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# VALCON 2018

## **Distressed Higher Ed and Health Care Topics in Valuation**

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## ABI VALCON 2018

**Distressed Higher Ed and Health Care Topics in Valuation:**  
Higher Education Funding, Financing, and Asset Monetization

May 18, 2018



RBC Capital Markets



### Key trends in higher education in 2018: excellence, access, affordability, and completion

*Sources: National Center for Education Statistics, EAB, JLL, Association of Governing Boards, Campus Computing Survey, Gartner Group, Forbes*

#### 1. Age and a focus on adult learners

- In 2015, more than 40% of post-secondary students were over 25; improvements that benefit the adult learner population are likely to benefit all students.

#### 2. The blending of for-profit and not-for-profit providers

- Collaboration and affiliation (see later pages as it relates to value); PROSPER Act will make it easier for alternative programs to receive Federal funding.

#### 3. US higher education as a top international export

- 2017 saw a decline in international students and a rise in expansion of American universities into other countries -> rise of the micro-campus.

#### 4. Re-imagining physical campus space

- As teaching delivery models have evolved, so has use of space -> smaller, more collaborative physical spaces and use of remote collaboration and connection.

#### 5. More unbundling and microcredentialing

- Students are "no longer buying that whole college experience." (Jim Hundrieser, Association of Governing Boards); think Napster, Apple and Spotify vs. the Album.

#### 6. Focus on technology and, especially, mobile apps

- Classes and class material were the first forays into the new media; now higher education institutions are reimagining the campus via mobile apps.

#### 7. Data, quality metrics, and cybersecurity

- Accountability shouldn't start and end with for-profit institutions; should outcomes be measured (and funding provided) as absolutes or relative to distance travelled? Additionally, increasing requirements around data protection combined with the desire to reduce expense is driving rapid adoption of next generation technologies.

#### 8. Completion

- Drop rates approach 50% at four year institutions and 80% at many two year colleges; completion leads to better debt repayment and higher job placement.

#### 9. Mergers & Acquisitions

- As demographics shift, not every institution can (or should!) be saved; as micro-campuses are on the list of hot trends, so too is consolidation.

So many interesting topics but this presentation will focus on funding, financing, and asset monetization...

It is expensive to pursue higher education and the expense outpaces inflation year after year...

Average Estimated Full-Time Undergraduate Budgets (Enrollment-Weighted) by Sector, 2017-18



Average Published Tuition and Fees by Sector, 1987-88 to 2017-18 ('17 dollars)



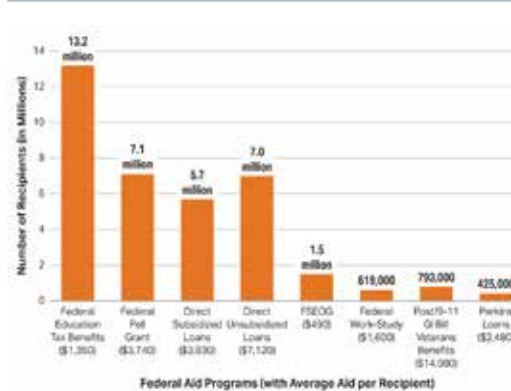
Source: The College Board, Trends in Student Aid 2017

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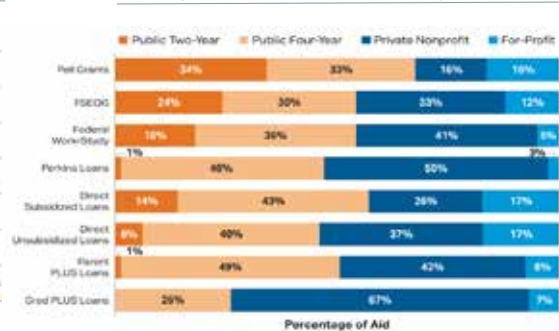
Higher Education: RBC Capital Markets and CR3 Partners

To make ends meet, 60% of students receive aid for higher ed whether 2 or 4 year, private or public

Number of Recipients by Federal Program (with Avg Aid Received), 2016-17



Percentage Distribution of Federal Aid Funds by Sector, 2015-16



Borrowers and Graduates: % with Debt

|         | Percentage with Debt | Average Debt per Borrower | Average Debt per Graduate |
|---------|----------------------|---------------------------|---------------------------|
| 2000-01 | 56%                  | \$22,100                  | \$12,300                  |
| 2005-06 | 58%                  | \$24,400                  | \$14,200                  |
| 2010-11 | 60%                  | \$26,400                  | \$15,800                  |
| 2015-16 | 60%                  | \$28,400                  | \$16,900                  |

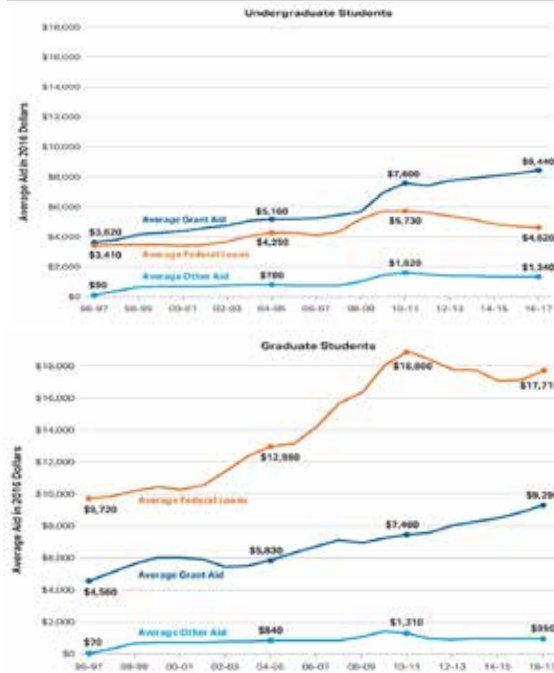
Source: The College Board, Trends in Student Aid 2017

