

2004 National Senior Living CFO Workshop



Actuarial Reports: What Can They Tell You? What Should You Learn?

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Overview

- **Annual Fee Adjustments**
- **Contract Design**
- **Audit support**
- **Prepaid Medical Expenses**
- **Discussion**

SECTION 1

Annual Fee Adjustments



Criteria for Satisfactory Actuarial Balance

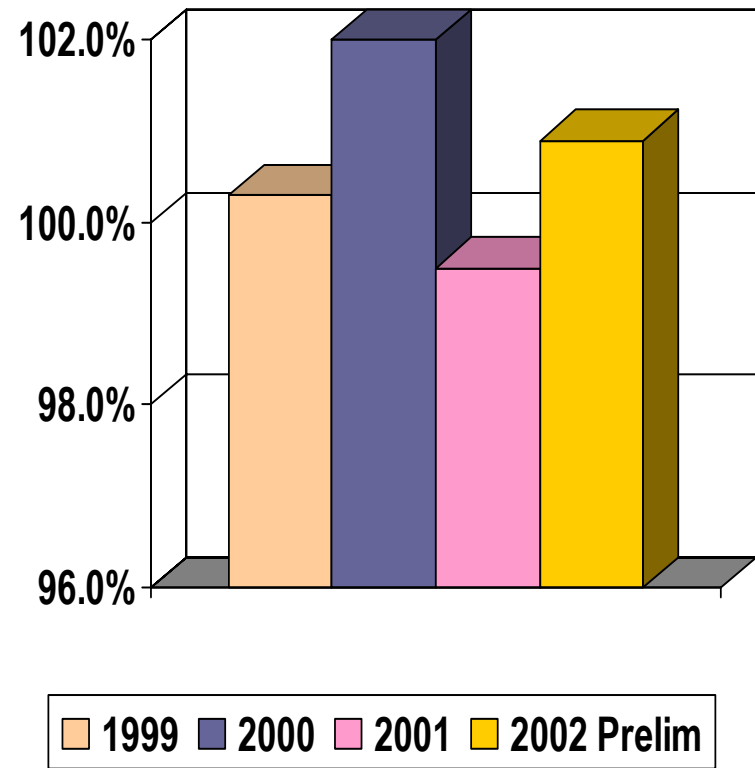
- **Promulgated by American Academy of Actuaries ASOP#3 in July 1994**
 - **Aggregate reserves for current residents are fully funding; 100%+ funded status**
 - **New entrants' fees cover costs; Margin > 0%**
 - **Annual projected cash balances are positive and expected to increase over 10 years**

Why Use the Actuarial Conditions?

- **Consistent**
- **Comprehensive**
- **Robust in handling facility uniqueness (variations)**
- **Procedural and applicable in real life**
- **20-year history of meaningful use**

Empirical Data on Condition 1 Funded Status

- Median is fully funded
- Recommended surplus depends on age of facility, mix of continuing care contracts and their risks
- AVP guidelines are 5% to 10% surplus



Do Reserves and Fees for Current Residents Cover their Costs?

Monthly Fees	\$ 77.1 million
Actuarial Reserves	30.8 million
Independent Living Costs	60.5 million
Assisted Living Costs	21.0 million
Nursing Costs	26.6 million
Refund Liabilities	<u>0.6 million</u>
Actuarial Deficit	(\$ 0.8 million)

Calculation of Funded Status?

100% +

Actuarial Deficit (\$ 0.8 million)

Divided by

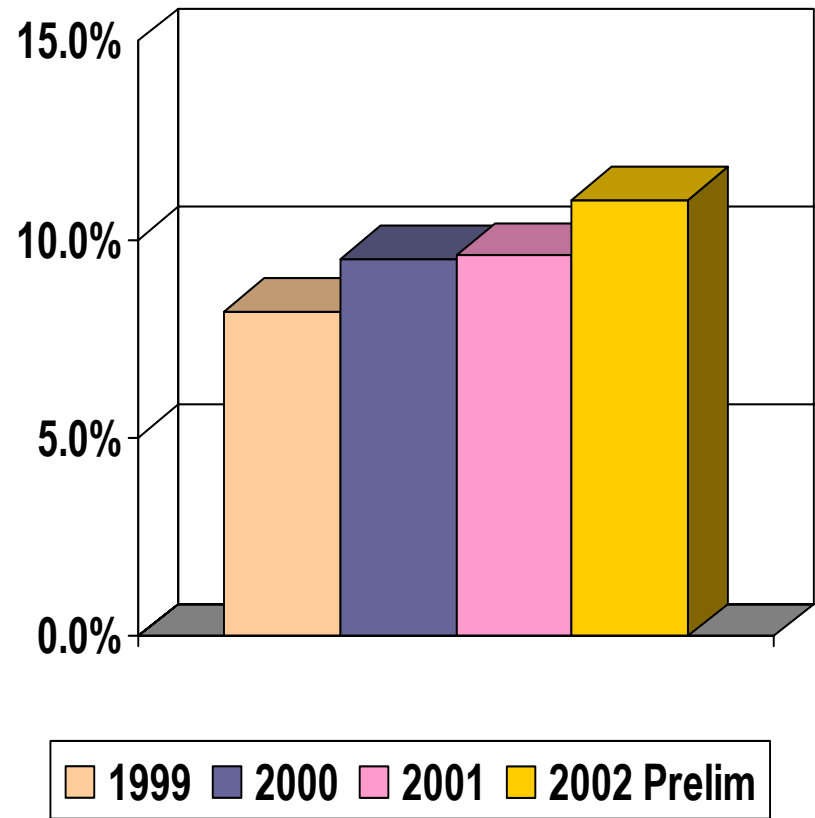
Total Actuarial Liabilities 108.1 million

+ Refund Liability 0.7 million

= Funded Status 99.3%

Empirical Data on Condition 2 New Entrant Pricing Surplus

- Median is nearly 9%
- Recommended surplus depends on size of facility, type of continuing care contract and its risk
- AVP guidelines are 10% to 15% surplus



Do Entry and Monthly Fees for New Entrants Cover their Costs?

