



Presentation to  
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# Introduction

- CCRC Actuaries, LLC
- New York Experience



# CCRC Financial Risk Issues

- CCRC's are small insurance companies
- Morbidity / Health Care Risk
- Mortality / Longevity Risk
- Inflationary Risk
- Investment Risk

# Morbidity Risk

- Risks include...
  - ◆ Higher Health Care Utilization
  - ◆ Lower Health Care Utilization

# Mortality Risk

- Depends on...
  - ◆ Entrance Fee Refundable Provisions
  - ◆ Health Care Guarantee

# Discussion Topics

- Traditional Actuarial Report
  - ◆ Demographic Analysis
  - ◆ Population Projection
  - ◆ Cash Flow Analysis
  - ◆ Actuarial Balance Sheet
  - ◆ New Entrant or Actuarial Pricing Analysis
- New York Article 46 Actuarial Report
- Actuarial Standards and GAAP Comparisons
- New York Regulatory Update

# Comprehensive Actuarial Study

- Demographic Analysis
- Population Projection
- Cash Flow Analysis
- Actuarial Balance Sheet
- New Entrant Pricing Analysis

# Demographic Analysis

- Input Assumptions
  - ◆ Occupancy
  - ◆ Entry age
  - ◆ Gender
  - ◆ Apartment density
  - ◆ Actuarial decrement