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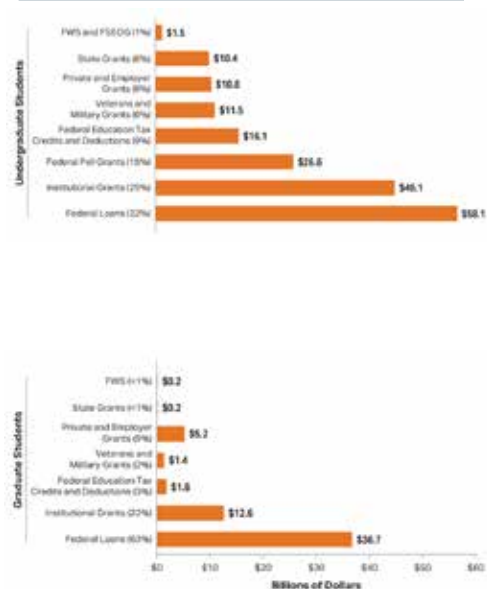
Higher Education: RBC Capital Markets and CR3 Partners

Federal Aid dollars remain, by far, the largest funding source for all students (Fed loans + Pell grants)

Average Aid per Full-Time Equivalent (FTE) Student ('96-'17, in '16 \$\$)



Student Aid by Source and Type 2016-17 (\$ in B's)



Source: The College Board, Trends in Student Aid 2017

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Leverage has increased as institutions have expanded infrastructure to attract students...

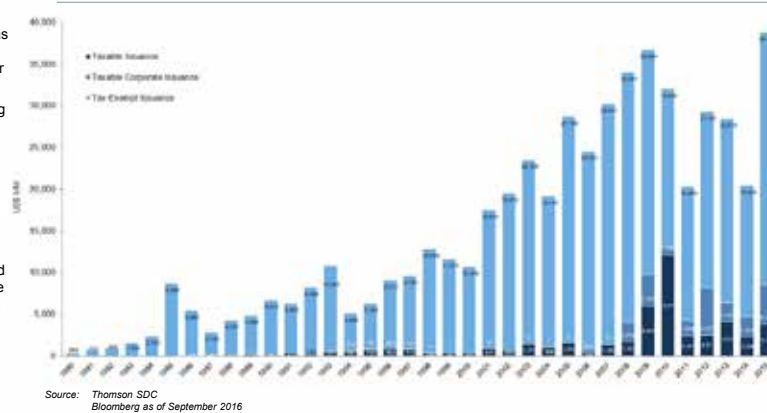
## Higher Education Trends

- Leverage has increased substantially across the higher education spectrum, as institutions have financed capital improvements in an effort to compete for student enrollment
- Considerations related to Title IV funding have placed pressure on for-profit institutions, and have resulted in similar market demand for degrees with high completion rates and identifiable employment prospects

## Financing Trends

- P3 Partnerships, Asset Monetization and Affiliations / Mergers are becoming more prevalent in the higher education sector, as institutions seek to deleverage their balance sheets
- New parties – including international education institutions and private equity firms – are seeking to work with U.S. higher education institutions

## Higher Education Taxable and Tax-Exempt Issuance 1980 to Present



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Higher Education: RBC Capital Markets and CR3 Partners

...and declining enrollment and price sensitivity have impacted the sector

| Higher Education Institutions and Interested Parties   |   |
|--|---|
| <b>Top Tier Institutions</b> <ul style="list-style-type: none"> <li>Leading Public and Private Institutions have trended towards corporate funding structures, with taxable bullet maturities and internal banks</li> <li>Flagship and Second Tier public institutions are seeking to monetize non-core, non-academic assets to expand</li> </ul>                                      | <b>Leading Public and Private</b> <ul style="list-style-type: none"> <li>Limited incentive to monetize assets</li> <li>Substantial debt capacity and endowments</li> <li>Taxable Corporate IG Issuance and Internal Banks</li> </ul>                              |
|  | <b>Flagship and Second Tier</b> <ul style="list-style-type: none"> <li>P3 agreements to leverage operating efficiency</li> <li>Incentivised to monetize assets to expand unrestricted endowment</li> </ul>  |
| <b>Middle Tier and Lower Tier</b> <ul style="list-style-type: none"> <li>Enrollment remains challenged</li> <li>State funding continues to erode for public institutions</li> <li>Smaller private institutions, particularly in geographically disadvantaged areas, are facing default or closure</li> </ul>   | <b>Third Tier Public</b> <ul style="list-style-type: none"> <li>Reductions in state support for higher education continue</li> <li>Spinoff of non-academic assets or academic medical centers</li> </ul>  |
|  | <b>Third Tier Private</b> <ul style="list-style-type: none"> <li>Institutions are enrollment challenged, with limited endowments and a lack of revenue diversity</li> <li>These institutions are contemplating affiliation, merger or closure</li> </ul>          |
| <b>Other Interested Parties</b> <ul style="list-style-type: none"> <li>Despite the challenges faced by higher education institutions, the value of a US accredited degree remains high</li> <li>For-profit domestic and international institutions are seeking to capitalize on this value</li> <li>Regulatory pressures have increased the advantages of tax-exempt status</li> </ul> | <b>For Profit</b> <ul style="list-style-type: none"> <li>For profit institutions face pressure from the US DOE for both gainful employment outcomes and Title IV fund use</li> <li>For profit institutions are seeking to convert to non profit status</li> </ul> |
|  | <b>International</b> <ul style="list-style-type: none"> <li>Non-US International Institutions are seeking to expand and affiliate within the United States</li> <li>Many are family-held, with enrollment management capabilities</li> </ul>                      |
|  | <b>Private Equity and Education Investors</b> <ul style="list-style-type: none"> <li>Asset, energy and real estate funds are seeking Infrastructure investments</li> <li>Private Equity firms seek to deploy portfolio company approaches</li> </ul>              |