Entry Fee	\$ 133,602
- Expected Refunds	(3,699)
Future Monthly Fees	382,943
- Cohort Liabilities	<u>505,590</u>
Actuarial Surplus	\$ 7,256

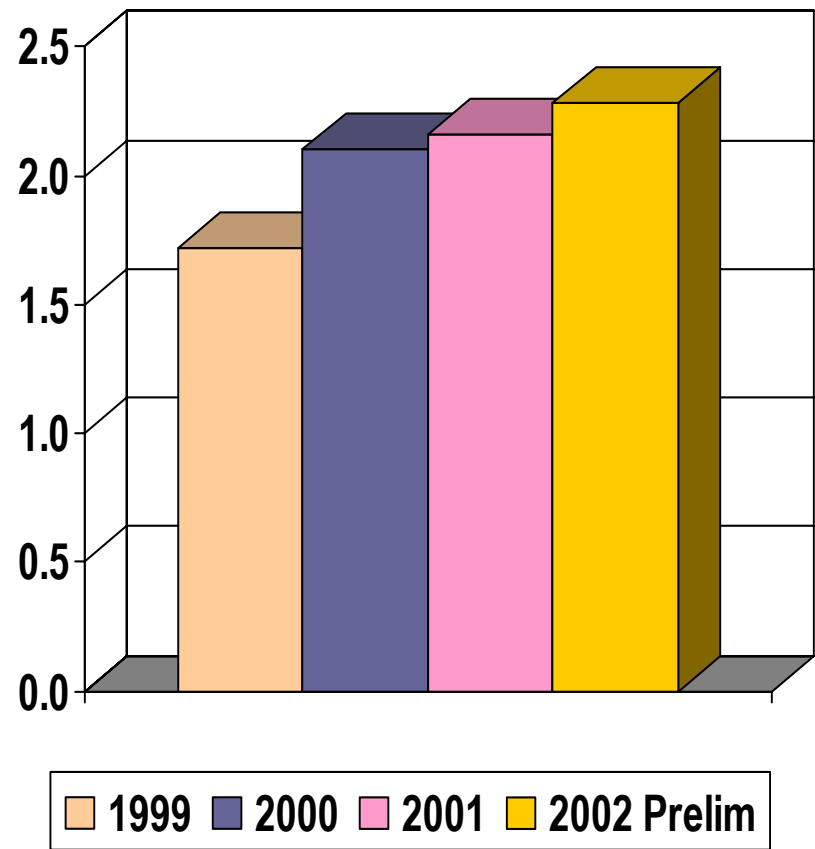
Calculation of New Entrant Surplus(Deficit)?

Actuarial Surplus	\$ 7,256
Divided by	
Total Cohort Liabilities	505,590
+ Refund Liability	3,699
= Actuarial Surplus	1.4%

Empirical Data on Condition 3

Projected Cash Balances

- Median is increasing cash balances
- Recommended position is for reserves to at least match increases in expenses since liabilities will increase approximately the same
- AVP guidelines are 1.50 to 2.00 (based on 4% to 7% inflation)



Calculation of 10-Year Projected Liquid Reserves

Project Liquid Reserve Balance	\$ 31,472,000
Divided by	
Initial Liquid Reserve Balance	\$ 14,050,000
= 10-Year Reserve Change Factor	2.24x

Actuarial Report Card

(2001 grades in parentheses)

	<u>Result</u>	<u>Quartile</u>	<u>Grade</u>
Actuarial Funded Status	99.3%	Second	B+ (B+)
New Entrant Pricing Adequacy	1.4%	First	B (A)
New Entrant Pricing Equity	NA	NA	B (B)
Projected Cash Accumulation	2.24	Second	B+ (A+)
Health Care Capacity	Expected Utilization exceeds capacity by 2008		C (B)

Implementing a Plan to Maintain Actuarial Balance

- **Define policy for acceptable actuarial results for:**
 - **Funded status**
 - **New entrant pricing surplus**
 - **10-year reserve increase**
- **Budget fees to meet targets**

Satisfactory Actuarial Balance Recommendations for CCRC

- **Targets will vary according to many factors**
 - Contract mix
 - Community size
 - Age of census and population “maturity”
 - Board’s risk aversion
- **Target recommendations for CCRC**
 - Funded status—105% or more
 - New entrant pricing surplus—10% or more
 - 10-year reserve increase—2 times or more

Implications of Not Maintaining Satisfactory Actuarial Balance

- **Financial decisions based on limited information**
- **Fees may be inequitable**
- **Intergenerational transfers for funding costs, i.e., Ponzi-like fee structure**
- **Unfunded liability legacy passed onto future Boards and management—is current Board discharging their fiduciary responsibilities?**
- **Financial crisis that might have been avoided**

