Advanced Ratios: Using Ratios to Measure Internal Operations Performance

AAHSA 40th Annual Meeting
Session #29D
November 6, 2001

Michael A. Flynn
mflynn@friendshipvillage.net

Robert Wetzler
Robert.wetzler@fitchratings.com

Kathleen A. Harris
kathie.harris@avpowell.com
Long Term Care Outlook

2001: expect weakening of most ratios

◆ Interim financials show stress
  ▪ Diminished profits
  ▪ Large unrealized losses

◆ Performance through remainder of year depends on external functions:
  ▪ Stock market (investment returns)
  ▪ Economy: unemployment rates (degree of “cooling”)

◆ Cyclical (except for shortage of nurses)
Long Term Care Outlook

- Demand remains strong
- Expect more defaults in the nursing home and assisted living sectors
- More concern for BBB credits, lower rated entities
## Discussion of Medians: ‘A’ Credits

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Days Cash on Hand</td>
<td>579.1</td>
<td>505.5</td>
<td>424.1</td>
</tr>
<tr>
<td>Cash to Debt</td>
<td>97.8</td>
<td>112.1</td>
<td>87.9</td>
</tr>
<tr>
<td>Excess Margin</td>
<td>10.5</td>
<td>9.0</td>
<td>8.4</td>
</tr>
<tr>
<td>Debt Service Coverage</td>
<td>2.7</td>
<td>3.6</td>
<td>2.9</td>
</tr>
<tr>
<td>Debt Service Coverage – Revenue Only</td>
<td>1.2</td>
<td>1.2</td>
<td>1.0</td>
</tr>
</tbody>
</table>
## Discussion of Medians: ‘BBB’ Credits

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Days Cash on Hand</td>
<td>252.3</td>
<td>307.8</td>
<td>305.2</td>
</tr>
<tr>
<td>Cash to Debt</td>
<td>61.6</td>
<td>59.4</td>
<td>55.3</td>
</tr>
<tr>
<td>Excess Margin</td>
<td>2.6</td>
<td>2.7</td>
<td>5.0</td>
</tr>
<tr>
<td>Debt Service Coverage</td>
<td>1.9</td>
<td>2.1</td>
<td>2.1</td>
</tr>
<tr>
<td>Debt Service Coverage – Revenue Only</td>
<td>0.8</td>
<td>1.3</td>
<td>1.3</td>
</tr>
</tbody>
</table>
What is Causing the BBB Declines?

What’s the difference between an A and a BBB credit?

- BBBs as a group have more nursing; as a group have more ILUs
  - A: 62% independent living, 527 average units
  - BBB: 49% independent living, 315 average units
- BBB: More healthcare, therefore greater wage pressures
- BBB: Smaller endowments, less investment returns
- BBB: Collect less entrance fees
Current Situation: 
External Pressures on Providers

Negative outlook in the short term because:

- Decreased investment returns and contributions
- Labor pressures
- Perpetual concerns mainly with nursing homes (AL somewhat)
Investment Returns

◆ A category – larger endowments
  ■ More ILUs often mean more cash
    ✤ All but 2 A credits collect entrance fees

◆ Greater investment income
  ■ More reliance, but better performance
Investment Returns

- Median A investment income: $1.7 million (14% of total revenue)
- Median BBB investment income: $489,000 (6% of total revenue)

- 53% would lose money without investment income
- Without contributions, donations and investment income, nearly all lose money
## CCRCs Investment Portfolios

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>1999</th>
<th>1997</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Return</td>
<td>5.2</td>
<td>7.6</td>
<td>9.3</td>
</tr>
<tr>
<td>% Equities</td>
<td>43</td>
<td>46</td>
<td>32</td>
</tr>
<tr>
<td>% Fixed Income</td>
<td>35</td>
<td>34</td>
<td>46</td>
</tr>
<tr>
<td>% Cash</td>
<td>23</td>
<td>20</td>
<td>22</td>
</tr>
</tbody>
</table>
Investment Returns and FYE 2000

- Mid-year end providers: ($55,000), 5.7% return
- Calendar year end: ($864,000), 4.0% return
- 2001 interims tell us it’s getting worse
- Best and worst practices
Labor Pressures

Nursing homes labor pressures most acute, compounded by:

- Increased liability insurance premiums (not just FL, now all over: IA, PA, etc.)
- Continued decline in occupancy
- Insufficient Medicaid
- Increased government scrutiny (Congressional Report)
- Favorite target of media, politicians, lawyers
Ratios Used to Measure Labor Pressures

