

U.S. Not-For-Profit Health Care Portfolio Snapshot

Overview (YTD as of 8/31)

- Large number of rated obligors with 296 stand alone hospitals, 161 health care systems, 28 senior living facilities and 10 human service providers.
- Acute care rating actions (YTD) include 76% affirmations, 10% upgrades, 10% downgrades, and 4% new issuers.
 - About 28% of the rating changes YTD reflect revised criteria released on March 19, 2018.
 - Total of 279 rating actions YTD.
- Average credit quality:
 - Stand alone hospitals 'A-',
 - Health care systems 'A+',
 - Senior living 'A-'

Sample Credits

- Acute care providers: Academic medical centers, healthcare systems, standalone providers, children's hospitals, specialty hospitals, rural hospitals, hospital districts, multi-state health care systems, single market health care systems
- Continuing care retirement facilities (various models)

Economic Fundamentals: Stand-Alone Hospitals vs. Health Care Systems

Stand-alone Hospitals

Economic fundamentals are based on primary service area population and a preponderance of other considerations.

Examples

Positive economic considerations:

- Population growth
- Employment growth
- Per capita personal income growth
- Stabilizing institutional influence

Negative economic considerations:

- Population decline
- Employment decline
- Per capita personal income decline
- Heavy employment concentration in an individual sector

Health Care Systems

Health care systems are inherently less reliant on specific demographics. We assess economic fundamentals based on a macro assessment of economic characteristics vs. national trends.

Examples

Extremely Strong or Very Strong

- Operating in one or a few distinct markets with heavy demographic growth, particularly when the strengths of key markets offset the weak conditions in others.

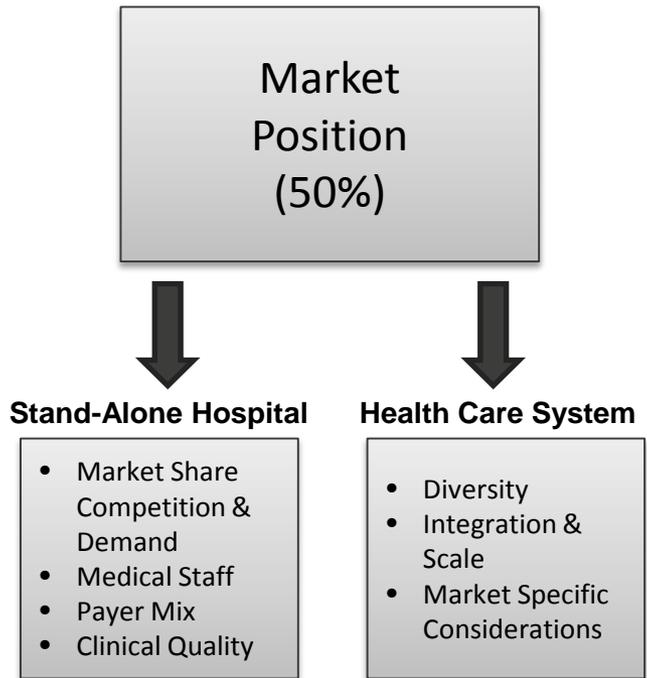
Strong or Adequate

- Operating in one or a few distinct markets with stable demographics, and the strengths of key markets offset the weak conditions in others.

Vulnerable or Highly Vulnerable

- Reliance on one or multiple service areas where overall economic characteristics are well below national trends or where declining trends are expected to continue.

Market Position: Stand-Alone Hospitals vs. Health Care Systems



Key considerations for evaluating a health care system's market position

Diversity

- Geographic footprint
- Sources of revenue
- Business line diversity

Integration & Scale

- Centralization of management, information technology strategy and key operational functions

Market Specific Considerations

- Market leadership
- Competitive dynamics
- Relationships with third-party payers
- Quality
- Physician integration

Market position credit factors for stand-alone hospitals are largely the same as the current criteria.