SECTION 2

Contract Design



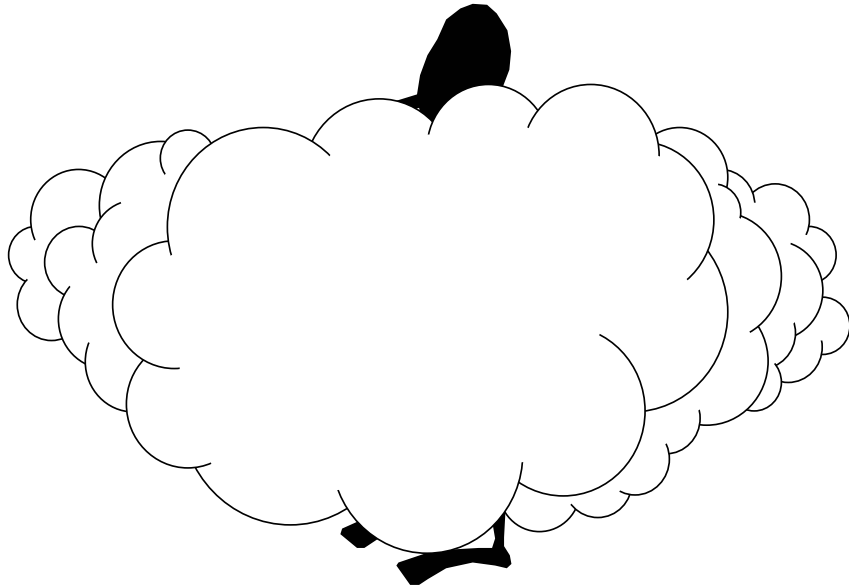
Challenges Associated with Developing New Contract Options

**Market/resident
desires**



Pricing Adequacy

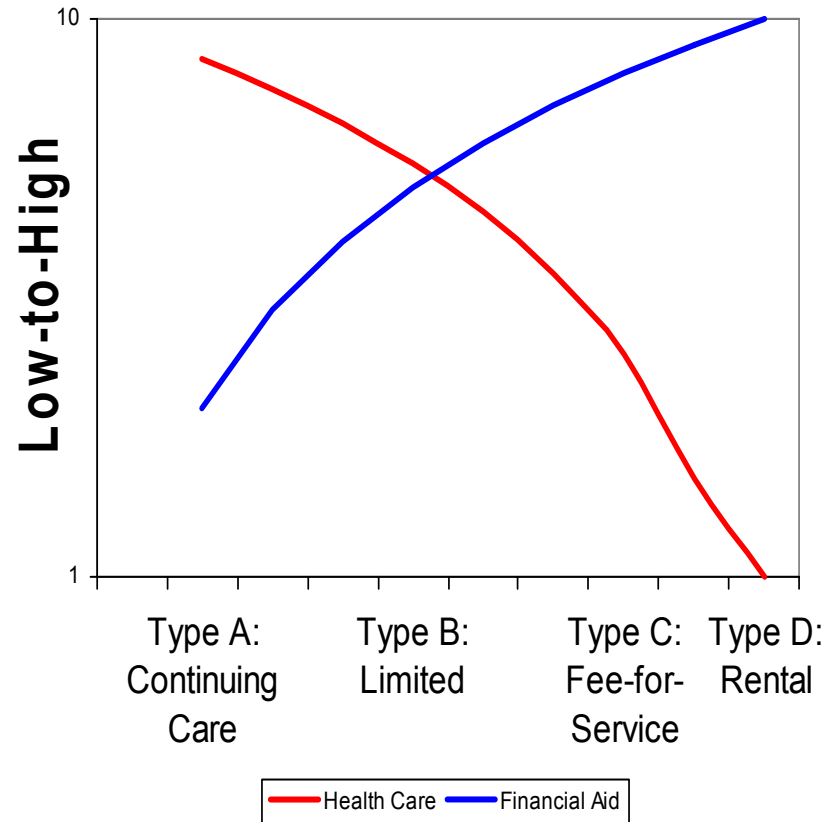
Uncloaking the Mystery of Pricing Continuing Care Entry Fees



