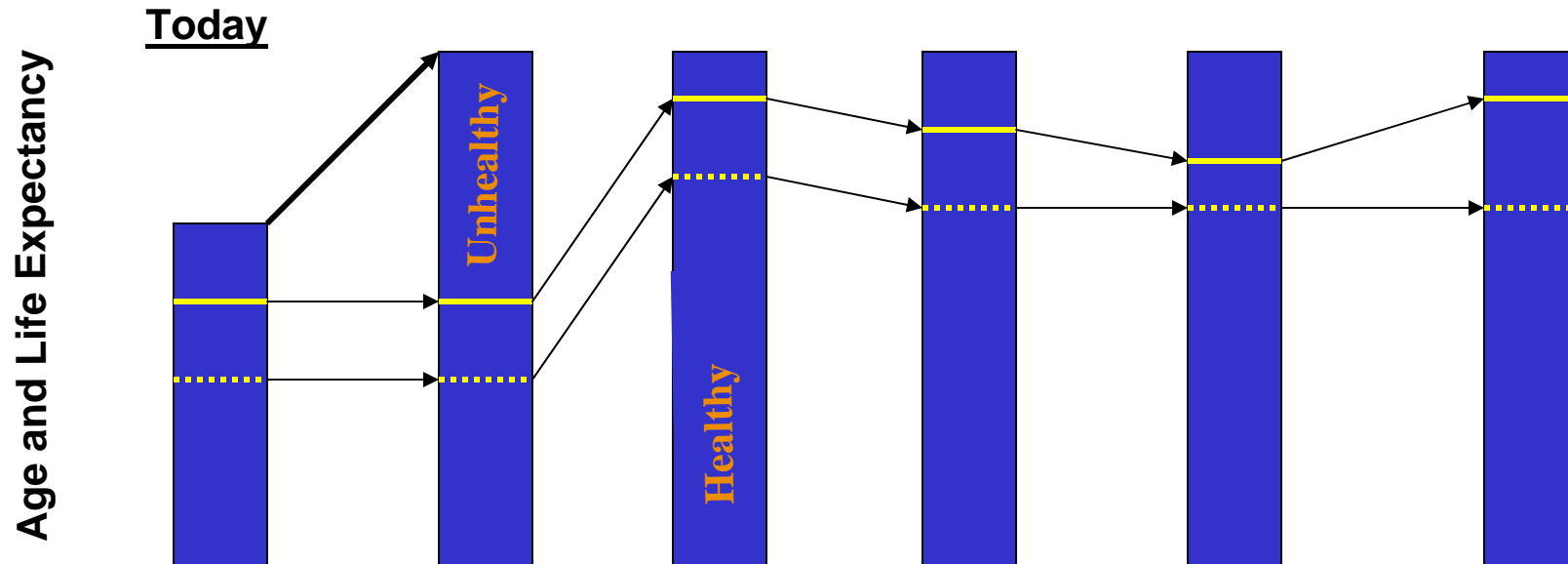
Expansion of Morbidity

Compression of Morbidity

Equilibrium of Morbidity

Equilibrium of Morbidity

Equilibrium of Morbidity



..... Onset of Disease _____ Onset of Care



Future Healthcare Scenarios

Three Plausible Future Scenarios

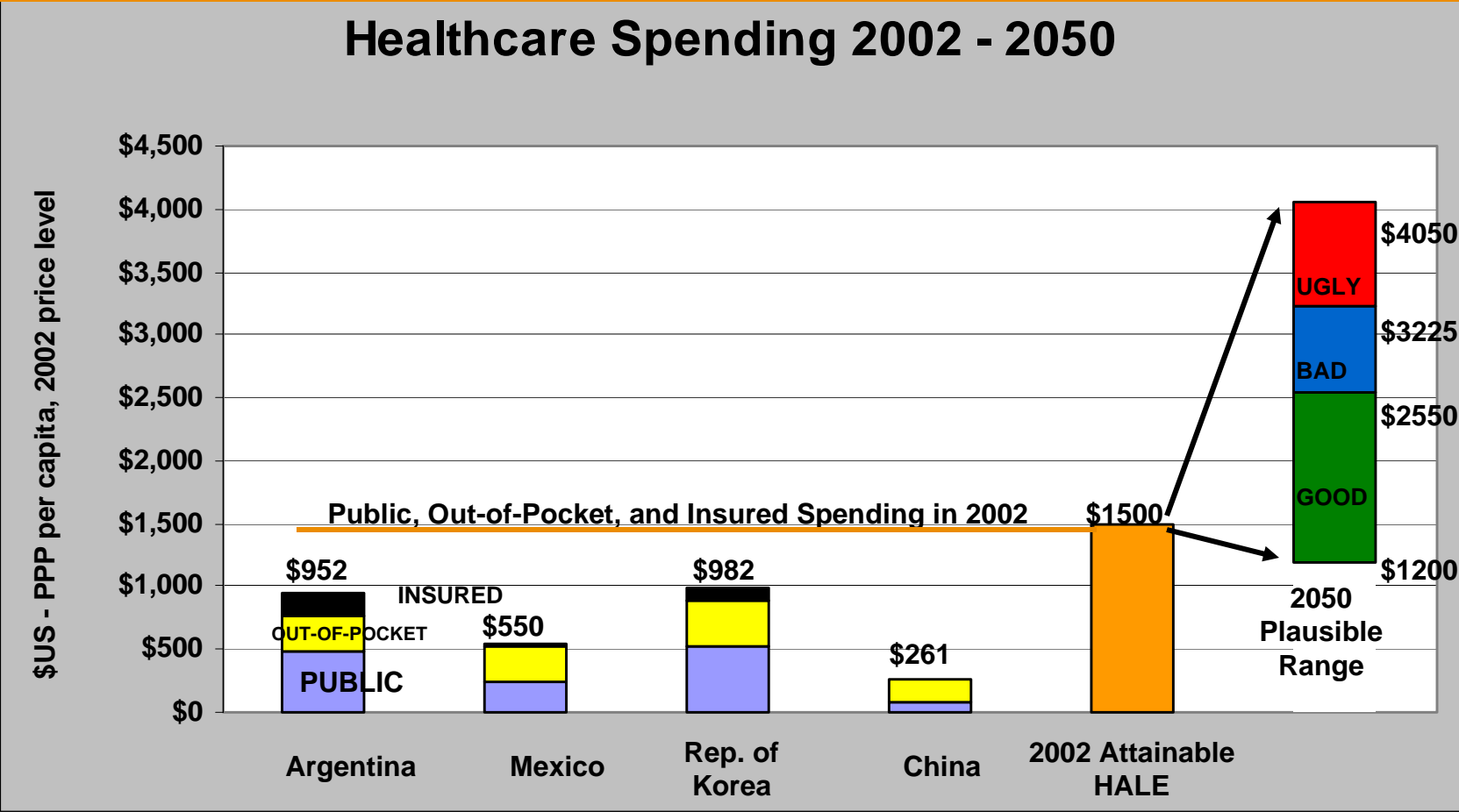
	Good	Bad	Ugly
Life Expectancy	Natural Aging	Natural Aging	Delayed Death
Biological Morbidity	Compression of Morbidity	Equilibrium of Morbidity	Expansion of Morbidity
Economic Morbidity	Compression of Care	Expansion of Care	Expansion of Care
Cost Range 2050*	.79 – 1.73	1.70 – 2.18	2.12 – 2.70

* Real healthcare expenditures expressed as multiples relative to \$1500 minimum current spending to attain HALE = 70 years