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## Higher education institutions face challenges from changing demographics and demand

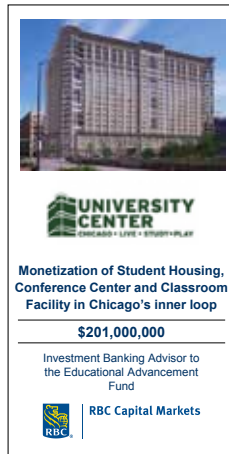
Higher Education institutions lack bankruptcy as recourse for reorganization, as bankruptcy eliminates an institution's ability to access Title IV funding

- The majority of U.S. higher education students rely on this form of government backed student aid as the lowest cost form of funding tradition
- While demand for higher education remains strong, the type of demand (i.e. distance learning) has diversified away from traditional, four year residential colleges
- Many institutions have responded, not by diversifying programs, but by utilizing leverage to expand physical infrastructure to compete for a shrinking pool of students
- Without bankruptcy as an alternative, reorganizing may take three forms:
  - Monetization of infrastructure or non-core assets to reduce leverage and recapitalize an institution's balance sheet
  - Merger or affiliation, for the purpose of geographic or programmatic diversity, which drives revenue
  - Improving the revenue cycle to ensure maximum efficiency in the receipt of student aid
- In the non-profit space, a variety of regulatory and governmental structures make exercising strategic alternatives 1 and 2 challenging.

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## Monetization of non-core infrastructure provides liquidity to academic institutions



### Transaction Highlights

- On July 20, 2017, RBCCM completed a unique investment banking / strategic advisory assignment for the Educational Advancement Fund (the "EAF") – a non-profit organization jointly created by **DePaul University, Roosevelt University** and **Columbia College Chicago** for the purpose of financing, constructing, operating and maintaining the University Center Chicago (the "UCC")
  - UCC is a ~1,700 bed student housing, conference and retail facility in Chicago's inner loop, established for the purpose of housing students from the three academic institutions and advancing their educational mission
  - The UCC was financed with \$151 million in tax-exempt bonds in 2002 (ratings of Baa2 Moody's / BBB Fitch), which were subsequently restructured in 2006, and were outstanding in the amount of \$126.725 million and currently callable
- RBCCM conducted extensive valuation analysis of the asset and recommended pursuing the sale process through which the UCC will be monetized through sale to a qualified investment party
  - RBCCM is serving as advisor to the Educational Advancement Fund, in partnership with the broker CB Richard Ellis
- In the concession, member institutions of the EAF have entered into master lease agreements for a defined number of beds, with a predetermined rate of rent increase, in exchange for the purchase price of the UCC
- Purchase price will be netted against the outstanding debt, resulting in distributions to the member institutions to enhance their educational mission
  - In the dissolution of the debt, certain reserve funds in excess of \$20 million will also be released back to the member institutions
  - Distributions to member institutions will be utilized to reduce deferred maintenance on other campus facilities, as well as for academic programming, research and student scholarships
- RBCCM's engagement included an analysis of the underlying bond documents, covenants and market conditions to determine the viability of a sale and debt defeasance, detailed work with the three member institutions to determine their objectives in a sale and participation in an ongoing master lease, preparation of offering documents and negotiations with potential counterparties
- The transaction closed July 20, 2017, with a sale price of \$201 million paid to the Educational Advancement Fund

## Affiliations or mergers may serve as a last resort to preserve an institution's value

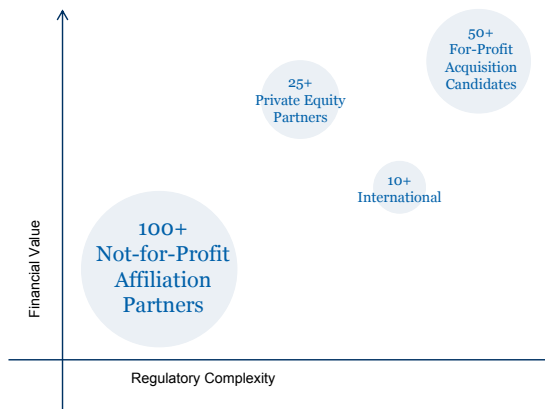
### Selecting a partner requires a comprehensive process

- Higher education affiliations has shown that each proposed solution is unique, and highly dependent on the counterparty to the affiliation
- There is no single template for the consideration given in an affiliation transaction
- Translating what partnership objectives and transaction drivers are most important to both parties requires a broad survey of the market

### Transaction Considerations

- Generally, non-profit affiliations provide the greatest regulatory certainty, but the lowest transaction "value" in monetary terms
- Academic institutions can organically grow new programs without acquisition, and have more limited debt capacity
- The greatest urgency exists in the for-profit sector, which is undergoing transformational change and needs immediate relief to pressing regulatory problems
- For this reason, for-profit institutions will offer the greatest transaction value – but face a challenging legal and regulatory environment
- Private equity and international entities, while a smaller segment of the market, provide greater value and a less stringent regulatory pathway

### Affiliation Partners and Transaction Drivers



A comprehensive process will yield multiple Memorandums of Understanding for consideration

## Addressing Distressed Healthcare Valuation in the 2018 U.S Regulatory Environment

VALCON 2018: Cutting-Edge Valuation Solutions  
May 18, 2018

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## What's Causing Hospital Financial Distress Today?



### Current Healthcare Headwinds

Headwinds impacting Hospital financial and operational success:

#### Reimbursement

- Value based care / reimbursement
- Population health management
- Loss of DSH payments
- Narrow networks

#### Demographic/Socioeconomic

- Migration from inpatient services to outpatient services
- "Graying" of the US population
- Skilled workforce shortage
- Industry consolidation

#### Regulatory

- Tax reform
- MACRA
- Medicare Advantage
- Drug pricing (340B)
- State Medicaid waivers
- IT investments

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## What's Causing Hospital Financial Distress Today?

