



CREDIT OPINION

27 September 2018



Contacts

Daniel Steingart, CFA VP-Sr Credit Officer daniel.steingart@moodys.com	+1.949.429.5355
Lisa Goldstein Associate Managing Director lisa.goldstein@moodys.com	+1.212.553.4431

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Charlotte-Mecklenburg Hospital Auth., NC

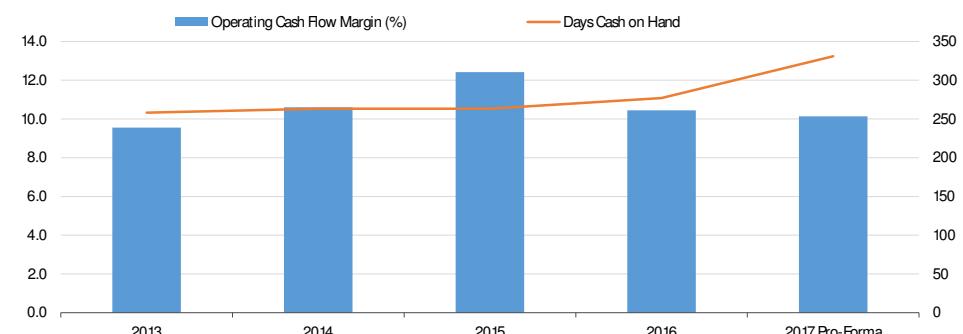
Update to credit analysis

Summary

Atrium Health's credit profile benefits from its large size and history of stable operating performance and cash flow. Although the organization will face some pressure as it integrates a relatively large merger (pending regulatory approval), we expect that it will ultimately integrate the new system without significant disruption to its financial performance and that Atrium Health will maintain margins at approximately current levels. We expect Atrium Health will pursue additional affiliations, mergers and acquisitions over the next several years, but that it will keep the pace of growth manageable and that it will continue to generate strong credit metrics including maintenance of a very strong balance sheet. Key challenges include a planned increase in capital spending and transition to a new Medicaid managed care model over the next several years.

Exhibit 1

Stable financial performance and favorable markets contribute to strong balance sheet



Source: Moody's Investors Service

Credit strengths

- » Large size of system with revenue diversity among several sizeable hospitals, including a children's hospital and academic medical center
- » Charlotte metro area population continues to grow, contributing to good organic patient volume and revenue growth
- » Regular capital spending can be supported through cash flow while continuing to add unrestricted liquidity to the balance sheet
- » Atrium Health has a built out IT system and has achieved the highest connectivity designation (HIMSS 7)

- » Long track-record of strong and stable operating performance and cash flow
- » Highly liquid balance sheet with approximately 92% of cash and investments liquid within a month

Credit challenges

- » Capital spending will grow significantly over the next several years, requiring Atrium Health to achieve targeted efficiencies in order to generate sufficient cash flow to maintain its strong credit profile
- » Pending approval for a merger, integration of Navicent will be Atrium Health's largest merger in many years; Navicent's financial performance is currently very weak following a problematic IT installation
- » Although growing, Charlotte (Atrium Health's largest market by a wide margin) is competitive and home to a large and well capitalized competitor
- » Atrium Health has a large amount of underlying variable rate debt and the 2018 plan of finance adds \$400 million in unhedged variable rate debt
- » North Carolina plans to transition to Medicaid managed care; Atrium Health is a co-owner in a managed care company, along with other major not-for-profit hospitals in the state, that will be applying to be one of several payors across North Carolina that take risk for patients covered under the program
- » Lawsuit questioning the legality of certain contracting provisions creates distraction, although no immediate financial liability
- » Large unfunded pension liability, although benefit accrual frozen effective January 2018 and the plan was frozen to new entrants in January 2014

Rating outlook

The stable outlook reflects our expectation that Atrium Health will maintain cash flow margins at approximately current levels and integrate a planned merger (subject to regulatory approval) with minimal disruption to financial performance.

Factors that could lead to an upgrade

- » Maintenance of cash flow margins at higher levels
- » Material growth in enterprise size and geographic diversification of cash flows

Factors that could lead to a downgrade

- » Prolonged period of lower cash flow margins
- » Significant increase in debt, or capital spending plans that require significant use of debt or balance sheet reserves
- » Expectation of prolonged period of acquisitive growth that dilutes margins or is likely to result in higher leverage

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Key indicators

Exhibit 2

CHARLOTTE-MECKLENBURG HOSPITAL AUTHORITY, NC

	2013	2014	2015	2016	2017 Pro-Forma
Operating Revenue (\$'000)	4,589,014	4,928,711	5,462,485	5,657,401	5,965,573
3 Year Operating Revenue CAGR (%)	10.9	10.3	9.5	7.2	6.6
Operating Cash Flow Margin (%)	9.6	10.6	12.4	10.4	10.1
PM: Medicare (%)	37.0	37.7	38.0	38.1	39.3
PM: Medicaid (%)	16.3	16.2	16.8	16.9	16.7
Days Cash on Hand	258	263	263	277	331
Unrestricted Cash and Investments to Total Debt (%)	158.2	172.2	185.8	213.8	224.8
Total Debt to Cash Flow (x)	3.0	2.6	2.2	2.3	2.6