Source: Bolnick, North American Actuarial Journal, October 2004



Future Healthcare Cost Scenarios Developing Countries



Cost Drivers: Technology, Lifestyle, Ethics, **Increasing Wealth**



The Future of Healthcare

An Ongoing Healthcare Cost “Crisis” ... of Unknowable Size

- ✓ **Life Expectancy - Expansion**
 - Elderly are living longer
 - “Cure” for aging is a “wild card”
- ✓ **Biological Morbidity – Equilibrium**
 - Elderly may be living longer and healthier, mainly due to healthier lifestyles
- ✓ **Economic Morbidity - Expansion**
 - Future cost increases will be determined mainly by factors that are external to healthcare systems
 - *Medical Technology* is the major factor in growth of supply of healthcare
 - *Lifestyle and Ethics* are major factor in growth of healthcare demand
 - Cost saving technology a possibility

Healthcare Systems Dilemmas

Feasibility

- ✓ An attainable level of health is quite costly
- ✓ Possible to satisfy only two of three goals (cost, quality, access)
- ✓ Public and private systems satisfy different goals
 - Driven by social ethic (social solidarity vs. individual equity)

Sustainability

- ✓ Very difficult to sustain balanced system given long term supply (technology-driven) and demand (lifestyle and ethics-driven) pressures
 - healthcare cost increases will continue to outstrip economic growth for foreseeable future
 - Problem is exacerbated in developing countries
- ✓ Strong personal healthcare ethic makes it virtually impossible to deny new medical care technology despite its high cost
 - Government stewardship is relatively constrained

Satisfaction

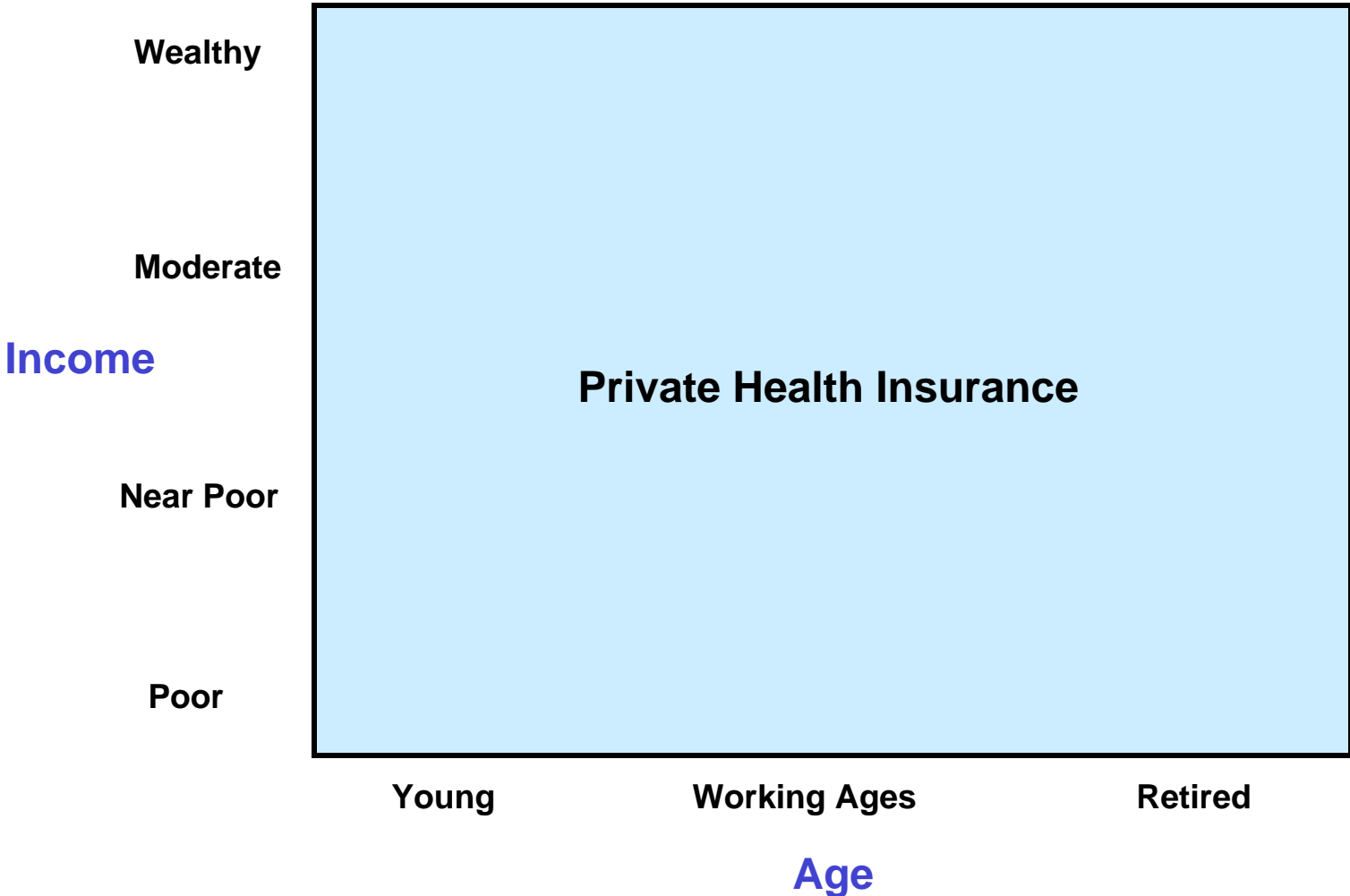
- ✓ No “solution” - healthcare always a political issue