- Salaries, wages and benefits as a % of total revenue
  - A median: 48.14%
  - BBB median: 51.8%

- Agency expense as a % of total revenue
  - BBB median: 3.3%
  - One provider: 12%
  - Agency costs are 2 to 3 times the cost of a regular employee
Ratios Used to Measure Labor Pressures

- Nursing hours per patient day
- Total staffing hours per patient day
- Other
Cost Allocation

- Fully allocated profitability by service line/unit
- Contribution margin, operating margin
- Case study
FORECAST

◆ Negative outlook in short term due to expected:
  ■ Reduced investment returns as a whole
  ■ Wage inflation
◆ Demand will remain solid
◆ Stresses are mainly cyclical, except for nursing shortage
Friendship Village of Schaumburg (FV)

Organization Highlights:

- Opened in January 1977 with the following unit mix:
  - 180 skilled nursing beds
  - 600 independent units (50% of units are studio or alcove units)
Changes to Unit Mix

◆ 1987: Converted one floor of IL to assisted living (76 AL units)
◆ Periodically combine smaller units and use less desirable units for offices, storage, etc.
◆ 1994: Added 10 healthcare beds and converted 32 other beds to a 42 bed Special Care/Alzheimer’s unit
◆ 1998: Added 60 healthcare beds
FV History of Financings

◆ 1977: Mortgage secured to develop campus
◆ 1987: First tax exempt financing to reduce interest rate from 9% to 6.5% plus additional cash to finance healthcare expansion
◆ 1994: Advance refunding of 1987 issue to further reduce interest cost
◆ 1997: $30 million financing to renovate and expand existing campus
FV Organization Highlights

- BBB rated by Standard & Poors and Fitch
- CCAC accredited since 1987
- Strong strategic thinking board
- Integrated strategic, marketing and operational plans
Long-term financial planning is the driver in determining short-term objectives.

In other words, annual operating budgets are established that not only meet current operating needs, but help to achieve long-term financial goals.
Long-Term Financial Modeling

- CCAC target ratios
- Operating performance
- Physical plant challenges
- Resident programming objectives
- Expansion and new services beyond the current campus
- Actuarial pricing and long-term viability
Annual Budget as Part of the Long Range Financial Plan - Assumptions

- Occupancy by level of care
- Resident turnover
- Payor mix
- Rate increases
- Expense increases
- Expansion
- Capital replacement
- Non-operating expenses
- Investment income
Variable Budgeting

- **Variable budgeting** is used to determine what-if scenarios.

- **Variable budgeting is particularly useful in testing:**
  - Different occupancy assumptions including differentiating by payor source
  - Per resident day costs that are directly affected by census...e.g., meal cost per resident day

- **Actual results can be calculated using per resident day cost and compared to that budgeted to better analyze budget variance.**
CCAC Ratios

- Targeted CCAC ratios are established as part of the long-range financial plan.
- FVS objectives:
  - Show positive trends in these ratios
  - Make adjustments to operations, fees, etc. to ensure long-term financial viability
- Annual budgets are established making sure projected CCAC ratios fit within long-term targets
Specified Ratios Targeted

Profitability
- Operating ratio
- Excess margin ratio
- Net operating margin
- Net operating margin ratio – adjusted

Liquidity
- Days cash on hand
- Cash to debt

Capitalization
- Debt service coverage
- Debt to total assets
Critical Success Factors in Meeting Annual Targets

- Net entrance fee receipts
- Positive operating performance
- Sustained occupancy levels
- Management of payor mix
Tools for Monitoring Routine Reporting

- Monthly financial statements, general ledgers, variance reports, census reports and capital spending to operating managers

- Budget Task Force
  - Guide new budget development
  - Monitor monthly actual results
  - Provide leadership in making mid-year corrections should results materially vary from budget
Board Involvement

- Monthly review of operations
- Monthly review of capital spending
- Monthly review of investment returns and review of investment mix every six months
- Review of long-range plans as updated, usually several times per year
Quarterly Reporting

◆ Quarterly reports are in same format as the annual audit to allow consistency in calculating ratios

◆ Quarterly reports are sent to:
  ■ Investors, Bond Trustee, LOC Bank
  ■ Board including CCAC ratios

◆ Quarterly town hall meetings are held with residents to discuss financial performance as well as other business issues affecting the organization
Compensation

The compensation policy was recently upgraded to be more performance-based.