Based on audits for The Charlotte-Mecklenburg Hospital Authority fiscal years ended December 31

Pension expense adjusted in years 2015 and beyond to reflect actual contributions to the plan. This adjustment decreased pension expense by \$4.1 million in 2015 and increased pension expense by \$13.8 million and \$21.9 million in 2016 and 2017, respectively.

2017 pro-forma reflects 2018 financings and includes \$400 million of additional debt and \$300 million reimbursement for prior capital expenditures.

Investment returns normalized at 6% prior to 2015, and at 5% in 2015 and beyond

Source: Moody's Investors Service

Profile

Atrium Health is headquartered in Charlotte, NC and owns or manages several dozen hospitals throughout the Carolinas. System hospitals include small community hospitals, large tertiary facilities, a children's hospital and a cancer hospital. Atrium Health also employs over 1,500 physicians. Atrium Health is the d/b/a name for Charlotte-Mecklenburg Hospital Authority. It was previously known as Carolinas HealthCare System.

Detailed credit considerations

Market position: stable and strong market position in Charlotte area; expansion to Georgia anticipated

Atrium Health will maintain a very strong market position in its primary market in the Charlotte metro area and throughout the region. Market share in the Charlotte region is approximately 50% with the primary competitor, Novant Health (A1 positive) picking up most of the balance; market share is largely stable between Atrium Health and Novant Health, although there are modest year to year fluctuations.

Atrium Health offers a full range of services in the Charlotte metro area, including a children's hospital and cancer institute with over 25 locations, and has a large number of employed physicians and network access points throughout the region.

Over the last decade-plus, Atrium Health has pursued an academic-like model that has had a positive impact on physician recruitment, program development and patient retention. Atrium Health is not the principal research or teaching institution for a school of medicine, but the organization engages in a significant amount of research and has recruited well known physicians and researchers, particularly to its flagship hospital in Charlotte, Carolinas Medical Center. These physicians, many of whom come from nationally recognized academic medical centers, will continue to elevate the prestige of CMC and Atrium Health as a whole, in turn contributing to physician recruitment and the ability to retain and treat higher acuity patients. Atrium Health does not subsidize research activities to the same extent as many well-known academic medical centers.

We expect Atrium Health to pursue a variety of growth opportunities in the Carolinas and the southeast regional generally. Pending regulatory approval, Atrium Health plans to merge with Navicent Health (formerly known as Central Georgia Health System) in Macon, GA in late 2018 or early 2019. Although Atrium Health does not currently have other mergers pending, we expect the system will pursue other opportunities in the southeast. Atrium Health has historically offered a variety of partnership opportunities to potential hospital affiliates, ranging from management services to outright acquisitions and we do not expect Atrium Health will change this approach.

The Navicent merger is Atrium Health's largest in years and given the magnitude of losses at Navicent in fiscal 2017, the merger will present some challenges to improving financial performance and realizing synergies. Following a difficult electronic medical record and

related revenue cycle installations, Navicent's financial performance remains very weak; its balance sheet measures, however are very strong. Were Navicent to be included in Atrium Health's results today, it would reduce Atrium Health's operating cash flow margin by 2 – 3 percentage points. However, Navicent is demonstrating improved financials in fiscal 2018 and we expect Navicent to continue improving. Navicent is much smaller than Atrium Health and will increase Atrium Health's revenue base by about 13%.

In 2019, North Carolina will transition to a Medicaid managed care program. Atrium Health and eleven other major not-for-profit hospitals in North Carolina have partnered with Presbyterian Health Services, NM (Aa3 stable) to create an insurance company to contract with the state and take risk on some of the Medicaid patients. This will introduce some financial risk, although we note that Presbyterian has a long and successful track-record in insurance which may help smooth the transition to the new model. The not-for-profit sponsored managed care company is applying to be one of several operating the new Medicaid managed care model. Initially, payment rates to providers will not change significantly as the state plans to establish rate floors that equal current fee for service payments for the first three years of managed care; beyond that period Atrium Health will be required to negotiate rate terms with individual payors. In subsequent years Atrium Health will likely need to increase its Medicaid market share in order to maintain absolute Medicaid reimbursement at current levels, given likely actions by payors to manage care and reduce utilization among the Medicaid population.