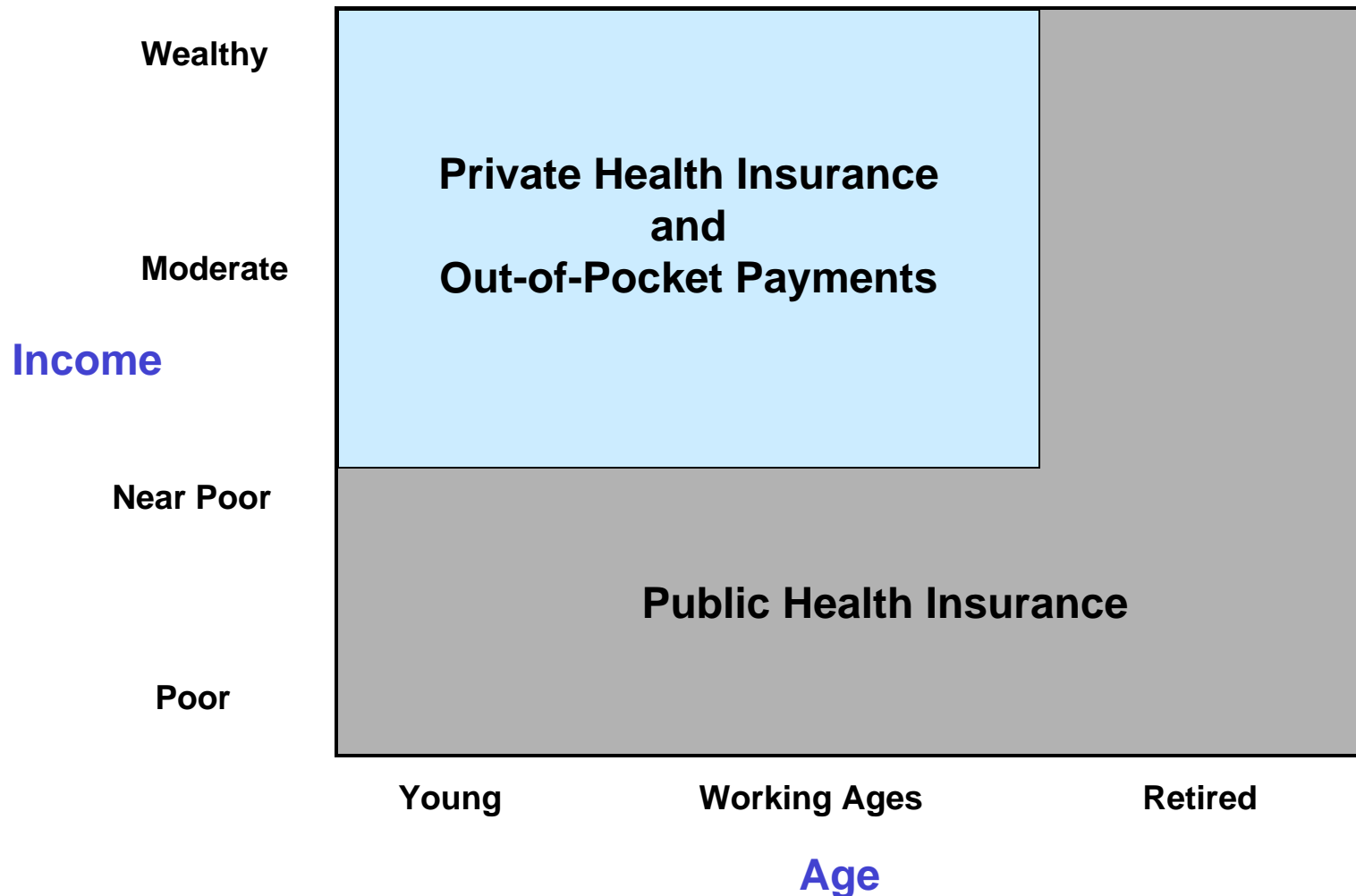
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