### Reimbursement Headwinds

| Headwind                                     | Description   | Financial Statement Impact  |
|--|---|---|
| Value Based Care (VBC) / Reimbursement (VBR) | <ul style="list-style-type: none"> <li>• VBR models have become increasingly popular in recent years which is shifting more responsibility to providers to control costs and improve quality</li> <li>• VBC models also incentivize providers to adopt/improve electronic health records which could be a strain for distressed hospitals</li> </ul>  | <ul style="list-style-type: none"> <li>• Positive for HCP that can deliver high quality, low cost care</li> <li>• Negative for providers that struggle to contain cost or achieve high quality care</li> </ul>                  |
| Population Health Management (PHM)           | <ul style="list-style-type: none"> <li>• PHM seeks to improve the health outcomes of a group by monitoring and identifying individual patients within that group.</li> <li>• PHM programs use a business intelligence (BI) tool to aggregate data and provide a comprehensive clinical picture of each patient. Using that data, providers can track, and hopefully improve, clinical outcomes while lowering costs.</li> </ul> | <ul style="list-style-type: none"> <li>• Positive for providers who successfully leverage PHM with VBR contracts</li> <li>• Negative for providers who lack VBR contracts or invest in but fail to utilize PHM tools</li> </ul> |
| Loss of DSH Payments                         | <ul style="list-style-type: none"> <li>• PPACA reduced DSH payments.</li> <li>• Medicaid expansion and health insurance exchange growth has not fully offset the loss of DSH payments</li> </ul>  | <ul style="list-style-type: none"> <li>• Neutral for providers not receiving DSH payments</li> <li>• Negative for providers receiving DSH payments</li> </ul>   |
| Narrow Networks                              | <ul style="list-style-type: none"> <li>• The Affordable Care Act has increased the interest in "narrow networks" by health plans</li> <li>• Health plans with "narrow networks" are including fewer in-network providers to target volumes and contain costs</li> </ul>   | <ul style="list-style-type: none"> <li>• Positive for providers included in narrow networks</li> <li>• Negative for providers excluded from narrow networks</li> </ul>  |

Sources: "What is Value-Based Healthcare?" NEJM Catalyst, Massachusetts Medical Society, 1/1/17, <https://catalyst.nejm.org/what-is-value-based-healthcare/> (Accessed 3/30/18); "What is population health management?" Phillips, 2018, <https://www.wellcentive.com/what-is-population-health-management/> (Accessed 3/30/2018)

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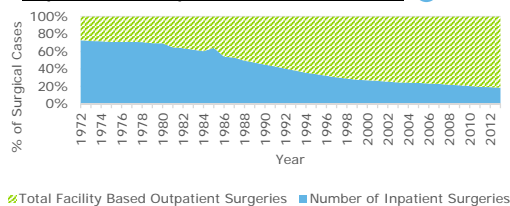
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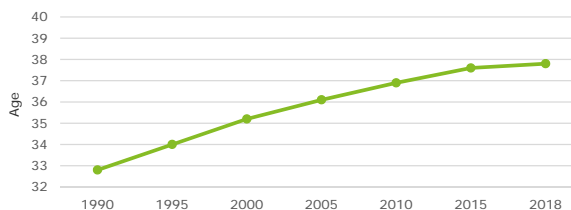
## What's Causing Hospital Financial Distress Today?

Demographic and Socioeconomic Headwinds

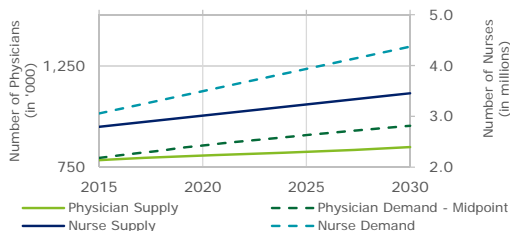
### Inpatient/Outpatient Volume Shift ①



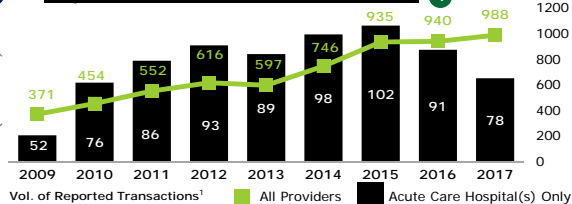
### "Graying of the Population" – US Median Age ②



### Projected Physician & Nurse Shortage - 2030 ③



### Reported Healthcare Transactions ④



#### Observations

- ① Volumes shifting to outpatient services requires the repurposing of resources potentially increasing reimbursement pressure
- ② Aging population creates an increased demand for medical services and shifts payor mixes towards lower reimbursing government payors
- ③ The demand for physicians and nurses is outpacing supply putting a strain on providers to service more patients with less work staff
- ④ The consolidation of hospitals pressures independent hospitals and smaller health systems as larger systems benefit from economies of scale

Sources are listed in the appendix  
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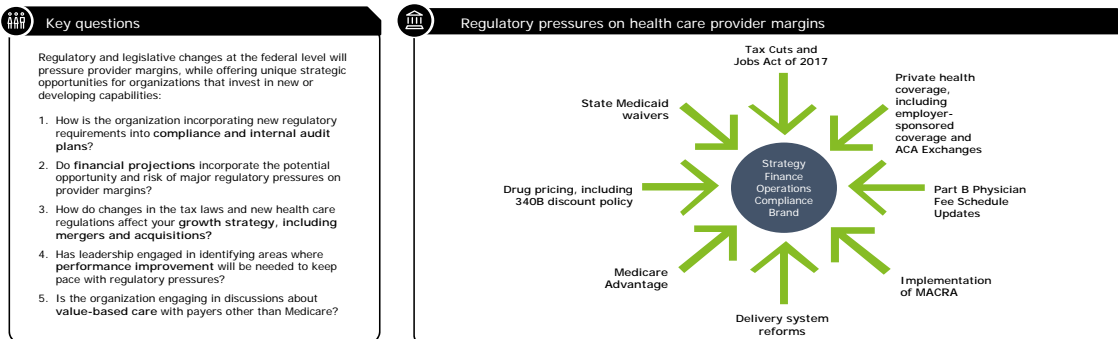
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## What's Causing Hospital Financial Distress Today?