Operating performance, balance Sheet, and capital plans: long track record of good financial performance expected to continue; capital spending to rise

Atrium Health's financial performance is strong and stable. Although we expect that margins may temporarily weaken following the Navicent merger, we expect Atrium Health to continue generating cash flow margins at about current levels over the next several years. The organization is implementing a variety of efficiency and cost reduction strategies in order to maintain margins despite industry headwinds with regard to revenue pressure from most payor sources and rising labor and supply expenses. Through six months fiscal 2018, Atrium Health is ahead of budget and in line with YTD fiscal 2017 with an operating cash flow margin of 11.1% (margin is based on the obligated group only and does not reflect Moody's adjustments for GASB 68).

Capital spending will rise, totaling over \$3 billion over the next five years as Atrium Health pursues a variety of strategic investments. Many investments will focus on expanding capacity and upgrading facilities at the flagship Carolinas Medical Center in Charlotte.

LIQUIDITY

Atrium Health's liquidity is very strong with over 300 days cash on hand and we expect liquidity to remain above 300 days for the next several years. Investments are diversified among managers with an asset allocation that is typical of large systems with some exposure to hedge funds, private equity and other less liquid investments.

Debt structure and legal covenants: manageable debt load; diversity of debt types and counterparties

After falling for several years, the 2018 financings will return Atrium Health to a more normal leverage position with about 37% debt to revenue. The 2018 financings will also introduce more unhedged variable rate debt. Additionally, Atrium Health will increase its commercial paper program to \$400 million from the current \$200 million for cash flow management purposes.

DEBT STRUCTURE

On a pro-forma basis, underlying debt is 53% variable and 47% fixed; after giving effect to swaps, debt is 20% variable and 80% fixed. Pro-forma product mix is the following: traditional fixed rate: 44%; direct placement: 21%; SBPA backed: 12%; self-liquidity: approximately 6%; floating rate notes: 4.5%; LOC backed: 3.5%; with the remainder in other forms of debt. The amount of commercial paper can flex up to \$400 million so the share of self-liquidity and relative proportions of other debt will fluctuate, but should be roughly consistent with these percentages at year end.

Atrium Health has liquidity facilities with two different banks supporting tender features on its variable rate debt. On a pro-forma basis, inclusive of planned financings later in 2018, Atrium Health will have four series of debt backed by SBPA's from JP Morgan and one series of debt back by an LOC from TD Bank. Atrium Health actively manages and staggers renewal dates with the nearest expiration in November 2020.

Atrium Health maintains a taxable commercial paper program; the authorized amount will be increased to \$400 million from the current \$200 million to accommodate greater cash flow management needs throughout the year. Maturities are limited to \$50 million

over a five day period. Balances outstanding have fluctuated with as much as \$200 million outstanding over the last twelve months; there was \$30 million outstanding at FYE 2017 and at August 31, 2018. As of August 31, 2018, Atrium Health had \$446 million in discounted daily liquidity, providing good coverage of 8.9x of the \$50 million in commercial paper that can mature in any five day period; after excluding the largest money market fund, coverage of the \$50 million is still robust at 5.6x. Atrium Health's daily assets are comprised of two money market funds, and a variety of US Treasury and agency securities.

DEBT-RELATED DERIVATIVES

Atrium Health has fourteen fixed payer swaps under six swap agreements with a total notional amount of approximately \$700 million at 12/31/17 under which Atrium Health makes fixed rate payments and receives floating rate payments based on SIFMA and LIBOR. At 12/31/17, Atrium Health's swap portfolio had a mark-to-market liability of \$220 million. Collateral posting thresholds vary from \$25 million - \$50 million and are measured against each swap agreement, not the entire portfolio. No collateral posting is required unless Atrium Health's rating is A2/A or lower, and a portion of the swaps have a further condition, only requiring collateral posting if the insurer's rating also falls below Baa1/BBB+. Atrium Health is not required to post any swap collateral at this time and has not had to since the swap agreements were put in place.

PENSIONS AND OPEB

Atrium Health maintains a defined benefit pension plan which is frozen to all employees, effective 1/1/18 (previously it had only been frozen to new employees hired after 1/1/14). Using GASB accounting, the plan was approximately 75% funded at FYE 2017. If the plan were accounted for using FASB standards and a lower discount rate, the unfunded liability would be much higher. Actuarially determined contributions have ranged from \$81 million to \$92 million over the last three years and Atrium Health has consistently contributed 100% of the required annual pension cost to the plan. In addition to its annual contributions, Atrium Health has made additional contributions over the last three years.

Management and governance

A new CFO began in 2018 following retirement of Atrium Health's long serving CFO. The new CFO has prior experience as CFO of a large public and academic health system. The CEO began in 2016, also following retirement of Atrium Health's long serving CEO. Under the new CEO's direction, Atrium Health revisited and updated certain elements of the organization's governance, vision, and goals including a name change to Atrium Health, reflecting the organization's goal to serve communities outside the Carolinas.

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