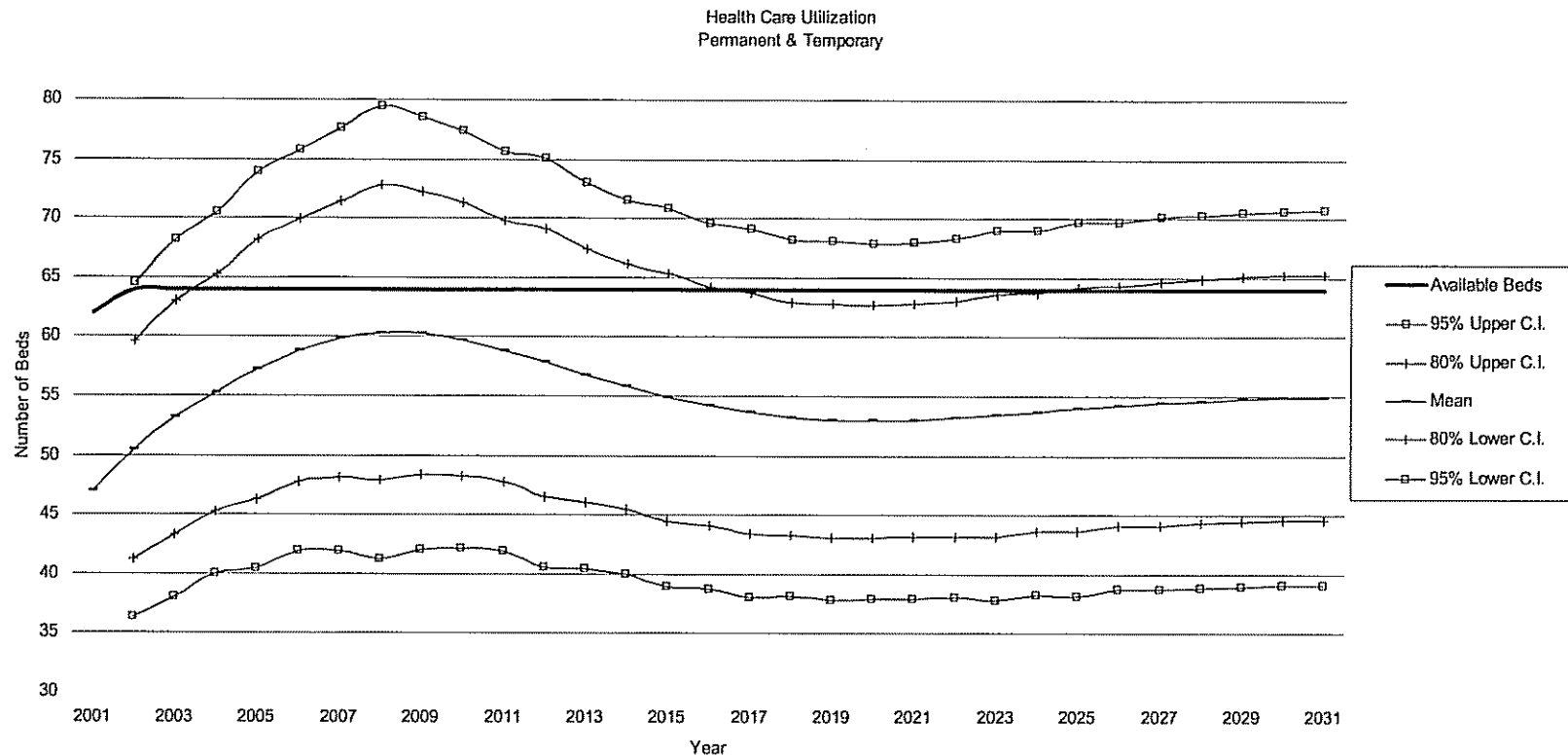
# Demographic Analysis

- Industry standard rates
    - ◆ NIA and Society of Actuaries study
    - ◆ CCRC Actuaries proprietary data
  - Analyze facility historical data
  - Discussions with management
- Select appropriate actuarial decrement assumptions

# Population Projection

- Identify current census
  - ◆ Number of residents
  - ◆ Average age
  - ◆ Average years in community
  - ◆ Gender breakdown
  - ◆ Density ratio
- Develop computer model for CCRC population
  - Apply actuarial decrements to current and new residents

# Population Projection



# Population Projection

- Key outputs
  - ◆ Turnover and transfer information
  - ◆ Health care utilization
- Interpret results for planning decisions
  - ◆ Health care needs of the community
  - ◆ Where will you provide care going forward
    - ◆ Changes in home health care
    - ◆ New levels of care
  - ◆ Marketing needs of the community

# Actuarial Standards

- ASOP No. 3
- Developed by American Academy of Actuaries
- Three financial tests:
  - ◆ Cash flow projection
  - ◆ Actuarial balance sheet
  - ◆ New entrant pricing analysis

# Cash Flow Projection

- Currently 20-year projection is required by SOP 3.
- Are cash flows sufficient to pay all operating and capital expense?
- Are cash reserves growing with inflation?

# Actuarial Balance Sheet

- Tests only the liability of current residents.
- Do current assets plus future fees received cover the expected cost of care?
- Current assets include actuarial present value of building and liquid assets.
- Provision for surplus should be a minimum of 5% to 10%.

# Actuarial Balance Sheet - Standard

(Dollars in Millions)

	GAAP Basis	GAAP Actuarial Basis	
Current Assets	\$ 4.5	\$ 4.5	(GAAP)
Assets whose use is limited	5.4	5.4	(GAAP)
Net Property and Equipment	51.9	72.3	(Actuarial)
Other Assets	1.5	1.5	(GAAP)
<b>Assets</b>	<b>\$ 63.3</b>	<b>\$ 83.7</b>	
Current Liabilities	\$ 4.4	\$ 4.4	(GAAP)
Long Term Debt	53.5	50.7	(Actuarial)
Obligation to Provide Future Services	-	N/A	
PV of Refundable Entry Fees	-	9.2	(Actuarial)
Refundable Advance Fees and Deposits	0.3	0.3	(GAAP)
Deferred Revenue from Entry Fees	31.4	N/A	
Actuarial Present Value of:			
Future Expenses	N/A	\$ 66.4	(Actuarial)
Future Revenues	N/A	(57.3)	(Actuarial)
Net Actuarial Liability (Asset)	N/A	9.1	
<b>Liabilities</b>	<b>\$ 89.6</b>	<b>\$ 73.7</b>	
Surplus (Deficit)	(26.3)	10.0	
<b>Total</b>	<b>63.3</b>	<b>83.7</b>	





# Funded Status

- The Actuarial Funded Status is a measure of the financial condition of a CCRC. Financially strong organizations are typically fully funded (actuarial funded status exceeds 100%).
- $$\frac{\text{Net Actuarial Assets} + \text{APV of Future Revenue}}{\text{APV of Future Liabilities} + \text{APV of Refund Liability}}$$

# Actuarial Ratio

- The Actuarial Ratio represents the portion of future expenses covered by contingent revenues which can be adjusted in the future. For a Lifecare community, this ratio typically ranges from 65% - 85%. The higher the ratio, the greater ability a community has to address adverse experience through fee increases.
- $$\frac{\text{Actuarial Present Value of Future Revenue}}{\text{Actuarial Present Value of Future Liabilities}}$$