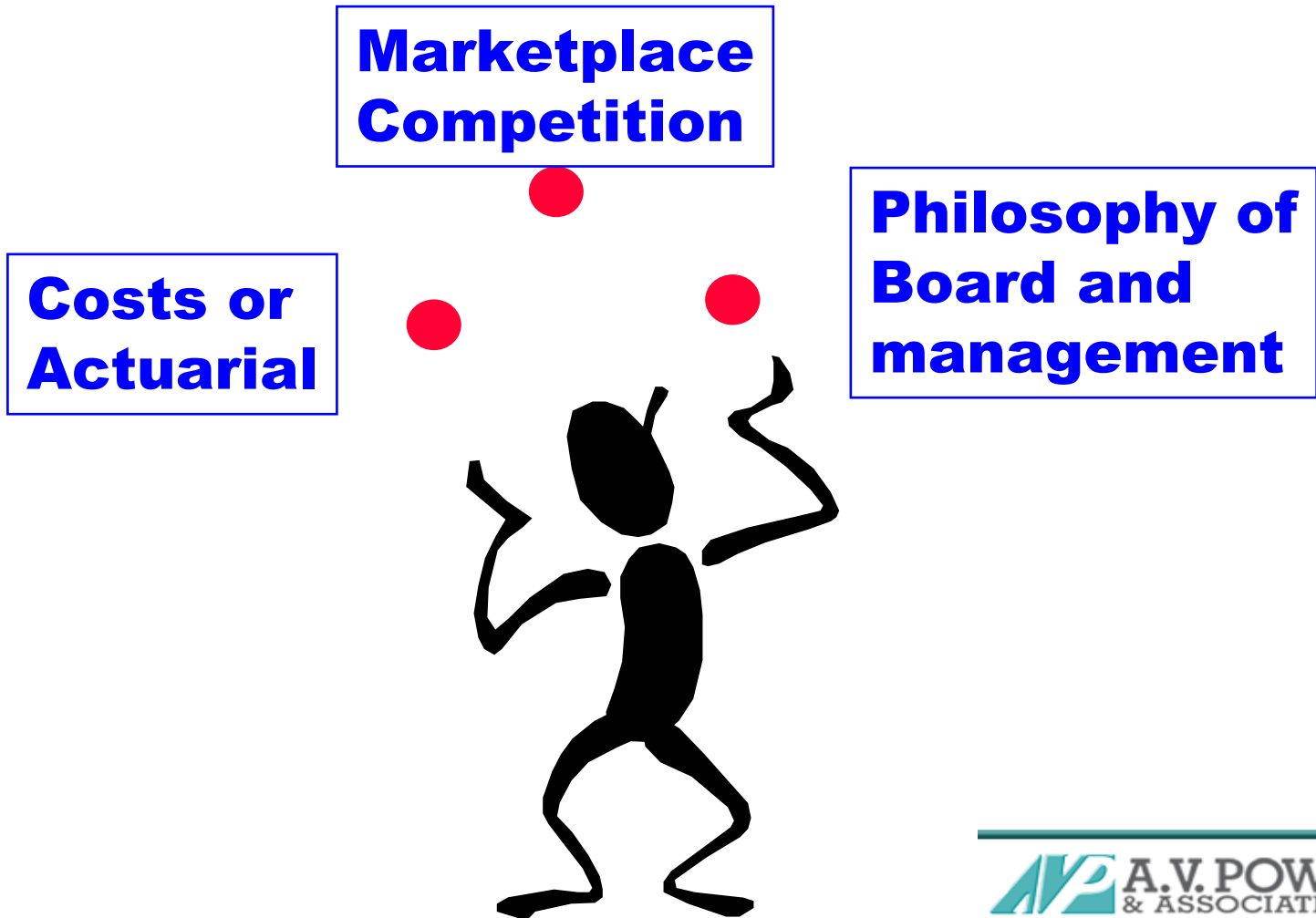
- **Entry fees are simply a prepayment of future monthly fees**
- **Entry fees plus monthly fees must cover operating, capital, and refund costs**

Risk by Contract Type

- All contract types have some form of risk
- Type A contracts have more health care risk, but less financial aid risk
- Type C/D contracts have less health care risk, but more financial aid risk