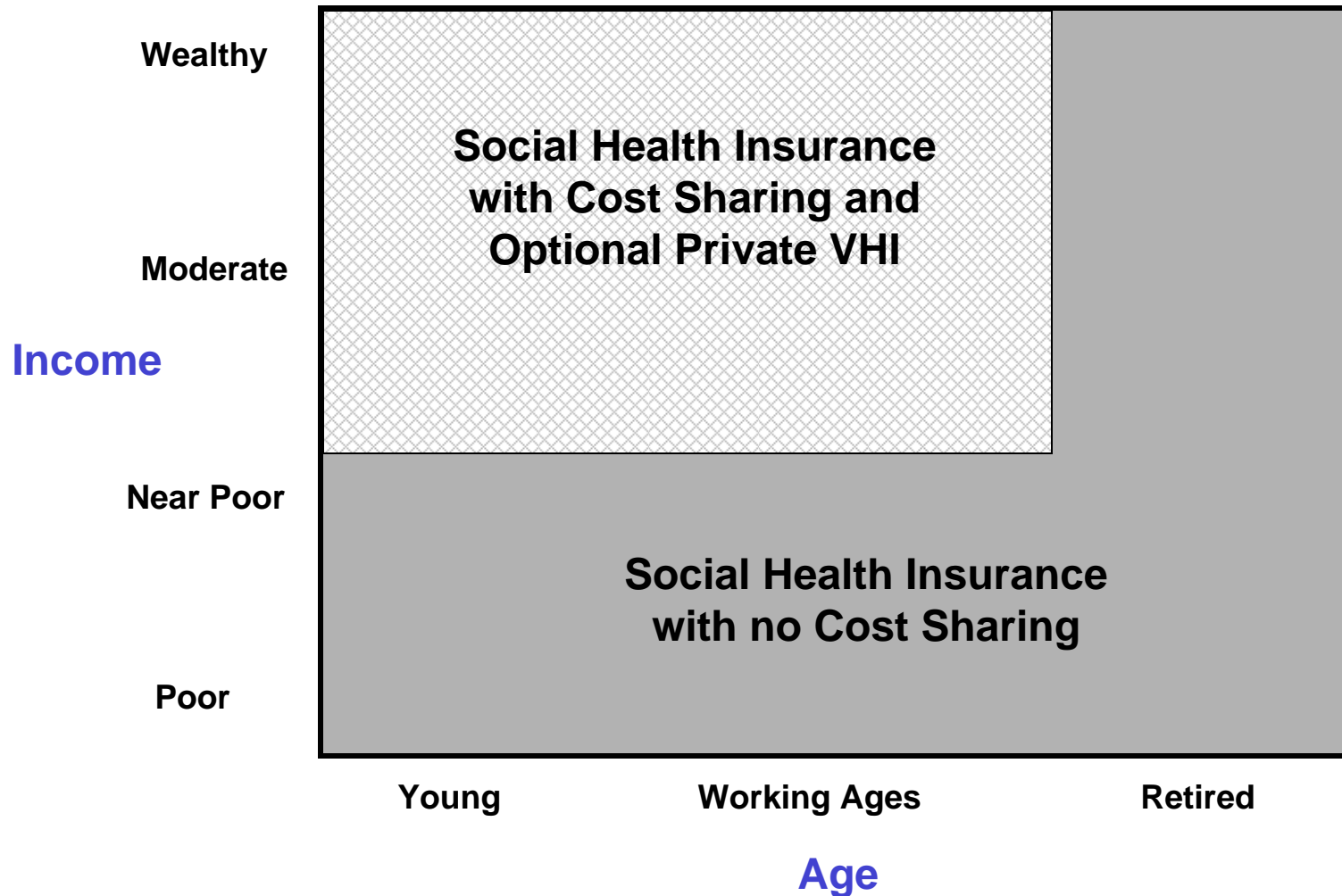
Structural Option #1: Private Health Insurance System