This system is currently evolving as operating performance is stabilized.
Establishing Performance Targets

- Identify key statistics and ratios
- Not only financial measures, but also operational measures
- Leading indicators as well as lagging indicators
Key Statistics and Ratios
Revenue Items

- Occupancy
  - Turnover rate
  - Average unit downtime
  - Wait list readiness

- Fee Increases

- Investment Returns
Key Statistics and Ratios
Expense Items

- Cash operating expense increases, excluding interest
  - By level of care
  - By department
- Productivity measures
  - FTEs/resident
  - Nursing hours/resident day
  - Number of units cleaned/housekeeping FTE
Establishing Performance Targets

- Past performance and trends
- Industry performance and trends
- Projections of the future using reasonable assumptions based on analysis of past and industry experience
Past Performance and Trends

- Financial ratios can vary significantly depending upon fee structure, contract provisions, age of facility, and type of financing.
- Focus on items that are controllable; for which management can be held accountable.
Industry Performance and Trends

Sources of data:

- Trade Associations
- Rating Agencies
- Investment Banking Firms
- Consulting Firms
- Governmental Agencies
Projections of Future Performance

◆ Use financial models to project future under various scenarios
◆ Update when variances become known to assess impact and evaluate potential action plans
◆ Actuarial-based model incorporates long-term liabilities associated with CCRC contracts and provides customized targets for financial results
Actuarial Ratios

Profitability – New Entrant Pricing Surplus

- Provides revenue over expense margin for expected duration of new contracts
- Compares entry fee and monthly fees, less refund payment, to allocated share of operating and capital costs
- Based on actuarial projection of life expectancy and health care utilization
Actuarial Ratios: Industry Performance
New Entrant Pricing

<table>
<thead>
<tr>
<th></th>
<th>25th</th>
<th>50th</th>
<th>75th</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- 25th Percentile
- 50th Percentile
- 75th Percentile

- 2000 data is compared to 1999 data for each percentile.
Actuarial Ratios

Liquidity (Solvency) – Funded Status

- Provides reserve adequacy ratio for expected duration of existing contracts
- Compares actuarial assets to actuarial liabilities to evaluate true “net worth” or economic value of CCRC
- Actuarial assets include investments in dollars and investments in fixed assets, net of debt
- Actuarial liabilities include allocated share of operating and capital costs, and refund costs
Actuarial Ratios: Industry Performance Funded Status

[Bar chart showing funded status for 25th, 50th, and 75th percentiles in 1999 and 2000]
Actuarial Ratios

Capital Structure – Cash Flow

- Actuarial-based 20-year projection of cash sources and uses
- Reflects contract provisions and assumptions related to revenue and expense items and future capital expenditures
- Basis for financial ratios
Actuarial Ratios: Industry Performance
10-Year Reserve Increase Factor

25th percentile
50th percentile
75th percentile

1999
2000
Comparison of Four CCRCs with 100% Funded Status

Operating Ratio

Excess Margin Ratio
Comparison of Four CCRCs with 100% Funded Status

Net Operating Margin Ratio

Net Operating Margin Ratio - Adjusted
Comparison of Four CCRCs with 100% Funded Status

Days Cash on Hand

- Case 1
  - CCAC 25th %
  - CCAC 50th %
  - CCAC 75th %
- Case 2
- Case 4
- Case 3

Debt to Total Assets

- CCAC 25th %
- Case 4
- Case 3
- CCAC 50th %
- Case 2
- CCAC 75th %
- Case 1
## Summary of Four CCRCs with 100% Funded Status

The table below summarizes the quartile rankings for different financial metrics across four cases of Continuing Care Retirement Communities (CCRCs) with 100% funded status. The quartile rankings are based on the following scale:

- **1** = above 75th%;
- **2** = 75th-50th%;
- **3** = 50th-25th%;
- **4** = below 25th%.

<table>
<thead>
<tr>
<th>Metric</th>
<th>Case 1</th>
<th>Case 2</th>
<th>Case 3</th>
<th>Case 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Ratio</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Excess Margin Ratio</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Net Operating Margin</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Net Oper. Margin – Adj.</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Days Cash on Hand</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Debt: to Total Assets</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

* 1=above 75th%; 2=75th-50th%; 3=50th-25th%; 4=below 25th%
Summary

◆ Financial ratio targets must be specific to individual community
◆ Customized targets can be developed from actuarial-based financial projections
◆ Ratios and statistics selected as key performance measures must be monitored at least quarterly by board and management