Setting Fees is a Act of Balancing Several Criteria

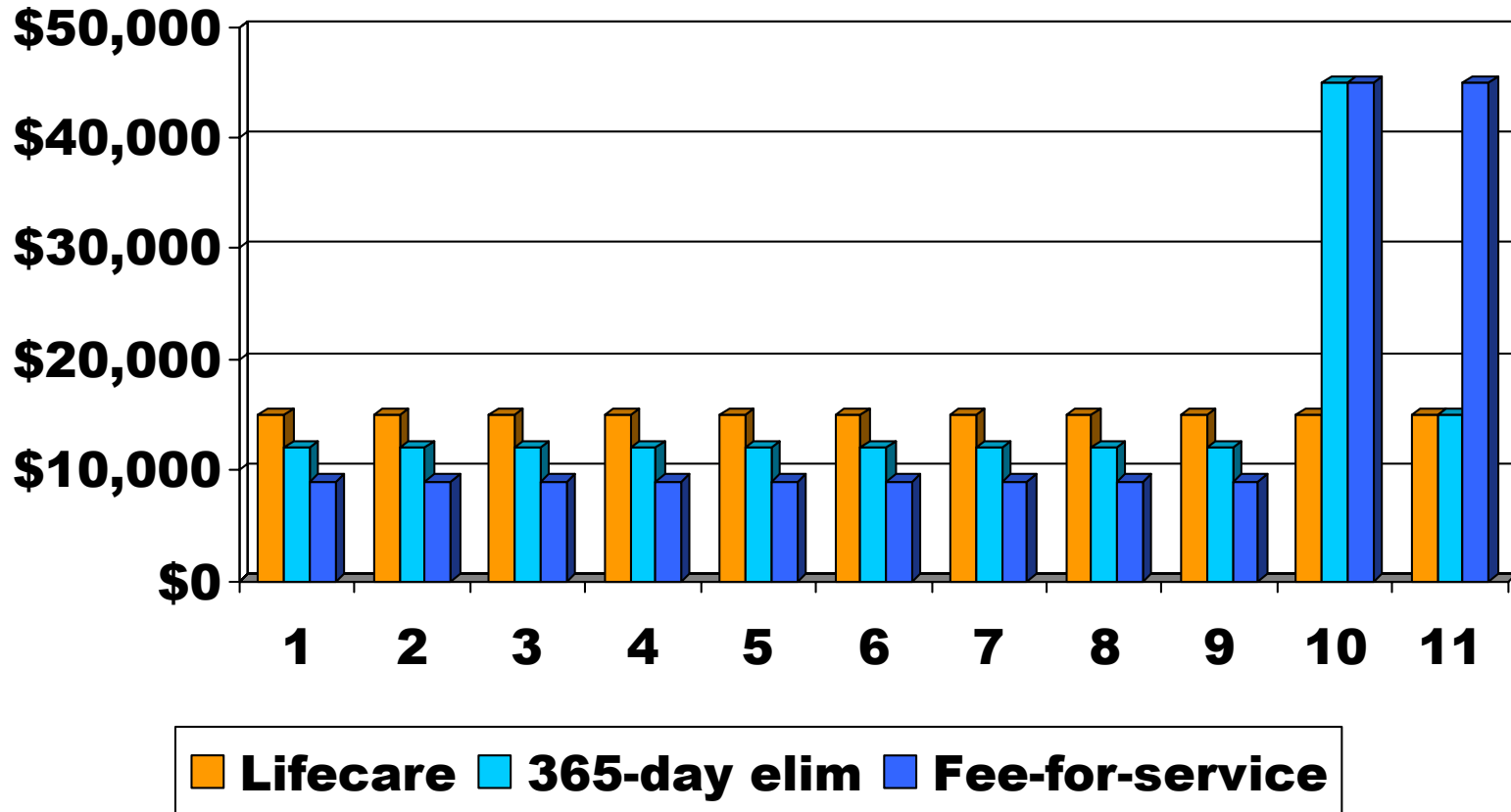


Objectives of Using Actuarial Pricing to Design Contracts

- **Develop “Revenue Equivalent” Contracts**

such that fees collected over resident’s lifetime are approximately equal regardless of the contract provisions

Revenue Equivalent Contracts: Sum of Monthly Fees = \$165,000



Five Categories of Contract Adjustments

- **Entry fee refunds**
- **Payment for health care usage**
- **Annuitizing a monthly fee reduction**
- ***A la carte* or unbundled services**
- **Risk factors**

Entry Fee Refunds: Pros and Cons

● Advantages

- Probably most popular option
- Simple to offer; easy to calculate entry fee differentials

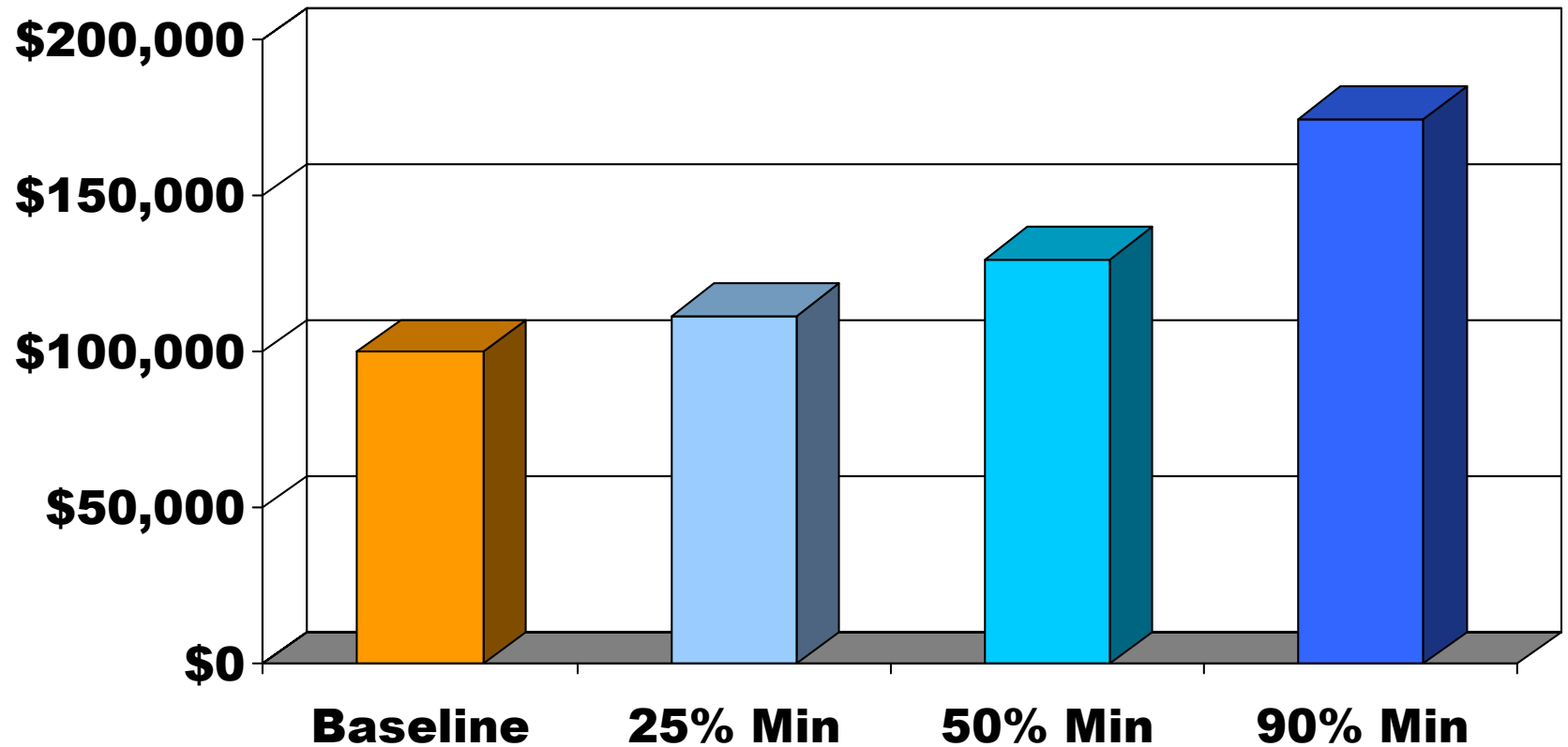
● Disadvantages

- Higher entry fees may exceed market
- Typically older residents select refund option