Regulatory Headwinds

The 2018 health care legislative and regulatory agenda: Strategic business risks and opportunities



| Highlights of key regulatory drivers affecting provider margins  |  |   |  |   |   |   |   |
|--|--|---|--|---|---|---|---|
| Tax Cuts and Jobs Act  | Private health coverage  | Physician fee schedule  | MACRA  | Delivery system reform  | Medicare Advantage  | Drug pricing, including 340B  | State Medicaid waivers  |
| <ul style="list-style-type: none"> <li>The December 2017 tax law nullified penalties under the Affordable Care Act's (ACA) individual mandate and enacted other policies that could require non-profit health care providers to re-evaluate executive compensation and tracking of unrelated business income (UBI). Provisions of the law also could affect the cost of borrowing for health care stakeholders in some circumstances.</li> </ul> | <ul style="list-style-type: none"> <li>Regulatory changes under consideration could expand the availability of health coverage options that would not be subject to certain ACA benefit requirements. The changes under consideration are in response to an executive order aimed at expanding access to lower-premium health coverage options.</li> </ul> | <ul style="list-style-type: none"> <li>The Medicare Part B physician fee schedule will increase by 0.5% in 2018 and by 0.25% in 2019. Then, from 2020 through 2025, the physician fee schedule essentially will be frozen as updates are set at 0% over the six-year period.</li> </ul> | <ul style="list-style-type: none"> <li>Implementation of the Medicare Access and CHIP Reauthorization Act (MACRA) continues, including several technical corrections enacted in February 2018. Providers face new considerations in 2018 as the cost measure under the Merit-based Incentive Payment System (MIPS) takes effect for the first time and as they prepare for the first performance year under MACRA's All-Payer Combination Option in 2019.</li> </ul> | <ul style="list-style-type: none"> <li>CMS in January 2018 released the Bundled Payments for Care Improvement (BPCI)-Advanced model, the first advanced Alternative Payment Model (APM) under MACRA released under the Trump Administration. The move follows the cancellation of mandatory cardiac and orthopedic bundled payment models and the reduction of the number of regions where knee and hip replacement (CJR) bundles will be mandatory.</li> </ul> | <ul style="list-style-type: none"> <li>CMS has outlined policies that would allow Medicare Advantage (MA) organizations to offer more plans in a market area, while also allowing MA plans to reduce cost sharing for certain health care providers for Part B drugs. The proposals come after CMS in November 2017 finalized a change in policy that will reduce payments for Part B drugs purchased under the 340B program by 28.5%.</li> </ul> | <ul style="list-style-type: none"> <li>The President's budget includes a list of proposals aimed at reducing prescription drug costs, including policies that in some cases would reduce Medicare payments to health care providers for Part B drugs. The proposals come after CMS in November 2017 finalized a change in policy that will reduce payments for Part B drugs purchased under the 340B program by 28.5%.</li> </ul> | <ul style="list-style-type: none"> <li>In recent months, CMS has approved state waivers that eliminate retroactive coverage for Medicaid beneficiaries, allow states to expand Medicaid coverage to eligibility levels lower than those included in the ACA, and includes work/community engagement requirements as a condition of enrollment for certain populations.</li> </ul> |

Source: Deloitte Risk and Financial Advisory Regulatory Services for Life Sciences and Health Care

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## How to Value Distressed Hospitals?

| Approach | Description   | Advantages / Disadvantages  |
|----------|---|---|
| Income   | The value of an asset or business equals the present value of the future earnings that are available for distribution to the investors in that asset or business. This is typically prepared with a discounted cash flow analysis, where cash flows are forecasted to a certain period then discounted back to a present value. | <b>Advantages:</b> captures the underlying fundamental drivers of a business; not heavily influenced by temporary market conditions<br><b>Disadvantages:</b> sensitive to valuation assumptions; requires forecasting future performance which is subjective and can be difficult. Cant be performed on business without cash flow. |
| Market   | The value of a business is estimated by compiling and analyzing data with respect to actual market transactions of similar businesses (guideline transaction method) or comparable public company pricing data (guideline public company method).   | <b>Advantages:</b> straightforward, simple calculations; uses market data and doesn't rely on subjective forecasts<br><b>Disadvantages:</b> comparable transactions may not be readily available; no two companies are exactly alike  |
| Cost     | The value of a business is estimated based on the cost to reproduce or replace its assets with others of like utility. The cost of reproduction is based upon the cost to reproduce a near replica of the existing asset, whereas replacement cost new is based upon the replacement of the asset with one of similar utility.  | <b>Advantages:</b> data required is usually readily available; suitable for companies with heavy tangible assets<br><b>Disadvantages:</b> potential difficulty in determining the asset values to use; ignores intangible and non-balance sheet assets; does not take into account future changes in earnings                       |

Source: "Understanding Business Valuation: A Practical Guide to Valuing Small to Medium Sized Businesses," Gary Trugman, American Institute of Certified Public Accountants, Third Edition, 2008, p. 23-26.  
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## How to Value Distressed Hospitals?