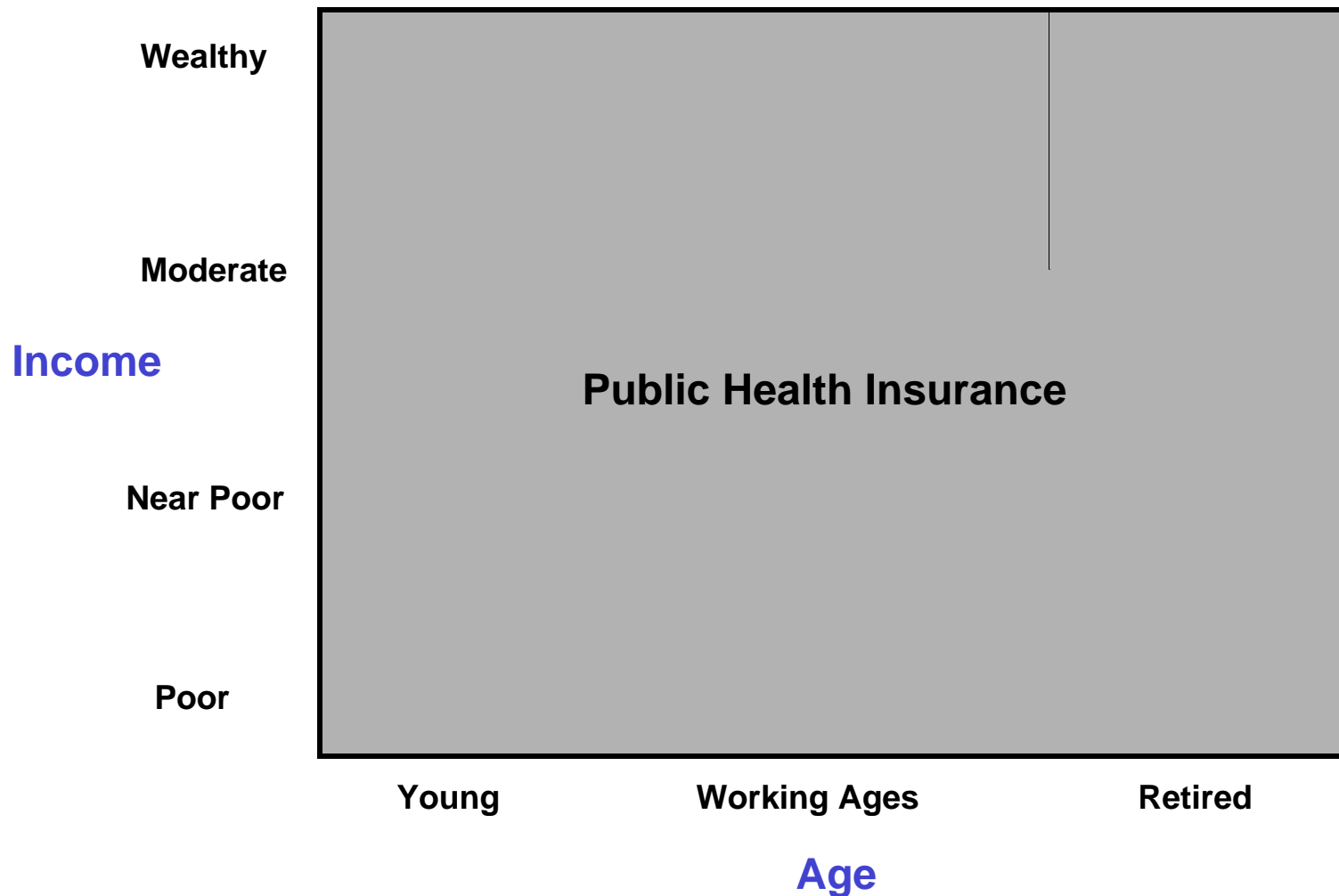
Structural Option #2: Mixed System with Private Insurance Base