Outlook

2018 Stable outlook reflects healthy balance sheets and enterprise profiles

Balance sheets providing credit stability

- Unrestricted reserves remain robust given favorable investment markets
 - DCOH median grew slightly to 215 days' in '17 following slight decrease in '16
 - Other balance sheet metrics remain strong as easy debt access and moderate capital spending
 - For many credits, increasing reliance on non-operating income due to robust reserves
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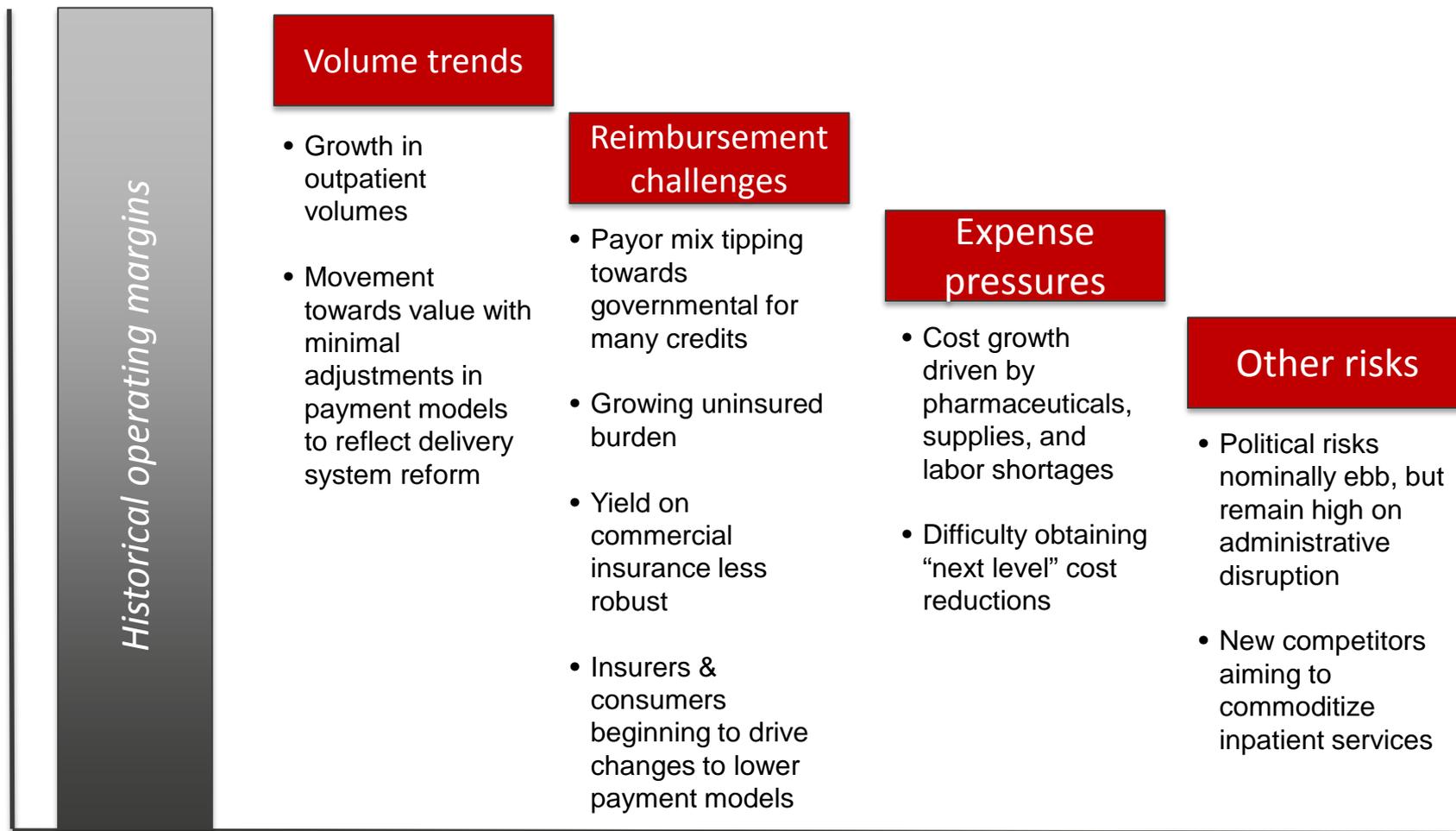
Enterprise profiles remain key credit strength