| Approach | Application to Healthy Hospital Asset Valuations   | Application to Distressed Hospital Asset Valuations   |
|----------|--|---|
| Income   | <ul style="list-style-type: none"> <li>Projections typically reflect business "as is" with achievable management targets</li> <li>Working capital is sufficient to fund current operations</li> <li>Discount rates reflect "normal" risk and may range from 7% to 13%</li> <li>Typically able to fund routine capital expenditures with cash flow from operations and contribute to unrestricted reserves</li> </ul> | <ul style="list-style-type: none"> <li>Projections may include turnaround plans reflective of stretch goals</li> <li>Working capital may be deficient and need to be "topped off"</li> <li>Discount rates reflect increased risk and may be above 15%</li> <li>May have historically underinvested in capital expenditures, have aging plant &amp; equipment, and drawing down unrestricted reserves</li> </ul> |
| Market   | <ul style="list-style-type: none"> <li>Guideline public companies comparable to the subject company likely exist</li> <li>Guideline transactions of companies with similar size, profitability, and scope likely exist</li> </ul>  | <ul style="list-style-type: none"> <li>Guideline public companies comparable to the subject company <u>do not</u> likely exist</li> <li>Guideline transactions of companies with similar size, profitability, and scope likely exist</li> </ul>   |
| Cost     | <ul style="list-style-type: none"> <li>To the extent <u>asset synergies</u> are appropriately quantified, the cost approach may result in reasonable valuation indications</li> </ul>  | <ul style="list-style-type: none"> <li>To the extent <u>economic obsolescence</u> is appropriately quantified, the cost approach may result in reasonable valuation indications</li> <li>Hospitals tend to be single use assets, with remediation and restoration costs potentially exceeding the value of the real estate</li> </ul>   |

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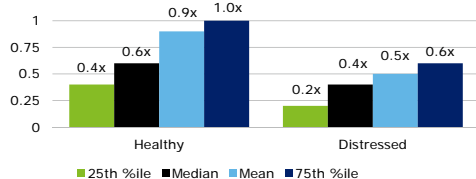
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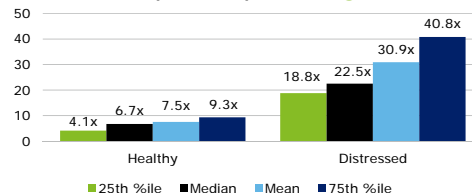
## How to Value Distressed Hospitals?

Illustrative Transaction Multiples and Financial Statistics

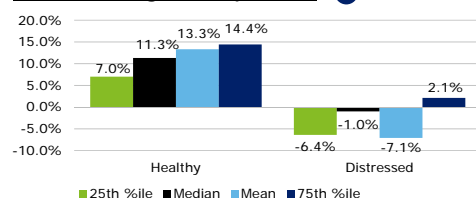
### Revenue Multiple Comparison ①



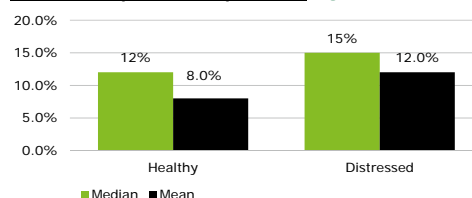
### EBITDA Multiple Comparison ②



### EBITDA Margin Comparison ③



### Cost of Capital Comparison ④



Source: Irving Levin Associates Health Care M&A Quarterly Reports 2015-2017

#### Observations

- ① Healthy hospitals typically command higher price to revenue multiples than distressed hospitals
- ② EBITDA multiples spike for distressed transactions due to the target hospitals having little or negative EBITDA
- ③ Distressed hospitals may struggle to deal with reimbursement headwinds and expense containment compared to healthy hospitals which may benefit from reimbursement shifts
- ④ Distressed hospitals may have higher company specific risk factors resulting in a higher cost of capital

\*The Health Care M&A Report," Irving Levin Associates, 2009Q1-2017Q4.  
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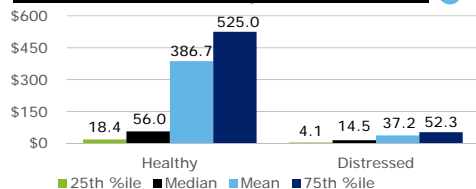
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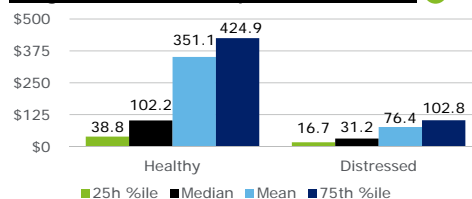
## How to Value Distressed Hospitals?

Transaction Data Summary Charts – 3 Year Lookback

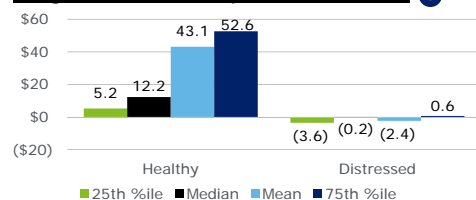
### Transaction Size Comparison (\$MM's) ①



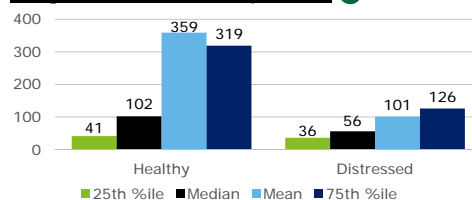
### Target Revenue Comparison (\$MM's) ②



### Target EBITDA Comparison (\$MM's) ③



### Target # of Beds Comparison ④



Source: Irving Levin Associates Health Care M&A Quarterly Reports 2015-2017

#### Observations

- ① Average transaction size is much smaller for distressed hospitals as revenues and EBITDA are much lower
- ② As shown in previous slides, distressed hospitals are generating less revenue compared to their healthy counterparts
- ③ As a key indicator of financial health, it is not surprising to see distressed hospitals having nearly zero or negative EBITDA
- ④ With less beds on average, distressed hospitals have less capacity to treat patients which could lead to less top line revenue