Entry Fee Refunds: Pricing Examples

- **Funding requires increase in entry fee over baseline fees**
- **Baseline: 50-month prorated refund**
 - Upgrade 50-month to 25% min—11.6%
 - Upgrade 50-month to 50% min—29.4%
 - Upgrade 50-month to 90% min—74.5%

Refundable Entry Fee: Differentials to 50-month Refund



Entry Fee Refund: Caveats

- **Adjustments are sensitive to:**
 - **Entry age (adverse selection)**
 - **Probably small number of participants**
 - **Coupled status (overly conservative)**
 - **Long-term earnings rate**

Payment for Health Care Usage: Pros and Cons

Advantages

- Lower monthly fee in ILU or reduction to entry fee
- Transfer risk of higher than expected health care usage to resident
- Facilitates coordination with LTC policies

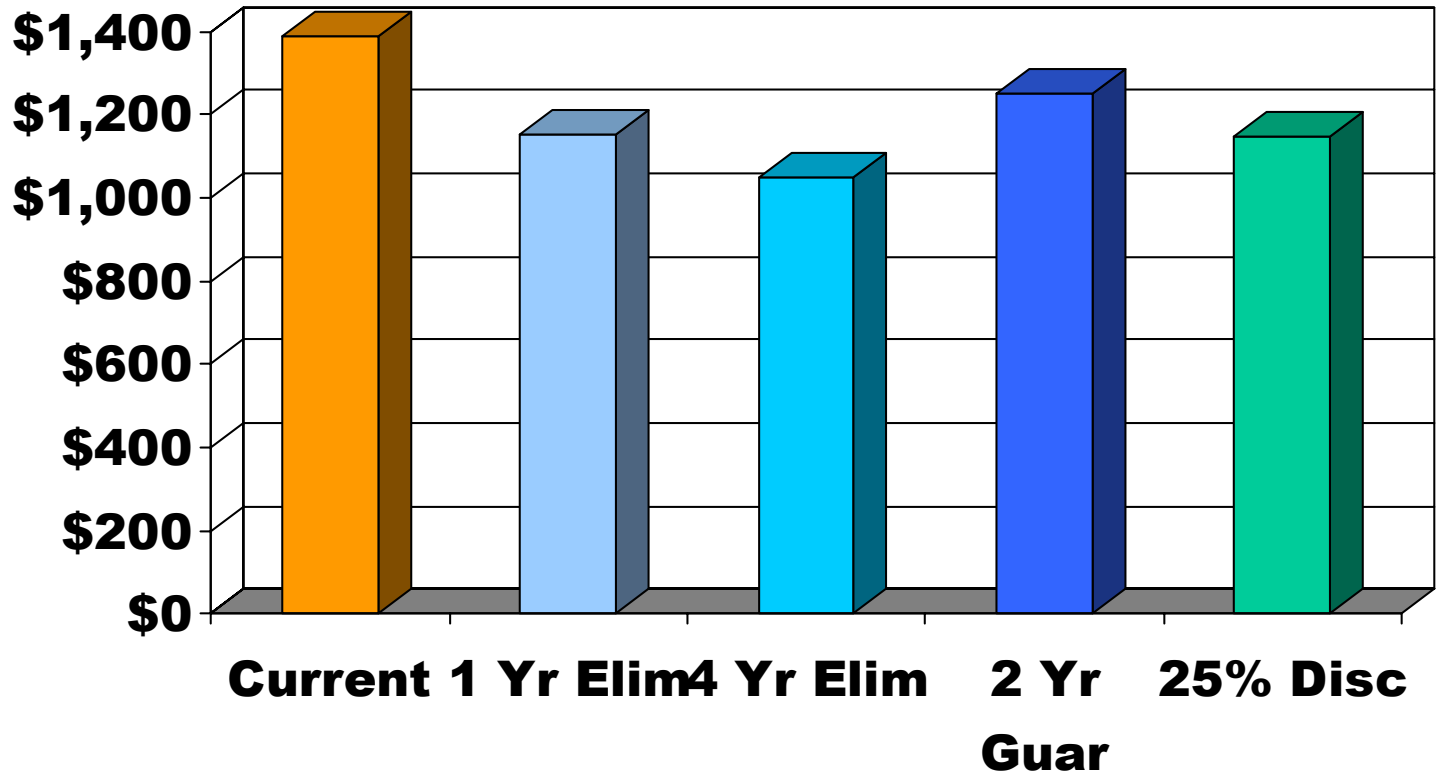
Disadvantages

- Health status underwriting challenge
- Potential for adverse selection

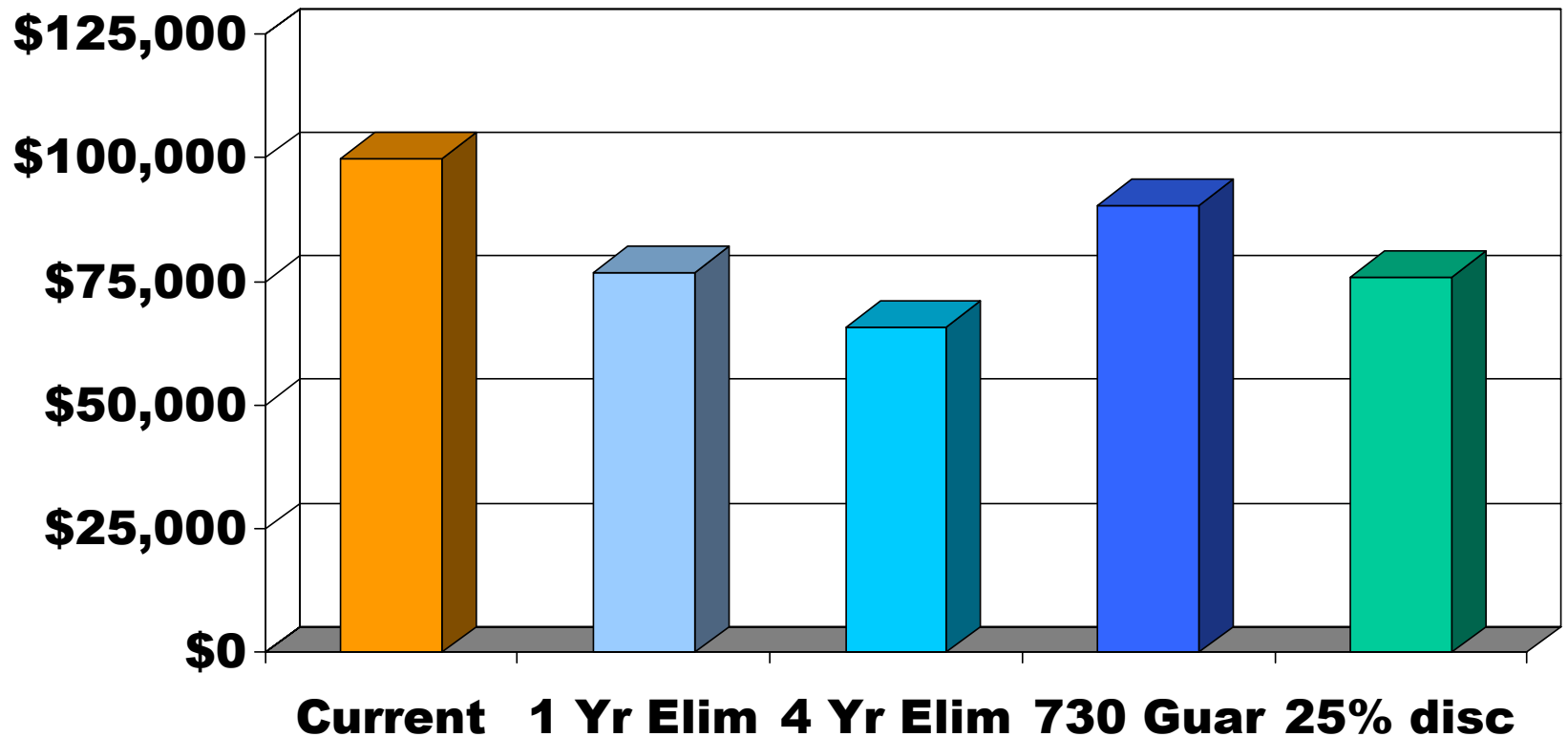
Payment for Health Care Usage: Pricing Examples

- **Funding allows reduction to either ILU monthly fee or entry fee**
- **Baseline: Pay same monthly fee (Type A)**
 - 1-year elimination—\$229 MF/\$23,088 EF
 - 4-year elimination—\$340 MF/\$34,253 EF
 - 730 pay same guar—\$95 MF/\$9,563 EF
 - 25% lifetime discount—\$240 MF/\$24,185 EF

Payment for Health Care Usage: Reductions in Monthly Fee



Payment for Health Care Usage: Reductions in Entry Fee



Payment for Health Care Usage: Caveats

- **Adjustments are sensitive to:**
 - **Coupled status (reduction for couple may be less than twice single)**
 - **Combining with multiple health care options may lead to adverse selection**
 - **Funding from monthly fee versus entry fee**

Annuitizing a Fee Reduction: Pros and Cons

● Advantages

- Residents are most sensitive to monthly fees
- Provides unlimited ability to customize fees