- M&A has often supported enhanced business positions in competitive markets
 - Business strength also supported by investments in ambulatory footprint, physician integration, and broadening patient reach
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Broad expectations of rating affirmations

- We believe many credits have considerable near-term flexibility to respond to industry challenges which we expect will continue into 2019 and beyond
- We expect affirmations to predominate through 2018 and into 2019, but the medium to longer term trend remains challenging in the face of operating margin pressure

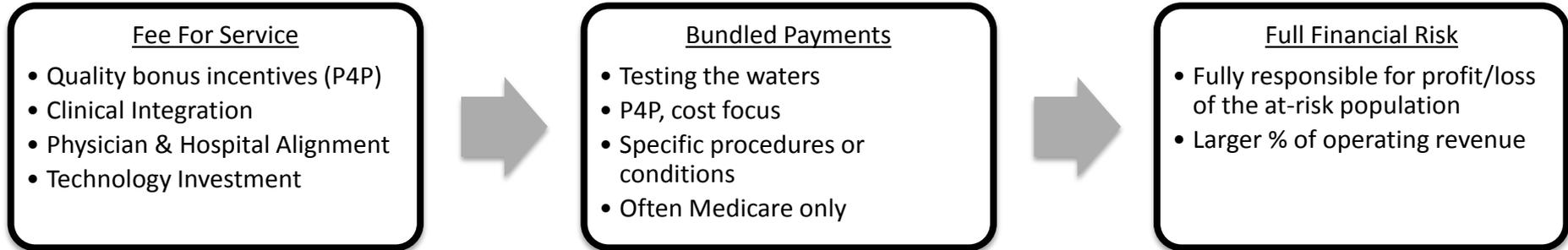
U.S. Not-for-Profit Acute Care Operating Pressures Mount



Margin pressures resulting in permanent focus on cost cutting and revenue enhancement

Hot Topics

Population Health Is Evolving At A Varied Pace:



Many markets are still overwhelmingly fee for service

- But are thinking of assuming more financial risk
- While operating margins may be maximized currently, your business may be more prone to disruption over time

Upside Potential and Downside Risk

- Often begins with upside potential only
- P4P and lower cost
- Requires larger sample of covered lives
- Often smaller % of overall operating revenue

Provider Sponsored Health Plan

- Full acquisition of multi-product health plan
- OR more gradual:
- Starts Medicare or Medicaid only
- Add employees
- Add other employers

Rating Agency Interests:

- Magnitude of risk (% of operating revenue at-risk)
- Profit or loss, by program or payor
- Strategies for growth
- Regulatory pressures through evolution



Mergers & Acquisitions:

- **M&A activity remains at a robust pace:**
 - Smaller more opportunistic M&A will continue - particularly in decentralized markets
 - Larger mergers will also continue, and will need to demonstrate the value proposition/benefit of the merger
- **Why merge:**
 - **Raising capital becomes to challenging under new tax law, and new competitors may be much larger with better access to capital (market cap for Amazon, CVS Aetna)**
 - Providers continue to seek size and scale (traditional cost savings & market clout), as well as diversity or expertise in different services (e.g., health plan, physician management);
 - Non-overlapping markets provided for cost savings without impacting volumes – part of widen the funnel strategy;
 - Expanding a geographic “footprint” for longer-term transition to population health management
 - There is a growing desire to acquire and partner on a national level
- **New observations:**
 - **Market disruption** with new entrants (Apple, Amazon, Optum, Aetna/CVS)
 - Have seen renewed push back from regulators, particularly in previously consolidated markets and/or where the participants cannot demonstrate the value proposition of the merger.
 - In some markets few unaffiliated partners remain, resulting in the next set of mergers with a higher likelihood to run into legal barriers;
- **Growth in affiliation strategies in lieu of full M&A and “non-trationals”:**
 - Joint ventures/joint operating agreements; clinical networks – often first step to something more permanent; management contracts – also often first step to something more permanent;
 - Affiliations with payers; urgent care/emergent care centers; “disruptive technology”

Appendix

Medians for MA & RI Credits

Seven-Year Comparison of Not-For-Profit Acute Care Overall Medians (Stand-Alone Hospitals and Healthcare Systems)