# Actuarial Balance Sheet – New York

ASSETS	(\$ in Millions)	
Total Current Assets	\$0.5	(GAAP)
Other Cash and Investments	12.5	(GAAP)
Property, Plant and Equipment	100.0	(Actuarial Value)
Unamortized Financing Costs	5.0	(Actuarial Value)
Deferred Marketing Costs	3.0	(Actuarial Value)
<b>Total Assets</b>	<b>\$121.0</b>	
<b>LIABILITIES</b>		
Current Liabilities	\$2.0	(GAAP)
Long - Term and Short - Term Debt	25.0	(GAAP)
Deferred Development Fee	1.5	(GAAP)
Subordinated Loan	8.0	(GAAP)
Prospective Reserve	\$87.0	(Actuarial Value)
Minimum Liquid Reserve	10.5	
Retrospective Reserve	88.0	Acc. of GAAP FS
<b>Reserve Liability</b>	<b>\$88.0</b>	
<b>Total Liabilities</b>	<b>\$121.0</b>	
<b>NET SURPLUS</b>	<b>0</b>	



# New York Reserve Liability

- The reserve liability on the Actuarial Balance Sheet is equal to the maximum of:
  - Minimum Liquid Reserve
  - Retrospective Reserve
  - Prospective Reserve

# Minimum Liquid Reserve

## ■ Sum of:

- ◆ The aggregate of all principal and interest payments due within the next twelve months on all long-term debt;
- ◆ The aggregate of all taxes and insurance premiums which are due within the next twelve months;
- ◆ The greater of the projected operating expenses for the next six months, or 50% of the projected operating expenses for the next twelve months; and
- ◆ The aggregate of all scheduled repair and replacement costs due within the next twelve months.

# Retrospective Reserve

- Percentage of Entrance Fee received;
- PLUS percentage of the Monthly Fees;
- PLUS revenues received from non residents for services rendered;
- PLUS interest received;
- PLUS adjustment for capital gains and losses;
- MINUS the actual operating expenses;
- MINUS any refunds to residents of Entrance or Monthly Fees;
- MINUS capital expenses;
- MINUS interest payments on all debt obligations;
- PLUS any appropriate revenue or expense adjustment

# Prospective Reserve

- Amounts due and unpaid;
- PLUS the present value of future operating expenses for services covered by the lifecare contract
- PLUS the present value of the following expenses:
  - ◆ Future depreciation charges on current and future capital assets;
  - ◆ Future imputed investment income;
  - ◆ Future interest payments;
  - ◆ Future insurance and taxes related to the capital assets; and
  - ◆ Future refund expenses;
- MINUS the present value of between 95% to 100% of the future scheduled Monthly Fee payments;
- PLUS any future expense or revenue item which the community can demonstrate as appropriate based on the law.

# New York Reserve Summary

- Retrospective > Prospective      GOOD
- Prospective > Retrospective      VERY BAD



# New Entrant Pricing Analysis

- Based on current Fee schedules and new entrants.
- Insurance pricing methodology.
- Results for different unit types, contracts and type of new entrant.
- Does the entrance fee collected plus future fees received cover the expected cost of care?
- Provision for surplus should generally be 10% to cover the contingency for adverse deviations.

# GAAP Financial Analysis

- Short-term/On-Going concern focus.
- Do your assets equal or exceed your liabilities?
- Five-year financial projection at most.
- Positives include thorough auditing of transactions.
- Future service obligation (“FSO”)

# Future Service Obligation Calculation

- Similar to Actuarial Balance Sheet
- Based on a closed group methodology
- Based on actuarial population flows
- Excludes:
  - Most General and administration expenses
  - Accounting and legal fees
  - Administrative salaries and benefits
  - Consulting fees

# Problems with FSO

- Amortization of entrance fees does not match expected expenditures – income is recognized too soon.
- Calculation excludes General & Administrative expenses, a significant portion of most operating budgets.
- Based on Accounting depreciation schedules rather than projected cash flows for capital replacement

# New York Regulatory Update

- Possible elimination of Retrospective Reserve
- Changes bottom line surplus, but will depend on NY Department of Insurance
- Cash flow projection may shorten
- No changes in fee regulations