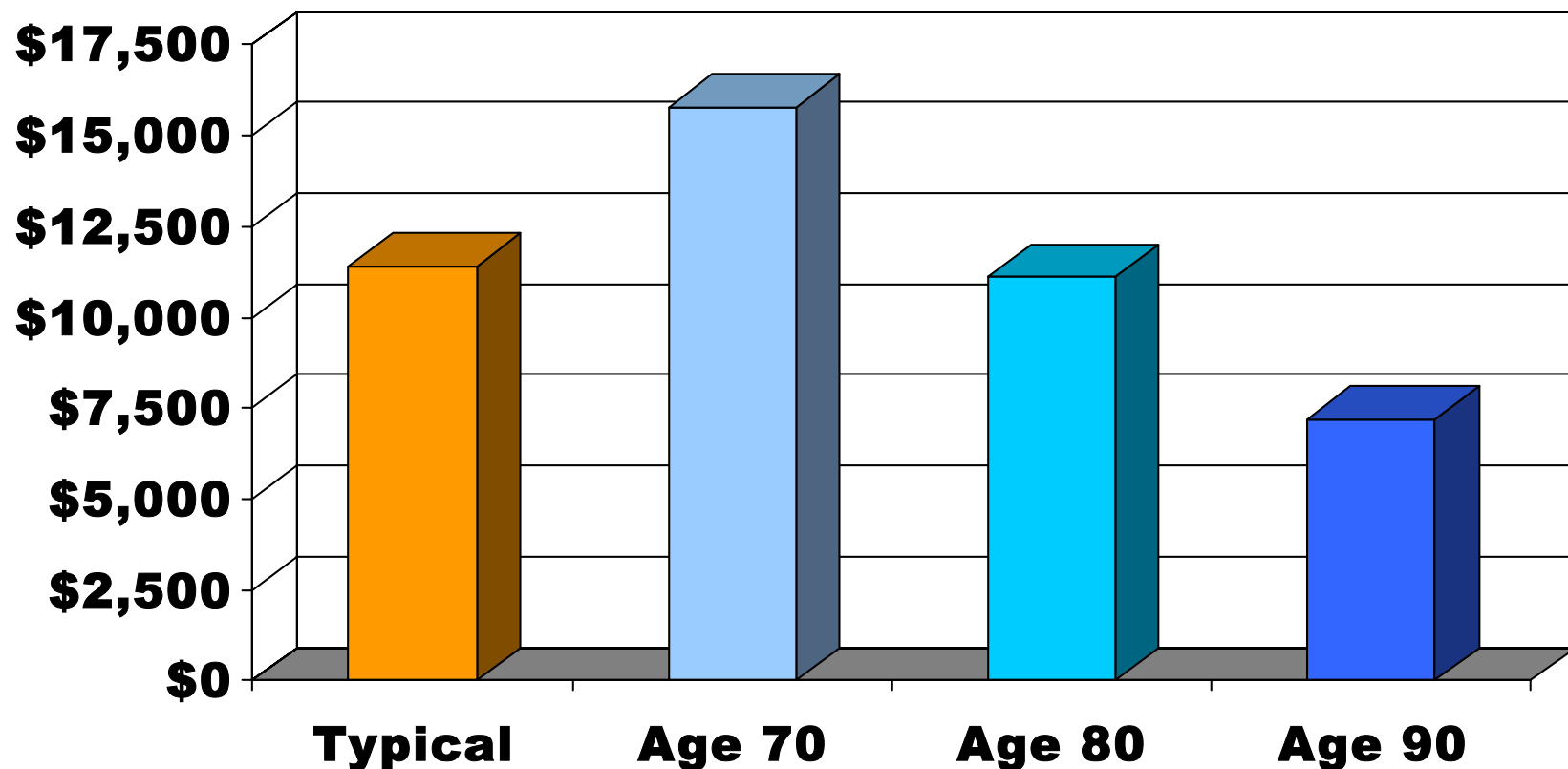
● Disadvantages

- Requires an actuarial estimate of longevity

Annuitizing a Fee Reduction: Pricing Examples

- **Funding requires payment of additional entry fee to cover monthly fee reduction**
- **Entry adjustment per \$100 monthly fee**
 - Typical entrant—\$11,400
 - Entry age 70—\$15,800
 - Entry age 80—\$11,100
 - Entry age 90—\$7,200

Annuitizing a Fee Reduction: \$300 adjustment



Annuitizing a Fee Reduction: Caveats

- **Adjustments are sensitive to:**
 - **Anecdotal evidence shows no interest**
 - **Should reflect entry age**
 - **Coupled adjustment can be complicated**
 - **Long-term earnings rate**

Unbundled Services: Pros and Cons

● Advantages

- Reduces fees for “unwanted” desired services
- Straightforward accounting allocation?

● Disadvantages

- Adds to complexity of billing
- Minimum overhead for certain services creates allocation challenge if optional

Unbundled Services: Pricing Examples

- **Funding allows reduction to either ILU monthly fee or entry fee**
- **Baseline: eliminate a service that costs \$100/month**
 - Reduce ILU monthly fees by \$100/month or
 - Reduce entry fee by \$10,000
 - Use ILU annuitizing factors to calculate

Unbundled Services: Caveats

- **Adjustments are sensitive to:**
 - **Entry age (for entry fee reductions)**
 - **Initial contract setup increase in administrative workload to track provisions**

Risk-Based Pricing

Fee variations based on:

- **Age (younger live longer)**
- **Gender (females live longer and use more health care than males)**
- **Marital Status (couples live longer and use less health care than singles)**
- **Health Status (assessment of individual needs)**

Contract Design Summary

- **Learn what market wants**
- **Evaluate financial implications and risks**
- **Contract variations are funding options**
- **We believe that offering multiple “revenue equivalent “ contracts is the future of continuing care**

Summary and Questions

- **Other issues**

- **Future service obligation**
- **Entry fee amortization**
- **Prepaid medical liability**

- **Useful tool**

- **Future of actuarial studies**

Discussion



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