	2017	2016	2015	2014	2013	2012	2011
Sample Size	19	20	20	20	20	19	18
Statement of operations							
Net patient revenue (NPR; \$000)	990,809	936,463	909,319	894,216	807,582	756,442	713,043
Salaries & benefits/NPR (%)	66.3	67.3	66.9	66.4	65.6	64.8	62.6
Maximum annual debt service coverage (x)	2.7	2.7	3.0	3.0	2.6	2.9	2.7
Operating lease-adjusted coverage (x)*	2.0	2.0	2.2	2.2	2.1	2.3	2.2
Debt burden (%)	2.2	2.3	2.3	2.5	2.5	2.6	2.7
EBIDA (\$000)	84,788	83,320	82,543	66,120	65,394	82,137	70,453
Nonoperating revenue/total revenue (%)	1.3	1.0	1.9	1.5	1.4	1.4	0.9
EBIDA margin (%)	5.7	6.5	7.7	7.8	7.5	8.5	8.0
Operating EBIDA margin (%)	4.2	5.6	5.9	6.5	6.5	7.6	6.8
Operating margin (%)	(0.4)	(0.4)	0.6	0.7	1.4	1.9	2.1
Excess margin (%)	0.5	1.2	2.1	2.2	2.6	3.7	2.9
Capital expenditures/depr. & amort. exp. (%)	120.4	123.5	141.0	129.0	131.3	124.0	131.0
Balance sheet							
Average age of plant (years)	11.5	10.9	10.8	11.1	10.6	11.0	10.6
Cushion ratio (x)	17.6	17.1	16.6	17.0	15.7	15.4	12.7
Days' cash on hand	140.0	146.9	151.4	162.4	163.5	142.1	130.1
Days in accounts receivable	39.8	40.5	41.7	45.1	44.9	45.8	41.8
Cash flow/total liabilities (%)	9.6	8.4	10.8	11.0	11.8	11.5	11.4
Unrestricted Reserves (\$000)	466,139	416,037	401,451	407,195	375,650	287,663	229,628
Unrestricted reserves/long-term debt (%)	154.8	157.7	165.9	164.3	165.1	152.9	129.0
Unrestricted reserves/contingent liabilities (%)*	436.3	414.5	312.1	413.1	440.3	434.8	352.3
Contingent liabilities/long-term debt (%)*	19.1	19.7	28.4	23.9	29.4	36.8	28.8
Long-term debt/capitalization (%)	35.4	40.7	35.9	32.2	32.7	37.3	40.5
DB pension funded status (%)*	83.8	74.6	76.3	80.2	81.0	70.2	70.5
Pension-adjusted long-term debt/capitalization (%)*	42.5	44.5	39.4	37.6	35.3	40.2	42.5

*These five ratios are only for organizations that have defined-benefit (DB) pension plans, operating leases, or contingent liabilities. N.A.--not available.