\*The Health Care M&A Report," Irving Levin Associates, 2009Q1-2017Q4.  
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## Distressed Hospitals Transactions 2015 - 2017

EBITDA Margin <5%

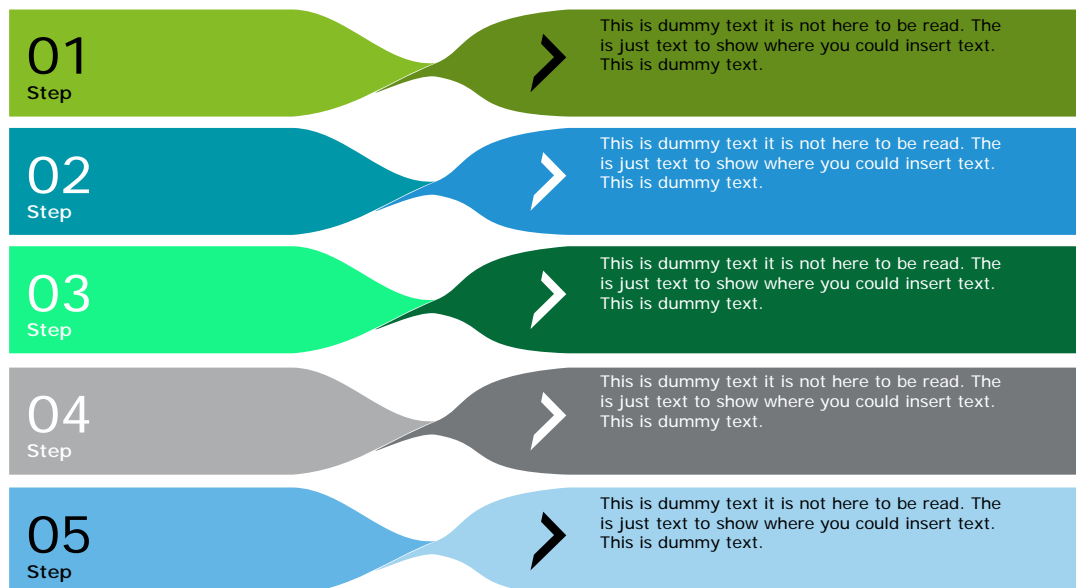
|                   |   |  |                | Distressed Transactions            |                          |                         |               |      |                 |
|-------------------|---|--|----------------|------------------------------------|--------------------------|-------------------------|---------------|------|-----------------|
| Announcement Date | Target                                      | Buyer  | State (Target) | Invested Capital / Price (\$000's) | Target Revenue (\$000's) | Target EBITDA (\$000's) | EBITDA Margin | Beds | Price / Revenue |
| 04/11/2017        | DeQueen Medical Center                      | Regional Owner/Operator Health Care Authority of | Arkansas       | 4,000                              | 9,850                    | 450                     | 4.6%          | 35   | 0.4x            |
| 03/03/2017        | Stringfellow Memorial Hospital              | Anniston   | Alabama        | 25,000                             | 41,534                   | 243                     | 0.6%          | 125  | 0.6x            |
| 12/27/2016        | Pioneer Community Hospital                  | LifeBrite Hospital Group LLC                     | North Carolina | 400                                | 18,080                   | (5,113)                 | -28.3%        | 25   | 0.0x            |
| 08/19/2016        | Chestatee Regional Hospital                 | Unidentified Buyer                               | Georgia        | 15,000                             | 22,750                   | 622                     | 2.7%          | 38   | 0.7x            |
| 08/05/2016        | Charlotte Hungerford Hospital               | Hartford Healthcare                              | Connecticut    | 76,000                             | 122,937                  | 4,052                   | 3.3%          | 109  | 0.6x            |
| 07/15/2016        | Unity Medical and Surgical Hospital         | Medical Facilities Corporation                   | Indiana        | 53,630                             | 31,227                   | (661)                   | -2.1%         | 29   | 1.7x            |
| 06/28/2016        | Floyd Memorial Hospital and Health Services | Baptist Health                                   | Indiana        | 276,000                            | 326,391                  | 6,764                   | 2.1%          | 211  | 0.8x            |
| 02/19/2016        | Bowie Memorial Hospital                     | Hashmi Group                                     | Texas          | 1,500                              | 15,386                   | (975)                   | -6.3%         | 37   | 0.1x            |
| 02/02/2016        | New Horizons Medical Center                 | St. Elizabeth Healthcare                         | Kentucky       | 1,050                              | 8,733                    | 25                      | 0.3%          | 25   | 0.1x            |
| 02/02/2016        | Doctors' Hospital of Michigan               | Sant Partners, LLC                               | Michigan       | 14,500                             | 13,226                   | (8,902)                 | -67.3%        | 47   | 1.1x            |
| 02/01/2016        | Palm Springs General Hospital               | Larkin Community Hospital                        | Florida        | 40,000                             | 85,893                   | 1,780                   | 2.1%          | 247  | 0.5x            |
| 12/16/2015        | Silverton Health                            | Legacy Health                                    | OR             | 60,000                             | 99,656                   | 2,889                   | 2.9%          | 48   | 0.6x            |
| 12/14/2015        | Hutcheson Medical Center                    | ValorBridge Partners                             | GA             | 4,200                              | 58,839                   | (787)                   | -1.3%         | 114  | 0.1x            |
| 10/28/2015        | Southern Regional Medical Center            | Prime Healthcare Services                        | GA             | 51,000                             | 186,282                  | (10,153)                | -5.5%         | 244  | 0.3x            |
| 10/01/2015        | Titusville Area Hospital                    | Meadville Medical Center                         | PA             | 8,000                              | 26,223                   | (2,471)                 | -9.4%         | 72   | 0.3x            |
| 09/30/2015        | West Jefferson Medical Center               | LCMC Health                                      | LA             | 54,000                             | 243,926                  | (2,326)                 | -1.0%         | 405  | 0.2x            |
| 09/23/2015        | Freedom Pain Hospital                       | Nobilis Health Corp.                             | AZ             | 3,200                              | 10,194                   | 216                     | 2.1%          | 12   | 0.3x            |
| 08/12/2015        | Summit Park Hospital                        | Sympaticare LLC                                  | NY             | 12,000                             | 73,704                   | (4,761)                 | -6.5%         | 74   | 0.2x            |
| 06/08/2015        | Lodi Health                                 | Adventist Health                                 | CA             | 100,000                            | 168,137                  | 4,042                   | 2.4%          | 182  | 0.6x            |
| 06/05/2015        | Ty Cobb Regional Medical Center             | St. Mary's Health Care System                    | GA             | 12,900                             | 27,896                   | (6,732)                 | -24.1%        | 56   | 0.5x            |
| 03/18/2015        | Teton Medical Center                        | Benefis Health System                            | MT             | 500                                | 6,321                    | (239)                   | -3.8%         | 10   | 0.1x            |
| 03/02/2015        | Mercy Suburban Hospital                     | Prime Healthcare Services                        | PA             | 30,000                             | 105,943                  | (34,028)                | -32.1%        | 126  | 0.3x            |
| 01/08/2015        | Nason Hospital                              | Conemaugh Health System                          | PA             | 12,000                             | 30,691                   | 615                     | 2.0%          | 44   | 0.4x            |