Structural Option #3: Mixed System with Public Insurance Base



Structural Option #4: Public Health Insurance System



Healthcare Systems Performance

Healthcare Systems Goals			
Structural Option	Access	Cost	Quality
Private Health Insurance	Universal Access Not Possible	Relatively Uncontrollable • Managed care or cost barriers	Coverage of Healthcare “Needs” and “Wants”
Mixed System with Private Base	Possible with Good Stewardship	Limited Public Sector Program Relatively Controllable	Public Sector Covers “Needs” of Underserved
Mixed System with Public Base	Possible with Good Stewardship	Public Sector May “Shift” Costs to Private Sector	Private Sector Covers Additional “Wants” of Affluent
Public Health Insurance	Universal Access Achieved	Relatively Controllable Through Budget Constraints	“Wants” Constrained, “Needs” Covered

Healthcare Systems Perpetual Stresses

Perpetual Stresses			
Structural Option	Feasibility	Sustainability	Satisfaction
Private Health Insurance	<ul style="list-style-type: none"> • Universal Coverage Not Possible • Unconstrained Grow and Costs 	Excluded Grow as Unconstrained System Becomes Increasingly Expensive	Disadvantaged Generally Excluded
Mixed System with Private Base	Balance Achievable in Carefully Designed System	Private Health Insurance May Become Too Expensive	Complicated Structure
Mixed System with Public Base	Balance Achievable in Carefully Designed System	Funding Problems Result in Public Sector Constraints	Dissatisfaction with Constraints, Waiting Lists and Out-of-Pocket Spending
Public Health Insurance	Unpopular Constraints	Political Funding Problems/Constraints	Dissatisfaction with Constraints

“Preferred” Healthcare Systems

Mixed Public - Private Systems

Developed Nations

Universal core public health insurance system covering healthcare “needs” (social solidarity) with private health insurance (VHI) providing coverage of additional healthcare “wants” and gaps in public system’ coverage of “needs”

Developing Nations

Regulated private health insurance covering both healthcare “needs” and “wants” with public subsidies or public financing of healthcare for disadvantaged groups

Either Option Requires Enlightened Government Stewardship

- ✓ Sufficient financial resources to provide for adequate healthcare personnel, capital and resources
- ✓ Adaptive system allowing for continuous improvement in effectiveness and efficiency
- ✓ Seamless, non-duplicative interface between public private sectors
 - Special consideration of needs of disadvantaged citizens



Why is This Important for Actuaries?

- ✓ **No healthcare system is capable of “resolving” ongoing dilemmas**
- ✓ **Governments will be pressured to find answers to perpetual stresses requiring choices that affect how healthcare systems evolve**
- ✓ **Preferred solutions incorporate both public and private programs to best manage perpetual stresses**
- ✓ **Knowledgeable actuaries’ in-depth understanding of public and private program will be instrumental in helping government choose and manage the most appropriate future path**
- ✓ **Private health insurance thrives only through government indulgence**