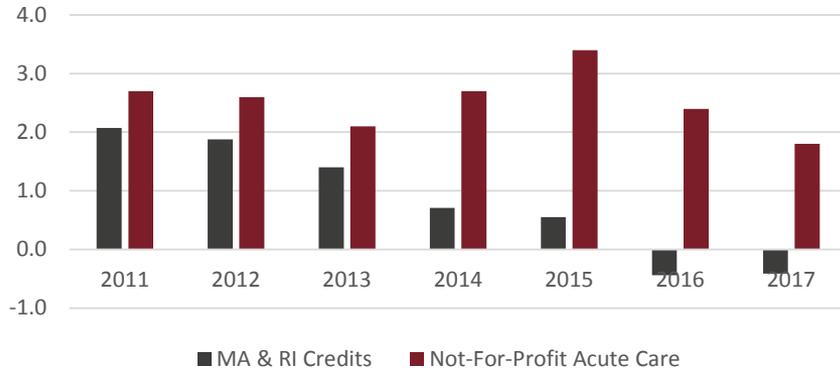
Ratings for MA & RI Credits

Current Ratings and Outlooks for Not-For-Profit Acute Care Credits		
Credit Name	Current Rating	Outlook
Lawrence General Hospital	BB+	STABLE
Milford Regional Medical Center (formerly Milford Whitinsville [MWRH])	BBB-	NEGATIVE
Lowell General Hospital - Circle Health*	BBB	STABLE
Berkshire Health System	A	STABLE
South Shore Health and Educational Corporation and Subs	A-	NEGATIVE
Tufts Medical Center*	BBB	STABLE
Cape Cod Healthcare Inc	A+	STABLE
Southcoast Health System Inc & Affiliates	BBB+	NEGATIVE
Boston Medical Center & Affiliates	BBB	STABLE
Dana-Farber Cancer Institute Inc & Subs	A	STABLE
Care New England Health System and Affiliates	BB-	DEVELOPING
Baystate Health System and Subsidiaries	A+	STABLE
Lifespan Corporation and Affiliates	BBB+	STABLE
Lahey Health System	A	STABLE
Children's Hospital & Medical Center of Boston & Subs	AA	STABLE
UMass Memorial Health Care Inc & Affiliates	BBB+	STABLE
CareGroup Inc & Subs	A-	DEVELOPING
Partners Healthcare System Inc & Affiliates	AA-	STABLE

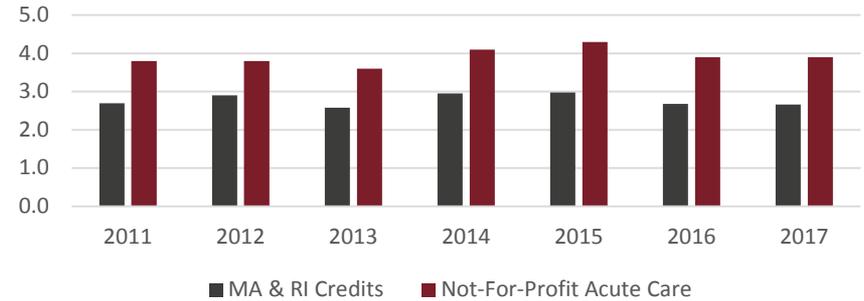
Above Rating and Outlooks listed are internally generated

MA & RI Medians Trends Compared With General Acute Care Sector

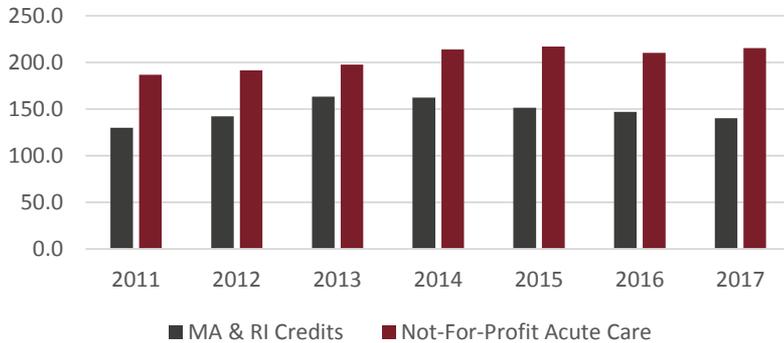
Operating Margin Medians (%)



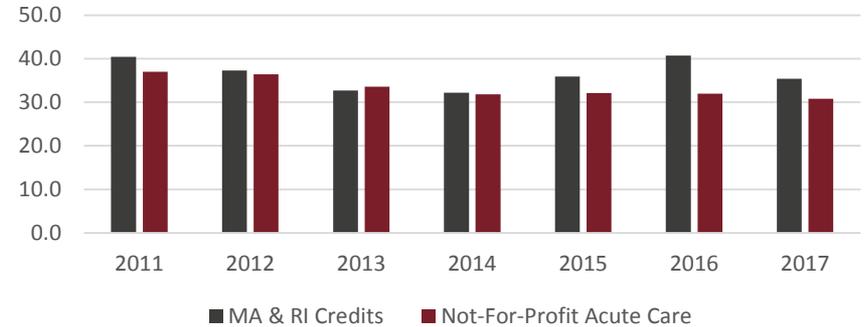
Maximum Annual Debt Service Coverage Medians (x)



Days Cash on Hand Medians



Long-term Debt/Capitalization Medians (%)



Thank you

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