\*The Health Care M&A Report," Irving Levin Associates, 2009Q1-2017Q4.  
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## What Does a Distressed Asset Valuation Look Like in Practice?

Case Study Placeholder



# Appendix

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Hector G. Calzada, Jr. is a Managing Director in Deloitte Corporate Finance LLC's corporate finance and valuation practice. He is also a member of the firm's Health Sciences industry group.



Mr. Calzada has extensive experience advising clients in transactions, capital markets and valuation-related matters. Mr. Calzada has conducted and supervised engagements for mergers, acquisitions, corporate divestitures, refinancings, joint ventures, intellectual property licensing transactions and strategy formulation, equity syndications, and tax-related restructurings. He has also advised in domestic and cross-border transactional matters involving Boards of Directors and Special Committees in matters addressing fairness and solvency opinions, as well as strategic alternatives.

Mr. Calzada is a recognized speaker, leader and trainer in advising clients in transactional matters and specializes in life sciences and healthcare, having advised clients in the for-profit and not-for-profit sectors, and has experience with cross-border transactions. Mr. Calzada's experience includes working with multiple healthcare provider and payor implementation strategy and assessments. Mr. Calzada has worked with multiple entities evaluating target healthcare opportunities in Puerto Rico as well as assessing the capital structure of target entities.

Mr. Calzada's healthcare experience includes acute care, long term care, home health, hospice, ambulatory surgery centers, physician and dental practices, IPAs, imaging, dialysis, catheterization laboratories, disease management, group purchasing organizations, healthcare products distribution and healthcare information technology.

Mr. Calzada also has managed care experience includes commercial, Medicare, Medicaid, pharmaceutical benefit management and disease management. His life science experience includes "big" Pharma, specialty pharma, medical and dental devices, contract research organizations, contract manufacturing organizations, research institutions, pharmaceutical services, biotechnology, and pharmaceutical distribution (institutional and pharmaceutical benefit management). Has also addressed a significant number of valuation, strategy, licensing, transaction and contractual dispute matters involving intangible assets and intellectual property including patents, trademarks and trade names, copyrights, trade secrets, and goodwill.

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- Albert Einstein Medical Center
- Stanford University Medical Center
- Osteopathic Medical Center of Texas
- Lourdes Health System
- Physicians Specialty Hospital of El Paso, East L.P.
- Genesis Physicians Practice Association
- Centennial Healthcare Corporation
- Omega Healthcare Investors, Inc.
- Wadley Regional Medical Center
- Publicly-traded Healthcare Real Estate Investment Trust
- Specialty Home Health Finance Company
- Asarco LLC

Mr. Patnode is the leader of Deloitte's Health Care Reform – Troubled Company Turnaround and Monitoring Solution. Mr. Patnode provides professional services related to crisis management, corporate recovery, valuation, mergers and acquisitions, and transaction advisory to parties in a broad variety of distressed corporate settings, with a significant emphasis on the U.S. health care industry. Mr. Patnode represents private and public companies, not-for-profit institutions, providers, secured creditors, unsecured creditor committees, bond insurance companies, governmental entities, trustees, examiners, and other parties in interest.

Mr. Patnode's health care sector experience includes hospitals, academic medical centers, ambulatory surgical centers, outpatient rehabilitation, clinical laboratories, skilled nursing care, senior housing, home health/home durable medical equipment, hospice, physician practices, physician practice management companies, independent practice associations (IPAs), HMO/managed care organizations, and institutional pharmacies. Mr. Patnode's other industry experience includes, but is not limited to, financial services, retail, energy, and refining.

Prior to joining Deloitte, Mr. Patnode was a director of a national boutique crisis management and restructuring firm. Prior to that position, he was a managing director at a large professional services firm with a particular emphasis in the health care industry. Prior to that position, he was a director in the Business Recovery Services group of a Big Four accounting/consulting firm, where he was also a member of the firm's Corporate Valuation Group, as well as the Mergers and Acquisition line of business within the Health Care Consulting Practice. In this capacity, Mr. Patnode completed fairness opinions of for-profit and not-for-profit health care systems transactions; fixed and intangible asset valuations of multi-industry companies; and financial feasibility studies for their inclusion into municipal bond offerings.

**Education:**

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Author's calculations.



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